

P. DEAN - 26 August 1968

105-1-13

Prospecting Report: "Spearhead Mtn." Area

Several small copper ~~are~~ showings were located at various places within the granodiorite plug. In all of these the chalcopyrite was concentrated mainly along joint fractures. At the largest of these copper showings chalcopyrite, pyrite, and some arsenopyrite occur abundantly in the talus for a distance of about 300 FT. The mineralized talus appears to be coming from a zone of intensive jointing & fracturing about 20 FT wide close to the contact. Copper concentrations within this zone may approach economic grade, but its relatively small size, coupled with the fact that it outcrops on a near-vertical cliff, probably make the showing of little interest.

SAMPLES
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Minor amounts of pyrite occur throughout most of the rocks surrounding the intrusive plug, and arsenopyrite, chalcopyrite, magnetite, & pyrrhotite have been found as float in a few localities. (~~Some~~) Two boulders of very ~~juicy~~ juicy looking rock were found in one stream close to the contact - these contained massive arsenopyrite, chalcopyrite, and pyrite in what looks like green chert. These boulders occurred close to the headwaters of a stream, but I couldn't find their source. Chert outcrops in the creek above where the mineralized flat occurred, but appears to contain no significant amounts of mineralization. It may

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be worthwhile to assay a sample of the float, & then try to track down its source with EM or mag if it seems to be sufficiently interesting.

I think that much more silt sampling is ~~required~~ required in the area - particularly along the south side of ^{the} mountain range (between Spearhead Mtn (6923) and the South MacMillan River) - before it can be safely written off. Several beds of limestone occur in the area south of the granodiorite plug, ~~and these, along with the~~ at least one known fault cuts through this area, we have found a few mineralized N-S trending dikes which may ~~not~~ reach the low elevation areas north of the South MacMillan, and the South MacMillan itself seems to lie in a trench-like feature analogous to the Tintina trench — all of which seems to indicate a good potential for a replacement-type ore deposit south of Spearhead Mtn.