

Granisle
883627

BABINE LAKE PROPERTY VISITS - June 16, 1976

On June 16th I accompanied Nick Carter (B.C.D.M. - Victoria) and Dick Nielsen and Mike Jones, both with the Research Division of Kennecot in Salt Lake City, to the Granisle mine and Bell Copper mine on Babine Lake.

GRANISLE

Louis Tsang, geologist, conducted the tour in the morning. We started on the Bench 17 level (current working level). Thus they are at about the halfway point in mining (ultimate - Bench 33). Three drills on the property- one working in pit on Bench 16?, one working at SW rim and one broken down on northwest side of pit - in area at proposed expansion. We saw the 'typical' geology including high-grade bornite and coarse hydrothermal green biotite. Breccias with angular and rounded fragments. Kennecot's people were impressed with the freshness of the rocks (i.e. little alteration). We also looked at the propylitic zone (pyrite). The major NE faulting pattern was very noticeable in the bottom of the pit. Louis suggests that this faulting will get stronger with depth and that the orebody is tilting to the west.

Louis hopes to do mapping and structural studies in the pit this summer.

Current production is about 13,000 tons/day, about 2,000 tpd lower than hoped for, due to harder grinding.

An intense quartz stockwork in the porphyry was observed for the first time on the bench wall.

BELL COPPER

Peter Ogryzlo, geologist, conducted the tour in the afternoon. The mine is still on strike (since Feb. 6th) and only staff workers are on the site. We were stopped at the picket line set up just outside the town of Granisle. The pit was completely vacant. Peter took us down to the 2620 level (lowest level). The surface is at 2220 so the vertical distance is 400 feet. This is the maximum at which the present pit design can handle and thus the next step is to increase the pit outwards. This will involve

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taking more waste (rock and overburden) than before and thus add to the cost.

There was a brilliant malachite stain down one of the pit faces where the water line was pumping. A lot of water has been pumped from the pit - leaving malachite-stained rocks everywhere.

The donut shape body is still envisaged with the better grade to the west.

Alteration studies at Bell are still a key. It appears that the ore 'zone' was made to biotite zone alteration which was later overprinted by a sericite-quartz-pyrite zone.

The pinkish colour of quartz veins is intriguing.

The paper by Carson, Jambor and Ogryzlo for the porphyry copper volume will deal with the alternation in length.

[Morrison will remain at a standstill 'till strike at Bell is settled. Even then, it is in question.]

TGS
June 23/76