

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX091818\  
 Data File : VX004671.D  
 Acq On : 18 Sep 2018 21:36  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/19/2018 12:51:26 PM

Quant Time: Sep 19 07:20:13 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 02:17:23 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 278313   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 369508   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 327192   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 200921   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 150255   | 41.87 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 83.74% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 138146   | 40.86 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 81.72% |      |
| 50) Toluene-d8            | 8.72   | 98  | 482206   | 42.52 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 85.04% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 178856   | 44.19 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 88.38% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 126634  | 48.55  | ug/l | 95     |
| 3) Chloromethane              | 1.32 | 50  | 169941  | 47.34  | ug/l | 97     |
| 4) Vinyl Chloride             | 1.40 | 62  | 182710  | 49.59  | ug/l | 100    |
| 5) Bromomethane               | 1.64 | 94  | 72840   | 47.15  | ug/l | 99     |
| 6) Chloroethane               | 1.71 | 64  | 112958  | 47.41  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 235553  | 48.23  | ug/l | 100    |
| 8) Diethyl Ether              | 2.18 | 74  | 109505  | 50.01  | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 150023  | 48.42  | ug/l | 97     |
| 10) Methyl Iodide             | 2.51 | 142 | 162235  | 44.33  | ug/l | 96     |
| 11) Tert butyl alcohol        | 3.07 | 59  | 223676  | 261.22 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 145314  | 49.97  | ug/l | 98     |
| 13) Acrolein                  | 2.29 | 56  | 62183   | 183.97 | ug/l | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 285924  | 47.82  | ug/l | 94     |
| 15) Acrylonitrile             | 3.15 | 53  | 508122  | 246.42 | ug/l | 99     |
| 16) Acetone                   | 2.45 | 43  | 385365  | 220.02 | ug/l | 98     |
| 17) Carbon Disulfide          | 2.56 | 76  | 381121  | 45.34  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 251402  | 51.16  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 525188  | 51.47  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 172226  | 47.93  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 161066  | 50.12  | ug/l | 95     |
| 22) Diisopropyl ether         | 3.87 | 45  | 558157  | 51.84  | ug/l | 96     |
| 23) Vinyl Acetate             | 3.82 | 43  | 2185634 | 250.83 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 296974  | 48.85  | ug/l | 98     |
| 25) 2-Butanone                | 4.70 | 43  | 642059  | 230.33 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 189904  | 45.48  | ug/l | 95     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 185563  | 51.73  | ug/l | 97     |
| 28) Bromochloromethane        | 5.02 | 49  | 125298  | 45.06  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.15 | 42  | 422312  | 251.22 | ug/l | 99     |
| 30) Chloroform                | 5.21 | 83  | 299507  | 50.46  | ug/l | 97     |
| 31) Cyclohexane               | 5.57 | 56  | 274478  | 52.88  | ug/l | 90     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 246453  | 51.56  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 221408  | 49.35  | ug/l | 97     |
| 37) Ethyl Acetate             | 4.86 | 43  | 240228  | 47.08  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 211005  | 48.16  | ug/l | 93     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 29 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 9/19/2018 12:51:26 PM

Quant Time: Sep 19 07:20:13 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Sep 12 02:17:23 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 240180   | 51.31   | ug/l  | 97       |
| 40) Benzene                    | 6.14  | 78   | 619255   | 46.52   | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.07  | 41   | 137818   | 49.03   | ug/l  | 98       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 204830   | 46.40   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 336841   | 49.71   | ug/l  | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 181450   | 52.47   | ug/l  | 99       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 159458   | 49.79   | ug/l  | 99       |
| 46) Dibromomethane             | 7.66  | 93   | 100643   | 49.74   | ug/l  | 97       |
| 47) Bromodichloromethane       | 7.90  | 83   | 189044   | 49.41   | ug/l  | 100      |
| 48) Methyl methacrylate        | 7.77  | 41   | 171199   | 51.05   | ug/l  | 97       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 87508    | 1102.44 | ug/l  | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 1110340  | 232.18  | ug/l  | 99       |
| 52) Toluene                    | 8.79  | 92   | 381530   | 48.65   | ug/l  | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 214413   | 47.97   | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 235821   | 51.76   | ug/l  | 95       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 157338   | 46.60   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 241826   | 50.62   | ug/l  | 96       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 257577   | 46.95   | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 564757   | 232.57  | ug/l  | 98       |
| 59) 2-Hexanone                 | 9.50  | 43   | 837797   | 228.40  | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 158040   | 49.72   | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 160778   | 49.84   | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 220273   | 53.92   | ug/l  | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 435860   | 53.63   | ug/l  | 95       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 153674   | 54.83   | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.26 | 91   | 732199   | 55.41   | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 569919   | 111.96  | ug/l  | 98       |
| 69) o-Xylene                   | 10.70 | 106  | 280762   | 57.37   | ug/l  | 100      |
| 70) Styrene                    | 10.71 | 104  | 469656   | 57.93   | ug/l  | 99       |
| 71) Bromoform                  | 10.86 | 173  | 126216   | 54.85   | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 751988   | 56.83   | ug/l  | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 307877   | 55.28   | ug/l  | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 210460   | 49.31   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 212933m  | 52.68   | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 201816   | 55.18   | ug/l  | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 852605   | 56.04   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 504475   | 54.67   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 629191   | 56.56   | ug/l  | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 70301    | 55.43   | ug/l  | 92       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 587219   | 54.52   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 597033   | 56.37   | ug/l  | 96       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 651316   | 57.35   | ug/l  | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 771273   | 57.15   | ug/l  | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 695342   | 58.35   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 374572   | 54.89   | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 375720   | 53.29   | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 599696   | 55.22   | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 106299   | 55.72   | ug/l  | 95       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 374732   | 54.25   | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 50016    | 54.88   | ug/l  | 93       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 29 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
9/19/2018 12:51:26 PM

Quant Time: Sep 19 07:20:13 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X091118W.M  
Quant Title : SW846 8260  
QLast Update : Wed Sep 12 02:17:23 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 286110   | 58.50 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 142443   | 55.76 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 836189   | 60.96 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 288202   | 57.36 | ug/l  | 99       |

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

