STARLIGHT (GOLD-SILVER)<br>ALBERNI MINING DIVISION<br>BRITISH COLUMBIA

## LOCATION

The STARLIGHT property is located on Vancouver 1 sland about 20 t.ilometers southeast of the town of Alberni, B.C.

## GENERAL DESCRIPTION

The STARLIGHT area is underlain by altered volcanic rocks, probably of the Upper Triassic Karmutsen Formation. Pyrite is widespread through the district.

Preliminary rock chip sampling and prospecting by Esperanza has shown geochemically anomalous amounts of gold and silver in certain areas of the altered volcanics. The anomalous areas are, as yet, undefined.

Assays of material from minor veins on the property have returned values as high as 2.9 grams/tonne in gold.

At the present time there is no clear understanding of the local geology of the area or of the origin and distribution of mineralization within it.

## PREVIOUS WORK

Old records of work done in the 1890's refer to free gold being found in altered volcanic rocks in the area. There are no records of more recent activity.

## RECOMMENDATIONS

A program of geochemistry and preliminary geoloqical mapping is recommended.

The geochemistry should consist of rock chip samples where outcrop is available. Overburden areas should be covered using reconnaissance soil sampling.

The estimated cost of the program would be 515,000 .

NaP

## Alberni Canal.

In passing down Alberni Canal frow the settlement, carbonaceous shale can be seen exposed along the shore at the old Alberni sawmill site, lying almost horizontally. Following down the shore of the canal, about a mile south, syenite out-crops for a short distance, and is then replaced with a blackish, almost aphanitic, diorite, which constitutes tho body of Copper Mountain. This formation extends aloug the shore down to a short distance below where the Esquimalt \& Nanaimo Railway boundary line crosses the canal, where syenite reappears and extends down to \#iwatches or Franklin River.

A good contact of this blackish, fine grained diorite with the syenite may be seen on China Creek, about midway between Mineral Mounds, numbers 5 and 6, the syenite dipping onder the diorite westward at an angle of about 55 degrese.

Therd is an old iunnel half-way up Copper Mountain and facing the canal, which was run in 1865 , following a cropping of chalcopyrite, which suddenly gave out.

I may mention that numerous veins of chalcopyrite have beeńfound in the diorite of Vancouver Island, but have not proved sufficiently strong to be worked, such as Sansome Narrows, Cedar Hill, Cowichan Bay, Cowichan Lake, etc.

At Hiwatches River there is a good trail starting from the bay below the mouth of the river and following along the foothills, up to the Star of the West claim on Granite Creek, which is a branch of Hiwatches River.

Some placer mining has been done on Granite Creek by the following miners: H. McCoy, W. Poole, H. Hanson, Wm. Lindsay, and G. Carman.

Gond pay in coarse gold was obtained along some of the crevices, but the creek being very rapid, and the boulders large, it was found that ground-sluicing would not pay very well. sume of the benches give collours to the pan and may prove to be sufficiently rich to pay bydraulicing.

Some work has been done on the Star of the West claim, located on McCoy Creek, a enall tributary of Granite Creek. Tho vein is quartz with pyrite, and considerable calcite. The vein is about 5 feet in width where it has been exposed, and it may be traced a short distance along the creek, with a strike of N: 50 deg. E. The country rock is syenite on both videy A ton of rock from the Star of the West, shipped to the Tacoma smelter, gave a return w 810 in gold.

The Islander clain, adjoining the Star of the West, shows an exposure of basic ore along the bed of McCoy Creek, which is composed of the usual combination of sulphurets.

The Nevadn clain also adjoins the Star of the West, being one of those in juxtaposition.
Six oiles up Granite Creek from these claims, a number of claims were recorded on a Innch called Yoole Creek.

The Starlight claim, located on this creek, carries free gold, which can be seen with the Eacmining glass, in very fine grains peppered through the rock, in a similar manner as at firral Creek, but the associations are different. In the Starlight, the gold is intimately averisted with small grains of galena, instead of blende as at Mineral Creek.

The Starlight can hardly be called a vein, but is rather an ore body charged with gold by i-mplating waters. An exposure of about 7 feet has been blown out without any well defined 7. A. The country rock appears to be a diabase that has undergone extensive alteration by a-icaing process of chemical solution so provalent in this district. The ore body consists irariz prrite, galena, calcite, etc. Calcito is a coinmon ingredient of nearly all the reins.
in this locality, showing that the solutions were highly cherged with carbonic acid, the calcicum bein: derived fron the feldspars in the rock.

A reurarkable feature of this whole re:ion is the prevalence of feld spathic rocks with_on free silica.

A large sample from the Starlight assayed $\$ 40$ to the ton in goid.
Adjoining the Starlight are the Texas and Emroa claims, upon which a small amunat of work has been done.

Two claims, called the Tangent aud Big Galena, have been taken up at the heardwaters of Museum Creek. They show gerd exposure of quartz containing chalcopyrite and blende. A sample from the Tangent gave 13 oz. per ton in silver.

Two miles beyend Sweet Water Meadow, on Granite Creek, near the divide, as shown on man , five chainis have been recorded on a large intrusive hoss of granite upivards of 1,000 feet across. It is a fine-grained granite, with numerous quartz veins, and heavily charged with sulphurets. Although the assays made have been suall, still it is a rermarkable mineralized nisiss, and will justify a thorough prospacting. In one spot. I came across some chalcopyrite aysuciated with molybdenite. It is interesting to note the common accurrence of molybdenjte throushout British Columbia in association with copper ores; it has been found in numerous places, but only in suall quantities.

A gond trail could easily be cut from the end of the present trail at the Star of the West Claius up (iranite Creek to this divide, and leading over to the Nitinat River, at a small expense. It would be a great convenience to the miners and prospectors in getting in their supplies.

