

YOS → RED Mtn.

Recent exploration on this large exploration property has identified other areas of porphyry copper-type mineralization, epithermal-type gold mineralization, skarn-type base and precious metal mineralization, and volcanogenic massive sulphide-type mineralization.

3:30 p.m. — Coffee Break

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**Paper No. 9 — 4:00 p.m.**

*Drift Prospecting for Porphyry Cu-Au Deposits in the Quatsino Area NTS (92L/12).*

DAN KERR and STEVE SIBBICK, Geological Survey Branch, British Columbia Ministry of Energy, Mines and Petroleum Resources

The Quatsino project, a regional drift exploration study of the Island Copper mine area and the Quatsino map sheet (92L/12), is part of the British Columbia Geological Survey Drift Prospecting program. It demonstrates the utility of a combined surficial geology - exploration geochemistry program in the search for drift-covered mineral deposits in areas of glaciated terrain. The program's main goals are: (1) to define regional Quaternary stratigraphy and glacial history; (2) to document glacial dispersion patterns from known mineral occurrences; (3) to produce 1:50 000-scale surficial geology and interpretive maps for use in mineral exploration; and (4) to develop interpretive drift exploration models.

Sampling in the Quatsino area consisted of 194 drift samples collected from road cuts, hand-dug pits and stream banks, at an approximate density of one sample per 5 km<sup>2</sup>. Many till samples were taken at depths of 3 m to 4 m below the surface from stratigraphic sections in which till was overlain by colluvium or outwash. At 161 sites, 25 pebbles were collected for lithological analyses and provenance studies.

Preliminary results show that mapping of surficial sediments can significantly aid in the design and interpretation of geochemical soil surveys; failure to correctly identify sediment types can mask true anomalies.

**Paper No. 10 — 4:30 p.m.**

*The Red Mountain Project.*

JOHN J. WATKINS and ADRIAN D. BRAY, Lac Minerals Ltd.

The Red Mountain Project of Lac Minerals Ltd. is located 15 km east of the seaport of Stewart in central British Columbia. Gold on Red Mountain was discovered in 1989, and to date, the project has identified a 500 000 oz gold resource with a 2 million ounce gold potential.

The gold zones occur within a large area of altered volcanoclastic rocks of the Unuk River Formation and lie marginal to the 200-million-year-old and 2 km in diameter hornblende-feldspar porphyritic Gold Slide Intrusion. The volcanic breccias are genetically related to the intrusion.

The defined resource lies within two zones, the Marc and North zones, with the best gold grades associated with semi-massive, coarse-grained pyrite veins and stockworks with accessory pyrrhotite, sphalerite, arsenopyrite and barite, with minor chalcopyrite, galena, tetrahedrite and various tellurides.

Mineralization at Red Mountain is part of a diverse Lower Jurassic metallogenic event that characterizes the volcanic and related plutonic rocks of Stikinia and range from porphyry to exhalative VMS deposit types. The Red Mountain deposit may be transitional to the two deposit types.

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