

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX020520\  
 Data File : VX014811.D  
 Acq On : 05 Feb 2020 09:46  
 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  
 2/6/2020 1:32:21 PM

Quant Time: Feb 06 03:13:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X012220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 22 12:35:15 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 424657   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 615898   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 564258   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 298438   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.04   | 65  | 225155   | 45.40 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 90.80% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 187745   | 48.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.62% |      |
| 50) Toluene-d8            | 8.71   | 98  | 703376   | 47.08 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.16% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 254434   | 47.81 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.62% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 243816  | 42.852  | ug/l | 98     |
| 3) Chloromethane              | 1.32 | 50  | 239556  | 41.699  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.41 | 62  | 281170  | 45.266  | ug/l | 100    |
| 5) Bromomethane               | 1.63 | 94  | 177868  | 42.158  | ug/l | 97     |
| 6) Chloroethane               | 1.72 | 64  | 160557  | 45.042  | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 331599  | 45.848  | ug/l | 98     |
| 8) Diethyl Ether              | 2.18 | 74  | 140185  | 44.406  | ug/l | 98     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 200154  | 47.141  | ug/l | 100    |
| 10) Methyl Iodide             | 2.50 | 142 | 270328  | 48.522  | ug/l | 98     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 206963  | 185.893 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 188260  | 44.596  | ug/l | 99     |
| 13) Acrolein                  | 2.28 | 56  | 226879  | 258.449 | ug/l | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 341381  | 44.991  | ug/l | 98     |
| 15) Acrylonitrile             | 3.13 | 53  | 565702  | 219.603 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 656796  | 241.665 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 470696  | 40.796  | ug/l | 100    |
| 18) Methyl Acetate            | 2.76 | 43  | 348729  | 44.951  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 655489  | 47.406  | ug/l | 99     |
| 20) Methylene Chloride        | 2.84 | 84  | 218293  | 43.406  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 204421  | 43.980  | ug/l | 99     |
| 22) Diisopropyl ether         | 3.84 | 45  | 709654  | 47.008  | ug/l | 92     |
| 23) Vinyl Acetate             | 3.80 | 43  | 2748451 | 238.833 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 375154  | 45.759  | ug/l | 100    |
| 25) 2-Butanone                | 4.65 | 43  | 866042  | 222.404 | ug/l | 97     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 317742  | 48.420  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 238168  | 45.783  | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 155795  | 43.244  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 493002  | 213.313 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 385174  | 47.427  | ug/l | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 337241  | 43.735  | ug/l | 94     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 325529  | 47.419  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 282152  | 49.302  | ug/l | 98     |
| 37) Ethyl Acetate             | 4.81 | 43  | 305529  | 46.613  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 280846  | 51.384  | ug/l | 95     |

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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  
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MMDadoda  
 2/6/2020 1:32:21 PM

Quant Time: Feb 06 03:13:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X012220W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Jan 22 12:35:15 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 351603   | 49.042  | ug/l   | 99       |
| 40) Benzene                    | 6.13  | 78   | 852177   | 48.193  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.03  | 41   | 170395   | 45.544  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 309824   | 50.739  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 503443   | 46.904  | ug/l   | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 240230   | 48.097  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 7.50  | 63   | 225778   | 49.562  | ug/l   | 98       |
| 46) Dibromomethane             | 7.65  | 93   | 144354   | 48.927  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.89  | 83   | 300201   | 51.878  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.76  | 41   | 247857   | 48.330  | ug/l   | 97       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 88008    | 809.562 | ug/l   | 98       |
| 51) 4-Methyl-2-Pentanone       | 8.63  | 43   | 1585017  | 233.969 | ug/l   | 100      |
| 52) Toluene                    | 8.78  | 92   | 545483   | 50.184  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 327489   | 52.559  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 364941   | 53.241  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 225053   | 50.571  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 345740   | 45.975  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.36  | 76   | 371530   | 48.837  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 597587   | 267.009 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.48  | 43   | 1253413  | 238.432 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.57  | 129  | 243243   | 52.365  | ug/l   | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 237125   | 50.396  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.33  | 164  | 262681   | 47.030  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.13 | 112  | 593840   | 49.203  | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 225325   | 50.635  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 1055141  | 51.201  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.35 | 106  | 800489   | 102.532 | ug/l   | 99       |
| 69) o-Xylene                   | 10.69 | 106  | 384813   | 51.056  | ug/l   | 100      |
| 70) Styrene                    | 10.71 | 104  | 674722   | 53.366  | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 186751   | 52.772  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 1042547  | 49.682  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.89 | 43   | 440610   | 47.916  | ug/l   | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 333705   | 44.539  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 281443m  | 40.534  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 274256   | 48.650  | ug/l   | 96       |
| 78) n-propylbenzene            | 11.35 | 91   | 1201822  | 50.456  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 707031   | 49.059  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 892617   | 51.252  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 112770   | 46.220  | ug/l   | 99       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 822960   | 50.158  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.76 | 119  | 832713   | 50.882  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 890625   | 50.983  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1025015  | 51.126  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 966281   | 52.152  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 491292   | 48.493  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 497704   | 49.042  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 836353   | 51.828  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 172277   | 50.059  | ug/l   | 97       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 489275   | 48.624  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 72511    | 45.045  | 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  
2/6/2020 1:32:21 PM

Quant Time: Feb 06 03:13:18 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X012220W.M  
Quant Title : SW846 8260  
QLast Update : Wed Jan 22 12:35:15 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 345876   | 53.315 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 171372   | 51.324 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 988230   | 47.290 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 340764   | 51.948 | ug/l  | 98       |

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

