

M E M O

June 20th, 1972.

To: D. McCarthy

From: W.R. Bacon

INTRODUCTION

The Tyner Creek property of Carolin Mines Ltd. is about half way between Craigmont and the old Aberdeen mine, which are about 10 miles apart.

The property is at the junction of Tyner and Guichon Creeks.

GEOLOGY

Except in the valley of Tyner Creek, the property is drift covered. It occurs at the southeastern extremity of the Guichon batholith, mainly in the Guichon variety of batholithic rocks. The Guichon variety is mainly granodiorite that shows wide compositional and textural differences.

At its junction with Guichon Creek, and for 1500 ft. upstream, Tyner Creek is in a narrow, rugged canyon about 200 feet deep. The top 100 feet is sand and gravel and the bottom 100 feet displays a variety of dioritic rocks. A strong northwest fault, nearly vertical, follows the course of Tyner Creek. In addition to the main fault there is a series of north-northwest faults.

Minor amounts of green copper stain are present at wide intervals along the canyon. A drill hole under the best showing of copper stain intersected minute amounts of secondary native copper. There is about 150 feet of oxidation in this drill hole (D.D.H. 1) which was quite steep (-74 degrees).

The points to remember about this malachite-chalcocite-native copper mineralization are that it is localized along a strong fault and that it is secondary. This is very reminiscent of the nearby Aberdeen Mine which had good grade chalcocite and native copper along a fault - down to a depth of 200 feet. Total production from the Aberdeen stands at less than 2000 tons.

EXPLORATION

Geochemistry, induced polarization and electromagnetic surveys have been carried out on part of the property.

Several geochemical anomalies were obtained but their validity is conjectural because of the depth of overburden.

Two of the four I.P. anomalies were drilled and one strong EM conductor was partially tested by a hole that was apparently abandoned before reaching its objective. The core from the drill holes, according to D.R. Cochrane, contained "low but fairly consistent amounts of native copper, and certain sections contain chalcopyrite and secondary copper minerals." As noted above the native copper is certainly secondary, a fact that mitigates against its depth possibilities.

CONCLUSIONS

The exploratory work to date has been done adjacent to the lower 3500 feet of Tyner Creek, i.e. in the general area of the known showings. These are interesting but obviously not of economic potential; they have been known and examined and explored one way or another since the turn of the century - without encouraging results.

The known mineralization is clearly secondary and, as such, cannot be expected to persist to a depth of more than 250 feet. Moreover, it is restricted to a fault zone.

With regard to the remainder of the property, i.e. away from the canyon, little is known because of the depth of overburden. It would have to be classified at this time as moose pasture, albeit it is in a relatively attractive environment.

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