



Figure 2. Determination of the pre-mining geochemical baseline, Mineral Creek terrace. We dug a trench beneath a dead stump (124 yr old, minimum date of 1876 on the basis of dendrochronology determined from the tree rings; Fey and others, 2000) to sample sands deposited in this terrace. Dendrochronology dates from six live trees on this terrace range from 148 to 252 yr, which would indicate a minimum age of the terrace of more than 200 yr (circa 1750–1800 A.D.), or at least 75 yr before the onset of mining in the Mineral Creek drainage (J. Dean, University of Arizona, Laboratory for Tree-Ring Research, written commun., 1999). The geochemical profile with depth indicates a constant amount of iron in the sediments, but a decreasing concentration of the deposit-related trace elements. We interpret the data to show that the surface of the terrace has been contaminated with young sediments, but that the lowest interval provides a measure of the pre-mining geochemical baseline (Church and others, 2000).