

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX021519\  
 Data File : VX007537.D  
 Acq On : 14 Feb 2019 11:07  
 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  
 2/15/2019 10:10:05 AM

Quant Time: Feb 15 02:44:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X020119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Feb 02 01:32:36 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 457943   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 667091   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 606952   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 316108   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 243487   | 50.09 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.18% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 226470   | 52.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.36% |      |
| 50) Toluene-d8            | 8.71   | 98  | 815633   | 50.65 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.30% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 295444   | 50.25 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.50% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 249578  | 44.371  | ug/l | 98     |
| 3) Chloromethane              | 1.33 | 50  | 210529  | 40.816  | ug/l | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 231957  | 45.839  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 211002  | 42.094  | ug/l | 100    |
| 6) Chloroethane               | 1.72 | 64  | 148764  | 45.446  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 370653  | 46.824  | ug/l | 98     |
| 8) Diethyl Ether              | 2.19 | 74  | 135073  | 45.335  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 216758  | 46.034  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 280257  | 40.461  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 245258  | 243.814 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 194951  | 44.586  | ug/l | 99     |
| 13) Acrolein                  | 2.29 | 56  | 110462  | 234.176 | ug/l | 98     |
| 14) Allyl chloride            | 2.73 | 41  | 334951  | 47.015  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 591458  | 237.681 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 615906  | 276.618 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 481157  | 42.419  | ug/l | 100    |
| 18) Methyl Acetate            | 2.78 | 43  | 325213  | 55.987  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 656124  | 46.319  | ug/l | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 216189  | 47.516  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 202981  | 43.579  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.87 | 45  | 638774  | 48.744  | ug/l | 100    |
| 23) Vinyl Acetate             | 3.82 | 43  | 2745458 | 252.465 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 369604  | 49.112  | ug/l | 99     |
| 25) 2-Butanone                | 4.70 | 43  | 845958  | 266.977 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 282600  | 49.308  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 238193  | 46.820  | ug/l | 99     |
| 28) Bromochloromethane        | 5.02 | 49  | 170624  | 49.301  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 522288  | 262.079 | ug/l | 100    |
| 30) Chloroform                | 5.21 | 83  | 384083  | 48.909  | ug/l | 99     |
| 31) Cyclohexane               | 5.57 | 56  | 317241  | 46.935  | ug/l | 96     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 333187  | 50.264  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 275037  | 45.951  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.85 | 43  | 297771  | 49.214  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 300502  | 51.750  | ug/l | 98     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX021519\  
 Data File : VX007537.D  
 Acq On : 14 Feb 2019 11:07  
 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  
 2/15/2019 10:10:05 AM

Quant Time: Feb 15 02:44:44 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X020119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Feb 02 01:32:36 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|----------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 345789   | 47.750   | ug/l   | 98       |
| 40) Benzene                    | 6.14  | 78   | 855989   | 48.550   | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.06  | 41   | 168696   | 52.022   | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 291640   | 47.808   | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 475092   | 50.871   | ug/l   | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 245986   | 46.324   | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 215848   | 48.862   | ug/l   | 96       |
| 46) Dibromomethane             | 7.66  | 93   | 153947   | 47.948   | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 283026   | 52.014   | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 243514   | 52.129   | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 109029   | 1026.119 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1569761  | 255.332  | ug/l   | 100      |
| 52) Toluene                    | 8.78  | 92   | 544143   | 47.835   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 300785   | 51.461   | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 338163   | 52.611   | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 233124   | 49.164   | ug/l   | 97       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 328534   | 50.025   | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 366603   | 48.616   | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 873601   | 252.371  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 1221269  | 255.276  | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.58  | 129  | 245377   | 54.715   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 247252   | 49.238   | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 253134   | 44.249   | ug/l   | 99       |
| 65) Chlorobenzene              | 10.13 | 112  | 626832   | 47.327   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 230860   | 51.988   | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 1045587  | 49.021   | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 826954   | 97.534   | ug/l   | 100      |
| 69) o-Xylene                   | 10.69 | 106  | 400543   | 49.095   | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 657504   | 49.693   | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 185228   | 47.755   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 1076554  | 50.116   | ug/l   | 98       |
| 74) N-amyl acetate             | 10.90 | 43   | 417849   | 50.291   | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 334814   | 51.143   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 285197m  | 46.383   | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 287355   | 47.477   | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 1219384  | 51.766   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 700310   | 48.997   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 882686   | 50.226   | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 96716    | 48.735   | ug/l   | 95       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 812530   | 49.130   | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 878571   | 50.494   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 907456   | 50.861   | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1086560  | 51.596   | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 966495   | 50.842   | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 521105   | 47.975   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 516177   | 46.840   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 835101   | 51.067   | ug/l   | 100      |
| 90) Hexachloroethane           | 12.60 | 117  | 161849   | 56.887   | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 512195   | 47.382   | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 71188    | 52.296   | ug/l   | 99       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX021519\  
Data File : VX007537.D  
Acq On : 14 Feb 2019 11:07  
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  
2/15/2019 10:10:05 AM

Quant Time: Feb 15 02:44:44 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X020119W.M  
Quant Title : SW846 8260  
QLast Update : Sat Feb 02 01:32:36 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 355150   | 48.717 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 172068   | 48.609 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 1075193  | 50.435 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 354055   | 48.249 | ug/l  | 100      |

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

