

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060420\  
 Data File : VX016577.D  
 Acq On : 04 Jun 2020 11:02  
 Operator : JC/SP  
 Sample : VX0604WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0604WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 6/5/2020 10:12:00 AM

Quant Time: Jun 05 06:29:07 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052720W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 27 16:31:05 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.63  | 168  | 253967   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.83  | 114  | 378579   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 349418   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.06 | 152  | 172559   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.03   | 65  | 142757   | 45.26 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.52% |      |
| 35) Dibromofluoromethane  | 5.46   | 113 | 114422   | 49.09 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.18% |      |
| 50) Toluene-d8            | 8.70   | 98  | 442259   | 48.74 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.48% |      |
| 62) 4-Bromofluorobenzene  | 11.12  | 95  | 162448   | 46.34 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 92.68% |      |

## Target Compounds

|                               |      |     |        |         |      | Qvalue |
|-------------------------------|------|-----|--------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.18 | 85  | 41998  | 16.804  | ug/l | 93     |
| 3) Chloromethane              | 1.31 | 50  | 47855  | 15.844  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.39 | 62  | 51208  | 16.032  | ug/l | 99     |
| 5) Bromomethane               | 1.62 | 94  | 32549  | 20.958  | ug/l | 98     |
| 6) Chloroethane               | 1.71 | 64  | 31499  | 16.906  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 76164  | 18.157  | ug/l | 99     |
| 8) Diethyl Ether              | 2.17 | 74  | 28494  | 16.290  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.36 | 101 | 42650  | 18.474  | ug/l | 99     |
| 10) Methyl Iodide             | 2.49 | 142 | 35824  | 15.250  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.01 | 59  | 61945  | 76.592  | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 42997  | 17.595  | ug/l | 99     |
| 13) Acrolein                  | 2.27 | 56  | 34733  | 100.956 | ug/l | 100    |
| 14) Allyl chloride            | 2.70 | 41  | 71735  | 15.962  | ug/l | 97     |
| 15) Acrylonitrile             | 3.11 | 53  | 132887 | 80.211  | ug/l | 98     |
| 16) Acetone                   | 2.42 | 43  | 112021 | 81.068  | ug/l | 99     |
| 17) Carbon Disulfide          | 2.55 | 76  | 114359 | 15.759  | ug/l | 99     |
| 18) Methyl Acetate            | 2.75 | 43  | 57124  | 16.118  | ug/l | 96     |
| 19) Methyl tert-butyl Ether   | 3.17 | 73  | 150734 | 17.178  | ug/l | 99     |
| 20) Methylene Chloride        | 2.83 | 84  | 47600  | 16.650  | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.14 | 96  | 46065  | 17.042  | ug/l | 93     |
| 22) Diisopropyl ether         | 3.82 | 45  | 141790 | 16.424  | ug/l | 93     |
| 23) Vinyl Acetate             | 3.78 | 43  | 606945 | 80.318  | ug/l | 96     |
| 24) 1,1-Dichloroethane        | 3.67 | 63  | 82988  | 17.031  | ug/l | 99     |
| 25) 2-Butanone                | 4.63 | 43  | 181561 | 77.543  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.55 | 77  | 77484  | 19.433  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.56 | 96  | 52839  | 16.897  | ug/l | 100    |
| 28) Bromochloromethane        | 4.98 | 49  | 36729  | 16.220  | ug/l | 91     |
| 29) Tetrahydrofuran           | 5.09 | 42  | 116976 | 77.331  | ug/l | 94     |
| 30) Chloroform                | 5.17 | 83  | 85370  | 17.387  | ug/l | 99     |
| 31) Cyclohexane               | 5.55 | 56  | 69820  | 15.927  | ug/l | 100    |
| 32) 1,1,1-Trichloroethane     | 5.46 | 97  | 79013  | 17.775  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.76 | 75  | 62510  | 17.439  | ug/l | 97     |
| 37) Ethyl Acetate             | 4.79 | 43  | 68917  | 16.015  | ug/l | 96     |
| 38) Carbon Tetrachloride      | 5.75 | 117 | 70238  | 18.646  | ug/l | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060420\  
 Data File : VX016577.D  
 Acq On : 04 Jun 2020 11:02  
 Operator : JC/SP  
 Sample : VX0604WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX0604WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 6/5/2020 10:12:00 AM

Quant Time: Jun 05 06:29:07 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052720W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 27 16:31:05 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.44  | 83   | 70798    | 18.185  | ug/l   | 99       |
| 40) Benzene                    | 6.11  | 78   | 190384   | 17.836  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.00  | 41   | 37943    | 16.052  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.16  | 62   | 67754    | 17.849  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.41  | 43   | 110427   | 16.451  | ug/l   | 98       |
| 44) Trichloroethene            | 7.19  | 130  | 61379    | 18.124  | ug/l   | 93       |
| 45) 1,2-Dichloropropane        | 7.49  | 63   | 47379    | 17.435  | ug/l   | 96       |
| 46) Dibromomethane             | 7.63  | 93   | 31673    | 17.353  | ug/l   | 94       |
| 47) Bromodichloromethane       | 7.87  | 83   | 68828    | 18.212  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.74  | 41   | 51174    | 15.922  | ug/l   | 95       |
| 49) 1,4-Dioxane                | 7.71  | 88   | 25057    | 333.139 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.62  | 43   | 345778   | 82.729  | ug/l   | 98       |
| 52) Toluene                    | 8.76  | 92   | 123668   | 18.373  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.02  | 75   | 76168    | 17.724  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.42  | 75   | 83019    | 18.251  | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 9.20  | 97   | 48409    | 18.088  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 9.16  | 69   | 73842    | 16.941  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.35  | 76   | 81823    | 17.812  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.29  | 63   | 189089   | 83.114  | ug/l   | 98       |
| 59) 2-Hexanone                 | 9.47  | 43   | 268010   | 82.456  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 56548    | 18.776  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.65  | 107  | 50901    | 17.761  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.32  | 164  | 70601    | 18.060  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.12 | 112  | 129736   | 18.212  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.20 | 131  | 51130    | 18.803  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.23 | 91   | 225167   | 17.753  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.34 | 106  | 172979   | 36.784  | ug/l   | 99       |
| 69) o-Xylene                   | 10.68 | 106  | 82365    | 18.085  | ug/l   | 98       |
| 70) Styrene                    | 10.70 | 104  | 143165   | 18.289  | ug/l   | 98       |
| 71) Bromoform                  | 10.84 | 173  | 42440    | 18.467  | ug/l # | 100      |
| 73) Isopropylbenzene           | 11.00 | 105  | 220734   | 18.462  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.88 | 43   | 88407    | 16.075  | ug/l   | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.25 | 83   | 54062    | 18.042  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.28 | 75   | 69701m   | 18.377  | ug/l   |          |
| 77) Bromobenzene               | 11.24 | 156  | 58459    | 18.642  | ug/l   | 95       |
| 78) n-propylbenzene            | 11.34 | 91   | 240986   | 18.041  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.40 | 91   | 146288   | 17.942  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.49 | 105  | 181859   | 18.216  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.05 | 75   | 26283    | 17.045  | ug/l   | 97       |
| 82) 4-Chlorotoluene            | 11.49 | 91   | 173532   | 18.023  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 159600   | 18.710  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.79 | 105  | 189618   | 18.781  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.93 | 105  | 202208   | 18.896  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.05 | 119  | 187372   | 18.692  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.01 | 146  | 98360    | 18.104  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.08 | 146  | 100244   | 18.041  | ug/l   | 97       |
| 89) n-Butylbenzene             | 12.37 | 91   | 153436   | 18.377  | ug/l   | 98       |
| 90) Hexachloroethane           | 12.58 | 117  | 31725    | 18.323  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.38 | 146  | 95652    | 18.172  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.98 | 75   | 16494    | 16.994  | ug/l   | 99       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060420\  
Data File : VX016577.D  
Acq On : 04 Jun 2020 11:02  
Operator : JC/SP  
Sample : VX0604WBS01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 4 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0604WBS01

Manual Integrations  
APPROVED

MMDadoda  
6/5/2020 10:12:00 AM

Quant Time: Jun 05 06:29:07 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052720W.M  
Quant Title : SW846 8260  
QLast Update : Wed May 27 16:31:05 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.63 | 180  | 65629    | 18.774 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 30694    | 22.363 | ug/l  | 96       |
| 95) Naphthalene            | 13.82 | 128  | 212878   | 17.764 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.00 | 180  | 65149    | 19.023 | ug/l  | 99       |

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

