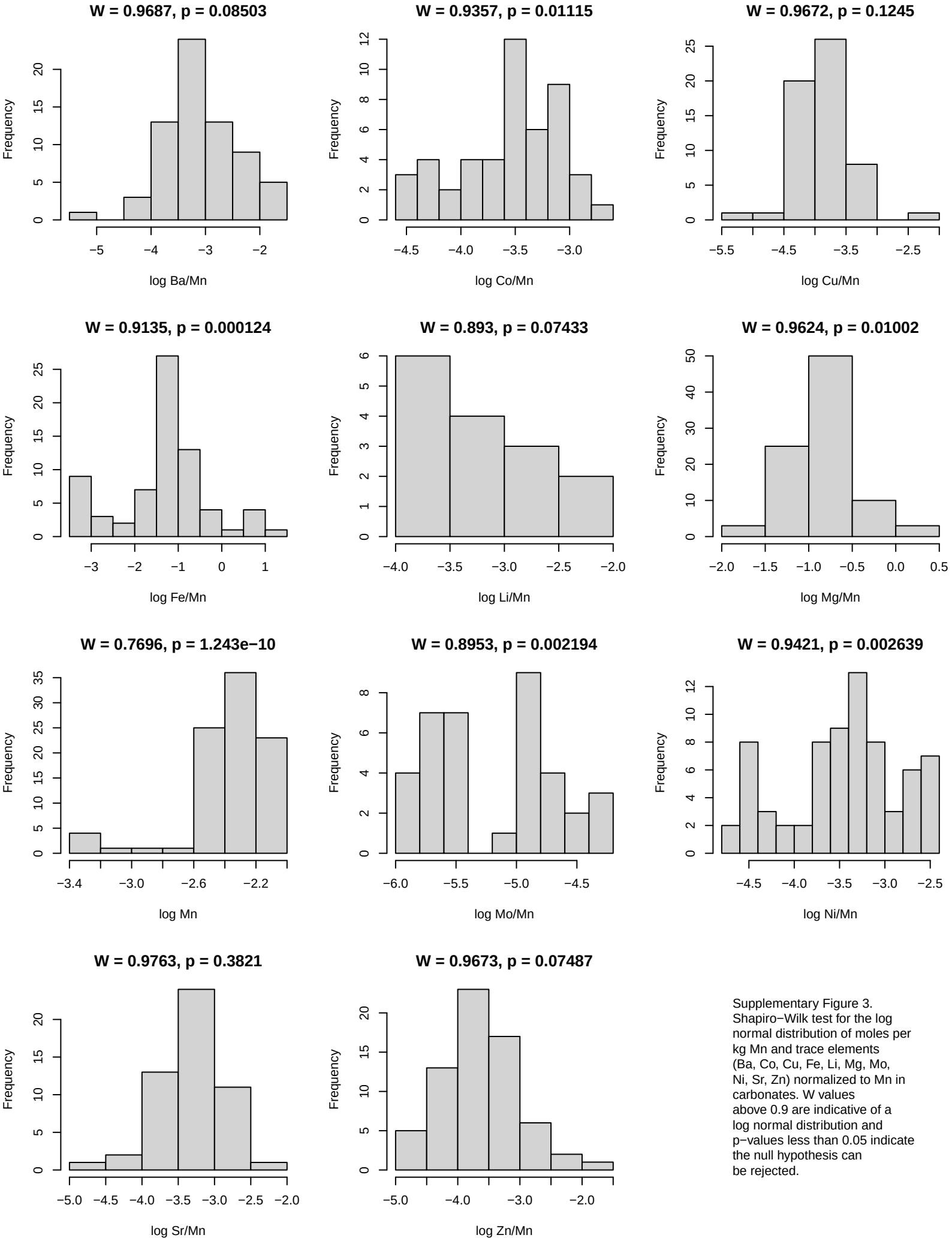

Supplementary Figure 3. Shapiro−Wilk test for the log normal distribution of moles per kg Mn and trace elements (Ba, Co, Cu, Fe, Li, Mg, Mo, Ni, Sr, Zn) normalized to Mn in carbonates. W values above 0.9 are indicative of a log normal distribution and p−values less than 0.05 indicate the null hypothesis can be rejected.