

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\VX102519\  
 Data File : VX013221.D  
 Acq On : 25 Oct 2019 11:25  
 Operator : JC/SP  
 Sample : VX1025WBS02  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 4 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 VX1025WBS02

Manual Integrations  
 APPROVED

MMDadoda  
 11/4/2019 1:23:10 PM

Quant Time: Oct 25 23:25:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X102419W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 24 03:56:38 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev (Min) |
|----------------------------|-------|------|----------|-------|-------|-----------|
| 1) Pentafluorobenzene      | 5.65  | 168  | 80202    | 50.00 | ug/l  | 0.00      |
| 34) 1,4-Difluorobenzene    | 6.85  | 114  | 114824   | 50.00 | ug/l  | 0.00      |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 115369   | 50.00 | ug/l  | 0.00      |
| 72) 1,4-Dichlorobenzene-d4 | 12.07 | 152  | 78675    | 50.00 | ug/l  | 0.00      |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.05   | 65  | 84642    | 50.46 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.92% |      |
| 35) Dibromofluoromethane  | 5.48   | 113 | 66116    | 51.63 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 103.26% |      |
| 50) Toluene-d8            | 8.71   | 98  | 241165   | 50.82 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 101.64% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 93623    | 49.85 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 99.70%  |      |

## Target Compounds

|                               |      |     |        |        |      | Qvalue |
|-------------------------------|------|-----|--------|--------|------|--------|
| 2) Dichlorodifluoromethane    | 1.19 | 85  | 30446  | 18.813 | ug/l | 99     |
| 3) Chloromethane              | 1.32 | 50  | 24377  | 18.911 | ug/l | 96     |
| 4) Vinyl Chloride             | 1.40 | 62  | 26021  | 17.867 | ug/l | 97     |
| 5) Bromomethane               | 1.63 | 94  | 16086  | 20.838 | ug/l | 100    |
| 6) Chloroethane               | 1.72 | 64  | 16230  | 18.292 | ug/l | 100    |
| 7) Trichlorofluoromethane     | 1.92 | 101 | 46919  | 20.592 | ug/l | 95     |
| 8) Diethyl Ether              | 2.18 | 74  | 15456  | 19.609 | ug/l | 97     |
| 9) 1,1,2-Trichlorotrifluoroet | 2.37 | 101 | 27337  | 19.207 | ug/l | 99     |
| 10) Methyl Iodide             | 2.50 | 142 | 26823  | 17.440 | ug/l | 100    |
| 11) Tert butyl alcohol        | 3.03 | 59  | 34733  | 94.784 | ug/l | 98     |
| 12) 1,1-Dichloroethene        | 2.36 | 96  | 25288  | 18.509 | ug/l | 100    |
| 13) Acrolein                  | 2.28 | 56  | 14601  | 74.188 | ug/l | 99     |
| 14) Allyl chloride            | 2.72 | 41  | 38909  | 18.090 | ug/l | 99     |
| 15) Acrylonitrile             | 3.13 | 53  | 69184  | 93.569 | ug/l | 99     |
| 16) Acetone                   | 2.43 | 43  | 77444  | 97.995 | ug/l | 100    |
| 17) Carbon Disulfide          | 2.56 | 76  | 61655  | 16.786 | ug/l | 100    |
| 18) Methyl Acetate            | 2.76 | 43  | 32761  | 19.586 | ug/l | 100    |
| 19) Methyl tert-butyl Ether   | 3.18 | 73  | 90802  | 18.873 | ug/l | 99     |
| 20) Methylene Chloride        | 2.84 | 84  | 29597  | 20.200 | ug/l | 99     |
| 21) trans-1,2-Dichloroethene  | 3.16 | 96  | 27269  | 19.476 | ug/l | 89     |
| 22) Diisopropyl ether         | 3.84 | 45  | 78520  | 18.670 | ug/l | # 88   |
| 23) Vinyl Acetate             | 3.80 | 43  | 338596 | 94.723 | ug/l | 100    |
| 24) 1,1-Dichloroethane        | 3.69 | 63  | 48518  | 18.756 | ug/l | 99     |
| 25) 2-Butanone                | 4.65 | 43  | 98950  | 93.362 | ug/l | 99     |
| 26) 2,2-Dichloropropane       | 4.57 | 77  | 45047  | 18.842 | ug/l | 99     |
| 27) cis-1,2-Dichloroethene    | 4.58 | 96  | 31590  | 18.880 | ug/l | 99     |
| 28) Bromochloromethane        | 5.00 | 49  | 13940  | 20.899 | ug/l | 100    |
| 29) Tetrahydrofuran           | 5.11 | 42  | 58457  | 91.504 | ug/l | 99     |
| 30) Chloroform                | 5.19 | 83  | 52521  | 19.069 | ug/l | 98     |
| 31) Cyclohexane               | 5.57 | 56  | 39995  | 18.436 | ug/l | 95     |
| 32) 1,1,1-Trichloroethane     | 5.48 | 97  | 48336  | 19.738 | ug/l | 98     |
| 36) 1,1-Dichloropropene       | 5.79 | 75  | 37867  | 19.655 | ug/l | 98     |
| 37) Ethyl Acetate             | 4.81 | 43  | 35226  | 18.410 | ug/l | 100    |
| 38) Carbon Tetrachloride      | 5.78 | 117 | 40121  | 18.904 | ug/l | 95     |

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Quant Time: Oct 25 23:25:22 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X102419W.M  
 Quant Title : SW846 8260  
 QLast Update : Thu Oct 24 03:56:38 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units  | Dev (Min) |
|--------------------------------|-------|------|----------|---------|--------|-----------|
| 39) Methylcyclohexane          | 7.45  | 83   | 45425    | 18.479  | ug/l   | 98        |
| 40) Benzene                    | 6.14  | 78   | 109774   | 19.033  | ug/l   | 99        |
| 41) Methacrylonitrile          | 5.03  | 41   | 20106    | 19.599  | ug/l   | 99        |
| 42) 1,2-Dichloroethane         | 6.18  | 62   | 44590    | 20.506  | ug/l   | 100       |
| 43) Isopropyl Acetate          | 6.43  | 43   | 60677    | 19.099  | ug/l   | 100       |
| 44) Trichloroethene            | 7.20  | 130  | 30906    | 18.881  | ug/l   | 98        |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 27222    | 18.845  | ug/l   | 99        |
| 46) Dibromomethane             | 7.65  | 93   | 19453    | 18.691  | ug/l   | 100       |
| 47) Bromodichloromethane       | 7.89  | 83   | 39716    | 19.582  | ug/l   | 98        |
| 48) Methyl methacrylate        | 7.76  | 41   | 29719    | 18.927  | ug/l   | 97        |
| 49) 1,4-Dioxane                | 7.73  | 88   | 15169    | 379.570 | ug/l   | 98        |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 181742   | 93.854  | ug/l   | 100       |
| 52) Toluene                    | 8.78  | 92   | 72085    | 18.860  | ug/l   | 98        |
| 53) t-1,3-Dichloropropene      | 9.03  | 75   | 41190    | 19.111  | ug/l   | 100       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 46367    | 19.665  | ug/l   | 98        |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 29872    | 19.768  | ug/l   | 97        |
| 56) Ethyl methacrylate         | 9.17  | 69   | 44371    | 19.509  | ug/l   | 98        |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 49845    | 19.549  | ug/l   | 99        |
| 58) 2-Chloroethyl Vinyl ether  | 8.30  | 63   | 91598    | 103.213 | ug/l   | 100       |
| 59) 2-Hexanone                 | 9.48  | 43   | 142139   | 95.291  | ug/l   | 98        |
| 60) Dibromochloromethane       | 9.57  | 129  | 31278    | 19.753  | ug/l   | 100       |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 31416    | 19.583  | ug/l   | 100       |
| 64) Tetrachloroethene          | 9.33  | 164  | 32030    | 21.399  | ug/l   | 95        |
| 65) Chlorobenzene              | 10.14 | 112  | 77582    | 19.210  | ug/l   | 100       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.21 | 131  | 29976    | 20.092  | ug/l   | 99        |
| 67) Ethyl Benzene              | 10.25 | 91   | 139849   | 19.343  | ug/l   | 98        |
| 68) m/p-Xylenes                | 10.35 | 106  | 104059   | 38.084  | ug/l   | 99        |
| 69) o-Xylene                   | 10.70 | 106  | 50251    | 19.172  | ug/l   | 100       |
| 70) Styrene                    | 10.71 | 104  | 85380    | 18.918  | ug/l   | 98        |
| 71) Bromoform                  | 10.85 | 173  | 21329    | 19.566  | ug/l # | 99        |
| 73) Isopropylbenzene           | 11.01 | 105  | 141239   | 19.769  | ug/l   | 100       |
| 74) N-amyl acetate             | 10.89 | 43   | 49474    | 18.867  | ug/l   | 99        |
| 75) 1,1,2,2-Tetrachloroethane  | 11.26 | 83   | 40995    | 18.898  | ug/l   | 94        |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 36253m   | 19.119  | ug/l   |           |
| 77) Bromobenzene               | 11.25 | 156  | 33071    | 19.313  | ug/l   | 99        |
| 78) n-propylbenzene            | 11.35 | 91   | 142985   | 18.425  | ug/l   | 98        |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 86734    | 17.689  | ug/l   | 97        |
| 80) 1,3,5-Trimethylbenzene     | 11.50 | 105  | 118447   | 19.946  | ug/l   | 100       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 12921    | 18.725  | ug/l   | 99        |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 108652   | 19.557  | ug/l   | 98        |
| 83) tert-Butylbenzene          | 11.76 | 119  | 112064   | 19.074  | ug/l   | 99        |
| 84) 1,2,4-Trimethylbenzene     | 11.81 | 105  | 116447   | 19.441  | ug/l   | 99        |
| 85) sec-Butylbenzene           | 11.94 | 105  | 132101   | 19.758  | ug/l   | 99        |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 125095   | 19.916  | ug/l   | 100       |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 59764    | 19.320  | ug/l   | 99        |
| 88) 1,4-Dichlorobenzene        | 12.09 | 146  | 60008    | 19.053  | ug/l   | 99        |
| 89) n-Butylbenzene             | 12.39 | 91   | 99601    | 19.384  | ug/l   | 100       |
| 90) Hexachloroethane           | 12.59 | 117  | 20182    | 19.186  | ug/l   | 99        |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 59965    | 19.713  | ug/l   | 98        |
| 92) 1,2-Dibromo-3-Chloropropan | 12.99 | 75   | 10128    | 18.774  | ug/l   | 99        |

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QLast Update : Thu Oct 24 03:56:38 2019  
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| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev (Min) |
|----------------------------|-------|------|----------|--------|-------|-----------|
| 93) 1,2,4-Trichlorobenzene | 13.64 | 180  | 34573    | 18.049 | uq/l  | 92        |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 18731    | 18.904 | uq/l  | 98        |
| 95) Naphthalene            | 13.83 | 128  | 112310   | 19.104 | uq/l  | 99        |
| 96) 1,2,3-Trichlorobenzene | 14.01 | 180  | 36139    | 19.093 | uq/l  | 98        |

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

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