

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX042618\  
 Data File : VX001137.D  
 Acq On : 26 Apr 2018 17:55  
 Operator : JC/MD  
 Sample : VSTDIC020  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC020

Manual Integrations  
 APPROVED

MMDadoda  
 4/30/2018 6:03:25 PM

Quant Time: Apr 27 01:33:50 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X042618W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Apr 27 01:18:12 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 226770   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 317862   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 298999   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 195642   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |        |      |
|---------------------------|--------|-----|----------|-------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.08   | 65  | 66376    | 22.43 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 44.86% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 51562    | 21.02 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 42.04% |      |
| 50) Toluene-d8            | 8.72   | 98  | 193711   | 21.31 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 42.62% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 73939    | 19.49 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 38.98% |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 46088  | 17.24  | ug/l | 95     |
| 3) Chloromethane              | 1.32 | 50  | 50354  | 19.68  | ug/l | 98     |
| 4) Vinyl Chloride             | 1.40 | 62  | 52797  | 19.70  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 39362  | 23.65  | ug/l | 97     |
| 6) Chloroethane               | 1.73 | 64  | 34173  | 21.10  | ug/l | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 84431  | 20.75  | ug/l | 99     |
| 8) Diethyl Ether              | 2.19 | 74  | 32322  | 21.16  | ug/l | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 47538  | 20.09  | ug/l | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 34125  | 17.00  | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.09 | 59  | 71799  | 146.07 | ug/l | 99     |
| 12) 1,1-Dichloroethene        | 2.38 | 96  | 44192  | 20.02  | ug/l | 97     |
| 13) Acrolein                  | 2.30 | 56  | 23892  | 144.06 | ug/l | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 84119  | 20.82  | ug/l | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 145726 | 118.96 | ug/l | 100    |
| 16) Acetone                   | 2.45 | 43  | 144764 | 126.94 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 111058 | 17.87  | ug/l | 99     |
| 18) Methyl Acetate            | 2.79 | 43  | 72963  | 22.06  | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 167109 | 22.02  | ug/l | 97     |
| 20) Methylene Chloride        | 2.86 | 84  | 51999  | 20.37  | ug/l | 94     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 49280  | 19.95  | ug/l | 93     |
| 22) Diisopropyl ether         | 3.88 | 45  | 162468 | 20.78  | ug/l | 94     |
| 23) Vinyl Acetate             | 3.84 | 43  | 712139 | 108.53 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 85830  | 19.76  | ug/l | 99     |
| 25) 2-Butanone                | 4.72 | 43  | 212932 | 120.24 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 67648  | 18.41  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 54528  | 19.84  | ug/l | 99     |
| 28) Bromochloromethane        | 5.03 | 49  | 40316  | 23.28  | ug/l | 99     |
| 29) Tetrahydrofuran           | 5.18 | 42  | 134276 | 119.83 | ug/l | 99     |
| 30) Chloroform                | 5.23 | 83  | 93188  | 20.60  | ug/l | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 73767  | 18.46  | ug/l | 98     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 77743  | 19.28  | ug/l | 97     |
| 36) 1,1-Dichloropropene       | 5.81 | 75  | 65513  | 17.79  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.87 | 43  | 81811  | 23.08  | ug/l | 99     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 66562  | 17.81  | ug/l | 99     |

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 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 5 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDIC020

Manual Integrations  
 APPROVED

MMDadoda  
 4/30/2018 6:03:25 PM

Quant Time: Apr 27 01:33:50 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X042618W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Apr 27 01:18:12 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.47  | 83   | 74981    | 17.64  | ug/l   | 98       |
| 40) Benzene                    | 6.15  | 78   | 198526   | 19.18  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.07  | 41   | 44845    | 20.50  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.21  | 62   | 81018    | 20.20  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.48  | 43   | 125864   | 20.92  | ug/l   | 99       |
| 44) Trichloroethene            | 7.22  | 130  | 58836    | 18.71  | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 7.52  | 63   | 52800    | 20.20  | ug/l   | 99       |
| 46) Dibromomethane             | 7.67  | 93   | 35979    | 19.61  | ug/l   | 98       |
| 47) Bromodichloromethane       | 7.91  | 83   | 65226    | 19.31  | ug/l   | 100      |
| 48) Methyl methacrylate        | 7.79  | 41   | 67550    | 20.95  | ug/l   | 100      |
| 49) 1,4-Dioxane                | 7.77  | 88   | 27151    | 528.61 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.66  | 43   | 428064   | 115.40 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 127725   | 18.93  | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 8.45  | 75   | 76706    | 19.04  | ug/l   | 97       |
| 54) cis-1,3-Dichloropropene    | 9.05  | 75   | 70093    | 18.47  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.22  | 97   | 54449    | 20.09  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.19  | 69   | 80624    | 20.15  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 89377    | 19.93  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 189360   | 97.88  | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.51  | 43   | 331199   | 116.12 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 54552    | 19.24  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 57865    | 20.17  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 62502    | 19.75  | ug/l   | 99       |
| 65) Chlorobenzene              | 10.15 | 112  | 151603   | 19.09  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 53739    | 19.67  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.26 | 91   | 249036   | 18.96  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.37 | 106  | 194530   | 37.57  | ug/l   | 99       |
| 69) o-Xylene                   | 10.71 | 106  | 95025    | 18.98  | ug/l   | 98       |
| 70) Styrene                    | 10.72 | 104  | 158071   | 19.18  | ug/l   | 100      |
| 71) Bromoform                  | 10.87 | 173  | 43211    | 19.14  | ug/l # | 97       |
| 73) Isopropylbenzene           | 11.02 | 105  | 249261   | 19.59  | ug/l   | 99       |
| 74) N-amyl acetate             | 6.48  | 43   | 125864   | 22.41  | ug/l # | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 83687    | 22.64  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 78500m   | 22.49  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 74553    | 20.12  | ug/l   | 100      |
| 78) n-propylbenzene            | 11.37 | 91   | 282234   | 19.33  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 172540   | 19.91  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 214929   | 19.88  | ug/l   | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 17919    | 18.45  | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 11.52 | 91   | 205190   | 19.61  | ug/l   | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 210048   | 19.30  | ug/l   | 96       |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 222100   | 19.93  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.95 | 105  | 252262   | 19.48  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 231753   | 19.32  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 133181   | 19.29  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 134948   | 18.99  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.40 | 91   | 197002   | 18.53  | ug/l   | 100      |
| 90) Hexachloroethane           | 12.60 | 117  | 31640    | 18.68  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 134303   | 19.97  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 18310    | 23.18  | ug/l   | 99       |

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Acq On : 26 Apr 2018 17:55  
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Sample : VSTDICC020  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 5 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDICC020

Manual Integrations  
APPROVED

MMDadoda  
4/30/2018 6:03:25 PM

Quant Time: Apr 27 01:33:50 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X042618W.M  
Quant Title : SW846 8260  
QLast Update : Fri Apr 27 01:18:12 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 101990   | 18.25 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 48127    | 18.89 | ug/l  | 99       |
| 95) Naphthalene            | 13.84 | 128  | 298643   | 21.29 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 103400   | 19.02 | ug/l  | 99       |

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

