NSERC-CMIC FOOTPRINTS

Chouinard RL, Winterburn PA, Ross M, Lee RG, 2017, Surficial geochemical exploration tools for porphyry Cu-Mo mineralization in glaciated and till-covered terrain: an example from Highland Valley Copper, south-central British Columbia, Abstract, Roundup, Vancouver, BC

This research project is part of the Porphyry Cu Subproject of the National Sciences and Engineering Research Council (NSERC) and Canadian Mining Innovation Council's (CMIC) Mineral Exploration Footprints project. It aims to quantify and identify the footprint of porphyry Cu-Mo mineralization at the Highland Valley Copper (HVC) operation through a multidisciplinary, integrated approach. Teck Resources Limited ("Teck") has a 100% interest in HVC which is located in south-central BC, 15 km west of the municipality of Logan Lake, and consists of five known porphyry-style Cu-Mo mineralized bodies. These clusters include: 1) the active producing Valley, Lornex and Highmont pits; 2) the past producing Bethlehem deposit; and 3) the buried J.A. deposit, all of which are centrally located within the Guichon Creek batholith. The J.A. and Highmont South targets comprise two mineralized areas that are both undeveloped and buried under variable thicknesses of glacial and preglacial sedimentary cover. Surficial geochemical studies at these two buried targets aim to fully characterize mineralogical and chemical changes that manifest themselves in the surficial environment after glacial dispersal and soil development over mineralized bedrock. The research will help develop surficial geochemical exploration models that can be applied to the search for other buried Cu-(Mo) porphyry mineralization. This poster provides an update on the progress of the project, which is expected to be complete by August 2017.

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