

## BRITISH COLUMBIA

NTS 94-D-2/W

Summary

The Bear Lake porphyry copper, molybdenum deposit is located 150 km. north of Smithers, B.C. in an area of rapidly advancing infrastructure (roads, railroads, power). The Bear Lake property overlies a multiphase intrusive complex varying in composition from monzodiorite to quartz-feldspar porphyry of granitic composition and ranging in age from Late Cretaceous to Tertiary. This intrusive complex intrudes volcanics belonging to the Takla (Triassic) and Hazelton (Jurassic) Groups of rocks.

Porphyry style chalcopyrite and molybdenite mineralization occurs within the monzodiorite and sometimes within the quartz feldspar porphyry dikes usually in association with quartz veins and veinlet filled fracturing within the intrusives. In addition, chalcopyrite and molybdenite has been observed within the hornfelsed envelope of volcanics for some distance away from the intrusive. Of the ten drill holes drilled on the property (1974), the three most southerly located holes returned the following values:

<u>Drill Hole</u>	<u>Intersection</u>	<u>Cu %</u>	<u>Mo %</u>
54303	460 ft.	.23	.05
54308	531 ft.	.27	.061
54304	484 ft.	.19	.035

The intrusive which is mapped as extending another 450 meters to the south of the above listed drill holes remains untested. Drill holes 54304 and 54308 are 200 meters apart and if the remaining southern portion ( 650 meters plus) of the intrusive is found to be mineralized a substantial tonnage of Cu, Mo, ore could be delineated. An area 650 m by 300 meters in width and perhaps 200 meters in depth could easily carry a reserve of 100 million tonnes of an expected grade of perhaps .3% copper or better and .05% Mo. Anomalously high I.P. response (Frequency effect) over the same area with high copper and molybdenum geochemical values from soils appear to confirm the southerly extension of the mineralization. Any extension of the mineralization into the volcanics would also add to the estimated tonnages available.

The following is a list of British Columbia copper producers indicating their published reserves

Gibraltar (year end 1990)	180 million tons	.313% Cu,	.009% Mo.
Princeton Mining (year end 1989)	47.5 million tons	.45% Cu	
Afton Mining (year end 1989)	23.4 million tonnes	.46% Cu,	.011 oz. Au
Highland Valley Copper (year end 1989)	776.5 million tonnes	.41% Cu,	.0072 % Mo.

In consideration of the above and because of the very limited testing previously carried out on the Bear Lake Porphyry (10 drill holes), further drill testing is recommended on this well mineralized porphyry system.

Bear Property  
(Drift Claims)

Excerpt from "Report on Geochemical Survey - Bear 1- 4 Claims, Omineca M.D."  
Operator Lornes Mining Corp. Ltd., M.L.Serack Dec. 1, 1985.

"Previous to 1985, studies had failed to detect mineralization other than that related to the porphyry system. During the course of prospecting this year a particular green framboidal pyrite (almost massive) within a network of euhedral quartz selvaged veinlets was observed on the property. This green pyrite, upon chemical analysis was found to carry significant values in gold. The veining was seen mainly associated with and crosscutting intrusive porphyritic units but usually occurred near the margins or in contact with host volcanic rocks. North of camp it occurs in veins up to 1 ft. wide, cutting volcanics. Here it is also associated with barite, and carbonate in a quartz matrix and minor chalcopyrite and galena occur as disseminations within the barite.

Gold occurrences reported in same report:

Area 6	.010 oz Au/ton
	.006 oz Au/ton
Area 7	.024 oz Au/ton
	.072 oz Au/ton
Area 1	.04 oz Au/ton

Another reported sample not from same source returned:

59,100 ppm Cu; 1,980 ppm Mo; 92 ppb Au.

Another sample collected by Lornex from new drill site location #3 returned:

.47% Cu; .344% Mo; .8 oz Ag/ton; .005 oz Au/ton.

Rubble at new drill site #1 was reported as "Chalcopyrite rich rubble"

Excerpt from "Geological, Geochemical & Geophysical Report, Canadian Nickel Co. Ltd."  
Peter Peto, & Barry Krause, Sept 1981.

"Chalcopyrite and molybdenite mineralization has been observed to extend into hornfelsed and highly deformed crystal lithic tuff of Unit 2 at

10N and 19E

In addition, pyrite-chalcopyrite mineralization was observed to extend as far east as

5N and 28E; 0N and 21E

in hornfelsed basic volcanic rock of Unit 1. The area of mineralization has been significantly extended to the east by the 1981 program."

G. Ryznar, PEng.  
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