

Barry Maynard: emeritus professor of Geology at the University of Cincinnati, now living in Portland OR. PhD in geochemistry from Harvard University supervised by Raymond Siever in Geology and Werner Stumm in Civil Engineering. Principal research area has been in geochemical behavior of metals (Al, Cu, Fe, Mn, Pb, U, Zn) in Earth surface environments and in water distribution systems. With colleagues at US EPA and in the consulting community, I have analyzed corrosion scales and modeled water-solids interactions for 28 public and private water systems. In addition, I have done ground water – surface water or ground water – waste water mixing models for 10 systems. In all, my lab has processed more than 700 samples of pipe scale material. Techniques that we have relied on most heavily have been scanning electron microscopy with energy dispersive analysis, X-ray fluorescence and X-ray diffraction, micro-Raman spectroscopy, and inductively-coupled plasma spectroscopy with mass spectral analysis. We have also done sulfur isotopes plus carbon and sulfur elemental analysis on a few systems.