

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122019\  
 Data File : VX014166.D  
 Acq On : 20 Dec 2019 12:10  
 Operator : JC/SP  
 Sample : VX1220WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 Client Sampled :  
 VX1220WBSD01

Manual Integrations  
 APPROVED

apatel  
 12/23/2019 10:25:07 AM

Quant Time: Dec 20 23:27:46 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 494151   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 745906   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 672358   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 339451   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 267794   | 47.82 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.64% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 218684   | 48.23 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.46% |      |
| 50) Toluene-d8            | 8.71   | 98  | 830881   | 47.07 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.14% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 298027   | 46.18 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.36% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 73975   | 16.733 | ug/l | 100    |
| 3) Chloromethane              | 1.32 | 50  | 99053   | 16.696 | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 107032  | 17.097 | ug/l | 96     |
| 5) Bromomethane               | 1.63 | 94  | 68860   | 15.498 | ug/l | 95     |
| 6) Chloroethane               | 1.72 | 64  | 70072   | 18.136 | ug/l | 96     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 140135  | 18.083 | ug/l | 98     |
| 8) Diethyl Ether              | 2.18 | 74  | 67391   | 18.529 | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 84263   | 18.038 | ug/l | 97     |
| 10) Methyl Iodide             | 2.50 | 142 | 86841   | 15.978 | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 115790  | 95.683 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 82779   | 17.415 | ug/l | 99     |
| 13) Acrolein                  | 2.28 | 56  | 68525   | 98.921 | ug/l | 100    |
| 14) Allyl chloride            | 2.72 | 41  | 149069  | 17.564 | ug/l | 99     |
| 15) Acrylonitrile             | 3.13 | 53  | 264133  | 93.513 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 252704  | 69.502 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 214956  | 16.795 | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 134452  | 18.662 | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 295417  | 18.913 | ug/l | 98     |
| 20) Methylene Chloride        | 2.84 | 84  | 102919  | 17.975 | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 90322   | 17.248 | ug/l | 96     |
| 22) Diisopropyl ether         | 3.84 | 45  | 317536  | 18.775 | ug/l | 94     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1366905 | 99.039 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 167861  | 17.839 | ug/l | 100    |
| 25) 2-Butanone                | 4.65 | 43  | 376919  | 84.083 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 128132  | 17.539 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 107204  | 18.101 | ug/l | 100    |
| 28) Bromochloromethane        | 5.00 | 49  | 64314   | 18.065 | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 239080  | 95.354 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 162540  | 18.222 | ug/l | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 148915  | 17.794 | ug/l | 90     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 133085  | 17.506 | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.78 | 75  | 119513  | 17.462 | ug/l | 99     |
| 37) Ethyl Acetate             | 4.81 | 43  | 142584  | 18.866 | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 114650  | 18.388 | ug/l | 98     |

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 ALS Vial : 5 Sample Multiplier: 1

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 ClientSampleId :  
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 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 153602   | 18.176  | ug/l   | 99       |
| 40) Benzene                    | 6.13  | 78   | 382081   | 18.144  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.02  | 41   | 81468    | 19.427  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 135297   | 18.954  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.43  | 43   | 238876   | 19.098  | ug/l   | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 103384   | 17.774  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.50  | 63   | 101929   | 18.885  | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 65472    | 18.347  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 123375   | 18.357  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.76  | 41   | 113529   | 18.536  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 49972    | 400.931 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.63  | 43   | 740192   | 94.230  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 243891   | 18.323  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 135574   | 18.397  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 154097   | 18.769  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 99165    | 18.589  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 157710   | 18.820  | ug/l   | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 169470   | 18.881  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 302719   | 95.457  | ug/l   | 98       |
| 59) 2-Hexanone                 | 9.48  | 43   | 561716   | 88.831  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 101331   | 19.109  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 102327   | 18.747  | ug/l   | 98       |
| 64) Tetrachloroethene          | 9.33  | 164  | 104806   | 17.616  | ug/l   | 96       |
| 65) Chlorobenzene              | 10.13 | 112  | 258071   | 18.052  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 94835    | 18.579  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 445012   | 18.106  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.35 | 106  | 345908   | 36.592  | ug/l   | 100      |
| 69) o-Xylene                   | 10.69 | 106  | 167690   | 18.087  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 281548   | 17.959  | ug/l   | 98       |
| 71) Bromoform                  | 10.85 | 173  | 73916    | 18.015  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 447981   | 18.744  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 200467   | 17.894  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 154146   | 18.603  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 124683m  | 16.919  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 118397   | 18.005  | ug/l   | 98       |
| 78) n-propylbenzene            | 11.35 | 91   | 500180   | 18.658  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 301793   | 18.520  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 366716   | 18.232  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 44512    | 17.048  | ug/l   | 92       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 339053   | 17.937  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.76 | 119  | 358028   | 18.290  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 372829   | 18.509  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 428358   | 18.537  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 395503   | 18.711  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 205560   | 17.836  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 204629   | 17.462  | ug/l   | 98       |
| 89) n-Butylbenzene             | 12.38 | 91   | 329708   | 18.280  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 67743    | 17.842  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.38 | 146  | 208171   | 17.943  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 32466    | 17.706  | ug/l   | 99       |

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Quant Title : SW846 8260  
QLast Update : Tue Dec 17 03:01:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 139938   | 18.558 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 68393    | 18.873 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 420943   | 19.001 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 138185   | 18.564 | ug/l  | 97       |

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

