

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX041719\  
 Data File : VX009029.D  
 Acq On : 17 Apr 2019 20:51  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 4/19/2019 3:01:16 PM

Quant Time: Apr 18 04:17:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X041519W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 17 06:47:58 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 210538   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 350958   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 308739   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 142880   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 154670   | 52.13 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.26% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 113049   | 50.19 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.38% |      |
| 50) Toluene-d8            | 8.71   | 98  | 450178   | 50.12 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.24% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 157662   | 49.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.44%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 122886  | 50.675  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 150408  | 50.521  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.41 | 62  | 144875  | 49.998  | ug/l | 100    |
| 5) Bromomethane               | 1.64 | 94  | 78830   | 43.949  | ug/l | 98     |
| 6) Chloroethane               | 1.71 | 64  | 85144   | 49.970  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 164350  | 48.580  | ug/l | 98     |
| 8) Diethyl Ether              | 2.19 | 74  | 77392   | 50.021  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 104075  | 48.114  | ug/l | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 120526  | 50.877  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.06 | 59  | 169982  | 258.091 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 109805  | 48.634  | ug/l | 98     |
| 13) Acrolein                  | 2.29 | 56  | 119871  | 210.645 | ug/l | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 253931  | 51.551  | ug/l | 99     |
| 15) Acrylonitrile             | 3.14 | 53  | 441451  | 264.045 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 381847  | 248.169 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 304676  | 46.024  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 202683  | 52.780  | ug/l | 97     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 414074  | 51.471  | ug/l | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 128783  | 48.943  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 115297  | 47.877  | ug/l | 96     |
| 22) Diisopropyl ether         | 3.86 | 45  | 500482  | 52.288  | ug/l | 88     |
| 23) Vinyl Acetate             | 3.81 | 43  | 2239609 | 266.181 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 243175  | 50.611  | ug/l | 99     |
| 25) 2-Butanone                | 4.68 | 43  | 655382  | 266.476 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 149986  | 41.644  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 134510  | 49.196  | ug/l | 99     |
| 28) Bromochloromethane        | 5.02 | 49  | 116451  | 58.685  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 437162  | 265.566 | ug/l | 99     |
| 30) Chloroform                | 5.21 | 83  | 217939  | 50.688  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 233270  | 49.361  | ug/l | 97     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 180278  | 50.590  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 167997  | 46.284  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.84 | 43  | 248044  | 53.108  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 148372  | 48.218  | ug/l | 98     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 27 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 4/19/2019 3:01:16 PM

Quant Time: Apr 18 04:17:40 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X041519W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Apr 17 06:47:58 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 203290   | 46.001  | ug/l   | 99       |
| 40) Benzene                    | 6.14  | 78   | 521208   | 48.676  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 139231   | 51.941  | ug/l   | 100      |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 185628   | 48.938  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.45  | 43   | 389477   | 51.747  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 122670   | 46.756  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 149607   | 50.362  | ug/l   | 99       |
| 46) Dibromomethane             | 7.66  | 93   | 84224    | 48.718  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 168231   | 49.613  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.77  | 41   | 194294   | 52.244  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 68485    | 983.872 | ug/l   | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1238679  | 258.326 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 308227   | 48.030  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 189790   | 48.634  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 211797   | 48.470  | ug/l   | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 125510   | 49.348  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 232082   | 50.889  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 224005   | 49.466  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 606997   | 247.164 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 941437   | 254.659 | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.58  | 129  | 124441   | 51.050  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 130599   | 49.752  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 112413   | 47.929  | ug/l   | 98       |
| 65) Chlorobenzene              | 10.14 | 112  | 314222   | 48.218  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 115276   | 50.213  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 585635   | 49.161  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 420702   | 97.174  | ug/l   | 98       |
| 69) o-Xylene                   | 10.69 | 106  | 205652   | 48.819  | ug/l   | 99       |
| 70) Styrene                    | 10.71 | 104  | 358439   | 49.101  | ug/l   | 99       |
| 71) Bromoform                  | 10.85 | 173  | 90547    | 49.507  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 548909   | 50.683  | ug/l   | 100      |
| 74) N-amyl acetate             | 10.90 | 43   | 324676   | 52.212  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 197383   | 49.881  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 173389m  | 49.698  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 131350   | 48.069  | ug/l   | 98       |
| 78) n-propylbenzene            | 11.36 | 91   | 627144   | 50.452  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 370375   | 49.445  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 460121   | 50.629  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 65471    | 48.177  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 425914   | 48.958  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 428660   | 49.127  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 460098   | 49.735  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 518433   | 49.818  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 469617   | 49.084  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 227200   | 47.506  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 225193   | 46.450  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 429831   | 48.239  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 78726    | 49.883  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 227232   | 48.116  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 45741    | 50.769  | ug/l   | 96       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 27 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
4/19/2019 3:01:16 PM

Quant Time: Apr 18 04:17:40 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X041519W.M  
Quant Title : SW846 8260  
QLast Update : Wed Apr 17 06:47:58 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 158742   | 46.564 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 78154    | 45.965 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 539955   | 49.437 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 160662   | 47.764 | ug/l  | 99       |

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

