

REPORT ON "HELI" and "COPTER" Groups.ATLIN Mining District, B. C.Introduction:

The information contained in the following report has been obtained from the following sources:

1. Personal examination.
2. Geological Outcrop Map compiled by H. N. Willis - 1950
3. Personal communication H. W. Hendry, Canadian Johns-Manville.

Conclusions:

1. On these group of claims there is a widespread area of basic intrusive rocks with associated chrysotile asbestos.
2. The grade of material as exposed on the surface is sub-marginal.
3. The property does not have any merit for immediate production. A diamond drill programme will possibly outline sufficient tonnage to warrant going into production at some future date.

Location and Access:

The "Heli" and "Copter" groups of mineral claims are located in the Atlin Mining Division, one mile east of Atlin Lake, and approximately three miles southeast of the town of Atlin, B. C. The property is accessible either via the Spruce Creek road as far as Little Spruce Creek, and thence by fair foot-trail to the head of Little Spruce Creek and the property; or via the O'Donnell

River Road to a point one mile beyond the Pine Creek bridge and thence by steep foot trail to the property.

Limiting Conditions:

The possibilities of the property are further limited due to:

1. Lack of water, which would have to be pumped either from Pine Creek or Atlin Lake. This would involve a vertical lift of more than 2,000 feet.
2. Lack of timber for mining purposes.
3. Absence of local or fairly accessible power.

History:

The Atlin area was first brought to the attention of prospectors and mining capital during the Klondyke Gold Rush of 1898. At that time prospectors en route to the Yukon discovered placer gold on Pine Creek. This caused a period of intensive placer activity with resultant hard rock prospecting. Many lode discoveries were made but none developed into prominence. The two most well-known are the Engineer Mine and the Atlin-Ruffner Mine.

Desultory prospecting has continued in the district until the present. In the late 1920's H. H. (Shorty) Mann noticed the presence of chrysotile asbestos stringers in a basic rock located between the headwaters of Little Spruce Creek and Atlin Lake. In 1950 this fact was reported to K. J. Springer and a

crew was sent to investigate.

Geology:

The Atlin district is underlain by Early to Middle Paleozoic sediments consisting of limestone and biotite and cherty quartzite. Intrusive into the sediments is a heavily serpentized basic intrusive which has been tentatively classified (1) as Paleozoic or Mesozoic in age. Overlying the above rocks are highly altered volcanics of Jurassic age. All of the older rocks have been intruded by granodiorite, a part of the Coast Range Intrusive. Small remnants of Tertiary volcanics can be observed as poorly consolidated peaks at isolated points throughout the district.

The groups of claims examined are underlain by altered basic intrusive, parts of which have been highly serpentized with a resultant formation of chrysotile. Overlying, and covering a large percentage of the intrusive is a highly altered fine-grained volcanics of basaltic to dacitic composition. On the southern section of the claim group there are two small sedimentary outcrops that were tentatively called greywacke by H. N. Willis.

There is no observable structure to which the chrysotile could be tied, though there does appear to be a general north-east-southeast trend to the mineralization.

Chrysotile was the only mineral with possible commercial

(1) G. S. C. Map 218A by W. E. Cockfield

possibilities that was observed. Exhaustive tests of surface material indicated that the percentage of fibre in the rock was sufficiently high but the grade was sub-marginal. Samples analysed by Canadian Johns-Mannville Co. at Asbestos, Quebec, grade between 5% and 20% asbestos, but all of the fibre was Group 7, the lowest.

A distinct magnetic attraction was noted in one section (see Map) Polished section work disclosed this to be due to the presence of fine-grained magnetite.

Development and Improvements:

The property has not been developed in any manner, nor have there been any improvements made.

Economics:

The economic value of this deposit or any chrysotile deposit in the area is nebulous at the present time. The high capital outlay, coupled with a market that would probably be restricted to the Pacific Coast indicate that only very high grade material is of immediate interest. On the other hand, the accelerated use of asbestos with a consequent depletion of the Eastern reserves places a value on a good deposit as a reserve particularly to a company which is presently in the asbestos mining and processing business.

Submitted by

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