

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX121119\  
 Data File : VX013935.D  
 Acq On : 11 Dec 2019 11:38  
 Operator : JC/SP  
 Sample : VX1211WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1211WBSD01

Manual Integrations  
 APPROVED

apatel  
 12/12/2019 9:26:34 AM

Quant Time: Dec 12 04:13:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 26 15:53:00 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 522543   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 780743   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 712234   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 372644   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 275947   | 45.49 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.98% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 229378   | 47.52 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.04% |      |
| 50) Toluene-d8            | 8.71   | 98  | 854011   | 45.41 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.82% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 323790   | 47.75 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.50% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 95288   | 16.383  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 108861  | 16.681  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 125201  | 17.045  | ug/l | 96     |
| 5) Bromomethane               | 1.64 | 94  | 83527   | 16.932  | ug/l | 97     |
| 6) Chloroethane               | 1.72 | 64  | 72150   | 17.261  | ug/l | 94     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 138971  | 17.038  | ug/l | 100    |
| 8) Diethyl Ether              | 2.18 | 74  | 67864   | 18.391  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 89227   | 17.910  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 78031   | 12.948  | ug/l | 98     |
| 11) Tert butyl alcohol        | 3.01 | 59  | 114363  | 76.386  | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 83720   | 16.835  | ug/l | 99     |
| 13) Acrolein                  | 2.28 | 56  | 78652   | 82.670  | ug/l | 96     |
| 14) Allyl chloride            | 2.72 | 41  | 151990  | 16.842  | ug/l | 98     |
| 15) Acrylonitrile             | 3.13 | 53  | 273919  | 88.635  | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 305717  | 102.088 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 211431  | 14.915  | ug/l | 98     |
| 18) Methyl Acetate            | 2.76 | 43  | 156926  | 18.819  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 305961  | 18.572  | ug/l | 99     |
| 20) Methylene Chloride        | 2.84 | 84  | 103883  | 18.057  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 90587   | 16.721  | ug/l | 94     |
| 22) Diisopropyl ether         | 3.84 | 45  | 329780  | 18.978  | ug/l | 91     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1318211 | 91.188  | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 171854  | 18.091  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 403143  | 90.582  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 132655  | 16.878  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 111576  | 17.934  | ug/l | 98     |
| 28) Bromochloromethane        | 5.00 | 49  | 74494   | 19.837  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 243623  | 88.795  | ug/l | 100    |
| 30) Chloroform                | 5.20 | 83  | 171547  | 17.807  | ug/l | 98     |
| 31) Cyclohexane               | 5.56 | 56  | 147701  | 16.485  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 136001  | 16.893  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 125360  | 17.688  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.82 | 43  | 145004  | 18.238  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 116223  | 17.785  | ug/l | 98     |

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 ALS Vial : 5 Sample Multiplier: 1

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apatel  
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Quant Time: Dec 12 04:13:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X112619W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Nov 26 15:53:00 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 150290   | 17.156  | ug/l   | 97       |
| 40) Benzene                    | 6.13  | 78   | 387644   | 17.959  | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.02  | 41   | 81662    | 18.728  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 140505   | 19.087  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 236770   | 18.089  | ug/l   | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 105420   | 17.795  | ug/l   | 94       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 103725   | 19.206  | ug/l   | 93       |
| 46) Dibromomethane             | 7.65  | 93   | 67731    | 18.466  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 131713   | 18.995  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.76  | 41   | 116960   | 18.390  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 45526    | 319.800 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.63  | 43   | 759389   | 92.231  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 246967   | 18.417  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 143064   | 18.126  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 158565   | 18.389  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 103447   | 19.143  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 159456   | 18.354  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 178684   | 19.184  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 329099   | 96.614  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.48  | 43   | 585460   | 91.171  | ug/l   | 97       |
| 60) Dibromochloromethane       | 9.57  | 129  | 103555   | 18.465  | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 109134   | 18.909  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 103971   | 19.575  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.14 | 112  | 272576   | 18.433  | ug/l   | 97       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 97769    | 18.412  | ug/l   | 100      |
| 67) Ethyl Benzene              | 10.24 | 91   | 458867   | 18.058  | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.35 | 106  | 351265   | 36.107  | ug/l   | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 169604   | 17.875  | ug/l   | 98       |
| 70) Styrene                    | 10.71 | 104  | 293976   | 18.419  | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 77797    | 17.707  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 455894   | 17.441  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 200614   | 16.754  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 161443   | 17.809  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 132209m  | 15.774  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 122063   | 17.285  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 524826   | 17.986  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 310233   | 17.723  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 381033   | 17.786  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 46552    | 15.195  | ug/l   | 93       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 360935   | 17.803  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 375627   | 17.252  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 385932   | 17.750  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 446590   | 17.957  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 409043   | 17.680  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 218677   | 17.765  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 220864   | 17.615  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 363315   | 18.412  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.59 | 117  | 68182    | 16.304  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.38 | 146  | 216774   | 17.823  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 32264    | 16.344  | ug/l   | 98       |

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ALS Vial : 5 Sample Multiplier: 1

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MSVOA\_X  
ClientSampleId :  
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Quant Title : SW846 8260  
QLast Update : Tue Nov 26 15:53:00 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 155386   | 18.332 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 71429    | 17.542 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 457826   | 18.137 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 153129   | 18.246 | ug/l  | 99       |

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

