

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX080618\  
 Data File : VX003870.D  
 Acq On : 06 Aug 2018 19:07  
 Operator : JC/MD  
 Sample : VSTDICV050  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 ICSVX080618

Manual Integrations  
 APPROVED

MMDadoda  
 8/7/2018 1:13:14 PM

Quant Time: Aug 07 07:52:50 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 07:45:48 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 368698   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 535502   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 483212   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 277224   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 232832   | 47.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 95.28%  |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 199436   | 49.16 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 98.32%  |      |
| 50) Toluene-d8            | 8.72   | 98  | 781933   | 49.56 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.12%  |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 269127   | 52.72 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.44% |      |

## Target Compounds

|                               |      |     |         |        |      | Qvalue |
|-------------------------------|------|-----|---------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 188441  | 50.43  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 242582  | 47.72  | ug/l | 99     |
| 4) Vinyl Chloride             | 1.40 | 62  | 244028  | 48.14  | ug/l | 98     |
| 5) Bromomethane               | 1.64 | 94  | 145674  | 55.42  | ug/l | 100    |
| 6) Chloroethane               | 1.71 | 64  | 170528  | 52.58  | ug/l | 98     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 323688  | 48.36  | ug/l | 98     |
| 8) Diethyl Ether              | 2.19 | 74  | 145702  | 48.43  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 198814  | 47.52  | ug/l | 100    |
| 10) Methyl Iodide             | 2.51 | 142 | 258844  | 49.73  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.08 | 59  | 296217  | 252.22 | ug/l | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 192423  | 48.62  | ug/l | 99     |
| 13) Acrolein                  | 2.29 | 56  | 146077  | 241.76 | ug/l | 100    |
| 14) Allyl chloride            | 2.73 | 41  | 372864  | 48.88  | ug/l | 100    |
| 15) Acrylonitrile             | 3.15 | 53  | 677571  | 241.78 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 674027  | 231.81 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.56 | 76  | 556852  | 49.65  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 305432  | 48.24  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 695993  | 49.63  | ug/l | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 225496  | 49.18  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 212429  | 47.28  | ug/l | 100    |
| 22) Diisopropyl ether         | 3.87 | 45  | 677366  | 48.31  | ug/l | 100    |
| 23) Vinyl Acetate             | 3.82 | 43  | 2901921 | 248.72 | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 398857  | 47.88  | ug/l | 100    |
| 25) 2-Butanone                | 4.71 | 43  | 1080115 | 247.07 | ug/l | 100    |
| 26) 1,2-Dichloropropane       | 4.58 | 77  | 273795  | 45.58  | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 237108  | 48.64  | ug/l | 98     |
| 28) Bromochloromethane        | 5.02 | 49  | 173607  | 48.70  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.17 | 42  | 558408  | 248.52 | ug/l | 100    |
| 30) Chloroform                | 5.21 | 83  | 379162  | 48.35  | ug/l | 100    |
| 31) Cyclohexane               | 5.57 | 56  | 349177  | 49.57  | ug/l | 99     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 326403  | 49.64  | ug/l | 100    |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 289216  | 48.22  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.87 | 43  | 328408  | 49.78  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 283340  | 49.64  | ug/l | 96     |

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 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
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Manual Integrations  
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MMDadoda  
 8/7/2018 1:13:14 PM

Quant Time: Aug 07 07:52:50 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Aug 07 07:45:48 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 355842   | 50.32   | ug/l  | 98       |
| 40) Benzene                    | 6.15  | 78   | 880111   | 48.87   | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.06  | 41   | 182674   | 50.27   | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 296120   | 48.63   | ug/l  | 99       |
| 43) Isopropyl Acetate          | 6.47  | 43   | 503238   | 50.69   | ug/l  | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 240736   | 48.88   | ug/l  | 93       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 225144   | 48.41   | ug/l  | 97       |
| 46) Dibromomethane             | 7.67  | 93   | 146392   | 48.48   | ug/l  | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 284228   | 49.97   | ug/l  | 100      |
| 48) Methyl methacrylate        | 7.78  | 41   | 262787   | 52.07   | ug/l  | 99       |
| 49) 1,4-Dioxane                | 7.76  | 88   | 123729   | 1040.71 | ug/l  | 100      |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 2131985  | 259.07  | ug/l  | 100      |
| 52) Toluene                    | 8.79  | 92   | 569981   | 50.09   | ug/l  | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 331649   | 51.58   | ug/l  | 100      |
| 54) cis-1,3-Dichloropropene    | 8.44  | 75   | 357480   | 51.57   | ug/l  | 98       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 229209   | 49.29   | ug/l  | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 355389   | 52.68   | ug/l  | 100      |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 389479   | 50.05   | ug/l  | 98       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 887787   | 267.60  | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.50  | 43   | 1599305  | 259.99  | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 220206   | 50.79   | ug/l  | 98       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 237055   | 50.92   | ug/l  | 96       |
| 64) Tetrachloroethene          | 9.34  | 164  | 225916   | 47.53   | ug/l  | 96       |
| 65) Chlorobenzene              | 10.14 | 112  | 605280   | 48.14   | ug/l  | 96       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 210571   | 48.72   | ug/l  | 96       |
| 67) Ethyl Benzene              | 10.26 | 91   | 1029668  | 50.03   | ug/l  | 99       |
| 68) m/p-Xylenes                | 10.36 | 106  | 826024   | 102.71  | ug/l  | 96       |
| 69) o-Xylene                   | 10.70 | 106  | 402018   | 52.95   | ug/l  | 97       |
| 70) Styrene                    | 10.71 | 104  | 659519   | 53.06   | ug/l  | 99       |
| 71) Bromoform                  | 10.86 | 173  | 171146   | 46.89   | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 1048707  | 51.14   | ug/l  | 99       |
| 74) N-amyl acetate             | 6.47  | 43   | 503238   | 47.19   | ug/l  | # 100    |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 339920   | 48.36   | ug/l  | 98       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 298684m  | 48.78   | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 274689   | 50.21   | ug/l  | 97       |
| 78) n-propylbenzene            | 11.36 | 91   | 1202993  | 52.24   | ug/l  | 98       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 714924   | 50.92   | ug/l  | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 867915   | 51.90   | ug/l  | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 105693   | 47.09   | ug/l  | 93       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 859713   | 52.26   | ug/l  | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 849380   | 51.63   | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 894804   | 53.22   | ug/l  | 98       |
| 85) sec-Butylbenzene           | 11.95 | 105  | 983618   | 50.66   | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 899550   | 51.63   | ug/l  | 99       |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 474464   | 46.92   | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 483424   | 49.85   | ug/l  | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 759541   | 50.03   | ug/l  | 98       |
| 90) Hexachloroethane           | 12.60 | 117  | 136098   | 48.11   | ug/l  | 99       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 484576   | 48.34   | ug/l  | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 70766    | 49.15   | ug/l  | 99       |

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Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
ICVVX080618

Manual Integrations  
APPROVED

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8/7/2018 1:13:14 PM

Quant Time: Aug 07 07:52:50 2018  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X080618W.M  
Quant Title : SW846 8260  
QLast Update : Tue Aug 07 07:45:48 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 334650   | 46.42 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 150538   | 47.35 | ug/l  | 99       |
| 95) Naphthalene            | 13.83 | 128  | 1053375  | 51.01 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 343921   | 47.80 | ug/l  | 99       |

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

