GEOCHEMICAL MAP SHOWING THE DISTRIBUTION AND ABUNDANCE OF COBALT, CHROMIUM, AND NICKEL IN THE NONMAGNETIC, HEAVY-MINERAL CONCENTRATE SAMPLES IN THE WEST CHICHAGOF-YAKORI WILDERNESS STUDY AREA, SITKA QUADRANGLE, SOUTHEASTERN ALASKA

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This map shows the distribution and abundance of cobalt, chromium, and nickel in the nonmagnetic, heavy-mineral concentrate samples collected during the 1982-83 field season in the west Chichagof-Yakori Wilderness Study Area, Sitka quadrangle, southeastern Alaska.

The area of this project is about 800 square miles (2,100 km²). The nonmagnetic, heavy-mineral concentrate samples were collected by using a hand magnet to selectively collect heavy minerals from the host rocks. The host rocks are predominantly sedimentary, with minor intrusives and metamorphic rocks.

A histogram showing cobalt in the nonmagnetic, heavy-mineral concentrate samples from the west Chichagof-Yakori Wilderness Study Area is provided. The histogram shows the frequency distribution of cobalt concentrations.

REFERENCES CITED


Statistical data were compiled and used to prepare this map. The data were used to calculate the average concentration of each element and to determine the total area sampled.

A list of brands used in this report is for descriptive purposes only and does not constitute endorsement by the U.S. Geological Survey.

LIST OF MAP CODES

1. Cobalt
2. Chromium
3. Nickel

N. not detected at limit of detection
1. Undetected below the limit of determination

Quantitative analysis of the nonmagnetic, heavy-mineral concentrates was performed using X-ray fluorescence spectroscopy.