



NORTHWEST BRITISH COLUMBIA

MINERAL PROPERTY EXAMINATIONS

By T. G. Schroeter

LETAIN – PROVENCHER LAKES JADE AREA (1041/7)

Several small operators have been working placer jade leases in an area centred around Letain Lake located approximately 80 kilometres east of Dease Lake. The jade boulders have weathered out from large masses of serpentine and are yielding some good quality material. A small airstrip with a camp, complete with large saws, is located in the valley between Wolverine Lake and Letain Lake to service companies exploring for jade. During the previous winter large boulders were trucked out to Dease Lake on Nodwells and during the summer of 1976 much of the cut jade was flown out to Dease Lake via helicopter and fixed-wing aircraft.

EAGLE (1041/6E, 11E)

The Eagle copper-molybdenum property is located approximately 50 kilometres east of Dease Lake. Imperial Oil Limited (under a joint venture agreement with Nuspar Resources Limited) diamond drilled five holes totalling 1 045 metres to test areas of coincident geochemical and geophysical anomalies. The work done was in three zones (Camp, Pass, and Bornite) along a linear zone over 3 000 metres long and 800 metres wide. The main host rock is an altered biotite-hornblende granodiorite and hornblende-biotite granodiorite in sheared contact with Lower Jurassic sedimentary rocks. Alteration includes strong saussuritization of feldspar, \pm feldspathization, \pm chloritization. Mineralization appears to be concentrated in steeply dipping shear zones, especially those containing chlorite and consists of chalcopyrite, bornite, molybdenite, and pyrite. Minor amounts of sulphides occur in quartz veins. Mineralization also appears to be related to K-feldspar flooding.

References: *Minister of Mines, B.C.*, Ann. Rept., 1963, p. 6; 1965, p. 16; *B.C. Dept. of Mines & Pet. Res.*, GEM, 1971, pp. 45, 46; 1972, pp. 540-543; 1973, p. 511; 1974, p. 349; Assessment Reports 585, 3476, 4256.

KEN, TOM (SNOWDRIFT) (104I/5E)

Utah Mines Ltd.'s Tom, Ken property is located some 30 kilometres southeast of Dease Lake. Approximately 275 metres in three holes was diamond drilled in a steeply dipping northwest-trending zone of shearing and alteration in a diorite-granodiorite which has intruded andesitic flows and pyroclastics. The quartz-sericite 'greisen' zone varies from a width of 300 metres in the southeast to a width of 1 000 metres in the northwest. Outcrops are leached, but locally pyrite is present in amounts up to 5 per cent. No copper mineralization was observed in the altered area, although minor malachite, chalcopyrite, and chalcocite are present in shears and quartz-carbonate stringers in unaltered volcanic rocks. Lazulite appears disseminated in parts of the altered zone. Significant concentrations of ferricrete fill the valley bottoms and presumably have been concentrated from the gossaniferous volcanic rocks.

References: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1973, p. 511; Assessment Reports 4464, 5769.

ATLIN AREA (104N/11W)

- (1) The Atlin Silver (Ruffner) mine is located approximately 25 air-kilometres northeast of Atlin on Vaughan Mountain. Construction of a 45 to 54-tonne per day crusher and mill was completed. The main ore block consisting of vein-type galena (with good silver values), sphalerite, and chalcopyrite in a mafic quartz monzonite exists between the 4100 and 4300 levels. Exploration work was also done on the 5700 level.

References: *Minister of Mines, B.C.*, Ann. Rept., 1923, pp. 89-91; *B.C. Dept. of Mines & Pet. Res.*, GEM, 1969, p. 28.

- (2) The Adanac molybdenum deposit, located approximately 40 kilometres northeast of Atlin, was under option to Noranda Mines, Limited. During the summer underground sampling and mapping and surface mapping of alteration zones were done to further define ore potential.

References: *B.C. Dept. of Mines & Pet. Res.*, GEM, 1969, pp. 29-35; 1970, p. 28; 1971, pp. 53, 54; 1972, p. 557; 1973, p. 515; 1974, p. 351; Assessment Report 5071.

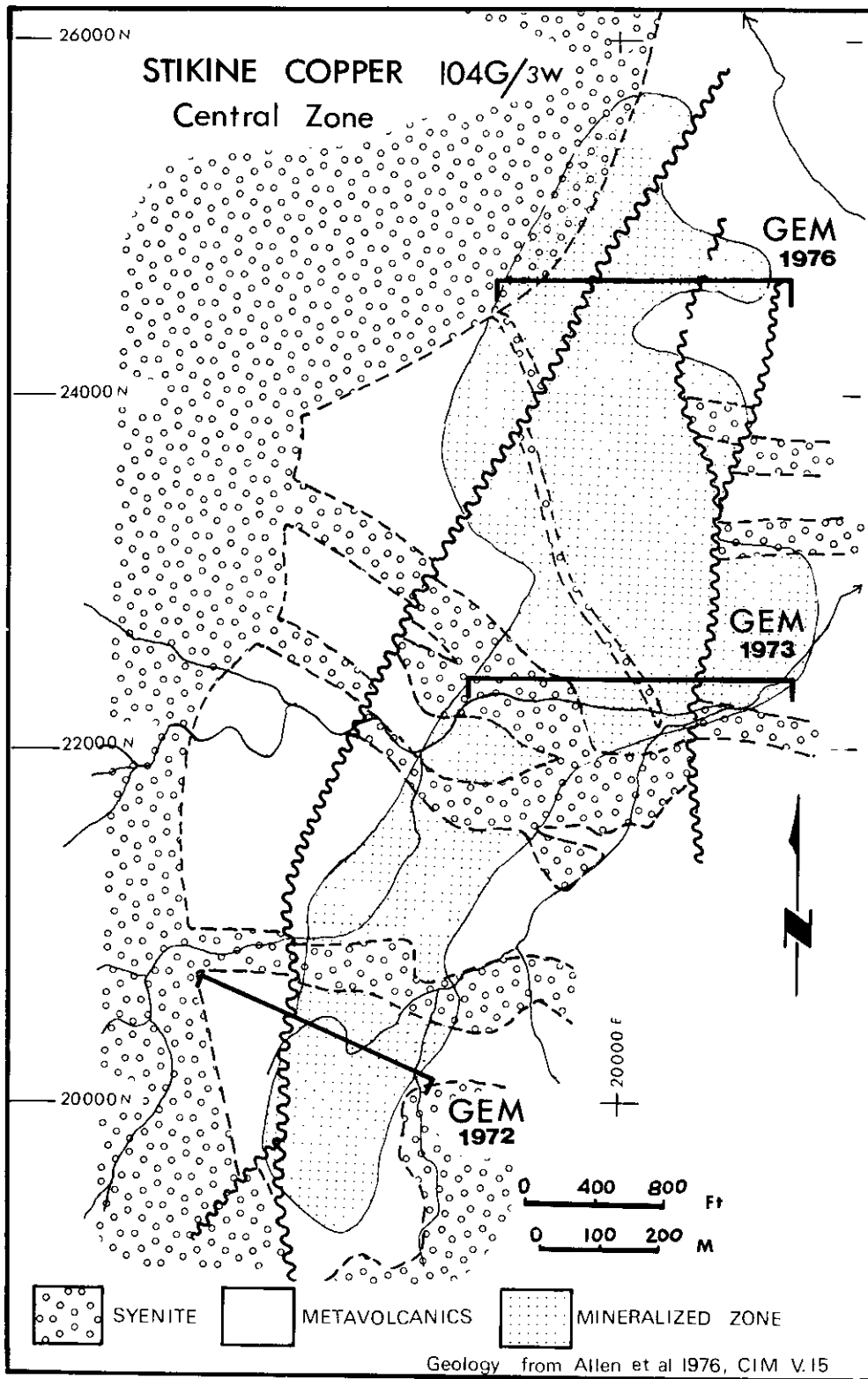


Figure 15. Locations of described geologic sections, Central Zone.