

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX082119\  
 Data File : VX011721.D  
 Acq On : 21 Aug 2019 08:56  
 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  
 8/22/2019 10:00:58 AM

Quant Time: Aug 21 13:32:58 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 16 04:15:26 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 304983   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 421924   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 393167   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 199136   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 141378   | 49.99 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.98%  |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 129802   | 47.04 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.08%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 425915   | 49.53 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.06%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 183517   | 50.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.12% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 174059  | 58.062  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 137519  | 44.167  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 131475  | 46.744  | ug/l | 98     |
| 5) Bromomethane               | 1.63 | 94  | 69942   | 55.497  | ug/l | 99     |
| 6) Chloroethane               | 1.71 | 64  | 73612   | 55.298  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 219348  | 56.304  | ug/l | 99     |
| 8) Diethyl Ether              | 2.18 | 74  | 71872   | 53.781  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 142202  | 52.846  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 184138  | 48.037  | ug/l | 99     |
| 11) Tert butyl alcohol        | 3.04 | 59  | 171485  | 247.144 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 128995  | 49.605  | ug/l | 99     |
| 13) Acrolein                  | 2.29 | 56  | 48032   | 226.193 | ug/l | 97     |
| 14) Allyl chloride            | 2.72 | 41  | 222648  | 51.469  | ug/l | 97     |
| 15) Acrylonitrile             | 3.13 | 53  | 404655  | 254.812 | ug/l | 100    |
| 16) Acetone                   | 2.43 | 43  | 426381  | 299.819 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 299985  | 48.956  | ug/l | 99     |
| 18) Methyl Acetate            | 2.76 | 43  | 230532  | 52.269  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 462440  | 54.602  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 151817  | 50.844  | ug/l | 96     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 143850  | 52.200  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.85 | 45  | 450259  | 52.265  | ug/l | 94     |
| 23) Vinyl Acetate             | 3.81 | 43  | 1815743 | 266.164 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.68 | 63  | 253420  | 52.029  | ug/l | 99     |
| 25) 2-Butanone                | 4.66 | 43  | 558185  | 250.013 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 214185  | 58.426  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 163839  | 51.000  | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 99907   | 46.725  | ug/l | 100    |
| 29) Tetrahydrofuran           | 5.11 | 42  | 323984  | 221.220 | ug/l | 97     |
| 30) Chloroform                | 5.20 | 83  | 262472  | 51.061  | ug/l | 98     |
| 31) Cyclohexane               | 5.57 | 56  | 210329  | 50.154  | ug/l | 93     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 238740  | 54.014  | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 191169  | 52.994  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.82 | 43  | 187127  | 45.100  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 218121  | 54.882  | ug/l | 97     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 2 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050

Manual Integrations  
 APPROVED

MMDadoda  
 8/22/2019 10:00:58 AM

Quant Time: Aug 21 13:32:58 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Aug 16 04:15:26 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 240653   | 54.020  | ug/l   | 99       |
| 40) Benzene                    | 6.13  | 78   | 560412   | 49.991  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.03  | 41   | 106625   | 46.692  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 215695   | 55.535  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 325669   | 50.294  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 173070   | 52.042  | ug/l   | 99       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 144565   | 51.709  | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 100472   | 49.453  | ug/l   | 94       |
| 47) Bromodichloromethane       | 7.89  | 83   | 198980   | 53.341  | ug/l   | 100      |
| 48) Methyl methacrylate        | 7.76  | 41   | 163064   | 50.852  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 81239    | 952.506 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.63  | 43   | 1085829  | 256.191 | ug/l   | 100      |
| 52) Toluene                    | 8.78  | 92   | 381299   | 53.389  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 221596   | 57.238  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 238018   | 56.178  | ug/l   | 97       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 162248   | 53.422  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 242678   | 54.976  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 255705   | 52.966  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 567811   | 258.159 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 861766   | 263.664 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.58  | 129  | 180307   | 56.981  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.66  | 107  | 172743   | 53.294  | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.33  | 164  | 176210   | 54.624  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.13 | 112  | 432314   | 51.553  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 169481   | 54.072  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 745644   | 53.278  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.35 | 106  | 579036   | 107.785 | ug/l   | 97       |
| 69) o-Xylene                   | 10.69 | 106  | 278688   | 52.961  | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 489574   | 55.266  | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 145688   | 47.974  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.01 | 105  | 775223   | 59.994  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 299735   | 54.584  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 244642   | 55.036  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 219199m  | 58.049  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 219062   | 56.982  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 852164   | 61.160  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.41 | 91   | 506406   | 59.188  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 654571   | 60.303  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 73842    | 52.707  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 594177   | 59.860  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 598149   | 54.106  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 601814   | 55.226  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 699092   | 56.049  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 662606   | 56.468  | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 345004   | 52.210  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 346163   | 51.686  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 574616   | 59.564  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 103519   | 55.866  | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 342375   | 51.614  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 54155    | 53.252  | ug/l   | 90       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 2 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050

Manual Integrations  
APPROVED

MMDadoda  
8/22/2019 10:00:58 AM

Quant Time: Aug 21 13:32:58 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X081519W.M  
Quant Title : SW846 8260  
QLast Update : Fri Aug 16 04:15:26 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 282842   | 57.227 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 159015   | 59.085 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 820907   | 58.751 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 291723   | 58.519 | ug/l  | 99       |

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

