

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX031919\  
 Data File : VX008189.D  
 Acq On : 19 Mar 2019 14:16  
 Operator : JC/SP  
 Sample : VX0319WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0319WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 3/20/2019 10:28:32 AM

Quant Time: Mar 20 07:35:43 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 20 06:51:58 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 314736   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 508292   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 454700   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 215046   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 212810   | 44.89 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 89.78%  |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 155781   | 45.78 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 91.56%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 623789   | 48.35 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 96.70%  |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 223359   | 50.28 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.56% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 76508   | 20.050  | ug/l   | 99     |
| 3) Chloromethane              | 1.33 | 50  | 90921   | 18.989  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 91079   | 19.078  | ug/l   | 98     |
| 5) Bromomethane               | 1.64 | 94  | 62953   | 15.481  | ug/l   | 99     |
| 6) Chloroethane               | 1.73 | 64  | 55657   | 18.594  | ug/l   | 99     |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 112212  | 18.418  | ug/l   | 100    |
| 8) Diethyl Ether              | 2.19 | 74  | 63365   | 20.215  | ug/l   | 96     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.39 | 101 | 80227   | 19.833  | ug/l   | 91     |
| 10) Methyl Iodide             | 2.51 | 142 | 95418   | 18.526  | ug/l   | 96     |
| 11) Tert butyl alcohol        | 3.04 | 59  | 100805  | 99.339  | ug/l   | 97     |
| 12) 1,1-Dichloroethene        | 2.38 | 96  | 75706   | 19.824  | ug/l   | 90     |
| 13) Acrolein                  | 2.29 | 56  | 70155   | 91.564  | ug/l   | 98     |
| 14) Allyl chloride            | 2.73 | 41  | 164478  | 19.785  | ug/l   | 93     |
| 15) Acrylonitrile             | 3.14 | 53  | 265009  | 98.735  | ug/l   | 99     |
| 16) Acetone                   | 2.45 | 43  | 261402  | 97.231  | ug/l   | 97     |
| 17) Carbon Disulfide          | 2.57 | 76  | 238742  | 19.569  | ug/l   | 100    |
| 18) Methyl Acetate            | 2.78 | 43  | 125477  | 20.160  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 274438  | 19.875  | ug/l   | 99     |
| 20) Methylene Chloride        | 2.86 | 84  | 88427   | 19.725  | ug/l   | 94     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 80797   | 19.585  | ug/l   | 92     |
| 22) Diisopropyl ether         | 3.85 | 45  | 323286  | 19.856  | ug/l # | 81     |
| 23) Vinyl Acetate             | 3.82 | 43  | 1408002 | 100.868 | ug/l   | 97     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 165439  | 19.756  | ug/l   | 99     |
| 25) 2-Butanone                | 4.67 | 43  | 396431  | 99.893  | ug/l   | 98     |
| 26) 2,2-Dichloropropane       | 4.59 | 77  | 123190  | 19.528  | ug/l   | 97     |
| 27) cis-1,2-Dichloroethene    | 4.59 | 96  | 92625   | 19.695  | ug/l   | 92     |
| 28) Bromochloromethane        | 5.01 | 49  | 70112   | 18.646  | ug/l # | 81     |
| 29) Tetrahydrofuran           | 5.13 | 42  | 252123  | 101.627 | ug/l   | 97     |
| 30) Chloroform                | 5.21 | 83  | 154644  | 19.743  | ug/l   | 99     |
| 31) Cyclohexane               | 5.58 | 56  | 161376  | 20.523  | ug/l   | 100    |
| 32) 1,1,1-Trichloroethane     | 5.50 | 97  | 128852  | 19.775  | ug/l   | 97     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 121237  | 20.487  | ug/l   | 97     |
| 37) Ethyl Acetate             | 4.83 | 43  | 145817  | 20.844  | ug/l   | 98     |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 108048  | 20.491  | ug/l   | 99     |

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 Acq On : 19 Mar 2019 14:16  
 Operator : JC/SP  
 Sample : VX0319WBS01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 12 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX0319WBS01

Manual Integrations  
 APPROVED

MMDadoda  
 3/20/2019 10:28:32 AM

Quant Time: Mar 20 07:35:43 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed Mar 20 06:51:58 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 149892   | 21.048  | ug/l   | 92       |
| 40) Benzene                    | 6.14  | 78   | 360205   | 20.565  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.04  | 41   | 81696    | 20.820  | ug/l   | 97       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 131359   | 20.472  | ug/l   | 96       |
| 43) Isopropyl Acetate          | 6.45  | 43   | 232211   | 20.709  | ug/l   | 97       |
| 44) Trichloroethene            | 7.21  | 130  | 86803    | 20.268  | ug/l   | 92       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 98854    | 20.161  | ug/l   | 100      |
| 46) Dibromomethane             | 7.66  | 93   | 58860    | 19.826  | ug/l   | 87       |
| 47) Bromodichloromethane       | 7.90  | 83   | 114086   | 20.164  | ug/l   | 98       |
| 48) Methyl methacrylate        | 7.77  | 41   | 120968   | 20.289  | ug/l   | 93       |
| 49) 1,4-Dioxane                | 7.74  | 88   | 43216    | 410.753 | ug/l   | 96       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 766073   | 105.678 | ug/l   | 97       |
| 52) Toluene                    | 8.78  | 92   | 217086   | 20.891  | ug/l   | 98       |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 126839   | 18.814  | ug/l   | 100      |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 142714   | 20.325  | ug/l # | 91       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 87356    | 20.807  | ug/l   | 99       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 143469   | 19.803  | ug/l # | 92       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 153615   | 20.683  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 331152   | 96.267  | ug/l   | 93       |
| 59) 2-Hexanone                 | 9.49  | 43   | 591862   | 106.050 | ug/l   | 96       |
| 60) Dibromochloromethane       | 9.58  | 129  | 82622    | 20.477  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 89332    | 20.377  | ug/l   | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 83901    | 20.452  | ug/l   | 96       |
| 65) Chlorobenzene              | 10.14 | 112  | 228076   | 20.385  | ug/l   | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 78959    | 20.241  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 409350   | 20.762  | ug/l   | 98       |
| 68) m/p-Xylenes                | 10.36 | 106  | 299382   | 41.337  | ug/l   | 92       |
| 69) o-Xylene                   | 10.69 | 106  | 145515   | 20.677  | ug/l   | 95       |
| 70) Styrene                    | 10.71 | 104  | 236478   | 20.676  | ug/l   | 95       |
| 71) Bromoform                  | 10.85 | 173  | 59549    | 19.139  | ug/l # | 100      |
| 73) Isopropylbenzene           | 11.02 | 105  | 397574   | 20.741  | ug/l   | 98       |
| 74) N-amyl acetate             | 10.90 | 43   | 202753   | 20.189  | ug/l   | 97       |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 137462   | 19.999  | ug/l   | 99       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 119917m  | 19.826  | ug/l   |          |
| 77) Bromobenzene               | 11.26 | 156  | 93481    | 20.171  | ug/l   | 85       |
| 78) n-propylbenzene            | 11.36 | 91   | 465463   | 20.907  | ug/l   | 95       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 273972   | 20.503  | ug/l   | 95       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 330252   | 20.855  | ug/l   | 96       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 41103    | 18.263  | ug/l   | 89       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 316235   | 20.337  | ug/l   | 95       |
| 83) tert-Butylbenzene          | 11.77 | 119  | 308887   | 20.430  | ug/l   | 92       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 332777   | 20.728  | ug/l   | 98       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 395449   | 21.121  | ug/l   | 96       |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 342789   | 21.151  | ug/l   | 96       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 168001   | 20.284  | ug/l   | 97       |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 167607   | 19.564  | ug/l   | 97       |
| 89) n-Butylbenzene             | 12.38 | 91   | 316055   | 20.778  | ug/l   | 96       |
| 90) Hexachloroethane           | 12.60 | 117  | 56958    | 20.636  | ug/l   | 82       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 165703   | 19.842  | ug/l   | 97       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 29074    | 19.045  | ug/l   | 78       |

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Acq On : 19 Mar 2019 14:16  
Operator : JC/SP  
Sample : VX0319WBS01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 12 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX0319WBS01

Manual Integrations  
APPROVED

MMDadoda  
3/20/2019 10:28:32 AM

Quant Time: Mar 20 07:35:43 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X031919W.M  
Quant Title : SW846 8260  
QLast Update : Wed Mar 20 06:51:58 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 110533   | 20.094 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 56041    | 20.889 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 348125   | 20.051 | ug/l  | 100      |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 111096   | 20.525 | ug/l  | 99       |

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

