

Whitehorse Copper Mines Ltd.

P.O. Box 4280, Whitehorse, Yukon Territory, Canada
telephone (403) 668-2171, Telex 049-8218

MEMORANDUM

Date: January 3rd, 1977.

TO: V.V. Jutronich
FROM: A. Hureau
RE: North Star Drilling

Drilling in the North Star area in 1975-76 has confirmed the existence of a large embayment of Lewes River limestone and quartzite in diorite, from 4,000' to 6,000' southeast of, and on strike with, the Little Chief Mine.

Hole NS 4, drilled to a depth of 1,596', intersected a quartzite limestone contact at an elevation of 1,200', which was poorly skarnified and contained only a few traces of chalcopyrite. This is the only hole which has tested this contact, which appears to have a strike length of over 1,000'.

The structure of the area is still not clear as far as the location and dip of intrusive contacts is concerned. The lack of skarnification of limestone near the footwall contact would seem to indicate that the contact was intersected too far from the intrusive. Skarn zones could be reasonably expected to the east, southeast and possibly north of NS 4. Since the contact of interest will be at a depth of $\pm 2,000'$, the location of diorite at surface cannot be used to rule out possible skarn zones at depth. The contact may be rolling away from the pendant for considerable depth. (Note mineralization on south end of Little Chief 1750 level is now 500' south of diorite contact at surface.) Because the area is on strike with and structurally analogous to Little Chief, it should be tested thoroughly.

The disadvantage of the depth to potential skarn zones is largely offset by the proximity to Little Chief, and the fact that a 20% decline driven from the 1450 level would reach the area at a depth of $\pm 2,000'$.

Two holes each of 2,000' are proposed to test the limestone near the diorite contact.

JAN 77
May 3rd, 1976.

V.V. Jutronich
A. Hureau*
North Star Drilling

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An attempt will be made to establish the diorite contact at surface by a mag survey in the area of 33S 0 - 5E. This may help in locating further holes; however, since the contact of interest will be at a depth of \pm 2,000', the location of diorite at surface cannot be used to rule out possible skarn zones at depth. The contact may be rolling away from the pendant for considerable depth. (Note mineralization on south end of Little Chief 1750 level is now 500' south of diorite contact at surface.) Because the area is on strike with and structurally analogous to Little Chief, it should be tested thoroughly. ~~I feel that funds should be allocated for 10,000' of drilling, at an estimated cost of \$160,000.~~

Done
Doesn't
help
H

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Whitehorse Copper Mines Ltd.

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MEMORANDUM

Date: February 21, 1978

TO: R. B. Cairns
FROM: A. Hureau
RE:

The location of the east contact of the North Star pendant is unknown because of lack of outcrop in the area. A slight change in magnetic intensity near the property boundary suggests that the pendant may extend \pm 1,200' east of the baseline from 28 S to 44 S.

An application has been made to stake eight claims to cover the down dip extension of the limestone quartzite contact. The grid will be extended to the south and east. Magnetometer coverage will be extended over this area and may help locate the intrusive - sediment contact.

A deep hole (\pm 2,000') is proposed to test the down dip extension of the thick limestone horizon intersected in holes NS 2 and NS 4. This horizon can reasonably be expected to become more skarnified as it approaches^S the intrusive. The exact location of the hole will be contingent on the results of the magnetometer survey, however it does not appear that a more shallow target is likely.

Section 104 E of Middle Chief is typical of several Middle Chief sections and shows how abruptly limestone can be replaced by mineralized skarn as the size of the pendant decreases and the intrusive is approached.

Cost 1 hole 2,000 ft. @ \$18/ft. = \$ 36,000.00