

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX060719\  
 Data File : VX010102.D  
 Acq On : 07 Jun 2019 11:54  
 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  
 6/10/2019 10:53:27 AM

Quant Time: Jun 07 13:11:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060719W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 07 13:02:35 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.66  | 168  | 326543   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 479814   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 431316   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 220489   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |      |        |      |
|---------------------------|--------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 16021    | 5.19 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.38% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 14799    | 5.10 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.20% |      |
| 50) Toluene-d8            | 8.71   | 98  | 55751    | 5.05 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.10% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 20787    | 5.03 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.06% |      |

## Target Compounds

|                               |      |     |        |        |        | Qvalue |
|-------------------------------|------|-----|--------|--------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 11679  | 3.602  | ug/l   | 94     |
| 3) Chloromethane              | 1.32 | 50  | 13435  | 4.527  | ug/l   | 100    |
| 4) Vinyl Chloride             | 1.41 | 62  | 12686  | 4.548  | ug/l   | 99     |
| 5) Bromomethane               | 1.64 | 94  | 5368   | 5.158  | ug/l   | 97     |
| 6) Chloroethane               | 1.71 | 64  | 6369m  | 4.090  | ug/l   |        |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 19842  | 4.863  | ug/l   | 97     |
| 8) Diethyl Ether              | 2.19 | 74  | 7057   | 5.211  | ug/l   | 76     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 14536  | 5.286  | ug/l   | 92     |
| 10) Methyl Iodide             | 2.51 | 142 | 19922  | 4.392  | ug/l   | 98     |
| 11) Tert butyl alcohol        | 3.05 | 59  | 20391  | 26.428 | ug/l   | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 14520  | 5.121  | ug/l # | 74     |
| 13) Acrolein                  | 2.29 | 56  | 3106   | 20.023 | ug/l   | 96     |
| 14) Allyl chloride            | 2.73 | 41  | 21479  | 5.051  | ug/l # | 88     |
| 15) Acrylonitrile             | 3.14 | 53  | 39055  | 24.961 | ug/l   | 99     |
| 16) Acetone                   | 2.45 | 43  | 36695  | 25.458 | ug/l   | 90     |
| 17) Carbon Disulfide          | 2.57 | 76  | 39985  | 5.009  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 16155  | 5.212  | ug/l # | 84     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 47321  | 5.216  | ug/l   | 91     |
| 20) Methylene Chloride        | 2.85 | 84  | 16104  | 5.160  | ug/l # | 80     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 15867  | 5.177  | ug/l # | 78     |
| 22) Diisopropyl ether         | 3.85 | 45  | 41526  | 4.977  | ug/l # | 93     |
| 23) Vinyl Acetate             | 3.81 | 43  | 183314 | 24.378 | ug/l # | 87     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 25393  | 5.173  | ug/l   | 94     |
| 25) 2-Butanone                | 4.67 | 43  | 54934  | 24.904 | ug/l # | 85     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 24492  | 5.421  | ug/l   | 95     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 17705  | 5.064  | ug/l   | 82     |
| 28) Bromochloromethane        | 5.01 | 49  | 11197  | 5.049  | ug/l # | 51     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 33908  | 24.878 | ug/l # | 74     |
| 30) Chloroform                | 5.21 | 83  | 26069  | 5.016  | ug/l   | 98     |
| 31) Cyclohexane               | 5.58 | 56  | 23029  | 5.027  | ug/l # | 78     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 24096  | 5.086  | ug/l   | 94     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 19913  | 5.313  | ug/l   | 91     |
| 37) Ethyl Acetate             | 4.83 | 43  | 20342  | 5.156  | ug/l # | 86     |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 22487  | 5.296  | ug/l   | 99     |

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 Data File : VX010102.D  
 Acq On : 07 Jun 2019 11:54  
 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  
 6/10/2019 10:53:27 AM

Quant Time: Jun 07 13:11:57 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060719W.M  
 Quant Title : SW846 8260  
 QLast Update : Fri Jun 07 13:02:35 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| -----                          |       |      |          |         |        |          |
| 39) Methylcyclohexane          | 7.46  | 83   | 27551    | 5.430   | ug/l # | 82       |
| 40) Benzene                    | 6.14  | 78   | 60872    | 5.161   | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 10937    | 5.075   | ug/l # | 83       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 19607    | 5.231   | ug/l   | 93       |
| 43) Isopropyl Acetate          | 6.45  | 43   | 34231    | 5.207   | ug/l # | 89       |
| 44) Trichloroethene            | 7.21  | 130  | 18037    | 5.183   | ug/l   | 81       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 15049    | 5.105   | ug/l   | 95       |
| 46) Dibromomethane             | 7.66  | 93   | 11428    | 5.383   | ug/l   | 93       |
| 47) Bromodichloromethane       | 7.90  | 83   | 21425    | 5.175   | ug/l # | 97       |
| 48) Methyl methacrylate        | 7.77  | 41   | 15582    | 4.891   | ug/l # | 77       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 9300     | 106.149 | ug/l # | 85       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 105581   | 25.713  | ug/l   | 89       |
| 52) Toluene                    | 8.78  | 92   | 40930    | 5.354   | ug/l   | 96       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 24113    | 5.015   | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 25881    | 5.075   | ug/l   | 91       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 16922    | 5.288   | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 26235    | 5.118   | ug/l # | 81       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 25590    | 5.151   | ug/l   | 97       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 62021    | 25.349  | ug/l # | 86       |
| 59) 2-Hexanone                 | 9.49  | 43   | 84506    | 26.008  | ug/l   | 90       |
| 60) Dibromochloromethane       | 9.58  | 129  | 19405    | 5.128   | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 18362    | 5.231   | ug/l   | 100      |
| 64) Tetrachloroethene          | 9.34  | 164  | 16729    | 5.575   | ug/l   | 95       |
| 65) Chlorobenzene              | 10.13 | 112  | 44902    | 5.225   | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 17536    | 5.295   | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 77303    | 5.277   | ug/l   | 95       |
| 68) m/p-Xylenes                | 10.36 | 106  | 61034    | 10.765  | ug/l   | 90       |
| 69) o-Xylene                   | 10.69 | 106  | 30328    | 5.439   | ug/l   | 88       |
| 70) Styrene                    | 10.71 | 104  | 50537    | 5.215   | ug/l   | 96       |
| 71) Bromoform                  | 10.85 | 173  | 15810    | 5.146   | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 78089    | 5.235   | ug/l   | 95       |
| 74) N-amyl acetate             | 10.90 | 43   | 30040    | 5.047   | ug/l # | 87       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 26108    | 5.170   | ug/l   | 97       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 21481m   | 5.093   | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 21571    | 5.286   | ug/l   | 80       |
| 78) n-propylbenzene            | 11.36 | 91   | 86168    | 5.143   | ug/l   | 93       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 51954    | 5.213   | ug/l   | 90       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 66281    | 5.310   | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 9887     | 5.028   | ug/l   | 85       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 59603    | 5.172   | ug/l   | 93       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 67584    | 5.354   | ug/l   | 95       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 66450    | 5.253   | ug/l   | 96       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 77533    | 5.251   | ug/l   | 94       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 70534    | 5.191   | ug/l   | 98       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 37351    | 5.180   | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 38080    | 5.362   | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.38 | 91   | 59888    | 5.087   | ug/l   | 95       |
| 90) Hexachloroethane           | 12.59 | 117  | 13716    | 5.113   | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 37213    | 5.331   | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 6009     | 5.184   | ug/l   | 73       |

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Data File : VX010102.D  
Acq On : 07 Jun 2019 11:54  
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  
6/10/2019 10:53:27 AM

Quant Time: Jun 07 13:11:57 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X060719W.M  
Quant Title : SW846 8260  
QLast Update : Fri Jun 07 13:02:35 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 25286    | 5.076 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 12351    | 5.574 | ug/l  | 97       |
| 95) Naphthalene            | 13.83 | 128  | 81432    | 5.068 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 26101    | 5.287 | ug/l  | 98       |

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

