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CAPOOSE PRECIOUS AND BASE METAL PROSPECT CENTRAL BRITISH COLUMBIA

The Capoose precious and base metal prospect is near latitude 53°16' north and longitude 125°9' west-central B. C., about two km north of Fawnie Nose approximately 110km southeast of Burns Lake. Detailed geologic mapping of the main area of mineralization at a scale of 1:2500 was undertaken to determine stratigraphy, structure and style of mineralization on the property. Several diamond drill holes were logged with the intent to produce a representative cross-section of the mineralized zones. Samples were taken for K-Ar and Rb-Sr dating, galena Pb isotope dating, fluid inclusion studies, oxygen isotope studies, and whole rock chemistry, as well as for standard petrographic analyses.

Detailed mapping and core logging on the Capoose property by Andrew has defined three packages of rocks in the vicinity of Fawnie Nose. The lower package is typically massive and locally scoriaceous basaltic andesite. Some interflow conglomerate with felsic, altered-felsic and dark basalt fragments are seen within the unit. The central volcaniclastic package, lying conformably above the basaltic andesite package, consists of welded felsic tuffs interbedded with sandstone and argillite, and minor aphanitic andesite. The sandstone unit has local discontinuous beds of fossiliferous limestone, and frequently contains belemnites. Unfortunately, only a broad Jurassic to Cretaceous age for these fossils could be inferred (Tipper, 1963). The upper package conformably overlies the central volcaniclastic package. It is characterized by a sequence of flow-banded, spherulitic, garnetiferous quartz rhyolite and rhyolite flows with recessively weathering interbedded fossiliferous sandstones.

Much of the felsic volcanic package has been strongly kaolinized and sericitized. No silicification from abundant quartz veining was observed. Rims of quartz and sericite were observed around garnets in the rhyolite units. Primary versus secondary origin for these garnets has yet to be established. The argillite unit has been hornfelsed near zones of mineralization. Epidote and chlorite are common alteration products in the andesitic rocks. Since these rocks are peripheral to the deposit area, this may represent regional greenschist metamorphism rather than peripheral propylitization.

The Capoose deposit has been classified as a low grade 'bulk silver' deposit by several authors (Schroeder, 1980; Church and Diakow, 1981). No genetic model for the deposit has been proposed, although a porphyry model has been suggested.

Currently, research is directed toward the the following topics: 1. an understanding of the origin of garnets within the upper package of rocks, 2. style and timing of mineralization, 3. genesis of the deposit, and 4. comparison with other deposits in the area.