

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX110818\  
 Data File : VX005845.D  
 Acq On : 08 Nov 2018 14:36  
 Operator : JC/MD  
 Sample : VX1108MBS01  
 Misc : 5.00µL/100µL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1108MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 11/9/2018 11:37:14 AM

Quant Time: Nov 08 15:05:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 07 14:40:53 2018  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 116488   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.87  | 114  | 166802   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.12 | 117  | 135696   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 71593    | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 70047    | 52.31 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.62% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 57420    | 50.61 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.22% |      |
| 50) Toluene-d8            | 8.71   | 98  | 182125   | 48.29 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.58%  |      |
| 62) 4-Bromofluorobenzene  | 11.14  | 95  | 65736    | 48.47 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.94%  |      |

## Target Compounds

|                               |      |     |        |         |        | Qvalue |
|-------------------------------|------|-----|--------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 21719  | 20.679  | ug/l   | 98     |
| 3) Chloromethane              | 1.32 | 50  | 29351  | 21.294  | ug/l   | 93     |
| 4) Vinyl Chloride             | 1.40 | 62  | 26549  | 19.187  | ug/l   | 99     |
| 5) Bromomethane               | 1.64 | 94  | 15680  | 18.517  | ug/l   | 100    |
| 6) Chloroethane               | 1.72 | 64  | 17032  | 20.629  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 36138  | 19.675  | ug/l   | 89     |
| 8) Diethyl Ether              | 2.19 | 74  | 15395  | 21.391  | ug/l   | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 21001  | 19.880  | ug/l   | 99     |
| 10) Methyl Iodide             | 2.51 | 142 | 19731  | 15.411  | ug/l   | 97     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 37060  | 96.604  | ug/l   | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 20631  | 20.037  | ug/l   | 85     |
| 13) Acrolein                  | 2.29 | 56  | 17207  | 106.022 | ug/l   | 99     |
| 14) Allyl chloride            | 2.73 | 41  | 46206  | 20.093  | ug/l   | 99     |
| 15) Acrylonitrile             | 3.15 | 53  | 81615  | 102.657 | ug/l   | 99     |
| 16) Acetone                   | 2.45 | 43  | 74509  | 103.334 | ug/l   | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 61561  | 20.045  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 41877  | 20.806  | ug/l   | 99     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 72283  | 20.569  | ug/l   | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 23294  | 19.667  | ug/l   | 85     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 22030  | 20.286  | ug/l   | 83     |
| 22) Diisopropyl ether         | 3.87 | 45  | 81687  | 20.278  | ug/l   | 93     |
| 23) Vinyl Acetate             | 3.82 | 43  | 357281 | 103.441 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 44912  | 20.897  | ug/l   | 98     |
| 25) 2-Butanone                | 4.69 | 43  | 113571 | 100.186 | ug/l   | 94     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 32527  | 20.632  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 24589  | 20.505  | ug/l   | 98     |
| 28) Bromochloromethane        | 5.01 | 49  | 21863  | 22.762  | ug/l   | 97     |
| 29) Tetrahydrofuran           | 5.16 | 42  | 75456  | 103.668 | ug/l   | 99     |
| 30) Chloroform                | 5.21 | 83  | 42955  | 20.716  | ug/l   | 91     |
| 31) Cyclohexane               | 5.58 | 56  | 37387  | 20.040  | ug/l # | 90     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 36800  | 21.278  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 31124  | 19.356  | ug/l   | 98     |
| 37) Ethyl Acetate             | 4.85 | 43  | 41479  | 19.616  | ug/l   | 99     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 31533  | 19.588  | ug/l   | 91     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX110818\  
 Data File : VX005845.D  
 Acq On : 08 Nov 2018 14:36  
 Operator : JC/MD  
 Sample : VX1108MBS01  
 Misc : 5.00µL/100µL/5.00mL/MSVOA\_X/MEOH  
 ALS Vial : 8 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1108MBS01

Manual Integrations  
 APPROVED

MMDadoda  
 11/9/2018 11:37:14 AM

Quant Time: Nov 08 15:05:33 2018  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Nov 07 14:40:53 2018  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 30493    | 18.710  | ug/l # | 81       |
| 40) Benzene                    | 6.14  | 78   | 93671    | 19.982  | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.06  | 41   | 22634    | 19.809  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 33990    | 20.244  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.46  | 43   | 59194    | 19.319  | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 21553    | 18.105  | ug/l   | 90       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 21107    | 18.551  | ug/l   | 100      |
| 46) Dibromomethane             | 7.66  | 93   | 13979    | 19.579  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.90  | 83   | 26481    | 19.626  | ug/l   | 97       |
| 48) Methyl methacrylate        | 7.77  | 41   | 26233    | 19.067  | ug/l   | 99       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 11071    | 373.431 | ug/l   | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.65  | 43   | 184082   | 95.326  | ug/l   | 99       |
| 52) Toluene                    | 8.79  | 92   | 48743    | 18.605  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 28537    | 17.922  | ug/l   | 95       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 30733    | 18.936  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 21528    | 18.437  | ug/l   | 93       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 31459    | 18.007  | ug/l   | 98       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 37674    | 19.200  | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 87646    | 97.296  | ug/l   | 99       |
| 59) 2-Hexanone                 | 9.49  | 43   | 168484   | 98.983  | ug/l   | 97       |
| 60) Dibromochloromethane       | 9.59  | 129  | 24065    | 19.070  | ug/l   | 96       |
| 61) 1,2-Dibromoethane          | 9.68  | 107  | 25700    | 19.905  | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 25196    | 21.809  | ug/l   | 87       |
| 65) Chlorobenzene              | 10.14 | 112  | 58748    | 21.611  | ug/l   | 91       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 20219    | 21.394  | ug/l   | 98       |
| 67) Ethyl Benzene              | 10.26 | 91   | 100434   | 23.040  | ug/l # | 89       |
| 68) m/p-Xylenes                | 10.36 | 106  | 72088    | 43.356  | ug/l   | 100      |
| 69) o-Xylene                   | 10.70 | 106  | 33160    | 22.241  | ug/l   | 97       |
| 70) Styrene                    | 10.71 | 104  | 55772    | 22.676  | ug/l   | 99       |
| 71) Bromoform                  | 10.86 | 173  | 16771    | 21.169  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 92417    | 22.322  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 44987    | 20.132  | ug/l   | 98       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 31786    | 20.917  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.30 | 75   | 31026m   | 21.283  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 24851    | 21.296  | ug/l   | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 107037   | 21.937  | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 64192    | 21.766  | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 79449    | 22.582  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 9489     | 20.746  | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 76785    | 22.092  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 76079    | 21.375  | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 81782    | 20.994  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 94362    | 21.680  | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.07 | 119  | 84232    | 21.848  | ug/l   | 99       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 45862    | 20.478  | ug/l   | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 46808    | 20.417  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 72508    | 20.292  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 13875    | 21.556  | ug/l   | 99       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 45736    | 20.386  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 8033     | 21.663  | ug/l   | 98       |

Data Path : Z:\V0ASRV\HPCHEM1\MSVOA X\DATA\VX110818\  
Data File : VX005845.D  
Acq On : 08 Nov 2018 14:36  
Operator : JC/MD  
Sample : VX1108MBS01  
Misc : 5.0µl/10mL/100ul/5.00mL/MSVOA\_X/MEOH  
ALS Vial : 8 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1108MBS01

Manual Integrations  
APPROVED

MMDadoda  
11/9/2018 11:37:14 AM

Quant Time: Nov 08 15:05:33 2018  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X110718W.M  
Quant Title : SW846 8260  
QLast Update : Wed Nov 07 14:40:53 2018  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 33499    | 21.210 | ug/l  | 100      |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 16810    | 20.262 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 100443   | 20.219 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 34281    | 21.305 | ug/l  | 99       |

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

