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REPORT

ON

BURNABY ISLAND

NICKEL-COPPER

February, 1963

SKEENA

MINING DIVISION

J. J. MCDOUGALL

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BURNABY ISLAND NICKEL-COPPER

FEBRUARY, 1963

This showing was visited very briefly by the writer on February 28, 1963. No exhaustive check was made at the time as claims were still being recorded and the owners still a little uneasy about visitors.

LOCATION: Section Cove, Burnaby Island, Queen Charlotte Islands. Immediately south of Huxley Island. 12 miles northwest of Ikeda and 40 miles southeast of Tasu.

PROPERTY: Approximately 200 located claims covering most of central and western Burnaby Island.

OWNERSHIP: Two claims staked last fall by original discoverer, John Johnson, presently a cook aboard a government Fisheries boat based at Charlotte. Preliminary but indefinite agreement with Silver Standard Mines Ltd. to conduct exploratory check before drawing up an option. Remaining claims staked by Silver Standard.

ORE: Nickel - copper

DEVELOPMENT: Several short packsack drill holes within 100 feet of main showing. Two men employed for past month.

GENERAL GEOLOGY

As mapped by the B. C. Government (Brown and Jeffries) the deposit occurs in the Kunga Formation (Upper Triassic Sediments). This rock group trends

northwest - the common "grain" of the Charlottes - paralleling a major regional fault shown in Burnaby Strait a couple thousand feet west of the mineralization of present interest. A narrow belt of similarly trending pre-Upper Triassic volcanic rocks is mapped about the same distance to the east. As in other mineralized areas on the Charlottes, a maze of dykes and sills all but obliterate structure at first glance. As these are generally highly altered, they can easily be mistaken in the field for country rock volcanics. To date in the immediate Section Cove area only a few sills have been recognized. These tend to exaggerate strike but often dip at high angles to the strata. Without careful deciphering, structure can only be guessed at. The writer believes the area of interest to occur in a steep northwesterly trending shear or breccia zone in the Kunga Sediments into which narrow sill-like andesitic and apparently ultrabasic bodies have been intruded.

DESCRIPTION OF PROPERTY

One small outcrop constitutes the property at present. This occurs at an elevation of about 30 feet in a creek bed about 200 yards south of the west side of Section Cove. The surrounding area, at least for a couple thousand feet, is relatively flat and heavily timbered. Between 10 and 30 feet of overburden covers bedrock, which, except at the showing, is exposed only along the beaches to the north and west.

The showing is about 8 feet long in a direction about 20° west of north. About 10 feet of overburden masks obvious extensions north where the beach is void of outcrop and a slightly greater thickness covers any extension to the south. Width of the showing is about 6 feet. The western limit is not exposed but to the east a northwesterly trending mass of fine-grained smooth weathering andesitic (?) dyke or sill rock is suggested. Several hundred yards to the west on the beach the rock appears to be altered schistose argillaceous sediments with occasional dyke or sill-like intrusions. Drilling is reported to have encountered "breccia" below the mineralized outcrop and the suggestion is that the deposit dips easterly.

The 6 x 8 foot exposure consists almost entirely of pyrrhotite and minor chalcopyrite which has replaced a medium to fine grained basic rock. An unusual foliated texture, amplified by lineation of black needle-like grains (hornblende ?), suggests the host rock to have been a schist - probably a gabbro.

The grey, shiny pyrrhotite is either massive or, as is more common, occurs as "flaky" grains reflecting texture. The chalcopyrite appears as gobs or irregular northwesterly-trending vein-like masses in the pyrrhotite. Nickel minerals have not as yet been identified with certainty but pentlandite is strongly suspected. All samples respond well to D. M. G. Some nickel could be present in the unreplaced host rock.

ASSAYS AND RESERVES

Silver Standard's average assay to date is about 0.8% nickel and 1.2% copper. Our grab sample ran 1.07 % nickel, 1.29 % copper, Tr gold and 0.4 silver.

Mr. Johnson reports possible nickeliferous basic rock to outcrop in another creek cut about 1000 feet along strike to the south. An A_3 magnetometer test is reported to have traced the magnetic zone 300 feet (northerly ?). A second series of packsack holes is now being put in from a position about 100 feet south and west of the outcrop. Results of these, or of the two or three vertical holes put in near the showing, are not known at this time although there is one report of "15 feet of mineralized material being encountered before entering a dyke."

OUTLOOK

The Section Cove Showing is a raw prospect warranting further work in the way of magnetic surveys, drilling, and possibly stripping. It is the second time nickel has been legitimately reported on the Charlottes and the third time in coastal B. C. Certainly no large deposit has gone undetected along the beaches or in easily prospected areas as the amount of copper present would give cause to investigate. Suitable basic rock is lacking in practically all areas mapped. This is the case around the Section Cove Showing where such enclosing rocks as do outcrop are not favourable. There are no "Sudburies" present. The best that can be hoped

for are small lenticular deposits along the structural trend. No one can say at the moment that in this over-burdened area small but worthwhile bodies do not exist. Structures crossing the regional trend could produce pipe-like shoots of interest similar to those which the writer has worked on or seen in S. E. Alaska.

Although we generally assay any suspicious pyrrhotite for nickel, we could now afford to give more attention to D. M. G. field tests, knowing nickel to be present in interesting amounts in the Charlottes. Some prospecting interest could be shown in the strong northwesterly fault continuations cutting the east coast of the Charlottes elsewhere than on Burnaby. The discovery of this previously undetected showing within a few hundred feet of a beach continues to water-down the effectiveness so often accredited to "old-time" prospectors.

While in the Charlottes, the writer, accompanied by Albert Jones, re-sampled a number of pyrrhotite-pyrite showings in the general area of Burnaby and Lyell Islands. In addition Meade Hepler, presently helping with assessment work at Ikeda, was asked to test and sample the numerous pyrrhotite - chalcopyrite showings in that area. Jones, Hepler, and Gerry Davis now have a supply of D. M. G. powder and will test any suspicious rock resembling that of Section Cove.

During this trip to the Charlottes, campsites and facilities at Owikeno Lake, Princess Royal, and Banks

Island were checked as a prelude to this summer's proposed work. A short time was spent at Tasu. Meade Hepler was taken to Ikeda and the camp re-supplied. Assessment work drilling is proceeding well.

Unless there is a late and heavy snow fall, an early spring is a certainty. Most hills on the north coast were bare to 3000 feet. Thus early work at Owikeno and early assessment work at the Apex appear practical.

March 6, 1963.
Vancouver, B. C.

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Geologist.

Telephone 6711

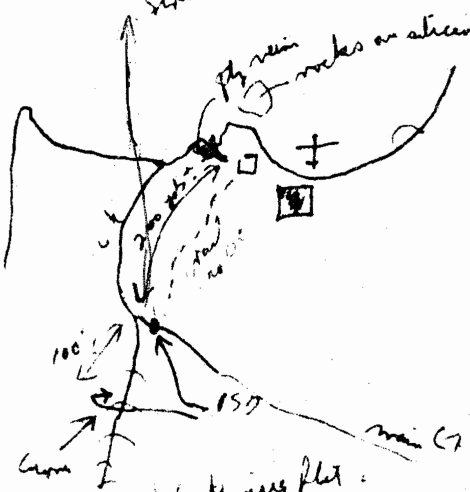
Prince Rupert Hotel (1957) Ltd.

PRINCE RUPERT, B.C.

Wed - Feb 28/63

S. S. Ni -

strike @ camp - al Potter - Bill? Potter - works for U I ab @ Zeballos.



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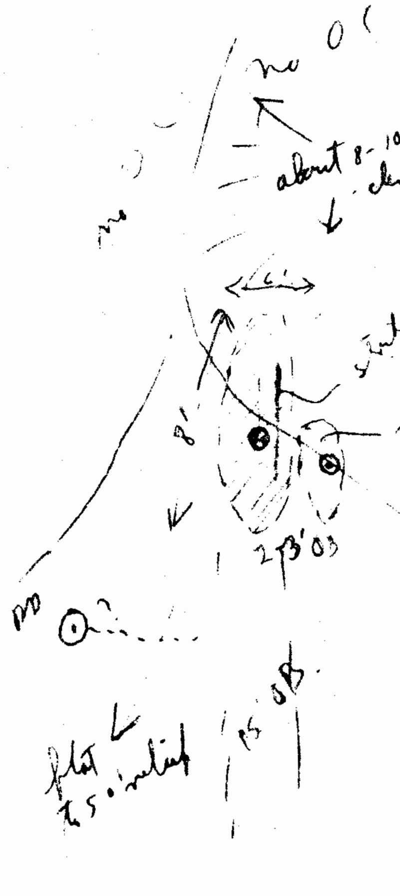

- rock under OB zone reported to be a breccia

- V. breccia float found in ck.

Must be near chimney as even high grade cp strings never broken into!! - py cut along strike for couple hundred feet - may be mainly - 2n body agrees to E. for 2 not to west, or N or S

"GATEWAY TO ALASKA"