

Data Path : Z:\VOASRV\HPCHEM1\MSVOA X\DATA\WX053119\  
 Data File : VX009996.D  
 Acq On : 31 May 2019 19:31  
 Operator : JC/SP  
 Sample : K3131-11MSD  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF014MW028-190530MSD

Manual Integrations  
 APPROVED

MMDadoda  
 6/3/2019 9:47:40 AM

Quant Time: Jun 01 05:57:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052819W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 29 04:00:56 2019  
 Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc  | Units | Dev(Min) |
|----------------------------|-------|------|----------|-------|-------|----------|
| 1) Pentafluorobenzene      | 5.67  | 168  | 160408   | 50.00 | ug/l  | 0.00     |
| 34) 1,4-Difluorobenzene    | 6.86  | 114  | 262240   | 50.00 | ug/l  | 0.00     |
| 63) Chlorobenzene-d5       | 10.11 | 117  | 239933   | 50.00 | ug/l  | 0.00     |
| 72) 1,4-Dichlorobenzene-d4 | 12.08 | 152  | 115381   | 50.00 | ug/l  | 0.00     |

## System Monitoring Compounds

|                           |        |     |          |       |         |      |
|---------------------------|--------|-----|----------|-------|---------|------|
| 33) 1,2-Dichloroethane-d4 | 6.06   | 65  | 114110   | 50.36 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.72% |      |
| 35) Dibromofluoromethane  | 5.50   | 113 | 82439    | 50.00 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.00% |      |
| 50) Toluene-d8            | 8.71   | 98  | 337442   | 50.40 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.80% |      |
| 62) 4-Bromofluorobenzene  | 11.13  | 95  | 121422   | 50.49 | ug/l    | 0.00 |
| Spiked Amount             | 50.000 |     | Recovery | =     | 100.98% |      |

## Target Compounds

|                               |      |     |         |         |        | Qvalue |
|-------------------------------|------|-----|---------|---------|--------|--------|
| 2) Dichlorodifluoromethane    | 1.20 | 85  | 107343  | 54.763  | ug/l   | 99     |
| 3) Chloromethane              | 1.32 | 50  | 126184  | 47.885  | ug/l   | 98     |
| 4) Vinyl Chloride             | 1.41 | 62  | 126093  | 53.080  | ug/l   | 98     |
| 5) Bromomethane               | 1.64 | 94  | 54515   | 37.877  | ug/l   | 98     |
| 6) Chloroethane               | 1.71 | 64  | 68280   | 46.693  | ug/l   | 100    |
| 7) Trichlorofluoromethane     | 1.93 | 101 | 130767  | 49.815  | ug/l   | 99     |
| 8) Diethyl Ether              | 2.19 | 74  | 57559   | 46.660  | ug/l   | 100    |
| 9) 1,1,2-Trichlorotrifluoroet | 2.38 | 101 | 76835   | 48.481  | ug/l   | 98     |
| 10) Methyl Iodide             | 2.51 | 142 | 69967   | 36.988  | ug/l   | 99     |
| 11) Tert butyl alcohol        | 3.05 | 59  | 135905  | 243.716 | ug/l   | 100    |
| 12) 1,1-Dichloroethene        | 2.37 | 96  | 81336   | 50.068  | ug/l   | 99     |
| 13) Acrolein                  | 2.29 | 56  | 91347   | 232.695 | ug/l   | 100    |
| 14) Allyl chloride            | 2.73 | 41  | 195962  | 49.631  | ug/l   | 100    |
| 15) Acrylonitrile             | 3.14 | 53  | 342648  | 255.020 | ug/l   | 99     |
| 16) Acetone                   | 2.45 | 43  | 296016  | 226.107 | ug/l   | 100    |
| 17) Carbon Disulfide          | 2.57 | 76  | 242770  | 49.359  | ug/l   | 99     |
| 18) Methyl Acetate            | 2.78 | 43  | 157874  | 51.825  | ug/l   | 98     |
| 19) Methyl tert-butyl Ether   | 3.20 | 73  | 315490  | 51.440  | ug/l   | 99     |
| 20) Methylene Chloride        | 2.85 | 84  | 98354   | 49.058  | ug/l   | 99     |
| 21) trans-1,2-Dichloroethene  | 3.17 | 96  | 87584   | 48.455  | ug/l   | 99     |
| 22) Diisopropyl ether         | 3.86 | 45  | 384809  | 51.223  | ug/l # | 86     |
| 23) Vinyl Acetate             | 3.82 | 43  | 1735729 | 257.189 | ug/l   | 99     |
| 24) 1,1-Dichloroethane        | 3.70 | 63  | 184298  | 50.622  | ug/l   | 99     |
| 25) 2-Butanone                | 4.67 | 43  | 523895  | 256.850 | ug/l   | 100    |
| 26) 2,2-Dichloropropane       | 4.58 | 77  | 112788  | 40.954  | ug/l   | 99     |
| 27) cis-1,2-Dichloroethene    | 4.60 | 96  | 104442  | 50.056  | ug/l   | 96     |
| 28) Bromochloromethane        | 5.02 | 49  | 92573   | 49.000  | ug/l   | 100    |
| 29) Tetrahydrofuran           | 5.13 | 42  | 349092  | 266.895 | ug/l   | 99     |
| 30) Chloroform                | 5.21 | 83  | 169448  | 51.608  | ug/l   | 96     |
| 31) Cyclohexane               | 5.58 | 56  | 178120  | 51.656  | ug/l   | 97     |
| 32) 1,1,1-Trichloroethane     | 5.49 | 97  | 141755  | 53.012  | ug/l   | 99     |
| 36) 1,1-Dichloropropene       | 5.80 | 75  | 130382  | 49.002  | ug/l   | 100    |
| 37) Ethyl Acetate             | 4.84 | 43  | 198303  | 53.489  | ug/l   | 100    |
| 38) Carbon Tetrachloride      | 5.79 | 117 | 117765  | 51.219  | ug/l   | 98     |

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 Sample : K3131-11MSD  
 Misc : 5.0mL/MSVOA X/WATER  
 ALS Vial : 25 Sample Multiplier: 1

Instrument :  
 MSVOA\_X  
 ClientSampleId :  
 LF014MW028-190530MSD

Manual Integrations  
 APPROVED

MMDadoda  
 6/3/2019 9:47:40 AM

Quant Time: Jun 01 05:57:24 2019  
 Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052819W.M  
 Quant Title : SW846 8260  
 QLast Update : Wed May 29 04:00:56 2019  
 Response via : Initial Calibration

| Internal Standards             | R.T.  | QIon | Response | Conc    | Units | Dev(Min) |
|--------------------------------|-------|------|----------|---------|-------|----------|
| 39) Methylcyclohexane          | 7.46  | 83   | 153388   | 48.600  | ug/l  | 99       |
| 40) Benzene                    | 6.14  | 78   | 403383   | 51.107  | ug/l  | 99       |
| 41) Methacrylonitrile          | 5.04  | 41   | 112171   | 51.779  | ug/l  | 99       |
| 42) 1,2-Dichloroethane         | 6.19  | 62   | 147866   | 50.674  | ug/l  | 100      |
| 43) Isopropyl Acetate          | 6.45  | 43   | 314924   | 52.645  | ug/l  | 100      |
| 44) Trichloroethene            | 7.21  | 130  | 94083    | 49.073  | ug/l  | 96       |
| 45) 1,2-Dichloropropane        | 7.51  | 63   | 115401   | 50.790  | ug/l  | 97       |
| 46) Dibromomethane             | 7.66  | 93   | 65773    | 49.179  | ug/l  | 100      |
| 47) Bromodichloromethane       | 7.90  | 83   | 133292   | 52.410  | ug/l  | 98       |
| 48) Methyl methacrylate        | 7.77  | 41   | 158418   | 53.496  | ug/l  | 100      |
| 49) 1,4-Dioxane                | 7.74  | 88   | 49996    | 907.643 | ug/l  | 99       |
| 51) 4-Methyl-2-Pentanone       | 8.64  | 43   | 1045707  | 268.723 | ug/l  | 100      |
| 52) Toluene                    | 8.79  | 92   | 244384   | 50.995  | ug/l  | 100      |
| 53) t-1,3-Dichloropropene      | 9.04  | 75   | 154793   | 50.750  | ug/l  | 99       |
| 54) cis-1,3-Dichloropropene    | 8.43  | 75   | 165774   | 49.883  | ug/l  | 99       |
| 55) 1,1,2-Trichloroethane      | 9.21  | 97   | 98247    | 50.936  | ug/l  | 98       |
| 56) Ethyl methacrylate         | 9.18  | 69   | 188356   | 54.851  | ug/l  | 99       |
| 57) 1,3-Dichloropropane        | 9.37  | 76   | 173886   | 50.198  | ug/l  | 99       |
| 58) 2-Chloroethyl Vinyl ether  | 8.31  | 63   | 458125   | 254.420 | ug/l  | 100      |
| 59) 2-Hexanone                 | 9.49  | 43   | 807634   | 269.571 | ug/l  | 100      |
| 60) Dibromochloromethane       | 9.58  | 129  | 99880    | 52.641  | ug/l  | 100      |
| 61) 1,2-Dibromoethane          | 9.67  | 107  | 101944   | 51.445  | ug/l  | 99       |
| 64) Tetrachloroethene          | 9.34  | 164  | 81610    | 48.695  | ug/l  | 97       |
| 65) Chlorobenzene              | 10.14 | 112  | 1852568  | 368.815 | ug/l  | 99       |
| 66) 1,1,1,2-Tetrachloroethane  | 10.22 | 131  | 90443    | 51.913  | ug/l  | 99       |
| 67) Ethyl Benzene              | 10.25 | 91   | 467510   | 51.836  | ug/l  | 100      |
| 68) m/p-Xylenes                | 10.36 | 106  | 336886   | 101.109 | ug/l  | 99       |
| 69) o-Xylene                   | 10.69 | 106  | 166545   | 52.120  | ug/l  | 100      |
| 70) Styrene                    | 10.71 | 104  | 293594   | 52.397  | ug/l  | 99       |
| 71) Bromoform                  | 10.85 | 173  | 78022    | 54.788  | ug/l  | 98       |
| 73) Isopropylbenzene           | 11.02 | 105  | 440062   | 51.692  | ug/l  | 99       |
| 74) N-amyl acetate             | 10.90 | 43   | 274981   | 54.055  | ug/l  | 100      |
| 75) 1,1,2,2-Tetrachloroethane  | 11.27 | 83   | 166340   | 52.374  | ug/l  | 100      |
| 76) 1,2,3-Trichloropropane     | 11.29 | 75   | 145010m  | 52.557  | ug/l  |          |
| 77) Bromobenzene               | 11.26 | 156  | 109466   | 50.456  | ug/l  | 99       |
| 78) n-propylbenzene            | 11.36 | 91   | 510410   | 52.015  | ug/l  | 99       |
| 79) 2-Chlorotoluene            | 11.42 | 91   | 304897   | 50.856  | ug/l  | 99       |
| 80) 1,3,5-Trimethylbenzene     | 11.51 | 105  | 374119   | 52.164  | ug/l  | 99       |
| 81) trans-1,4-Dichloro-2-buten | 11.07 | 75   | 54418    | 48.798  | ug/l  | 97       |
| 82) 4-Chlorotoluene            | 11.51 | 91   | 354399   | 50.780  | ug/l  | 100      |
| 83) tert-Butylbenzene          | 11.77 | 119  | 364448   | 53.115  | ug/l  | 99       |
| 84) 1,2,4-Trimethylbenzene     | 11.80 | 105  | 376748   | 51.726  | ug/l  | 99       |
| 85) sec-Butylbenzene           | 11.94 | 105  | 427028   | 52.313  | ug/l  | 100      |
| 86) p-Isopropyltoluene         | 12.06 | 119  | 387438   | 52.768  | ug/l  | 100      |
| 87) 1,3-Dichlorobenzene        | 12.02 | 146  | 194604   | 50.383  | ug/l  | 100      |
| 88) 1,4-Dichlorobenzene        | 12.10 | 146  | 200784   | 50.972  | ug/l  | 100      |
| 89) n-Butylbenzene             | 12.38 | 91   | 352968   | 51.153  | ug/l  | 99       |
| 90) Hexachloroethane           | 12.60 | 117  | 68204    | 54.129  | ug/l  | 98       |
| 91) 1,2-Dichlorobenzene        | 12.39 | 146  | 199692   | 52.439  | ug/l  | 99       |
| 92) 1,2-Dibromo-3-Chloropropan | 13.00 | 75   | 38081    | 50.939  | ug/l  | 98       |

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Sample : K3131-11MSD  
Misc : 5.0mL/MSVOA X/WATER  
ALS Vial : 25 Sample Multiplier: 1

Instrument :  
MSVOA\_X  
ClientSampleId :  
LF014MW028-190530MSD

Manual Integrations  
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MMDadoda  
6/3/2019 9:47:40 AM

Quant Time: Jun 01 05:57:24 2019  
Quant Method : Z:\VOASRV\HPCHEM1\MSVOA\_X\METHOD\82X052819W.M  
Quant Title : SW846 8260  
QLast Update : Wed May 29 04:00:56 2019  
Response via : Initial Calibration

| Internal Standards         | R.T.  | QIon | Response | Conc   | Units | Dev(Min) |
|----------------------------|-------|------|----------|--------|-------|----------|
| 93) 1,2,4-Trichlorobenzene | 13.65 | 180  | 137423   | 50.498 | ug/l  | 99       |
| 94) Hexachlorobutadiene    | 13.78 | 225  | 66358    | 48.615 | ug/l  | 100      |
| 95) Naphthalene            | 13.83 | 128  | 449987   | 53.136 | ug/l  | 99       |
| 96) 1,2,3-Trichlorobenzene | 14.02 | 180  | 137669   | 50.539 | ug/l  | 99       |

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

