

673767
Lennac Lake
93L/aw

MEMO

January 22nd, 1974.

To: W.R. Bacon
From: J.C. Stephen
Re: Lennac Lake

- (1) Amax report on Lennac drilling received January 21st, 1974, recommends 3 diamond drill holes with a budget of \$53,000 (3200').
- (2) Two 1200' holes are recommended along section 76E drilled north at -50° on the West Zone.
- (3) One hole 800' at -50° is recommended in the East Zone.

Comparison

Granisle and Lennac Lake rock types, drilling and crushing costs should be similar.

Granisle, Jan.-Sept. 1973, mined 4,188,483 tons at 0.46% Cu
for Net Revenue \$22,154,059 = \$5.28/ton.
Cost of Production \$10,928,920 = \$2.61/ton.
\$5.28/ton net revenue at 0.46% Cu = 57.4¢/lb. net.

Lennac Lake .3% Cu = 6 lbs. Cu/ton @ 57¢ net = \$3.42/ton net revenue
Cost = \$2.62
Gross margin = \$.80 net/ton

Strip ratio at Lennac Lake, however, would be very much higher than at Granisle wiping out this margin.

Grade required below 300' from surface will be in the order of .5-.6% Cu to offset higher mining cost.

Discussion

West Zone

The two angle holes to 1200' along section 76E will explore to vertical depth 800'. If these holes do not show substantial increase in grade, the property option should be dropped.

The large intense circular pyrite halo indicated by IP and drilling indicates a source of some magnitude, presumably greater than the intrusive outlined near surface. It might be presumed the copper zone would strengthen below the pyrite halo, if we assume we are looking at the top of a structure.

The Amax report presents a sectional view at 76E. This section contains several errors but there is a suggestion contained in the geology of the property and distribution of values in the percussion holes that the intrusive and/or volcanic remnants as well as copper values dip to the north. Hence the suggested drill holes may be proposed going down dip. In this case, discussion should be had with Amax to explore this possibility and it may be better to drill from north to south along section 76E.

East Zone

Results here have been poor in relation to magnetic results and geology. They are about in line with IP results.

The proposed drill hole should add good geological information and should be drilled. The area has some potential but is still secondary to the West Zone.

Conclusion

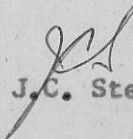
Rock age, rock type, copper values and probable mining costs suggest this property is not a viable prospect.

However, stage of exploration, large extent and circular shape of pyrite halo, increase of copper values with depth and accessibility indicate every effort should be made to exhaust all possibilities before dropping the option.

Cost of the next phase to LUC will be $\$53,000/2 = \$26,500$ or \$13,250 for each of Dome and Brascan. In view of this modest cost, I would recommend continuation of the program.

It might be interesting to explore possibility of bringing in another partner to replace Conwest who retain no interest.

JCS/ic


J.C. Stephen