

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX030420\  
 Data File : VX015080.D  
 Acq On : 04 Mar 2020 09:02  
 Operator : JC/SP  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 3/5/2020 12:32:22 PM

Quant Time: Mar 04 14:00:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X030420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 04 13:12:07 2020  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 397883   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 609656   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.10 | 117  | 554166   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 274727   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |      |        |      |
|---------------------------|--------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 25331    | 5.37 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.74% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 19927    | 5.18 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.36% |      |
| 50) Toluene-d8            | 8.71   | 98  | 72846    | 4.98 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 9.96%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 24883    | 4.77 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 9.54%  |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 17166  | 4.927  | ug/l   | 100    |
| 3) Chloromethane              | 1.32 | 50  | 26288  | 5.326  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 24621  | 4.920  | ug/l   | 93     |
| 5) Bromomethane               | 1.65 | 94  | 16793  | 5.458  | ug/l   | 99     |
| 6) Chloroethane               | 1.72 | 64  | 15317  | 5.102  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 30682  | 5.153  | ug/l   | 97     |
| 8) Diethyl Ether              | 2.19 | 74  | 13779  | 5.055  | ug/l   | 86     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 19857  | 5.300  | ug/l   | 100    |
| 10) Methyl Iodide             | 2.51 | 142 | 16536  | 3.907  | ug/l # | 97     |
| 11) Tert butyl alcohol        | 3.05 | 59  | 21265  | 25.965 | ug/l   | 95     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 19644  | 5.081  | ug/l   | 97     |
| 13) Acrolein                  | 2.29 | 56  | 22111  | 28.729 | ug/l   | 95     |
| 14) Allyl chloride            | 2.72 | 41  | 33219  | 4.927  | ug/l   | 98     |
| 15) Acrylonitrile             | 3.14 | 53  | 51884  | 25.438 | ug/l   | 99     |
| 16) Acetone                   | 2.44 | 43  | 47307  | 24.747 | ug/l   | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 52479  | 4.887  | ug/l   | 98     |
| 18) Methyl Acetate            | 2.77 | 43  | 23468  | 5.021  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.19 | 73  | 60315  | 4.992  | ug/l   | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 23664  | 5.289  | ug/l   | 90     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 21400  | 5.183  | ug/l   | 92     |
| 22) Diisopropyl ether         | 3.85 | 45  | 69685  | 5.188  | ug/l   | 98     |
| 23) Vinyl Acetate             | 3.81 | 43  | 269178 | 24.379 | ug/l   | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 39565  | 5.307  | ug/l   | 100    |
| 25) 2-Butanone                | 4.67 | 43  | 69206  | 24.728 | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 29617  | 5.004  | ug/l   | 96     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 22915  | 4.947  | ug/l   | 95     |
| 28) Bromochloromethane        | 5.01 | 49  | 17779  | 5.237  | ug/l   | 99     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 43121  | 23.902 | ug/l   | 99     |
| 30) Chloroform                | 5.20 | 83  | 39374  | 5.419  | ug/l   | 91     |
| 31) Cyclohexane               | 5.57 | 56  | 33406  | 5.024  | ug/l   | 98     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 30687  | 5.095  | ug/l   | 98     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 28007  | 4.966  | ug/l   | 99     |
| 37) Ethyl Acetate             | 4.83 | 43  | 25463  | 4.868  | ug/l # | 93     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 25280  | 4.749  | ug/l   | 89     |

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 Data File : VX015080.D  
 Acq On : 04 Mar 2020 09:02  
 Operator : JC/SP  
 Sample : VSTDIC005  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 3 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VSTDIC005

Manual Integrations  
 APPROVED

MMDadoda  
 3/5/2020 12:32:22 PM

Quant Time: Mar 04 14:00:18 2020  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X030420W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 04 13:12:07 2020  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 32575    | 4.947   | ug/l   | 95       |
| 40) Benzene                    | 6.14  | 78   | 87049    | 5.203   | ug/l   | 98       |
| 41) Methacrylonitrile          | 5.03  | 41   | 15256    | 5.259   | ug/l   | 92       |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 30162    | 5.249   | ug/l   | 96       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 44168    | 4.799   | ug/l   | 99       |
| 44) Trichloroethene            | 7.21  | 130  | 23934    | 5.136   | ug/l   | 98       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 22957    | 5.301   | ug/l   | 98       |
| 46) Dibromomethane             | 7.66  | 93   | 14402    | 5.103   | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 26862    | 4.814   | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.76  | 41   | 21776    | 4.649   | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.75  | 88   | 10170    | 100.658 | ug/l   | 89       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 133917   | 24.614  | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 52944    | 5.175   | ug/l   | 99       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 27023    | 4.520   | ug/l   | 94       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 30955    | 4.610   | ug/l   | 96       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 21812    | 5.180   | ug/l   | 95       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 27044    | 4.503   | ug/l   | 97       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 36458    | 5.147   | ug/l   | 95       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 77863    | 23.798  | ug/l   | 98       |
| 59) 2-Hexanone                 | 9.49  | 43   | 98109    | 24.330  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 19922    | 4.504   | ug/l   | 95       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 23358    | 5.281   | ug/l   | 98       |
| 64) Tetrachloroethene          | 9.33  | 164  | 23646    | 5.161   | ug/l   | 94       |
| 65) Chlorobenzene              | 10.14 | 112  | 57986    | 5.212   | ug/l   | 100      |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 20961    | 4.996   | ug/l   | 97       |
| 67) Ethyl Benzene              | 10.25 | 91   | 93498    | 4.949   | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.35 | 106  | 71951    | 10.010  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 32973    | 4.791   | ug/l   | 98       |
| 70) Styrene                    | 10.71 | 104  | 55165    | 4.675   | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 15266    | 4.693   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.01 | 105  | 88539    | 5.045   | ug/l   | 97       |
| 74) N-amyl acetate             | 10.89 | 43   | 32643    | 4.414   | ug/l # | 96       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 31168    | 5.329   | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 28697m   | 5.323   | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 25354    | 5.184   | ug/l   | 96       |
| 78) n-propylbenzene            | 11.35 | 91   | 101538   | 5.064   | ug/l   | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 63583    | 5.310   | ug/l   | 100      |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 71787    | 4.914   | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 8307     | 4.302   | ug/l   | 96       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 70549    | 4.987   | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 69896    | 4.948   | ug/l   | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 72412    | 4.934   | ug/l   | 98       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 85097    | 4.990   | ug/l   | 99       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 75692    | 4.818   | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 43806    | 5.095   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 45605    | 5.254   | ug/l   | 97       |
| 89) n-Butylbenzene             | 12.38 | 91   | 63952    | 4.577   | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 13369    | 4.501   | ug/l   | 93       |
| 91) 1,2-Dichlorobenzene        | 12.38 | 146  | 42570    | 4.980   | ug/l   | 96       |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 5260     | 4.491   | ug/l   | 92       |

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Data File : VX015080.D  
Acq On : 04 Mar 2020 09:02  
Operator : JC/SP  
Sample : VSTDICC005  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 3 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VSTDICC005

Manual Integrations  
APPROVED

MMDadoda  
3/5/2020 12:32:22 PM

Quant Time: Mar 04 14:00:18 2020  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X030420W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 04 13:12:07 2020  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 26526    | 4.470 | ug/l  | 94       |
| 94) Hexachlorobutadiene    | 13.77 | 225  | 14449    | 4.745 | ug/l  | 93       |
| 95) Naphthalene            | 13.83 | 128  | 70519    | 4.348 | ug/l  | 97       |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 28309    | 4.782 | ug/l  | 98       |

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

