

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122419\  
 Data File : VX014246.D  
 Acq On : 24 Dec 2019 15:38  
 Operator : JC/SP  
 Sample : VX1224WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1224WBSD01

Manual Integrations  
 APPROVED

apatel  
 12/26/2019 9:24:42 AM

Quant Time: Dec 25 07:19:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 504284   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 801945   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 709709   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 344582   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 298248   | 52.18 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 104.36% |      |
| 35) Dibromofluoromethane  | 5.49   | 113 | 243508   | 49.95 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.90%  |      |
| 50) Toluene-d8            | 8.71   | 98  | 953871   | 50.26 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.52% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 337593   | 48.66 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 97.32%  |      |

## Target Compounds

|                               |      |     |         |         |      | Qvalue |
|-------------------------------|------|-----|---------|---------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 78007   | 17.291  | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 111627  | 18.437  | ug/l | 98     |
| 4) Vinyl Chloride             | 1.40 | 62  | 115981  | 18.155  | ug/l | 98     |
| 5) Bromomethane               | 1.63 | 94  | 75584   | 16.669  | ug/l | 98     |
| 6) Chloroethane               | 1.72 | 64  | 75432   | 19.131  | ug/l | 97     |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 147880  | 18.699  | ug/l | 96     |
| 8) Diethyl Ether              | 2.18 | 74  | 70595   | 19.020  | ug/l | 99     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 89520   | 18.778  | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 99100   | 17.558  | ug/l | 98     |
| 11) Tert butyl alcohol        | 3.03 | 59  | 126462  | 102.402 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 90718   | 18.701  | ug/l | 98     |
| 13) Acrolein                  | 2.28 | 56  | 67116   | 94.940  | ug/l | 99     |
| 14) Allyl chloride            | 2.72 | 41  | 170385  | 19.672  | ug/l | 100    |
| 15) Acrylonitrile             | 3.13 | 53  | 301130  | 104.469 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 252821  | 68.137  | ug/l | 98     |
| 17) Carbon Disulfide          | 2.56 | 76  | 230862  | 17.636  | ug/l | 98     |
| 18) Methyl Acetate            | 2.76 | 43  | 159774  | 21.731  | ug/l | 98     |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 320763  | 20.123  | ug/l | 98     |
| 20) Methylene Chloride        | 2.85 | 84  | 108385  | 18.549  | ug/l | 98     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 100181  | 18.746  | ug/l | 98     |
| 22) Diisopropyl ether         | 3.84 | 45  | 354796  | 20.557  | ug/l | 95     |
| 23) Vinyl Acetate             | 3.80 | 43  | 1253210 | 88.977  | ug/l | 99     |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 188446  | 19.625  | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 419495  | 91.701  | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 132621  | 17.788  | ug/l | 100    |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 117722  | 19.478  | ug/l | 99     |
| 28) Bromochloromethane        | 5.01 | 49  | 79851   | 21.880  | ug/l | 96     |
| 29) Tetrahydrofuran           | 5.11 | 42  | 274174  | 107.154 | ug/l | 99     |
| 30) Chloroform                | 5.20 | 83  | 179639  | 19.734  | ug/l | 95     |
| 31) Cyclohexane               | 5.57 | 56  | 166544  | 19.501  | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 148190  | 19.101  | ug/l | 99     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 133223  | 18.105  | ug/l | 100    |
| 37) Ethyl Acetate             | 4.82 | 43  | 164455  | 20.239  | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 123472  | 18.419  | ug/l | 97     |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122419\  
 Data File : VX014246.D  
 Acq On : 24 Dec 2019 15:38  
 Operator : JC/SP  
 Sample : VX1224WBSD01  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 16 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleID :  
 VX1224WBSD01

Manual Integrations  
 APPROVED

apatel  
 12/26/2019 9:24:42 AM

Quant Time: Dec 25 07:19:03 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
 Quant Title : SW846 8260  
 QLast Update : Tue Dec 17 03:01:07 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev(Min) |
|--------------------------------|-------|------|----------|---------|--------|----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 160084   | 17.619  | ug/l   | 100      |
| 40) Benzene                    | 6.14  | 78   | 425393   | 18.789  | ug/l   | 100      |
| 41) Methacrylonitrile          | 5.03  | 41   | 89239    | 19.793  | ug/l   | 99       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 146592   | 19.101  | ug/l   | 100      |
| 43) Isopropyl Acetate          | 6.44  | 43   | 266545   | 19.821  | ug/l   | 100      |
| 44) Trichloroethene            | 7.20  | 130  | 116509   | 18.631  | ug/l   | 97       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 110922   | 19.115  | ug/l   | 96       |
| 46) Dibromomethane             | 7.65  | 93   | 70641    | 18.412  | ug/l   | 99       |
| 47) Bromodichloromethane       | 7.89  | 83   | 134585   | 18.626  | ug/l   | 99       |
| 48) Methyl methacrylate        | 7.76  | 41   | 129189   | 19.619  | ug/l   | 98       |
| 49) 1,4-Dioxane                | 7.73  | 88   | 52084    | 388.675 | ug/l   | 97       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 847145   | 100.310 | ug/l   | 99       |
| 52) Toluene                    | 8.78  | 92   | 265723   | 18.568  | ug/l   | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 145235   | 18.331  | ug/l   | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 166632   | 18.878  | ug/l   | 98       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 110426   | 19.253  | ug/l   | 98       |
| 56) Ethyl methacrylate         | 9.17  | 69   | 171147   | 18.996  | ug/l   | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 186143   | 19.290  | ug/l   | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 341560   | 100.179 | ug/l   | 100      |
| 59) 2-Hexanone                 | 9.48  | 43   | 636722   | 93.657  | ug/l   | 99       |
| 60) Dibromochloromethane       | 9.57  | 129  | 107394   | 18.837  | ug/l   | 98       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 113615   | 19.361  | ug/l   | 98       |
| 64) Tetrachloroethene          | 9.33  | 164  | 153067   | 24.374  | ug/l   | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 279992   | 18.555  | ug/l   | 98       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 103004   | 19.117  | ug/l   | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 494360   | 19.055  | ug/l   | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 377620   | 37.844  | ug/l   | 99       |
| 69) o-Xylene                   | 10.70 | 106  | 183917   | 18.794  | ug/l   | 98       |
| 70) Styrene                    | 10.71 | 104  | 310680   | 18.774  | ug/l   | 100      |
| 71) Bromoform                  | 10.85 | 173  | 78841    | 18.204  | ug/l # | 98       |
| 73) Isopropylbenzene           | 11.01 | 105  | 488203   | 20.123  | ug/l   | 99       |
| 74) N-amyl acetate             | 10.89 | 43   | 224392   | 19.732  | ug/l   | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 162135   | 19.276  | ug/l   | 98       |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 138571m  | 18.524  | ug/l   |          |
| 77) Bromobenzene               | 11.25 | 156  | 127601   | 19.116  | ug/l   | 97       |
| 78) n-propylbenzene            | 11.35 | 91   | 537817   | 19.763  | ug/l   | 100      |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 320695   | 19.386  | ug/l   | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 401097   | 19.644  | ug/l   | 100      |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 49088    | 18.521  | ug/l   | 91       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 363914   | 18.965  | ug/l   | 99       |
| 83) tert-Butylbenzene          | 11.76 | 119  | 350491   | 17.639  | ug/l   | 94       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 395118   | 19.323  | ug/l   | 100      |
| 85) sec-Butylbenzene           | 11.94 | 105  | 458895   | 19.563  | ug/l   | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 414992   | 19.340  | ug/l   | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 217980   | 18.633  | ug/l   | 99       |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 217783   | 18.308  | ug/l   | 99       |
| 89) n-Butylbenzene             | 12.39 | 91   | 344342   | 18.807  | ug/l   | 99       |
| 90) Hexachloroethane           | 12.59 | 117  | 70748    | 18.356  | ug/l   | 100      |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 218916   | 18.589  | ug/l   | 100      |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 34480    | 18.524  | ug/l   | 97       |

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX122419\  
Data File : VX014246.D  
Acq On : 24 Dec 2019 15:38  
Operator : JC/SP  
Sample : VX1224WBSD01  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 16 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
VX1224WBSD01

Manual Integrations  
APPROVED

apatel  
12/26/2019 9:24:42 AM

Quant Time: Dec 25 07:19:03 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X121319W.M  
Quant Title : SW846 8260  
QLast Update : Tue Dec 17 03:01:07 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 140303   | 18.330 | ug/l  | 98       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 66351    | 18.036 | ug/l  | 98       |
| 95) Naphthalene            | 13.83 | 128  | 449674   | 19.995 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 142654   | 18.879 | ug/l  | 98       |

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

