

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX050918\  
 Data File : VX001571.D  
 Acq On : 09 May 2018 22:27  
 Operator : JC/MD  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 5/10/2018 1:52:00 PM

Quant Time: May 10 05:05:39 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sun May 06 07:59:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 231208   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 302692   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 295685   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 212813   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 160991   | 48.44 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.88% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 132116   | 49.07 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.14% |      |
| 50) Toluene-d8            | 8.72   | 98  | 468651   | 47.69 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.38% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 180666   | 47.89 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.78% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 151675  | 48.73  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 138339  | 45.64  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 149894  | 47.38  | ug/l | 100    |
| 5) Bromomethane               | 1.64 | 94  | 46169   | 30.54  | ug/l | 100    |
| 6) Chloroethane               | 1.72 | 64  | 109199  | 52.22  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 244330  | 51.32  | ug/l | 99     |
| 8) Diethyl Ether              | 2.19 | 74  | 96077   | 51.49  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 141603  | 50.73  | ug/l | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 107915  | 26.79  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.09 | 59  | 185899  | 265.32 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 130164  | 50.88  | ug/l | 99     |
| 13) Acrolein                  | 2.30 | 56  | 30502   | 219.41 | ug/l | 95     |
| 14) Allyl chloride            | 2.73 | 41  | 245419  | 51.45  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 419623  | 265.03 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 378370  | 250.74 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 315800  | 48.50  | ug/l | 100    |
| 18) Methyl Acetate            | 2.78 | 43  | 226415  | 57.11  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 469603  | 52.72  | ug/l | 100    |
| 20) Methylene Chloride        | 2.86 | 84  | 148806  | 49.81  | ug/l | 95     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 139469  | 48.85  | ug/l | 97     |
| 22) Diisopropyl ether         | 3.88 | 45  | 462525  | 51.90  | ug/l | 99     |
| 23) Vinyl Acetate             | 3.83 | 43  | 1933628 | 260.32 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 265521  | 53.33  | ug/l | 99     |
| 25) 2-Butanone                | 4.72 | 43  | 569987  | 261.31 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 163327  | 42.48  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 154821  | 50.91  | ug/l | 95     |
| 28) Bromochloromethane        | 5.03 | 49  | 115336  | 53.43  | ug/l | 97     |
| 29) Tetrahydrofuran           | 5.18 | 42  | 369436  | 264.71 | ug/l | 100    |
| 30) Chloroform                | 5.22 | 83  | 274219  | 53.47  | ug/l | 98     |
| 31) Cyclohexane               | 5.58 | 56  | 215196  | 50.33  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 242071  | 54.01  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 189960  | 49.34  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.87 | 43  | 219539  | 52.01  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 219350  | 53.42  | ug/l | 100    |

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 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 20 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
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MMDadoda  
 5/10/2018 1:52:00 PM

Quant Time: May 10 05:05:39 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050518W.M  
 Quant Title : SW846 8260  
 QLast Update : Sun May 06 07:59:25 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 227031   | 49.87   | ug/l  | 99       |
| 40) Benzene                    | 6.15  | 78   | 582787   | 51.82   | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.07  | 41   | 126086   | 52.21   | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 228706   | 52.91   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.48  | 43   | 347221   | 53.59   | ug/l  | 100      |
| 44) Trichloroethene            | 7.22  | 130  | 175432   | 51.04   | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 145149   | 51.77   | ug/l  | 98       |
| 46) Dibromomethane             | 7.67  | 93   | 102823   | 51.80   | ug/l  | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 203108   | 55.29   | ug/l  | 99       |
| 48) Methyl methacrylate        | 7.79  | 41   | 189066   | 53.59   | ug/l  | 100      |
| 49) 1,4-Dioxane                | 7.77  | 88   | 79212    | 1039.21 | ug/l  | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.66  | 43   | 1183730  | 274.93  | ug/l  | 99       |
| 52) Toluene                    | 8.79  | 92   | 387656   | 52.72   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 8.44  | 75   | 225288   | 54.27   | ug/l  | 98       |
| 54) cis-1,3-Dichloropropene    | 9.05  | 75   | 203763   | 47.59   | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 156187   | 52.72   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 9.19  | 69   | 228851   | 53.59   | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 256893   | 52.44   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 612423   | 292.38  | ug/l  | 99       |
| 59) 2-Hexanone                 | 9.51  | 43   | 892874   | 270.81  | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 171444   | 56.51   | ug/l  | 99       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 165684   | 53.26   | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 212909   | 51.66   | ug/l  | 99       |
| 65) Chlorobenzene              | 10.15 | 112  | 439870   | 50.72   | ug/l  | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 166695   | 53.74   | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 731042   | 51.43   | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.37 | 106  | 584216   | 104.02  | ug/l  | 99       |
| 69) o-Xylene                   | 10.71 | 106  | 284661   | 52.15   | ug/l  | 99       |
| 70) Styrene                    | 10.72 | 104  | 471629   | 53.19   | ug/l  | 100      |
| 71) Bromoform                  | 10.87 | 173  | 140458   | 47.29   | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 760765   | 51.64   | ug/l  | 100      |
| 74) N-amyl acetate             | 6.48  | 43   | 347221   | 51.89   | ug/l  | # 100    |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 227495   | 52.28   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 223080m  | 51.69   | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 216657   | 50.58   | ug/l  | 99       |
| 78) n-propylbenzene            | 11.37 | 91   | 838622   | 52.27   | ug/l  | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 507554   | 51.41   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 640283   | 52.20   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 57606    | 43.19   | ug/l  | 98       |
| 82) 4-Chlorotoluene            | 11.52 | 91   | 589611   | 51.77   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 637502   | 52.23   | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 661086   | 52.44   | ug/l  | 100      |
| 85) sec-Butylbenzene           | 11.95 | 105  | 772486   | 52.73   | ug/l  | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 708324   | 52.71   | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 389448   | 50.86   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 389763   | 49.91   | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.40 | 91   | 573102   | 51.47   | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 108885   | 53.81   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 398929   | 51.21   | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 52996    | 55.44   | ug/l  | 99       |

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Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 20 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
5/10/2018 1:52:00 PM

Quant Time: May 10 05:05:39 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050518W.M  
Quant Title : SW846 8260  
QLast Update : Sun May 06 07:59:25 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 291549   | 51.15 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 154180   | 49.43 | ug/l  | 100      |
| 95) Naphthalene            | 13.84 | 128  | 863486   | 54.77 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.03 | 180  | 302824   | 51.77 | ug/l  | 99       |

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

