

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX032319\  
 Data File : VX008345.D  
 Acq On : 23 Mar 2019 12:35  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/25/2019 11:11:14 AM

Quant Time: Mar 25 09:36:47 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  | 271395   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 452263   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 405682   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 196801   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 198798   | 48.03 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.06%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 148167   | 50.57 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.14% |      |
| 50) Toluene-d8            | 8.71   | 98  | 594082   | 51.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.52% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 220367   | 51.79 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.58% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 136198  | 44.331  | ug/l   | 100    |
| 3) Chloromethane              | 1.32 | 50  | 191021  | 41.942  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.40 | 62  | 187037  | 42.076  | ug/l   | 99     |
| 5) Bromomethane               | 1.64 | 94  | 115280  | 41.183  | ug/l   | 99     |
| 6) Chloroethane               | 1.71 | 64  | 106278  | 40.823  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 215534  | 42.637  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.18 | 74  | 99200   | 40.984  | ug/l   | 92     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 131191  | 43.810  | ug/l   | 90     |
| 10) Methyl Iodide             | 2.51 | 142 | 169902  | 44.720  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 190139  | 206.227 | ug/l   | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 131753  | 42.623  | ug/l   | 92     |
| 13) Acrolein                  | 2.29 | 56  | 167545  | 212.657 | ug/l   | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 291184  | 42.581  | ug/l   | 95     |
| 15) Acrylonitrile             | 3.14 | 53  | 484066  | 205.020 | ug/l   | 99     |
| 16) Acetone                   | 2.45 | 43  | 410680  | 198.492 | ug/l   | 98     |
| 17) Carbon Disulfide          | 2.56 | 76  | 405584  | 41.033  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.77 | 43  | 205992  | 39.776  | ug/l   | 96     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73  | 470690  | 42.278  | ug/l   | 97     |
| 20) Methylene Chloride        | 2.85 | 84  | 151811  | 40.759  | ug/l   | 93     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 140121  | 41.863  | ug/l   | 91     |
| 22) Diisopropyl ether         | 3.85 | 45  | 564672  | 42.410  | ug/l # | 88     |
| 23) Vinyl Acetate             | 3.81 | 43  | 2546718 | 216.638 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 286789  | 42.247  | ug/l   | 98     |
| 25) 2-Butanone                | 4.67 | 43  | 693151  | 203.459 | ug/l   | 96     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 195882  | 44.787  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 161104  | 42.024  | ug/l   | 89     |
| 28) Bromochloromethane        | 5.01 | 49  | 156898  | 46.298  | ug/l # | 78     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 461114  | 203.843 | ug/l   | 96     |
| 30) Chloroform                | 5.21 | 83  | 259736  | 42.438  | ug/l   | 99     |
| 31) Cyclohexane               | 5.57 | 56  | 285104  | 43.798  | ug/l   | 92     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 210115  | 43.392  | ug/l   | 96     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 210528  | 45.554  | ug/l   | 95     |
| 37) Ethyl Acetate             | 4.83 | 43  | 270172  | 43.195  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 177080  | 44.699  | ug/l   | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX032319\  
 Data File : VX008345.D  
 Acq On : 23 Mar 2019 12:35  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 3/25/2019 11:11:14 AM

Quant Time: Mar 25 09:36:47 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   | 266173   | 46.988  | ug/l   | 93       |
| 40) Benzene                    | 6.14  | 78   | 619633   | 44.026  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.04  | 41   | 147778   | 43.347  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 220743   | 43.219  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 6.44  | 43   | 431410   | 44.295  | ug/l   | 97       |
| 44) Trichloroethene            | 7.21  | 130  | 144303   | 44.151  | ug/l   | 89       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 176036   | 44.181  | ug/l   | 99       |
| 46) Dibromomethane             | 7.66  | 93   | 101702   | 43.011  | ug/l # | 85       |
| 47) Bromodichloromethane       | 7.90  | 83   | 202569   | 44.914  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 219595   | 44.682  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 83367    | 840.762 | ug/l   | 92       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1376501  | 215.405 | ug/l   | 98       |
| 52) Toluene                    | 8.78  | 92   | 370429   | 44.885  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 233439   | 48.140  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 260173   | 47.322  | ug/l   | 93       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 149502   | 43.612  | ug/l   | 97       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 275470   | 45.391  | ug/l   | 91       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 267003   | 43.722  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 802540   | 245.265 | ug/l   | 92       |
| 59) 2-Hexanone                 | 9.49  | 43   | 1071631  | 218.453 | ug/l   | 96       |
| 60) Dibromochloromethane       | 9.58  | 129  | 147110   | 46.233  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 154114   | 44.298  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 118155   | 44.538  | ug/l   | 95       |
| 65) Chlorobenzene              | 10.13 | 112  | 376738   | 44.280  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 133285   | 45.174  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.25 | 91   | 719746   | 45.179  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.36 | 106  | 521726   | 91.147  | ug/l   | 92       |
| 69) o-Xylene                   | 10.69 | 106  | 250684   | 44.788  | ug/l   | 94       |
| 70) Styrene                    | 10.71 | 104  | 445813   | 45.928  | ug/l   | 96       |
| 71) Bromoform                  | 10.85 | 173  | 105783   | 46.542  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 671835   | 43.257  | ug/l   | 98       |
| 74) N-amyl acetate             | 10.90 | 43   | 403885   | 44.417  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 256727   | 41.499  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 250926m  | 48.712  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 157609   | 42.888  | ug/l   | 81       |
| 78) n-propylbenzene            | 11.36 | 91   | 812425   | 44.631  | ug/l   | 95       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 476802   | 43.000  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 577321   | 43.696  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 85531    | 47.317  | ug/l # | 88       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 559480   | 43.789  | ug/l   | 94       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 545003   | 43.319  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 585585   | 44.414  | ug/l   | 97       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 671412   | 44.527  | ug/l   | 95       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 606231   | 45.613  | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 288322   | 43.684  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 292021   | 43.483  | ug/l   | 97       |
| 89) n-Butylbenzene             | 12.38 | 91   | 593936   | 46.810  | ug/l   | 97       |
| 90) Hexachloroethane           | 12.60 | 117  | 98702    | 44.959  | ug/l   | 79       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 291251   | 43.570  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 56717    | 43.016  | ug/l   | 77       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX032319\  
Data File : VX008345.D  
Acq On : 23 Mar 2019 12:35  
Operator : JC/SP  
Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
3/25/2019 11:11:14 AM

Quant Time: Mar 25 09:36:47 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  | 202384   | 44.898 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 96923    | 45.498 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 684694   | 43.254 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 201317   | 44.259 | ug/l  | 98       |

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

