PE-114-3

(7.6, 13.7)

136°41'W
57° 47'N

13630 T 13X

PRELIMINARY REPORT OF HOLDINGS OF NEW CHICHAGOF MINING SYNDICATE,
PINTA BAY, CHICHAGOF ISLAND,
July 3, 1936.

KX 114-29

Location and Accessibility:

A group of 17 claims are held by the New Chichagof Mining Syndicate at the head of Pinta Bay, formerly called Deep Bay, on the west coast of Chichagof Island. Pinta Bay is located 10 miles in a straight line southeast of the mouth of Lisianski Strait and 8 miles northwest of the Chichagoff Mine. The group extends from the beach at the head of the Bay inland for approximately 3000'. The showings are located 1500' east from the head and reached by a trail that leads from the camp at the mouth of a small creek on the beach 2000' east to elevations of 170 to 400'. Deep water extends from the mouth of the bay to 2000' of the present camp.

History:

This discovery was made in the fall of 1933 by J. Nieland while prospecting along the creek. Max Behrmann became interested in the discovery through grubstaking Nieland. Later Juneau capital became interested and the present stock syndicate was formed. Development work followed intermittently and was in progress on the date of visit. B. B. Nieding visited the property in the fall of 1934. He sampled the cuts and tunnels and recommended the expenditure of $30,000 to sink a small shaft on the ore. To date development work consists of four tunnels, two of which are short crosscut tunnels, and several opencuts and some stripping.

Geology:

The geology of the west coast of Chichagof Island has been reported on generally by R. M. Overbeck of the U. S. G. S., Bull. 692, "Mineral Resources of Alaska, 1917," pp. 91-137, inclusive. The formations of limestone and greenstone on this group are classified under undifferentiated metamorphic rocks of probable Mesozoic and older ages. The diorite intrusive is classified under probable Mesozoic age and believed to be a later phase of the Coast Range batholith.

Highly schistose greenstone outcrops at the head of the bay and gradually becomes less schistose inland. Interbedded in this greenstone lava is a band of yellowish to dark gray schistose limestone which contains the showings of this group. A small stock of diorite has intruded both the limestone and greenstone lavas. The general strike of the limestone and schistosity of the lavas varies 15 to 20° W. and dips 65° W. These formations, including the diorite, have been cut and slightly faulted by a fissure that strikes N. 28-30° E. and a dip that varies 65° to 80° W. Plates No. 1 and No. 2, accompanying this

report, show the positions of these formations in the vicinity of the ore showings. Further geology has not been worked out. The limestone is an impure limestone grading from black slaty limestone to dense black and to a light yellow cherty nature. Where the fissure cuts the limestone considerable brecciation has resulted. The limestone pieces have been recemented and partly replaced by silica. Gold values were found in this zone which contains sufficient values to make an ore. Thus this type of deposit is classified as a brecciaed gold deposit in limestone. Small bunches of crystalline calcite are found along the fissure.

Showings:

The fissure, along which the small lenses of quartz occur, can be traced by a series of eight opencuts and some stripping for a distance of 700'. Four tunnels and crosscuts represent the underground workings of nearly 900'. The outcrop located to the south of a small ravine is a mass of brecciated limestone cemented and silicified with an exposed length of 40 feet and varies in width from 9 to 12 feet. Various widths of quartz occur in the open cuts and tunnels, these being noted on the accompanying sketch.

The best showing of ore is in No. 3 tunnel. This tunnel is approximately 30 to 40' below the surface outcroppings. This tunnel has a length of 160' with four short crosscuts. Over 100' of quartz shows and the greater part of this contains good values. One length of 35' averages in width from 12 inches to 39 inches and in gold content one ounce per ton. This is an average of 5 samples taken by B. B. Nieding in 1934. The walls of the ore are not distinct and the limestone is partly replaced and blends from nearly pure silica to limestone. Open vugs show in the quartz and the general appearance of the ore is a cemented breccia.

No. 4 tunnel has a length of approximately 600' with three short crosscuts in addition and is vertically 87' below the No. 3 tunnel. The first 250' of this tunnel was in hard greenstone, most of which followed the fissure. This fissure shows strong and very persistent features, but it has a narrow width between walls and is lacking over this distance in quartz and gold values. Then a width of 100' of black slaty limestone was cut which to the north becomes dense black limestone. The latter was cut for a width of 40' along the tunnel. Within this section the fissure widened from 2 to 3 feet and contains an occasional small bunch of quartz. Low assays were reported obtained from these small bunches. At the contact of the dense black limestone and the grayish buff limestone, a large bunch of crystalline calcite, 12 feet in length and 5 feet wide, occurs on the hanging wall of a lense of quartz. This quartz lense is 50 feet in length and 9 feet wide in the widest section.

Sample No. 23 was taken across 99 inches of mostly quartz with the characteristic variable amount of limestone (note accompanying sketch). Then for a distance of 25 feet two small bunches of calcite occur and an altered diorite come in along the footwall. Over this distance the drift was turned more northerly and the fissure continued into the footwall. The hanging wall of another small bunch of quartz was followed. This has an exposed length of 25 feet and its width is not exposed. The last few feet of drift was turned to the west and followed along a limestone diorite contact on which no ore is exposed. Sample No. 22 was taken across 70 inches of this quartz which was not its full width. This later quartz is directly under the first quartz showing in No. 3 tunnel on the dip of the vein.

Nos. 1 and 2 tunnels are short crosscut tunnels above No. 4 tunnel and cut the vein only a few feet under the surface. No. 1 shows a strong shear in limestone and No. 2 shows a 9-foot vein of mixed quartz and limestone. These later tunnels and opencuts were sampled by B. D. Stewart, Commissioner of Mines, and B. B. Nieding at different stages of development. Plate No. 2 gives width and description with results of their sampling.

Mineralization:

The ore may be described as a breccia of altered limestone and quartz. It varies in shades from milky white to gray with various portions of light buff to brown. The limestone pieces are angular and partly replaced by silica. This acts as a cementing material between the pieces. Calcite is also abundant throughout the ore and also acts as a cementing material. Free gold is visible in No. 3 tunnel and gold can be panned in several of the opencuts. The mineralization is very sparse, very fine pyrite crystals are evident upon panning, and occasionally they can be seen in the ore with the occasional chalcopyrite crystal. In places graphite is contained in the ore.

Machinery:

The opencut work and the three above tunnels were driven by hand methods. No. 4 tunnel was driven with power furnished by a 7x8 Ingersoll-Rand, single stage compressor. This was run by a 20 H. P. Le Roi gasoline engine. Two receiver tanks, one leyner using detachable bits, and ore car complete the amount of machinery.

The buildings consist of two small sheds at the portal of No. 3 tunnel, a compressor house, blacksmith shop and powder house at the portal of No. 4 tunnel and a cabin used as a camp on the beach.

Timber is abundant on the ground and immediate vicinity. A small amount of water power might be developed from the creek that flows across the property. However, the flow of water is small and very low during the winter season.