

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX050418\  
 Data File : VX001406.D  
 Acq On : 04 May 2018 19:26  
 Operator : JC/MD  
 Sample : VX0504MBS01  
 Misc : 5.00µl/10mL/100µL/5mL/MSVOA\_X/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0504MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 5/7/2018 7:28:04 PM

Quant Time: May 05 06:42:37 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 02 01:48:25 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 134144   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 179454   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 170867   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.09 | 152  | 111371   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.07   | 65  | 97968    | 52.76 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.52% |      |
| 35) Dibromofluoromethane  | 5.51   | 113 | 81378    | 52.64 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 105.28% |      |
| 50) Toluene-d8            | 8.72   | 98  | 283493   | 51.33 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 102.66% |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 103881   | 47.03 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 94.06%  |      |

## Target Compounds

|                               |      |     |        |         | Qvalue |     |
|-------------------------------|------|-----|--------|---------|--------|-----|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 29347  | 19.776  | ug/l   | 96  |
| 3) Chloromethane              | 1.32 | 50  | 30196  | 20.727  | ug/l   | 99  |
| 4) Vinyl Chloride             | 1.40 | 62  | 32297  | 21.061  | ug/l   | 98  |
| 5) Bromomethane               | 1.64 | 94  | 27530  | 23.220  | ug/l   | 98  |
| 6) Chloroethane               | 1.72 | 64  | 22105  | 22.802  | ug/l   | 96  |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 57445  | 22.195  | ug/l   | 96  |
| 8) Diethyl Ether              | 2.19 | 74  | 22970  | 25.848  | ug/l   | 99  |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 32121  | 21.524  | ug/l   | 97  |
| 10) Methyl Iodide             | 2.51 | 142 | 45754  | 30.024  | ug/l   | 99  |
| 11) Tert butyl alcohol        | 3.09 | 59  | 54212  | 169.692 | ug/l   | 99  |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 29229  | 21.722  | ug/l   | 100 |
| 13) Acrolein                  | 2.30 | 56  | 13408  | 72.891  | ug/l   | 96  |
| 14) Allyl chloride            | 2.73 | 41  | 54929  | 23.332  | ug/l   | 99  |
| 15) Acrylonitrile             | 3.15 | 53  | 113392 | 153.140 | ug/l   | 100 |
| 16) Acetone                   | 2.45 | 43  | 108400 | 136.760 | ug/l   | 97  |
| 17) Carbon Disulfide          | 2.57 | 76  | 59100  | 16.858  | ug/l   | 97  |
| 18) Methyl Acetate            | 2.78 | 43  | 63179  | 33.749  | ug/l   | 100 |
| 19) Methyl tert-butyl Ether   | 3.21 | 73  | 117743 | 25.689  | ug/l   | 98  |
| 20) Methylene Chloride        | 2.86 | 84  | 36574  | 24.769  | ug/l   | 99  |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 31978  | 21.834  | ug/l   | 96  |
| 22) Diisopropyl ether         | 3.89 | 45  | 115955 | 25.574  | ug/l   | 98  |
| 23) Vinyl Acetate             | 3.84 | 43  | 514271 | 133.848 | ug/l   | 100 |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 63106  | 24.985  | ug/l   | 99  |
| 25) 2-Butanone                | 4.73 | 43  | 148870 | 138.907 | ug/l   | 98  |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 36425  | 17.723  | ug/l   | 99  |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 34977  | 21.729  | ug/l   | 95  |
| 28) Bromochloromethane        | 5.03 | 49  | 29683  | 26.144  | ug/l   | 97  |
| 29) Tetrahydrofuran           | 5.18 | 42  | 94224  | 142.953 | ug/l   | 99  |
| 30) Chloroform                | 5.23 | 83  | 61158  | 22.909  | ug/l   | 99  |
| 31) Cyclohexane               | 5.58 | 56  | 40359  | 17.693  | ug/l   | 95  |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 48920  | 20.965  | ug/l   | 100 |
| 36) 1,1-Dichloropropene       | 5.81 | 75  | 38257  | 18.471  | ug/l   | 100 |
| 37) Ethyl Acetate             | 4.88 | 43  | 54528  | 26.073  | ug/l   | 99  |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 42395  | 19.538  | ug/l   | 96  |

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX050418\  
 Data File : VX001406.D  
 Acq On : 04 May 2018 19:26  
 Operator : JC/MD  
 Sample : VX0504MBS01  
 Misc : 5.00µl/10mL/100µL/5mL/MSVOA\_X/MEOH  
 ALS Vial : 18 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX0504MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 5/7/2018 7:28:04 PM

Quant Time: May 05 06:42:37 2018  
 Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050118W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 02 01:48:25 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 41931    | 17.118  | ug/l   | 97       |
| 40) Benzene                    | 6.15  | 78   | 124546   | 20.904  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.08  | 41   | 30693    | 25.198  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.21  | 62   | 50857    | 22.046  | ug/l   | 98       |
| 43) Isopropyl Acetate          | 6.48  | 43   | 81187    | 23.978  | ug/l   | 99       |
| 44) Trichloroethene            | 7.22  | 130  | 39124    | 21.452  | ug/l   | 100      |
| 45) 1,2-Dichloropropane        | 7.53  | 63   | 33370    | 21.810  | ug/l   | 98       |
| 46) Dibromomethane             | 7.67  | 93   | 24458    | 22.805  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.91  | 83   | 42131    | 21.971  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.79  | 41   | 43012    | 23.897  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.77  | 88   | 20367    | 599.626 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.66  | 43   | 301762   | 138.243 | ug/l   | 100      |
| 52) Toluene                    | 8.79  | 92   | 79883    | 20.511  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 8.45  | 75   | 46496    | 20.389  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 9.05  | 75   | 41518    | 19.789  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.23  | 97   | 37560    | 23.874  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.19  | 69   | 50463    | 23.149  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.38  | 76   | 59736    | 23.606  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.32  | 63   | 131915   | 125.430 | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.51  | 43   | 232194   | 136.098 | ug/l   | 100      |
| 60) Dibromochloromethane       | 9.59  | 129  | 35928    | 21.892  | ug/l   | 99       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 38960    | 23.365  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 47478    | 23.454  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.15 | 112  | 96269    | 20.717  | ug/l   | 94       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.23 | 131  | 36080    | 22.367  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.26 | 91   | 149629   | 19.540  | ug/l   | 99       |
| 68) m/p-Xylenes                | 10.37 | 106  | 119659   | 39.712  | ug/l   | 99       |
| 69) o-Xylene                   | 10.71 | 106  | 59251    | 20.275  | ug/l   | 100      |
| 70) Styrene                    | 10.72 | 104  | 96624    | 20.217  | ug/l   | 99       |
| 71) Bromoform                  | 10.87 | 173  | 29918    | 21.618  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 155832   | 20.915  | ug/l   | 99       |
| 74) N-amyl acetate             | 6.48  | 43   | 81187    | 25.401  | ug/l # | 99       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 54396    | 24.369  | ug/l   | 100      |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 52813m   | 25.645  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 48097    | 22.381  | ug/l   | 97       |
| 78) n-propylbenzene            | 11.37 | 91   | 172743   | 20.862  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.43 | 91   | 105692   | 21.155  | ug/l   | 98       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 132566   | 21.186  | ug/l   | 98       |
| 81) trans-1,4-Dichloro-2-buten | 11.08 | 75   | 11368    | 20.705  | ug/l   | 88       |
| 82) 4-Chlorotoluene            | 11.52 | 91   | 123771   | 20.596  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 129994   | 20.835  | ug/l   | 98       |
| 84) 1,2,4-Trimethylbenzene     | 11.82 | 105  | 138458   | 21.595  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.95 | 105  | 156003   | 20.898  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 144041   | 21.034  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.03 | 146  | 83117    | 20.713  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 83332    | 20.145  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.40 | 91   | 114708   | 19.192  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 20501    | 20.673  | ug/l   | 98       |
| 91) 1,2-Dichlorobenzene        | 12.40 | 146  | 87478    | 21.907  | ug/l   | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.01 | 75   | 12593    | 27.915  | ug/l   | 99       |

Data Path : W:\HPCHEM1\MSVOA X\DATA\VX050418\  
Data File : VX001406.D  
Acq On : 04 May 2018 19:26  
Operator : JC/MD  
Sample : VX0504MBS01  
Misc : 5.00g/10mL/100uL/5mL/MSVOA\_X/MEOH  
ALS Vial : 18 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0504MBS01

Manual Integrations  
APPROVED

MMDadoda  
5/7/2018 7:28:04 PM

Quant Time: May 05 06:42:37 2018  
Quant Method : W:\HPCHEM1\MSVOA\_X\METHOD\82X050118W.M  
Quant Title : SW846 8260  
QLast Update : Wed May 02 01:48:25 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 61872    | 19.260 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.79 | 225  | 33634    | 20.011 | ug/l  | 100      |
| 95) Naphthalene            | 13.84 | 128  | 193485   | 23.740 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 66408    | 21.058 | ug/l  | 99       |

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

