File 1512

WSB

860073

PROPERTY EXAMINATION
REPORT

NAME Molybdenum Creek Prospect (molybdenite) MAP SHEET 103 I-10W½

LOCATION

The prospect crops out in the canyon on Molybdenum Creek at an elevation of about 1100 feet, 14 miles northwest of the town of Terrace, British Columbia (latitude 54° 34.5' N, longitude 128° 46.5'W).

There are numerous logging roads throughout the area. One crosses Molybdenum Creek about one mile below the showing and another follows the northern slope of Molybdenum Creek and terminates about 1000 feet north of the showing.

CLAIMS & OWNERSHIP

Mr. E. R. Anderson of Box 297, Terrace, British Columbia is the owner of six claims (Leo #1 to #6) that he staked about four years ago. In June of 1964, Southwest Potash Corporation staked a large group of claims over and around Anderson's claims*; but they allowed these to lapse in 1965. Mr. Anderson told the writer that he had offered Southwest Potash Corporation an option on his claim group for $200,000 cash payments, the first of which was to be $5000. He says this was recommended by some Southwest Potash geologists but that it was turned down in their New York Office**.

In August, 1966 Mr. William Yorke-Hardy, President of Moly Mines Limited optioned the property from Anderson for $125,000 with $1500 cash payment and $1500 due in the near future. Yorke-Hardy and associates have re-staked the ground dropped by Southwest Potash and they plan, according to Anderson, to form a public company on the property to be called Elmo Metals Limited.

CONDITIONS OF VISIT

During a visit to the Terrace area in the fall of 1965, the writer heard from Anderson about his property and the over-staking by the geologists of Southwest Potash Corporation. After Southwest Potash Corporation allowed the surrounding and conflicting claims to lapse, the writer decided to examine the property at his earliest convenience. On August 11th, 1966 the writer went from Prince Rupert to Terrace and contacted Mr. Anderson who informed him that the claims had been optioned by Yorke-Hardy and that Yorke-Hardy and associates had just completed their staking program.

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*Apparently the Southwest Potash personnel could not find Anderson's claim posts.

**Whether it was the Vancouver office or the New York office that turned down the property is not known. It is often easier to pass the blame for such decisions on to unknown persons sitting in head offices than to express one's candid opinion to a prospector.

Mr. Yorke-Hardy granted permission for an examination of the prospect and the writer, accompanied by Mr. Anderson, spent one half-day on the property.

EXPLORATION WORK

The exploration work done thus far consists of a few pits blasted in the rock and overburden in the walls of the canyon.

REGIONAL GEOLOGY

The deposit occurs adjacent to the eastern margin of the Coast Crystalline Belt near the northern contact of a major eastward protrusion of the Belt. It is 70 miles south-southeast of Alice Arm, 60 miles southwest of Glacier Gulch and 40 miles west of the Serb Creek molybdenum deposit.

GEOLOGY OF PROPERTY

The molybdenite mineralization occurs about 1000 feet northeast of the contact of the plutons of the Coast Crystalline Belt. It lies within the aureole of hornfels adjacent to these batholitic intrusions. The mineralization appears to be associated with a small stock of diorite (?) porphyry. Brown biotite hornfels occurs at the contacts of the porphyry and porphyroblasts of feldspar occur within the hornfels; in places there is a sharp gradation from the porphyry through the porphyroblastic hornfels into biotite hornfels. As this "stock" occurs within the hornfels aureole of the batholith it is not known whether the contact biotite is related to the stock or to the batholitic plutons. In places the porphyry itself has a brownish tint and it appears that the secondary biotite in the hornfels extends into the diorite porphyry. Possibly some of the biotite in the hornfels and the molybdenite mineralization are related to an unexposed stock of another composition.

The molybdenite mineralization occurs alone or with quartz veins in widely spaced fractures in both the diorite porphyry and the adjacent hornfels. Although the veins and veinlets have numerous attitudes, gently dipping mineralized fractures appear to be prevalent. The molybdenite itself is of a powdery type and the thickness of the molybdenite coating is unusually great. Grade of some of the exposures would probably be between .1 and .2% MoS_2.

Abundant chalcopyrite occurs in places, generally it is associated with the molybdenite in the quartz veins. Pyrite, although not particularly abundant, is present in fractures and in disseminated form.

A limited amount of the biotite hornfels has been bleached to muscovite hornfels in the area of better molybdenite mineralization.

CONCLUSIONS

(1) This is a stockwork-type molybdenite deposit with powdery molybdenite occurring in fractures, with or without quartz.

(2) Whether the mineralization is related to the small stock of diorite porphyry or whether it is related to another more

acidic buried intrusion is not known.

(3) Except in the canyon of Molybdenum Creek, exposures are scarce. No one has mapped the area to outline the zones of interest.

(4) Because of the nature of the mineralization, sampling will be difficult even with a suitable diamond drill.

(5) The property could be placed in my second category of stockwork prospects (good to mediocre). It warrants a preliminary program consisting of some mapping and a limited amount of diamond drilling.

RECOMMENDATIONS

If Yorke-Hardy's preliminary drill program does not intersect ore-grade mineralization, we should examine the core and appraise the data with a view to further work.

J. R. Woodcock

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September 16th, 1966