3890 0009

(160)
Item 9

REESE RIVER COPPER

A copper property under lease and option to Apex Minerals Corporation is located in Section 31, T. 12 N., R. 40 E., M. D. M. (unsurveyed). The property consists of seven claims held by possessory title as follows: Sue, Sue No. 1, Sue No. 2, Sue No. 3, Blue Rock, Blue Rock No. 1 and Blue Rock No. 2.

Copper is found on the surface over an area 3,000 feet long by hundreds of feet wide. The copper occurs as oxides and carbonates. It is found as stringers in an oxidized iron gossan. The gangue rock is limestone, most of which has been replaced by the iron and copper, with subsequent leaching of the copper.

This is a typical example of a leached copper outcrop, and most of the large copper mines of the world had these surface characteristics, many with no commercial values at the surface.

The sequence of events, geologically, is: solutions carrying copper and iron ascend and circulate through the country rock, replacing it and precipitating as iron and copper sulphides. Leaching and weathering oxidize both the iron and copper, with formation of sulphuric acid. The copper, being more soluble, is carried down in solution to be re-precipitated as secondary sulphides at or near the water table, leaving the iron oxides behind. Where the copper re-precipitates is called the "zone of secondary enrichment", and is always richer than either the surface residual or the primary ores.

At our Reese River property a surface cut has been bull-dozed at both ends of the exposure mentioned above to depths of

35 feet. These are still in the gossan iron, with streaks of high grade copper (these have been assayed from 3% to 21.4%). Arrangements have been made to put down churn drill holes at each end, to prospect for the secondary enrichment. The depth at which this will be found is, of course indeterminate at this time, but it should change at around 100 feet. However, it is recommended that the holes be drilled 200 feet if necessary, or until the permanent water table is reached. When this water table is reached it is confidently expected that there will be an important concentration of the copper in the zone of secondary enrichment.

Harry H. Hughes