

INTRODUCTION:

The project was started in 1985 with the hope that perhaps the ore zones were not in a klippe zone but rather in a graben and that a volcanic vent such as at Aylwin Creek could be found. So far, no evidence for such a theory has been found and the present data reinforces the original theory of a klippe zone.

No skarn development has been observed at the Millie Mack Mine but it is believed that a good silver potential exists. (Ref Geological Fieldwork 1985 P. 391) The gold values of 1.74 oz Au/T and 2.20 oz Au/T mentioned the Ministry of Mines Annual Report of 1918 (p. 175) should not be ignored and warrants further investigation.

PROPERTY GEOLOGY:

The Millie Mack Mine is at the base of a klippe (Hyndman, 1968) of late Triassic Slocan Group sedimentary rocks which are in contact with volcanic rocks of the Slocan Group and the lower Jurassic Rossland Group. In our study we were unable to tell the difference between the volcanic groups. Both are volcanic flow breccias.

The Slocan sediments above the klippe are gently folded with low plunges to west at the Millie Mack and to the north east at the Billie P and Great Western showings. The mineralized zone at the Millie Mack consists of quartz vein "boudins" (from boudinage) which occur near the top of a very friable black graphitic argillite zone.

One of the marker units in the Slocan sediments is a limey siltstone with occasional pods of limestone. Several of these were dissolved in hydrochloric acid but no fossils were found.

Based on contact data, the klippe is an east-west plane which dips 11 - 12° south. On closer examination of this plane (from the percussion hole information at the Millie Mack Mine), this plane may also have undulations (Ref section A-B). This does not have any effect on the projection of the plane even though some faulting is present.

VEINS:

The main ore zones are bedding plane veins which have been stretched showing boudinage. This is best seen at the Black Bear deposit. In the other deposits, the quartz now exists as separate boudins. (Highly polished lenses of quartz)

Within the volcanics, sediments, and the feldspar porphyry, there are small tension veins which contain geochemical amounts of the same elements as the bedding plane ore veins. None of the veins in the volcanics were found cutting the sediments. Diamond drill hole 5-1981, intersected a quartz vein in "silicified" andesite at 37.2 - 38.1 m with fine pyrite but it was not assayed (ASR 9965).

FELDSPAR PORPHYRY:

The feldspar porphyry occurs near the junction of the Rossland volcanic breccia and the Slocan volcanic breccia. At this stage it is not known if this intrusion has anything to do with the mineralization. It would be interesting to have an age date from this rock.

CONCLUSION:

The potential for a large structurally controlled silver ore zone remains at the Millie Mack Mine. The high grade gold samples reported in the 1918 Annual Report have not been duplicated and warrant further exploration.

REFERENCES:

Addie, G.G. (1985): Structural Geology of the Millie Mack Mine and a Theoretical Ore Control (in) Geological Fieldwork 1985, B.C. Ministry of Energy, Mines and Pet. Res., P. 351-355.

Hyndman, D.W. (1968): Petrology and Structure of Nakusp Map Area, British Columbia, Geol. Surv., Canada, Bull. 161, p. 85.

Paper 1986-1,
Mooney, M.G. (1981a): Assessment Report on the Drilling Work Program on the Millie Mack Claim, Slocan Mining Division, B.C. Ministry of Energy, Mines & Pet. Res., Assessment Report 8813.

(1981b): Assessment Report on the Physical Work Program on the Millie Mack Property, Slocan Mining Division, B.C. Ministry of Energy, Mines & Pet. Res., Assessment Report 9965.

OK



TO: Dr. V. Preto, P. Eng.
Geological Survey Branch

DATE: Feb. 29/88

Re: Notes on the Mllie Mack Project 82K/4

I can't do anything with this report as I can't locate the legal owner. The registered owner from the Government Agents office in Kaslo is Wayne D. Smith. I sent him a copy prior to displaying the map at the Cordilleran Round Up (1988) for his permission to put it up. However, the map was returned; the letter unopened.

Susan Craik P.A.A. inherited this property from her father and obtained an option agreement from David Minerals. When this company went bankrupt, I understand Wayne Smith picked it up in a Sheriff's sale. The question is, does the option agreement go with it? I have advised Susan to get a good lawyer.

In the meantime nothing should be done with this map without the owner's consent. So, I suppose it should simply go to "property files".

Yours truly,

G.G. Addie, P. Eng.
District Geologist

GGA/db
Enclosure

* See accompanying maps (2)
in Map Cabinet:
"Unfoldable Map"
↓
one
overlays
a topo
map