## REPORT ON MINERAL PROPERTIES

AT LAKE BENNETT, Y.T. and B.C.

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# MAIN LAKE

Three days, July 5, 6, and 7 were spent in examining rusty outcrops and reported mineralization along Lake Bennett in B.C. Numerous very rusty outcrops proved to be merely common black argillite with a normal amount of pyrrhotite. oxidizing to give rust. Veinlets of quartz and calcite with minor pyrite, pyrrhotite, and chalcopyrite occur in places but these are of no economic significance.

examined:

The following prospects along Lake Bennett were

1. Gold prospect on Pavy Mtn. above mile 45;

2. Gold showing at old arrastre on west side of Lake Bennett at mile 47:

3. Treber copper showing east of mile 56.

All three of these prospects are too small to warrant further work.

# Pavy Mtn. Prospect:

The gold prospect on Pavy Mountain is situated about 2000 feet above the lake on the east hillside above mile 45 and may be reached by climbing up the hillside slightly north of this point, the former trail being too overgrown for use. A tramway amd several buildings were erected in the early 1900's and a tunnel was driven about 700 feet woutheast through barren granite. Crosscuts from this tunnel extend for 300 feet northeast and for 40 feet southwest along a twenty- to thirty-foot wide, rustyweathering carbonatized feldspar porphyry dike which is followed in places by a fault. The dike strikes about N 50°E, dips vertically and extends up the hillside at least 1500 feet from the adit. Joints in the dike carry small seams of pyrite and thin stringers of quartz and calcite. Minor galena and arsenopyrite are also reported. Some skarn occurs at a granitelimestone contact near the showing but no mineralization was noted. Assay records have been lost but the property seems worthless and from its reported history, it appears to have been largely a stock promotion by Fred Storey, financed by New England capital.

### Arrastre:

At an old arrastre on the west shore of Lake Bennett. across from mile 47 on the White Pass & Yukon Railway, an adit

was driven 25 feet above lake level along a shear zone which strikes east-west and dips 45°N in and sitic metavolcanics. The shear is mineralized with pods of quartz carrying varying amounts of arsenopyrite, galena, and pyrrhotite. The gold content is unknown. Although the shear is 6 feet wide at the caved portal of the adit, it narrows in a short distance, and 200 feet to the southwest it is represented by slickensided fractures with associated small specks of pyrrhotite. The prospect is too small to merit any further attention.

Treber Showing:

The Treber copper showing lies in a creek  $2\frac{1}{2}$  miles east of mile 56 on the White Pass & Yukon Railway and can be reached by a trail which leads from a tent camp near the railway to a cabin on the creek  $\frac{1}{2}$  mile below the whowing. The property, formerly owned by Joe Treber (deceased), is now held by Arthur Tunley of Skagway. The shwwing consists of a shear from a few inches to 6 feet in width, which shows sparse pyrite and malachite in gougey, carbonatized andesitic to acidic intrusive or volcanic rocks. The shear strikes northwest and dips steeply NE, continuing for about 200 feet before pinching out into a slickensided alteration fracture in both directions along the strike. A short adit about 100 feet long follows the shear but exposes nothing but sparse mineralization. The prospect appears to be too small to merit further work.

This brief examination of the mineralization around the main southern portion of Lake Bennett revealed no promising conditions for economic mineral deposits.

Gold decospects reported around Paddy's Pass (between Lake Bennett and Tutshi Lake) and on the west side of Lake Bennett across from Pennington were searched for but could not be found. Reports by individuals suggest that they are too small to merit further attention.

#### WEST ARM

During a four-day trip into the West Arm of Bennett Lake, areas around McCauley Creek, Stony Mtn., and Millhaven Bay were examined. Only the latter area was found to be of economic interest.

Waters of creeks west of the Munroe (Black) Lake drainage were tested for traces of copper or zinc by means of the hydrogspchemistry kit. No significantly anomalous amounts of these metals were found.

McCauley CreeK:

Dodson traversed parts of the McCauley Creek and Partiidge River drainages in order to investigate the Skukum volcanics, particularly large red zones within them. The volcanics are somewhat more basic in composition than those seen in the Wheaton district and the red zones are a result of exidation of pyritized and somewhat dilicified rhyolitic volcanics. No mineralization other than sporadic pyritization was noted. At the divide between Wheaton River and McCauley Creek was found some barren quartz float presumably derived from veins over a foot-wide in the granites. Some such veins carry minor pyrite and have been brecciated and recemented by more quartz but show no other metallic minerals.

Stony Mtn:

Aho traversed the Stony Mtn area in order to investigate an occurrence of high grade antimony float reported by Walter McAllister, and to assess the prospecting possibilities. Although the southwest portion of Stony Mountain was carefully searched, only granodicrite with minor veins of barren quartz carrying small amounts of pyrite could be found. However, a few specks of galena were found in meta-andesites in the main valley near the large creek draining the mountain, and minor float of skarn and sintery-looking vein quartz with small amounts of galena, were found at the fork of this creek near the granodicrite contact. A small body of pyroxenite and of sheared porphyritic granite occurs near the contact. In connection with discovery of similar mineralization at Milhaven Bay and of zinc mineralization in skarn at Mt. Anderson, it is thought advisable to prospect this area for: (a) pyrometasomatic deposits near the granite contacts, and (b) veins or replacements in the volcanics, especially in associated limestones.

Millhaven Bay:

During the return journey from the West Arm a quick investigation was made of a linear, topographically low area which trended east-west across glacial stria and the strike of formations on the west side of Millhaven Bay, as noted on aerial photos. Meta-andesites on both sides of a pronounced gully were found to contain disseminated glaena, chalcopyrite, and pyrite along with quartz and epidote. Quartz lenses with similar mineralization occur for several hundred yards south of the gully. Although no definite evidence of faulting could be obtained, it is thought that the topographic low may represent a fault zone wlong which mineralization is localized.

In any case the occurrence of mineralization in a series of volcanics, conglomerates, and limestone such as is found here is encouraging enough to merit further reconnaissance and prospecting particularly since this area lies along the same structural belt as the Windy Arm and Wheaton areas to the south and north. It is

thought that since this area is low lying, it may not have been prospected very thoroughly.

It is recommended that about a week be spent in geologic mapping and reconnaissance of the Millhaven Bay area and the terrain as far north as Mt. Stevens, in order to determine whether or not the area has economic potentialities and whether or not it merits further work.

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