



**Stream Sediment Sample Locality**

○ 73 < 250 ppm Cu  
● 25 ≥ 250 ppm Cu

Threshold = 250 ppm  
Background = 90 ppm

**Rock Chip Sample Locality**

△ 1 < 300 ppm Cu  
▲ 100 ≥ 300 ppm Cu

Threshold = 300 ppm  
Background = 40 ppm

**Altered Zone**

Area of heavy limonitic staining. Generally coincident with highly sheared areas in metavolcanic rocks and metasediments.

**Mineralized Locality**

X Site where minor quantities of malachite or chalcocite are present in small veinlets, in vesicles, or on fracture and joint surfaces. Usually associated with fault or shear zones in metavolcanic rocks.

X A Elongate mineralized zone with sporadic occurrences of chalcopyrite, azurite, and malachite. Coincides with faulted contact between metavolcanic rocks and pelitic metasediments. Fault zone mostly covered by talus. Exposed copper occurrences are in highly fractured and altered volcanic rock on southeast side of fault.

X B Locality where cupriferous quartz veins 2 to 6 inches wide occupy minor fault zone. Veins contain chalcocite, pyrrhotite, covellite(P), and malachite.

Thomas E. Smith, Geologist

1973

Gary L. Kline, Assistant

GEOCHEMICAL SAMPLE LOCATIONS, MT. HAYES A-6 QUADRANGLE, SOUTH-CENTRAL ALASKA