NORTH ISLAND COPPER PROJECT

The North Island Copper Project covers 8 known documented copper-silver skarn type mineral occurrences, just north of the past producing Island Copper Mine as well as showings of porphyry copper type mineralisation in the island intrusives.

Diamond drilling in the Swamp showing area intersected 8.4 metres assaying 1.26 per cent copper, 7.72 per cent zinc, 57.25 grams per tonne silver

BHP's past producing Island Copper mine which produced 345 million metric tonnes @ 0.41% Cu, 0.017% Mo, 0.19 g/t Au, and 1.4 g/t Ag. During its prime operating period the Island Copper mine was Canada's third-largest copper producer. The Mine produced about 1227 million kilograms of copper, 35,268 kilograms of gold, 360,800 kilograms of silver), 32 million kilograms of molybdenum and 236 kilograms of rhenium from 367 million tonnes of ore.



Showings on the North Island Copper Project

The **COPPER DRAGON** formerly (Marisa) **Porphyry Cu +/- Mo +/- Au** occurrence is located on an eastflowing tributary of the Quatse River, approximately 2.5 kilometres northeast of the northeastern end of Quatse Lake on Northern Vancouver Island

The area is underlain by northwest-trending belts of volcanics and carbonate sedimentary rocks of the Upper Triassic Karmutsen and Quatsino formations (Vancouver Group) and mafic volcanics and sediments of the Upper Triassic to Lower Jurassic Bonanza Group (Holberg volcanic unit, Nahwitti River wacke and Parson Bay Formation).

These volcanic and sedimentary rocks have been intruded by granodioritic rocks of the Early to Middle Jurassic Island Plutonic Suite.

Locally, fracture filling and disseminated chalcopyrite with traces of molybdenite is hosted by a finegrained quartz diorite. Magnetite mineralization is associated with mafic clots. The quart diorite has undergone weak argillic and/or sericitic alteration.

The Porphyry mineralization can be traced in outcrops along a stream bed (Structure) for approximately 450 metres.

In 1991, a sample (60768) assayed 0.028 per cent molybdenum, 0.445 per cent copper and 3.5 grams per tonne silver (Assessment Report 21581).

In 1992, a drillhole (M92-1) intercepted **16.17 metres averaging 0.17 per cent copper** (Assessment Report 22243).

A **second zone of mineralization**, located approximately **1 kilometre to the northwest**, contains chalcopyrite, bornite and pyrite in shears cutting the intrusive rocks. In 1991, a sample (60714) assayed 0.222 per cent copper and 1.0 gram per tonne silver (Assessment Report 21581).

Another zone of mineralization, located to the southeast of the main zone, comprises **disseminated chalcopyrite in a diorite.** In 1991, a sample (60747) assayed 0.597 per cent copper, 0.153 per cent zinc and 4.3 grams per tonne silver (Assessment Report 21581).

In 1968, Brett Explorations soil sampled the area as the Gub and Tab claims. In 1968 and 1969, Tro-Buttle Exploration Ltd. completed a program of soil sampling, geological mapping and ground magnetic surveys on the GB claims. In 1991, Daiwan Engineering Ltd. prospected and sampled the area as the Marisa 1-4 claims. The following year, a program of geochemical sampling, ground induced polarization and magnetic surveys and five diamond drill holes, totaling 376.4 metres, were completed on the area.

Recent new logging roads have been constructed in the area. These new roads and blocks are prime new exploration targets.

AMAZON

Locally Copper and zinc mineralization is present in rocks of the Karmutsen Formation, and based on other mineralization in the area (092L 159 - Little Joe), this mineralization is probably in a replaced limestone unit which is intercalated within the Karmutsen volcanics. A grab sample collected in 1980 assayed **4.12 per cent copper and 1.45 per cent zinc** (Assessment Report 9811).

CRANBERRY

Locally, quartz diorite and andesite dykes intrude Karmutsen Formation limestone, andesite and basalt. The sediments and volcanics strike 070 degrees and dips 35 degrees south. The Cranberry A showing is a 2.0 metre thick zone of skarn exposed for 60 metres along a lime- stone-andesite contact. A grab sample from the showing assayed **3.180 per cent copper**, 11.66 grams per tonne silver and 0.10 grams per tonne gold (Assessment Report 8284).

The Cranberry B showing is a 1.7-metre-thick zone of skarn exposed for 27 metres along a limestoneandesite contact, and may be a faulted portion of the Cranberry A showing. Chalcopyrite and malachite are reported to be present.

RAINBOW

The Rainbow showings are spread out along a strike length of 500 metres and have widths of up to 18 metres. Skarn is erratically developed in narrow beds of limestone and along limestone-volcanic (andesite, basalt) contacts. The host rocks strike 070 degrees and dip 035 degrees south. Stratigraphically, the limestones and volcanics lie near the top of the Karmutsen Formation. The rocks have been intruded by andesite dykes and quartz diorite.

The skarn consists of grossularite disseminated with chalco- pyrite and minor magnetite ("brown ore") and hedenbergite, hornblende, tremolite, actinolite, ilvaite, magnetite and sphalerite and disseminated chalcopyrite ("black ore"). Two 18 kilogram samples assayed, respectively, 3.070 per cent copper, 0.11 per cent zinc, 66.85 grams per tonne silver, 0.02 per cent lead and 0.10 grams per tonne gold ("brown ore") and **4.88 per cent copper, 4.42 per cent zinc, 91.87 grams per tonne silver**, 0.10 per cent lead and 0.14 grams per tonne gold ("black ore"), (Assessment Report 8284). Malachite can be found at surface.



Pyrite Chalcopyrite – Calc Silicate Skarn - Rainbow Trend

WEST CLIFF

Locally, quartz diorite and andesite dykes intrude Karmutsen Formation limestone and tuff which strike 070 degrees and dip 35 degrees south. At the West showing a 1 by 3 metre lens of skarn is present in limestone near a limestone-tuff contact. The skarn contains a high amount of disseminated pyrite and chalcopyrite.

Similar skarns, comprised of grossularite, are found nearby. A grab sample assayed **6.7 per cent copper**, **44.6 grams per tonne silver** and 0.309 grams per tonne gold (Assessment Report 8284).



Magnetite with Pyrite and Chalcopyrite – West Cliff zone

BRANCH 7

Locally a limestone Formation is altered to skarn along limestone-andesite contacts. The skarn is rich in disseminated chalcopyrite and, in places, magnetite. Several showings are present within a 200 by 200 metre area. The largest showing (South Showing) is traceable for 35 metres, striking northwest and dipping 30 degrees south. Skarn is also developed along the margins of an andesite dyke. The limestone in this area has been metamorphosed to marble. A grab sample of the skarn containing chalcopyrite and magnetite assayed **5.75 per cent copper, 6.86 grams per tonne silver** and trace gold (Assessment Report 8284).

The Branch 7 showing outcrops along a logging road. A grab sample of this skarn assayed **8.45 per cent copper, 65.13 grams per tonne silver and 0.69 grams per tonne gold** (Assessment Report 8284). The East showing is a small exposure 150 metres southeast of the Branch 7 showing and may be a continuation of that showing. A grab sample assayed **1.69 per cent copper**, 1.31 grams per tonne silver and 0.34 grams per tonne gold.

SWAMP

Locally, hornblende granodiorite and an andesite dyke intrude Karmutsen Formation limestone. Skarn has formed at the granodiorite- limestone contact. The skarn is mineralized with grossularite, andradite, calcite, chlorite, quartz and magnetite and contains disseminated to massive pyrite, chalcopyrite and sphalerite with lesser galena and bornite.

The skarn is irregular in outline, having a sharp contact with the limestone and a gradual contact with the grano- diorite. **Diamond drilling in 1983 intersected 8.4 metres assaying 1.26 per cent copper, 7.72 per cent zinc, 57.25 grams per tonne silver**, 0.28 per cent lead and 0.17 grams per tonne gold (Assessment Report 11407).

FRANCES

In the area of the old Frances showings, chalcopyrite, sphalerite and pyrite occur in skarn zones at the footwall and hangingwall contacts of a limestone band in volcanics.



Map of claim area showing areas of copper silver zinc mineralisation



MAG MAP WITH COPPER SHOWINGS (X)

The region is prospective for both skarn and porphyry mineralization. Skarn mineralization occurs at or near the contact of Island Plutonic Suite rocks with calcareous rocks of the Parsons Bay and Quatsino formations.

Skarn mineralization typically occurs as calc-silicate magnetite skarns with Cu-Pb-Zn-Ag mineralization.

Calc-alkaline Cu-Mo porphyry mineralization occurs in association with the Island Plutonic Suite, which is the host intrusion of the Island Copper mine.





The **Island Copper deposit** lies within moderately south dipping brecciated tuff, lapilli and tuff breccia of andesitic and basaltic composition, which comprise the lower part of the Bonanza Group pyroclastic sequence. These volcanic rocks are cut by a digitating quartz feldspar porphyry dykes.

During its operating life from 1971 to 1995 inclusive, the Mine produced about 1227 million kilograms of copper, 35,268 kilograms of gold, 294,106 kilograms of silver (probably 360,800 kilograms of silver), 32 million kilograms of molybdenum and 236 kilograms of rhenium from 367 million tonnes of ore.

This property has excellent further discovery and development potential

This property is offered for sale by way of working option to purchase.

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