

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX111219\  
 Data File : VX013396.D  
 Acq On : 12 Nov 2019 19:34  
 Operator : JC/SP  
 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDCCC050EC

Manual Integrations  
 APPROVED

MMDadoda  
 11/13/2019 9:38:39 AM

Quant Time: Nov 13 03:49:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X103119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 07:06:38 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 710422   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 1084206  | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 989859   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 495408   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 418477   | 49.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.44%  |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 349996   | 51.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.94% |      |
| 50) Toluene-d8            | 8.71   | 98  | 1323207  | 51.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.22% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 477789   | 51.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.28% |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 375841  | 45.915  | ug/l | 99     |
| 3) Chloromethane              | 1.31 | 50  | 426430  | 48.040  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 485601  | 48.052  | ug/l | 99     |
| 5) Bromomethane               | 1.62 | 94  | 296162  | 42.054  | ug/l | 98     |
| 6) Chloroethane               | 1.71 | 64  | 265658  | 45.889  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 532238  | 44.578  | ug/l | 100    |
| 8) Diethyl Ether              | 2.18 | 74  | 246041  | 46.601  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 326820  | 49.112  | ug/l | 100    |
| 10) Methyl Iodide             | 2.50 | 142 | 420974  | 51.096  | ug/l | 98     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 489536  | 220.679 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 329798  | 50.609  | ug/l | 99     |
| 13) Acrolein                  | 2.28 | 56  | 307342  | 255.636 | ug/l | 98     |
| 14) Allyl chloride            | 2.72 | 41  | 613259  | 51.794  | ug/l | 96     |
| 15) Acrylonitrile             | 3.13 | 53  | 1038714 | 250.672 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 944815  | 225.064 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 834959  | 47.871  | ug/l | 100    |
| 18) Methyl Acetate            | 2.76 | 43  | 607663  | 52.431  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 1134390 | 52.192  | ug/l | 96     |
| 20) Methylene Chloride        | 2.84 | 84  | 374861  | 48.330  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.15 | 96  | 351450  | 49.532  | ug/l | 97     |
| 22) Diisopropyl ether         | 3.84 | 45  | 1214907 | 53.147  | ug/l | 91     |
| 23) Vinyl Acetate             | 3.80 | 43  | 5000672 | 255.651 | ug/l | 98     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 657034  | 51.381  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 1510282 | 245.235 | ug/l | 100    |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 513220  | 50.450  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 413700  | 52.049  | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 182015  | 50.131  | ug/l | 98     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 946511  | 249.402 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 642410  | 50.876  | ug/l | 96     |
| 31) Cyclohexane               | 5.57 | 56  | 573279  | 49.822  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 543023  | 49.971  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 476752  | 51.257  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.81 | 43  | 573264  | 49.879  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.77 | 117 | 470232  | 51.700  | ug/l | 99     |

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 Sample : VSTDCCC050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 24 Sample Multiplier: 1

Instrument :  
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 VSTDCCC050EC

Manual Integrations  
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MMDadoda  
 11/13/2019 9:38:39 AM

Quant Time: Nov 13 03:49:42 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X103119W.M  
 Quant Title : SW846 8260  
 QLast Update : Sat Nov 02 07:06:38 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc     | Units | Dev(Min) |
|--------------------------------|-------|------|----------|----------|-------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 578682   | 49.932   | ug/l  | 99       |
| 40) Benzene                    | 6.13  | 78   | 1480886  | 51.113   | ug/l  | 98       |
| 41) Methacrylonitrile          | 5.03  | 41   | 326472   | 50.680   | ug/l  | 97       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 523003   | 50.045   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 919984   | 51.405   | ug/l  | 99       |
| 44) Trichloroethene            | 7.20  | 130  | 392576   | 49.225   | ug/l  | 98       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 382978   | 51.879   | ug/l  | 99       |
| 46) Dibromomethane             | 7.65  | 93   | 248237   | 49.250   | ug/l  | 96       |
| 47) Bromodichloromethane       | 7.89  | 83   | 499880   | 52.594   | ug/l  | 95       |
| 48) Methyl methacrylate        | 7.76  | 41   | 461830   | 51.695   | ug/l  | 98       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 206880   | 1011.188 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 2939791  | 250.369  | ug/l  | 99       |
| 52) Toluene                    | 8.78  | 92   | 934981   | 52.067   | ug/l  | 98       |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 564303   | 54.296   | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 618090   | 53.165   | ug/l  | 97       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 389751   | 52.364   | ug/l  | 100      |
| 56) Ethyl methacrylate         | 9.17  | 69   | 627373   | 49.393   | ug/l  | 97       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 648976   | 51.364   | ug/l  | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 1277254  | 250.974  | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.48  | 43   | 2278222  | 251.076  | ug/l  | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 413433   | 54.312   | ug/l  | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 405716   | 51.333   | ug/l  | 100      |
| 64) Tetrachloroethene          | 9.33  | 164  | 349888   | 49.377   | ug/l  | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 1015464  | 50.671   | ug/l  | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 380461   | 51.705   | ug/l  | 100      |
| 67) Ethyl Benzene              | 10.25 | 91   | 1776599  | 51.366   | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.35 | 106  | 1363825  | 104.263  | ug/l  | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 659311   | 51.483   | ug/l  | 99       |
| 70) Styrene                    | 10.71 | 104  | 1147272  | 53.593   | ug/l  | 98       |
| 71) Bromoform                  | 10.85 | 173  | 324397   | 47.705   | ug/l  | 100      |
| 73) Isopropylbenzene           | 11.01 | 105  | 1763687  | 53.695   | ug/l  | 100      |
| 74) N-amyl acetate             | 10.89 | 43   | 840647   | 55.191   | ug/l  | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 626099   | 52.250   | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 499305m  | 49.621   | ug/l  |          |
| 77) Bromobenzene               | 11.25 | 156  | 460497   | 52.590   | ug/l  | 99       |
| 78) n-propylbenzene            | 11.35 | 91   | 1994833  | 54.520   | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 1168456  | 53.004   | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 1470687  | 53.755   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 205905   | 52.671   | ug/l  | 98       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 1355430  | 52.525   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 1504032  | 54.611   | ug/l  | 100      |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 1476980  | 53.815   | ug/l  | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 1718482  | 54.292   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 1590926  | 54.584   | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 812224   | 52.038   | ug/l  | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 814225   | 51.201   | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.39 | 91   | 1381982  | 54.339   | ug/l  | 100      |
| 90) Hexachloroethane           | 12.59 | 117  | 286443   | 55.159   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 824758   | 52.862   | ug/l  | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 137312   | 47.034   | ug/l  | 99       |

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Sample : VSTDCCC050  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 24 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDCCC050EC

Manual Integrations  
APPROVED

MMDadoda  
11/13/2019 9:38:39 AM

Quant Time: Nov 13 03:49:42 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X103119W.M  
Quant Title : SW846 8260  
QLast Update : Sat Nov 02 07:06:38 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 578947   | 53.197 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 261148   | 49.047 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 1820077  | 53.303 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 574405   | 52.628 | ug/l  | 99       |

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

