

REPORT
to
CHILLI COPPER CORPORATION LIMITED
on
The Property of
RICO COPPER MINES LTD.
New Westminster Mining District

LATILAW B.C.

by

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November 14th, 1951.

CHILLICOPPER CORPORATION LIMITED

REPORT ON THE PROPERTY OF
RICO COPPER MINES LTD.

New Westminster Mining District of B.C.

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The main Rico showing is located on and below a precipitous bluff at elevations of from 6,100 to 6,350 feet above sea level and consists of a zone of garnetite and sediments, mineralized with chalcopyrite, and located some 350 feet from a large intrusion of granodiorite. The showing, not all of which is mineralized, is exposed for a length of 500 feet with widths of around fifty feet. Copper in the form of chalcopyrite occurs disseminated in the zone to form low to medium grade copper ore, and as concentrations of high grade ore.

At the crest of the ridge at elevation of 6,200 feet the ore zone is intersected by a fault zone striking northerly. This fault zone has the effect of displacing the eastern part of the ore to the south a horizontal distance of around 40 to 60 feet.

The northwest segment, or the main showing, is exposed on high bluffs and alongside a glacier and is included in Henry Hill's report in orebodies "B", "C", and "D". As exposed on the surface and explored by diamond drill holes this part of the ore zone has a mineralized length of around 240 feet, with an average width of fifty feet and by taking a proportionate amount of high and low grade ore exposures the average grade is estimated to be between two and three per cent copper.

The southeast segment is referred to in Hill's report as the "A" orebody. Here a width of forty feet is exposed of medium and high grade copper ore. The ore terminates against the fault to the northwest and is mainly hidden by a large snowfield to the southeast. This ore has been followed down the dip for a distance of 350 feet and shows width of from thirty to forty feet of an average grade similar to that of the northwest segment of the ore.

Owing to the location of the snowfield this ore has not been followed along the strike for any appreciable distance.

The combined strike lengths, of the northwest and southeast segments is between 400 and 500 feet with widths of between thirty and fifty feet.

As a means of exploring this deposit, it appeared to the writer, that diamond drilling offered the best and easiest solution. As work progressed, it became apparent, that there are certain difficulties to be overcome in the carrying out of a complete drilling campaign.

Some of the more apparent difficulties are:

1. All drilling has to be carried on at the general elevation of the outcrop about 6,200 feet above sea level.
2. At this elevation the drilling season is limited to between three and four months in each year.
3. There are few locations suitable for the set up of a drill. Some of those that are suitable are exposed so late in the year (from snow) that only one or two holes can be drilled therefrom.
4. The location of practically all drill set ups is in the vicinity of the faulted area, giving rise to a large loss of core and difficulty of interpreting results.
5. An adequate water supply is not always available.
6. It is hard to keep men at this location for any length of time.

It will be readily seen that drilling under the aforementioned conditions is costly and time consuming.

The uncertainty of, and the cost of transportation is a large factor in the above. At present it is only possible to transport material to the showings by helicopter.

The above reasoning applies also to any tunnel or underground work that may be undertaken in the vicinity of the showings.

The matter of an aerial tramway has been considered. This at best would be a salvage proposition to take out any of the higher grade ore available above an adit level. A mining operation at the high levels could only be carried on between six and seven months a year, owing to the heavy snowfall and the virtual impossibility of keeping men under winter conditions. Lack of an adequate supply of water under winter conditions is a serious condition.

Consideration has therefore been given, to the opening up of the property by means of an adit from a lower level to get away from the high level winter hazards that have been partly enumerated above.

From visual examination at a distance and during the summer, the writer picked out what he considered to be a suitable location for the portal of an adit at an elevation of about 4,000 feet above sea level. This location would require a crosscut adit approximately 4,500 feet long to reach vertically below the known ore showings. Recently the writer visited this proposed location at 4,000 feet and found that while it is not impossible to drive an adit from this point, it is not entirely free from the winter conditions on the higher levels. For one thing there is no adequate location for a camp where men could be housed all year, secondly it is not accessible by a road except at extreme cost. A tramway would be necessary to transport men and

material to the adit site. The total snowfall here is rather uncertain and it may be that a great amount of snow may be blown into the basin from the bare rocky slopes, in addition to the normal snowfall.

An examination on the spot, within the past two weeks, has shown that there is a suitable site for the portal of an adit at an elevation of 3,000 feet. This point is distant 6,800 feet horizontally from the showings or distant between 5,500 and 6,000 feet from the granite-sediment contact fifteen hundred feet to the northwest of the showings.

There is every reason to believe that copper bearing orebodies will be found along the contact zone in addition to those now exposed in the showings around 6,200 feet elevation.

By driving a crosscut adit towards a nearer point on the contact than the main showing, it will be possible to explore some of this contact zone while driving the lower tunnel. The length of adit in the granite will be appreciably reduced.

The 3,000 feet elevation adit site, is below the precipitous cliffs at the head of Flat Creek, a branch of Jones Creek. This point is about 7,000 feet distant from a good truck road. This 7,000 feet can be easily constructed along the valley bottom with a grade of not more than five per cent to the tunnel site.

In all, this 3,000 feet (elevation) site is a suitable location for a main production working, as transportation, camp sites and water are readily available.

D. C. McKechnie

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