



Figure 8. Geochemical data from oxbow deposits in an abandoned meander along the Animas River near Durango, Colorado. This meander was active when the original U.S. Geological Survey topographic map was produced in 1898. Note the high concentration of all trace elements in these sediments. In particular, manganese exceeds 20,000 ppm throughout much of the interval between 100 and 200 cm depth. The large increase in manganese concentrations is interpreted to represent the increase in tonnage milled by the Sunnyside mill at Eureka from 1917 to 1930. Ore from the Sunnyside mine is characterized by high manganese concentrations in the gangue. Parallel geochemical trends are observed for the metal pairs cadmium-zinc and silver-lead, reflecting the sphalerite and galena hosts, respectively. Iron concentrations in this section are relatively low, indicating that the contaminants are transported as discrete mineral grains rather than as colloids.