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HIGH-GRADE TONNAGE IN THE GIANT COPPER NORTH-NOSE ORE BODY

In December of 1973 a study was undertaken to determine the maximum grade in percent copper which could be achieved in the North-Nose section of the Giant Copper ore body.

Initially, it was conjectured that mining of the above high-grade zone would take place from an inclined shaft originating on ten level. Additional investigations, however, led to the conclusion that the North-Nose could be mined more easily from the fifteen level adit.

An interval commencing at elevation 4390 (50 ft. above 15 level) and terminating at elevation 5415 (525 ft. above 10 level) was chosen for an ore reserve calculation with an eye to the best possible grade. The results obtained indicated that the interval described contained 651,000 tons grading 1.81% copper. It was noted that mining of the ore body would be complicated by the pressence of a fault offsetting the ore at elevation 4965 ft.

In carrying out the above work to maximize grade and tonnage in the North-Nose, the writer noted that the drill hole assays are such that a further reduction in tonnage from that reported above, would not significantly increase the grade.

It was decided to carry the tonnage and grade calculation through to surface from the 5415 ft. elevation. This latter work indicated that 86,440 tons of material grading 1.81% copper exists in the interval 5540 ft. to 5850 ft. elevation; however, the upper part of the North-Nose zone is discontinous and not well defined and therefore, the above figures cannot be reported with complete confidence. A section of low-grade material from 5415 ft. to 5540 ft. was not included in the ore reserve calculation.

The combined tonnage and grade above and below the last mentioned low-grade section, is 737,900 tons containing 1.81% copper, or 848,600 tons @ 1.57% copper taking 15% dilution.

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It must be emphasized that grade and tonnage values as determined from the diamond drill hole information was assigned to intervals in the ore zone averaging, say 80 feet, and therefore, further drilling is required to substantiate the above calculation.

The calculation sheets and level plans utilized for the North-Nose ore-reserve calculation have been bound in a booklet dated and signed by this writer, and placed with diamond drill records relating to Giant Copper.

Yours truly,

I.S. Rote

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