

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX031919\  
 Data File : VX008180.D  
 Acq On : 19 Mar 2019 10:19  
 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  
 3/20/2019 10:26:41 AM

Quant Time: Mar 19 11:43:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 19 11:34:11 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 294126   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 487011   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 424402   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 185245   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |      |        |      |
|---------------------------|--------|-----|----------|------|--------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 26007    | 5.77 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 11.54% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 18269    | 5.44 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.88% |      |
| 50) Toluene-d8            | 8.71   | 98  | 66728    | 5.17 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 10.34% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 21110    | 4.67 | ug/l   | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =    | 9.34%  |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 14629  | 3.799  | ug/l | 100    |
| 3) Chloromethane              | 1.33 | 50  | 20855  | 4.782  | ug/l | 100    |
| 4) Vinyl Chloride             | 1.41 | 62  | 23214  | 5.084  | ug/l | 99     |
| 5) Bromomethane               | 1.64 | 94  | 21399  | 5.453  | ug/l | 98     |
| 6) Chloroethane               | 1.72 | 64  | 15018  | 5.491  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 30864  | 5.477  | ug/l | 98     |
| 8) Diethyl Ether              | 2.19 | 74  | 13594  | 4.247  | ug/l | 90     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 17052  | 4.224  | ug/l | 90     |
| 10) Methyl Iodide             | 2.51 | 142 | 18318  | 3.426  | ug/l | 93     |
| 11) Tert butyl alcohol        | 3.06 | 59  | 20734  | 20.449 | ug/l | 97     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 15948  | 4.167  | ug/l | 93     |
| 13) Acrolein                  | 2.29 | 56  | 23529  | 34.218 | ug/l | 97     |
| 14) Allyl chloride            | 2.73 | 41  | 34398  | 4.035  | ug/l | 91     |
| 15) Acrylonitrile             | 3.14 | 53  | 57477  | 21.241 | ug/l | 98     |
| 16) Acetone                   | 2.45 | 43  | 62391  | 23.633 | ug/l | 99     |
| 17) Carbon Disulfide          | 2.57 | 76  | 43032  | 3.604  | ug/l | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 24713  | 3.832  | ug/l | 99     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 59574  | 4.243  | ug/l | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 20012  | 4.576  | ug/l | 97     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 16524  | 4.073  | ug/l | 89     |
| 22) Diisopropyl ether         | 3.86 | 45  | 70666  | 4.222  | ug/l | # 86   |
| 23) Vinyl Acetate             | 3.82 | 43  | 291706 | 19.765 | ug/l | 95     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 36001  | 4.273  | ug/l | 99     |
| 25) 2-Butanone                | 4.68 | 43  | 87396  | 21.563 | ug/l | 98     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 26510  | 4.134  | ug/l | 98     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 19775  | 4.245  | ug/l | 90     |
| 28) Bromochloromethane        | 5.01 | 49  | 17483  | 4.938  | ug/l | 83     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 53040  | 20.311 | ug/l | 97     |
| 30) Chloroform                | 5.21 | 83  | 35573  | 4.496  | ug/l | 90     |
| 31) Cyclohexane               | 5.58 | 56  | 30904  | 3.754  | ug/l | 91     |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 28061  | 4.222  | ug/l | 96     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 25074  | 4.118  | ug/l | 99     |
| 37) Ethyl Acetate             | 4.84 | 43  | 30742  | 4.054  | ug/l | 98     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 22036  | 3.960  | ug/l | 96     |

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 Data File : VX008180.D  
 Acq On : 19 Mar 2019 10:19  
 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  
 3/20/2019 10:26:41 AM

Quant Time: Mar 19 11:43:28 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Mar 19 11:34:11 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc   | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|--------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 29362    | 3.899  | ug/l   | 94       |
| 40) Benzene                    | 6.14  | 78   | 79042    | 4.331  | ug/l   | 99       |
| 41) Methacrylonitrile          | 5.04  | 41   | 17021    | 4.007  | ug/l   | 98       |
| 42) 1,2-Dichloroethane         | 6.20  | 62   | 29168    | 4.419  | ug/l   | 99       |
| 43) Isopropyl Acetate          | 6.45  | 43   | 48903    | 4.026  | ug/l   | 97       |
| 44) Trichloroethene            | 7.21  | 130  | 18865    | 4.343  | ug/l   | 86       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 21757    | 4.335  | ug/l   | 94       |
| 46) Dibromomethane             | 7.66  | 93   | 13154    | 4.343  | ug/l # | 85       |
| 47) Bromodichloromethane       | 7.90  | 83   | 24470    | 4.081  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.77  | 41   | 25121    | 3.931  | ug/l # | 88       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 9323     | 88.914 | ug/l   | 89       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 161451   | 20.845 | ug/l   | 96       |
| 52) Toluene                    | 8.78  | 92   | 45611    | 4.247  | ug/l   | 97       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 24022    | 3.471  | ug/l   | 98       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 28684    | 3.794  | ug/l # | 87       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 18979    | 4.289  | ug/l   | 96       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 28397    | 3.830  | ug/l # | 89       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 33950    | 4.345  | ug/l   | 100      |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 87537    | 25.372 | ug/l   | 94       |
| 59) 2-Hexanone                 | 9.49  | 43   | 123494   | 20.916 | ug/l   | 93       |
| 60) Dibromochloromethane       | 9.58  | 129  | 17086    | 3.893  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 19147    | 4.164  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 17525    | 4.295  | ug/l   | 92       |
| 65) Chlorobenzene              | 10.13 | 112  | 48600    | 4.339  | ug/l   | 95       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 16709    | 4.161  | ug/l   | 96       |
| 67) Ethyl Benzene              | 10.25 | 91   | 83061    | 4.073  | ug/l   | 97       |
| 68) m/p-Xylenes                | 10.36 | 106  | 60022    | 8.023  | ug/l   | 93       |
| 69) o-Xylene                   | 10.69 | 106  | 29650    | 4.067  | ug/l   | 94       |
| 70) Styrene                    | 10.71 | 104  | 46632    | 3.909  | ug/l   | 95       |
| 71) Bromoform                  | 10.85 | 173  | 11349    | 3.625  | ug/l # | 99       |
| 73) Isopropylbenzene           | 11.02 | 105  | 78204    | 4.295  | ug/l   | 98       |
| 74) N-amyl acetate             | 10.90 | 43   | 39313    | 4.060  | ug/l   | 94       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 28925    | 4.623  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 25160m   | 4.574  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 18959    | 4.438  | ug/l   | 82       |
| 78) n-propylbenzene            | 11.36 | 91   | 88145    | 4.083  | ug/l   | 95       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 55272    | 4.407  | ug/l   | 94       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 63263    | 4.171  | ug/l   | 97       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 7036     | 3.371  | ug/l # | 75       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 61233    | 4.176  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 61125    | 4.291  | ug/l   | 91       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 64522    | 4.180  | ug/l   | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 74990    | 4.164  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 63702    | 4.081  | ug/l   | 95       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 32701    | 4.280  | ug/l   | 95       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 34057    | 4.453  | ug/l   | 91       |
| 89) n-Butylbenzene             | 12.38 | 91   | 56428    | 3.801  | ug/l   | 96       |
| 90) Hexachloroethane           | 12.59 | 117  | 10240    | 3.816  | ug/l   | 84       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 34246    | 4.498  | ug/l   | 98       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 5756     | 4.055  | ug/l   | 78       |

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Acq On : 19 Mar 2019 10:19  
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  
3/20/2019 10:26:41 AM

Quant Time: Mar 19 11:43:28 2019  
Quant Method : Z:\V0ASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
Quant Title : SW846 8260  
QLast Update : Tue Mar 19 11:34:11 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 20589    | 4.022 | ug/l  | 95       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 10583    | 4.232 | ug/l  | 96       |
| 95) Naphthalene            | 13.83 | 128  | 62216    | 3.687 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 20839    | 4.107 | ug/l  | 98       |

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

