

(17.8 2.6 2.2)

PE-119-17

55°28'N

133°42'W

PRELIMINARY REPORT OF CASCADE PROSPECT, Kx 119-30
PRINCE OF WALES ISLAND, KETCHIKAN DISTRICT, ALASKA
May 15, 1939

Location and Accessibility:

The Cascade prospect is located four miles west of Hollis, via trail, and two miles southwest of the Hope mine on Prince of Wales Island. The trail to the property starts at Hollis, continues along the old horse tramway to the Hope mine, and thence continues up the mountain to the old workings situated between elevations of 1300 and 1500 feet. These elevations represent timber line in this locality.

The owner and operator of this one claim is J. J. Matuska of Hollis, Alaska.

History:

The discovery of gold on this claim was made by R. Knuckolls of Ketchikan, Alaska in the year 1900. The following year the property was optioned to a company which drove the present tunnels. During the development a large quartz boulder, weighing two and one-fourth tons, was found on the surface above the upper tunnel. This boulder contained considerable free gold and it was broken up and shipped. The company operated two seasons and dropped the option.

In 1914 J. LeBrandt and Charles Redienloe built an arrastre and operated during the season with a production of 30 ounces of gold. The following year they installed a three-ton stamp mill and operated that season with a small unsuccessful production.

The property remained idle until the year 1932, at which time it was staked by Tom Stevens. Little or no work, other than a little prospecting, was done by Stevens. The property was sold for \$50 to John Bulfers who tried to sell, but dropped his title the following year. The present owner, J. J. Matuska, restaked the property in September, 1938.

Geology and Development:

A short description of the property is given in U. S. G. S. bulletin 347, "Ketchikan and Wrangell Mining Districts, Alaska" by F. E. & C. W. Wright, pp. 161-162, as follows:

"The developments consist chiefly of two drift tunnels, and in the upper one a quartz vein is well exposed. The vein averages 2 feet in width and fills an old fracture crack in an altered basic intrusive. The lower tunnel, which was driven to under cut the vein, is 300 feet in length and crosscuts intrusive rocks and dikes of several different types, but does not expose the vein. The original sedimentary rocks in this area have been profoundly altered by the intrusives, and epidotization is widespread. The vein strikes N. 53° W., dips 70° SW., and has been followed for about 175 feet in the upper tunnel. * * * * *

On the date of visit the surface was covered with heavy snow and surface outcroppings were not observed. The lower tunnel, elevation 1300 feet, was caved a few feet in from the portal. Further development in the upper tunnel, since the above report, consists of a crosscut into the footwall 12 feet in length at a point 21 feet back from the face. This tunnel was driven on the vein over its entire length of 175 feet. The crosscut shows only hard clastic greenstone. At a point 4 feet back from the face a small quartz lense is exposed for a distance of 36 feet. It has a width of two feet, has a banded character, and lies on the foot-wall side of the vein, the latter consisting of a parallel mineralized shear in the greenstone. The remainder of the vein consists mainly of these shears, some of which are filled with quartz, varying up to a few inches in width. Small lenses of quartz occur along the stringers. The ore that was milled was reported to have been taken from surface cuts and a small lense of heavy sulphide ore located in the creek bed 30 feet west of the upper tunnel portal. This lense was covered with deep snow, but was reported to be 15 feet in length, averages 8 to 10 inches in width, and contains gold and silver values averaging \$100 per ton.

Both post and pre-vein movement shows in the vein mainly of horizontal direction. The walls are slightly fractured, the vein banded, and the quartz is frozen in spots.

Mineralization:

The metallic minerals noted in the ore were unevenly distributed from nearly massive in spots to very lean in others. They consisted of free gold, silver, pyrite, sphalerite, chalcopryrite and galena. The gold and silver values were reported as highest in the areas of greatest concentration of the sulphides. The gangue minerals consisted of white to gray quartz, calcite and pieces of altered wall rock. Pyrite mineralization is evident along and penetrating the walls of the vein, but is mostly confined to the walls of the shears.

Sampling and Assays:

A total of four channel samples were taken in the upper tunnel, elevation 1400 feet. Snow prevented sampling the sulphide lense crossing the creek bed, which was reported averaging nearly \$100 per ton in gold and silver.

Sample No. 607 was taken in the upper tunnel at a point in the roof 10 feet back from the face across 27 inches of quartz. This gave returns of 0.24 oz. gold and 0.40 oz. silver per ton.

Sample No. 608 was taken 18 feet back from the face across 13 inches of quartz. This gave returns of 0.14 oz. gold and 0.40 oz. silver per ton.

Sample No. 609 was cut from the roof 23 feet back from the face across 12 inches of quartz and mineralized wall rock. This gave returns of 0.50 oz. of gold and 0.70 oz. of silver per ton.

Sample No. 610 was taken 30 feet in from the portal across 4 inches of quartz. This gave returns of 0.12 oz. gold and 1.60 oz. silver per ton.

Higher values were reported by Matuska from the opencuts on the surface.

Machinery:

The old mill buildings and machinery are obsolete, but Matuska has installed a small rocker type mill of a few hundred pounds daily capacity. In addition he has a 4x6" Mine, Mill & Smelter Company jaw crusher and a 3½x7' Wilfley table. For power, he is installing an 18-inch Pelton wheel using the water from the small creek alongside the tunnel. This is a very small creek which has its source mainly from melting snow. There is considerable timber in the valley below the tunnels. Large water power development is lacking.