

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX032319\  
 Data File : VX008354.D  
 Acq On : 23 Mar 2019 16:22  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/25/2019 11:17:04 AM

Quant Time: Mar 25 08:36:30 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 23 15:27:34 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 232685   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 393131   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 351659   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 166143   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 176788   | 49.81 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.62%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 130081   | 51.07 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.14% |      |
| 50) Toluene-d8            | 8.71   | 98  | 528697   | 52.48 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.96% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 197301   | 53.34 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 106.68% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 129014  | 48.979  | ug/l   | 99     |
| 3) Chloromethane              | 1.32 | 50  | 184770  | 47.318  | ug/l   | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 179762  | 47.167  | ug/l   | 99     |
| 5) Bromomethane               | 1.64 | 94  | 117138  | 48.809  | ug/l   | 100    |
| 6) Chloroethane               | 1.71 | 64  | 102760  | 46.038  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 206028  | 47.537  | ug/l   | 98     |
| 8) Diethyl Ether              | 2.18 | 74  | 94511   | 45.543  | ug/l   | 91     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 125711  | 48.964  | ug/l   | 89     |
| 10) Methyl Iodide             | 2.51 | 142 | 157845  | 48.459  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 3.05 | 59  | 178052  | 225.244 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 125740  | 47.445  | ug/l   | 91     |
| 13) Acrolein                  | 2.29 | 56  | 164926  | 244.158 | ug/l   | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 276281  | 47.123  | ug/l   | 95     |
| 15) Acrylonitrile             | 3.14 | 53  | 465974  | 230.190 | ug/l   | 99     |
| 16) Acetone                   | 2.44 | 43  | 408426  | 230.243 | ug/l   | 98     |
| 17) Carbon Disulfide          | 2.56 | 76  | 389133  | 45.919  | ug/l   | 100    |
| 18) Methyl Acetate            | 2.77 | 43  | 197696  | 44.524  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73  | 456296  | 47.804  | ug/l   | 96     |
| 20) Methylene Chloride        | 2.85 | 84  | 147337  | 46.138  | ug/l   | 91     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 132702  | 46.243  | ug/l   | 91     |
| 22) Diisopropyl ether         | 3.85 | 45  | 547055  | 47.922  | ug/l # | 88     |
| 23) Vinyl Acetate             | 3.81 | 43  | 2467117 | 244.781 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 276196  | 47.455  | ug/l   | 98     |
| 25) 2-Butanone                | 4.67 | 43  | 684468  | 234.334 | ug/l   | 97     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 187597  | 50.029  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 152743  | 46.472  | ug/l   | 90     |
| 28) Bromochloromethane        | 5.01 | 49  | 153239  | 52.741  | ug/l # | 79     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 443800  | 228.828 | ug/l   | 96     |
| 30) Chloroform                | 5.21 | 83  | 247788  | 47.221  | ug/l   | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 271361  | 48.622  | ug/l   | 92     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 200733  | 48.351  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 198767  | 49.479  | ug/l   | 96     |
| 37) Ethyl Acetate             | 4.83 | 43  | 260608  | 47.933  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 168797  | 49.018  | ug/l   | 99     |

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 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 11 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/25/2019 11:17:04 AM

Quant Time: Mar 25 08:36:30 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032319W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Mar 23 15:27:34 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 253201   | 51.421  | ug/l   | 91       |
| 40) Benzene                    | 6.14  | 78   | 596506   | 48.758  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 144419   | 48.733  | ug/l   | 96       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 210133   | 47.330  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 419992   | 49.608  | ug/l   | 97       |
| 44) Trichloroethene            | 7.21  | 130  | 135550   | 47.711  | ug/l   | 86       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 169717   | 49.002  | ug/l   | 99       |
| 46) Dibromomethane             | 7.66  | 93   | 97174    | 47.277  | ug/l # | 85       |
| 47) Bromodichloromethane       | 7.90  | 83   | 193225   | 49.286  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 213109   | 49.885  | ug/l   | 94       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 76725    | 890.163 | ug/l   | 91       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1345245  | 242.178 | ug/l   | 98       |
| 52) Toluene                    | 8.78  | 92   | 361934   | 50.452  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 221533   | 52.556  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 248135   | 51.921  | ug/l   | 92       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 144269   | 48.415  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 270353   | 51.249  | ug/l   | 91       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 257755   | 48.556  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 839432   | 295.126 | ug/l   | 92       |
| 59) 2-Hexanone                 | 9.49  | 43   | 1025059  | 240.389 | ug/l   | 96       |
| 60) Dibromochloromethane       | 9.58  | 129  | 140770   | 50.895  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 150964   | 49.919  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 115336   | 50.154  | ug/l   | 96       |
| 65) Chlorobenzene              | 10.13 | 112  | 365808   | 49.601  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 129732   | 50.724  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.25 | 91   | 699779   | 50.673  | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.36 | 106  | 506579   | 102.096 | ug/l   | 92       |
| 69) o-Xylene                   | 10.69 | 106  | 243536   | 50.195  | ug/l   | 94       |
| 70) Styrene                    | 10.71 | 104  | 429165   | 51.005  | ug/l   | 96       |
| 71) Bromoform                  | 10.85 | 173  | 101613   | 51.575  | ug/l # | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 656045   | 50.035  | ug/l   | 98       |
| 74) N-amyl acetate             | 10.90 | 43   | 382210   | 49.789  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 242730   | 46.476  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 203247m  | 46.737  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 152611   | 49.191  | ug/l   | 80       |
| 78) n-propylbenzene            | 11.36 | 91   | 789410   | 51.369  | ug/l   | 95       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 456530   | 48.769  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 561013   | 50.298  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 80813    | 52.957  | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 537201   | 49.804  | ug/l   | 94       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 532867   | 50.169  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 561191   | 50.418  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 649861   | 51.051  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 589387   | 52.529  | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 275965   | 49.527  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 276456   | 48.762  | ug/l   | 97       |
| 89) n-Butylbenzene             | 12.38 | 91   | 570902   | 53.298  | ug/l   | 97       |
| 90) Hexachloroethane           | 12.60 | 117  | 97470    | 52.590  | ug/l   | 79       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 274114   | 48.574  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 52826    | 47.458  | ug/l   | 76       |

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Acq On : 23 Mar 2019 16:22  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 11 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
3/25/2019 11:17:04 AM

Quant Time: Mar 25 08:36:30 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X032319W.M  
Quant Title : SW846 8260  
QLast Update : Sat Mar 23 15:27:34 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 194067   | 50.997 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 95623    | 53.170 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 650534   | 48.680 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 191792   | 49.946 | ug/l  | 99       |

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

