Final frontier in the Golden Triangle: East Hoodoo Mountain area

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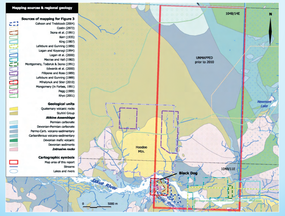
Introduction

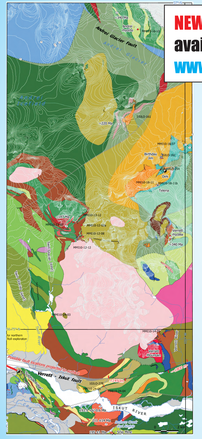
The Iskut River area of northwestern BC is characterized by exceptional mineral endowment, it is mostly enveloped by the fabled "Golden Triangle". West-flowing lower Iskut River marks the northern edge of the south-pointing Golden Triangle. Rocks which host stratabound mineralization, such as at the Rock and Roll deposit, are appatently barren north of the river. There is no obvious geological explanation for the dearth of deposits north of the Iskut River edge of the Golden Triangle. However, a reason for the lack of deposits in the Hoodoo Mtn area (104B/14) may arise from the lack of a geological framework; much of the area has never been systematically mapped. A working partnership was established between the BC Ministry of Forests, Mines and Lands, the Geological Survey of Canada (GEMS), Pacific North West Capital Corp. and the University of Victoria to address this lack of public geologic knowledge.

True Frontier

Prior to 2010, most rocks north of the Iskut River within NTS 104B/14E had not been mapped as part of systematic regional programs. This data gap existed in a region of extremely high mineral potential. Our obvious task was to establish a geological framework to test the northern limit of the "Golden Triangle".



NEW 1:50K map Open File 2011-4 available as FREE download from: www.mapplace.ca



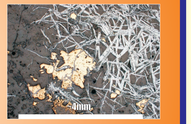
Hoodoo-Iskut area mapping

Our new reconnaissance mapping incorporates 2.5 weeks of intensive, helicopter-assisted mapping in the frontier areas of the eastern Hoodoo Mountain sheet (104B/14E) and another week of mapping around the Rock and Roll deposit.

This mapping is presented on Open File 2011-4, together with a compilation of the wealth of industry data along the Iskut River valley. The digital, GIS version of this map includes source information for almost every outcrop and contact represented.

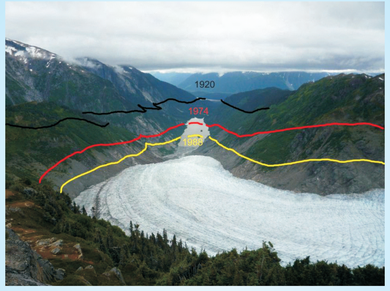
What's in it for you?

A new geologic framework and continued ice recession provide unprecedented opportunities to expand the "Golden Triangle" to the north in 104B/14 - towards the large Cu-Au-Ag porphries in the neighbouring Galore map area.



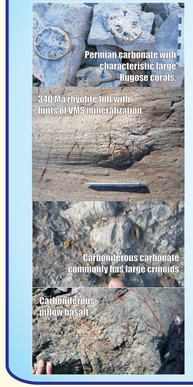
Chalcopyrite-hematite at the Birthday Jim

More to explore



When Forrest Kerr conducted the first comprehensive geological survey of the area in the 1920's, much more of the region was covered by ice than is today. Each year there's more to explore!

Stratigraphic framework

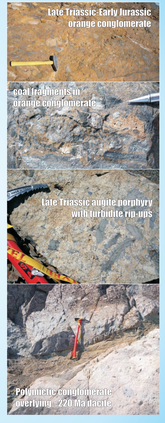


<Paleozoic

Paleozoic basement rocks are relicts of volcanic arcs with fringing reefs. Thick carbonate units provide unambiguous markers. Bimodal volcanic sections display VMS potential.

Triassic-Jurassic>

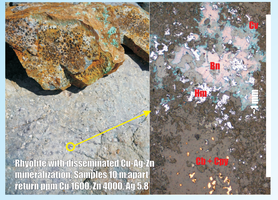
Triassic-Jurassic strata unconformably overlie Paleozoic rocks. Although many units are similar in appearance, the sections are conglomerate-rich and lack thick carbonate units. They display potential for porphyry copper and gold as well as VMS mineralization (right).



Copper porphyry potential

Three areas of intense syenitic stock and dike intrusion have been identified. Part of Late Triassic Copper Mountain suite, these rocks display alkalic Cu-Au-Ag mineralization best developed within the central area containing the Dirk, Telena and Birthday Jim prospects -all return impressive gold analyses. Volcanic facies are highly dynamic shallow submarine deposits.

VMS potential



New isotopic age determinations date a bimodal volcanic event with signs of VMS mineralization at ~340 Ma. This belt of rocks extends more than 20 km in the eastern Hoodoo map area. In the north, a rhyolite unit displays disseminated Cu-Ag-Zn mineralization (left). In the south, rhyolite tuff and breccia is interbedded with immature clastics containing sulphide pebbles and overlain by ferruginous chert containing chalcopyrite lenses.

Could this bimodal belt correlate with host strata at the Rock and Roll deposit (0.58 Mt: 2.4 g/t Au, 335 g/t Ag, 0.64% Cu, 0.79% Pb, 3.1% Zn), and could that deposit have offset portions north of the Iskut River?