

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX120519\  
 Data File : VX013783.D  
 Acq On : 05 Dec 2019 18:24  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

apatel  
 12/6/2019 11:37:30 AM

Quant Time: Dec 06 03:34:34 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  | 615206   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 936680   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 841228   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 429633   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 340133   | 47.63 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.26% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 284434   | 49.12 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.24% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1073316  | 47.57 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.14% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 396490   | 48.74 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.48% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 328396  | 47.958  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 353012  | 45.944  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.40 | 62  | 426123  | 49.274  | ug/l | 100    |
| 5) Bromomethane               | 1.63 | 94  | 273160  | 47.034  | ug/l | 100    |
| 6) Chloroethane               | 1.71 | 64  | 423859  | 86.131  | ug/l | 91     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 471470  | 49.098  | ug/l | 99     |
| 8) Diethyl Ether              | 2.18 | 74  | 216982  | 49.946  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 287052  | 48.939  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 379141  | 53.436  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.03 | 59  | 362805  | 205.827 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 291607  | 49.807  | ug/l | 96     |
| 13) Acrolein                  | 2.29 | 56  | 88964   | 79.660  | ug/l | 96     |
| 14) Allyl chloride            | 2.72 | 41  | 507076  | 47.725  | ug/l | 98     |
| 15) Acrylonitrile             | 3.13 | 53  | 852647  | 234.343 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 955546  | 271.025 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 750022  | 44.938  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 496864  | 50.609  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 976279  | 50.336  | ug/l | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 324396  | 47.892  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 301358  | 47.249  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.84 | 45  | 1031620 | 50.425  | ug/l | 97     |
| 23) Vinyl Acetate             | 3.80 | 43  | 4213906 | 247.594 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 560008  | 50.072  | ug/l | 99     |
| 25) 2-Butanone                | 4.66 | 43  | 1307447 | 249.521 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 457519  | 49.444  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 355357  | 48.516  | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 225653  | 51.057  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 779089  | 241.190 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 549450  | 48.442  | ug/l | 97     |
| 31) Cyclohexane               | 5.57 | 56  | 493450  | 46.778  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 472561  | 49.857  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 405189  | 47.654  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.82 | 43  | 469870  | 49.259  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 401365  | 51.193  | ug/l | 97     |

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 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          | 7.46  | 83   | 511267   | 48.645  | ug/l  | 97       |
| 40) Benzene                    | 6.14  | 78   | 1264796  | 48.841  | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.03  | 41   | 265036   | 50.664  | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 442452   | 50.098  | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 772950   | 49.221  | ug/l  | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 338226   | 47.589  | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 334128   | 51.569  | ug/l  | 99       |
| 46) Dibromomethane             | 7.65  | 93   | 215060   | 48.871  | ug/l  | 98       |
| 47) Bromodichloromethane       | 7.89  | 83   | 435496   | 52.349  | ug/l  | 99       |
| 48) Methyl methacrylate        | 7.76  | 41   | 389179   | 51.006  | ug/l  | 98       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 144124   | 843.863 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 2441855  | 247.200 | ug/l  | 99       |
| 52) Toluene                    | 8.78  | 92   | 798102   | 49.609  | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 486106   | 51.336  | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 539844   | 52.183  | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 331284   | 51.099  | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 542027   | 52.002  | ug/l  | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 553517   | 49.533  | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 961078   | 235.174 | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 1919777  | 249.188 | ug/l  | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 359542   | 53.439  | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 346774   | 50.081  | ug/l  | 100      |
| 64) Tetrachloroethene          | 9.33  | 164  | 311299   | 49.622  | ug/l  | 99       |
| 65) Chlorobenzene              | 10.14 | 112  | 870821   | 49.859  | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 330844   | 52.752  | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 1542612  | 51.399  | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.35 | 106  | 1170450  | 101.862 | ug/l  | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 571011   | 50.953  | ug/l  | 98       |
| 70) Styrene                    | 10.71 | 104  | 983308   | 52.161  | ug/l  | 99       |
| 71) Bromoform                  | 10.85 | 173  | 287662   | 55.433  | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.01 | 105  | 1511265  | 50.146  | ug/l  | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 703381   | 50.950  | ug/l  | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 532410   | 50.942  | ug/l  | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 480415m  | 49.716  | ug/l  |          |
| 77) Bromobenzene               | 11.25 | 156  | 401838   | 49.356  | ug/l  | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 1707216  | 50.746  | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 1020980  | 50.591  | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 1272735  | 51.528  | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 174004   | 49.264  | ug/l  | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 1172071  | 50.144  | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 1285063  | 51.193  | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1278163  | 50.988  | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1467708  | 51.189  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1371850  | 51.430  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 710152   | 50.038  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 702247   | 48.579  | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 1198773  | 52.693  | ug/l  | 100      |
| 90) Hexachloroethane           | 12.59 | 117  | 245680   | 50.956  | ug/l  | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 710052   | 50.637  | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 118175   | 51.923  | ug/l  | 99       |

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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  | 507451   | 51.926 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 225559   | 48.047 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 1580890  | 54.320 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 502373   | 51.919 | ug/l  | 99       |

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

