



IDAHO, AURUM, PIPESTEM, AND EMANCIPATION GOLD PROSPECTS

By P. A. Christopher

The Idaho, Aurum, and Pipestem gold prospect of Carolin Mines Ltd. (under option to Precambrian Shield Resources Limited and Numac Oil & Gas Ltd.) and the Emancipation gold prospect of Longbar Minerals Ltd. are situated in the Cascade Mountains of southwestern British Columbia about 17 to 20 kilometres northeast of Hope. Access is provided by a logging and mining road that heads northerly from the Coquihalla River road at about Mile 15.5 (25 kilometres from Hope). The area has rugged topography with elevations ranging from over 1 577 metres on Spider Mountain to about 364 metres in the Coquihalla River valley.

GENERAL GEOLOGY

Gold deposits occur within and adjacent to the Coquihalla serpentine belt from Siwash Creek to just south of the Coquihalla River. The main units of interest are the Paleozoic Hozameen Group to the west, the Upper Jurassic Ladner Group to the east, and serpentinite and altered dioritic to basic bodies that occur along the Hozameen fault. The Hozameen fault is a northwesterly trending structure that appears to have a near vertical dip. The lithology of the major units in the area has been described by Monger (1970).

AURUM—IDAHO—PIPESTEM PROSPECT (92H/11W)

This prospect has recently been referred to as the Ladner Creek property of Carolin Mines Ltd. It consolidates the old Aurum, Idaho, and Pipestem gold properties with exploration directed toward large tonnage replacement deposits.

The Idaho zone, the only one of several anomalous areas explored by extensive diamond drilling (39 holes totalling about 6 700 metres), has drill indicated and geologically inferred ore reserves totalling 2,600,000 tons at better than 0.10 ounce of gold per ton (estimated by D. Cochrane for Carolin Mines Ltd. after completion of hole 33; George Cross Newsletter No. 69, 1975). The McMaster Pond zone, about 1 200 metres northwest of the Idaho zone, was located using soil geochemistry for gold and is presently undergoing further exploration.

In the Idaho zone two subparallel mineralized replacement zones strike about north 30 degrees west and dip 20 to 30 degrees northeasterly. The thickness of the zones vary but large parts of the upper zone average over 25 metres. Auriferous zones are structurally

controlled replacements with albite, carbonate, pyrrhotite, arsenopyrite, pyrite, and minor chalcopyrite. The auriferous zones start about 75 to 100 metres east of faulted contact between the serpentine and Ladner Group rocks and appear to occur in coarser grained horizons.

EMANCIPATION PROSPECT (92H/6W)

Exploration of the old Emancipation prospect by Longbar Minerals Ltd. is at an early stage with surface geochemical, magnetometer, and electromagnetic surveys conducted during the past field season. Previous exploration was mainly concentrated along two north 20 degree west striking quartz veins that occur in or near the serpentinite and Ladner Group contact. The property covers several kilometres of contact between serpentinite and Ladner Group rocks that deserves further testing for auriferous replacements similar to the Idaho zones.

REFERENCE

Monger, J.W.H. (1970): Hope Map-Area, West Half, British Columbia, *Geol. Surv., Canada*, Paper 69-47.