This plot represents the distribution and abundance of cobalt in 976 stream sediment and 129 glacial debris samples collected during 1975 and 1976 in the Talkeetna quadrangle. At most sites, stream sediment was collected from the active channels of swift mountain streams draining areas ranging from about 3 to 10 km². Glacial debris was collected from lateral and medial moraines of small glaciers with catchment areas less than 1 km². For the purposes of this study, analytical data from the samples of stream sediment and glacial debris were plotted on a log-log scale.

The analytical data showed that the two media were chemically similar. The samples of stream sediment and glacial debris were air-dried and sieved through a 100-mesh (0.16 mm) screen. A split of the minus-100-mesh material was analyzed for 30 elements by semi-quantitative X-ray fluorescence spectroscopy using the XRF Spectral Analysis System (XRF-4000) of the U.S. Geological Survey.

The range of concentration of each element was subdivided into three or more intervals for plotting by symbols as shown on the accompanying histogram.

Scale 1:250,000

MAP SHOWING DISTRIBUTION PATTERN OF COBALT IN STREAM SEDIMENT AND GLACIAL DEBRIS SAMPLES

GEOCHEMICAL MAPS SHOWING DISTRIBUTION AND ABUNDANCE OF SELECTED ELEMENTS IN THE TALKEETNA QUADRANGLE, ALASKA

by


1978