J. C. R. 1/24/38.

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PE-095-10

PRELIMINARY REPORT OF GOLD MINT GROUP, PALMER CREEK,
HOPE MINING DISTRICT, ALASKA,
October 5, 1937.

Location and Accessibility:

This group of claims is located on a ridge between Palmer, Cub and Bear creeks north of the Palmer Creek road, 7 miles down from the head and 7 miles via gravel road from Hope, Alaska.

The mill is located 1500 feet off the road and 500 feet above. The workings are located 3000 feet north of the road and approximately 1800 feet above. A horse trail has been constructed from the road to the workings.

Owners:

The group consists of 11 lode claims, all unpatented, held by I. Nearhouse of Hope, Alaska.

History and Development:

This property was discovered by I. Nearhouse in 1925, who found considerable float scattered near the top of the ridge. Trenching revealed a 2-foot vein at which time the property was visited by H. Townsend, representing this department. One sample was taken from a cut across 2 feet. This sample assayed .56 oz. gold and .5 oz. silver to the ton. More cuts followed and Nearhouse took into partnership a man by the name of Smith who owned half interest at that time. (Mr. Smith, according to Mr. Nearhouse holds no interest at the present time).

J. D. Bozard optioned the property from Nearhouse and Smith in 1935 and formed the Gold Mint Mining Company. This option terminated the following year. Again in the spring of 1937 Bozard had the property leased for 60 days.

From the date of discovery annual assessment work has been done and the total work to date consists of a crosscut tunnel (note sketch) 240 feet in length which strikes the vein at a depth of over 100 feet below the surface and a drift 90 feet in length on the vein. Two shafts have been sunk on the vein approximately 500 feet apart. The west shaft was reported to be 30 feet and the east shaft (note sketch) was reported as 37 feet in depth. Small cuts, outcrops and float mark the vein between shafts.

Geology and Showings:

The vein cuts the formation of thinly bedded graywacke and slates at nearly right angles. The strike of the vein in the tunnel varies from N. 45° W. to N. 75° W. The formation strikes N. 20° E. and dips 62° W. Several slip faults were noted in the crosscut tunnel with various strikes and dips. The vein itself has been subjected to past movement and shear which with the small slip faults may account for its change in strike. The vein is exposed the length of the drift and varies in width from 4 to 30 inches. It contains values (note assay sheet on sketch) its entire length. The east shaft was only accessible for 10 feet in depth and the vein width was 3 feet. This was the only surface exposure visited, due to light snow fall which made further examination impossible due to the steepness of the slope. The west shaft was reported inaccessible. A small flat vein with values and well mineralized was reported under the dump at the mouth of the tunnel. Other small veins containing visible gold were reported further up near the top of the ridge associated with irregular greenish dikes.

A small stock of rhyolite was reported outcropping 600 feet east of the east shaft. This was not seen, but was reported as very fine grained and light greenish in color.

The vein in the tunnel has much the same appearance as on the surface. It shows considerable minor shearing with resultant crushed quartz and gouge. Small bunches of slate and altered graywacke are contained in the vein. Most of the metallic minerals are oxidized and the walls are free and distinct.

The structure is reported in U. S. G. S. Bull. 849-I, "The Moose Pass-Hope District" by Ralph Tuck, p. 504, as a shear zone. This is very evident from the shear movement shown on the walls. This shear zone represents one of the shears of the limb of the now eroded anticlinal fold, the crest of which was eroded away and is now the valley of Palmer Creek.

Tuck, above reference, describes the fold on p. 484, as follows:

> "A few broad folds were recognized. One anticline strikes down Palmer Creek, and the headward part of the creek is flowing on the crest of the fold. The axis of this fold strikes a little east of north, continuing along the divide between Bear and Cub creeks, and probably passes into Turnagain Arm about two miles west of Sunrise. At this location on Turnagain Arm the fold appears to be plunging north at an angle of about 10°."

Mineralization:

The mineralization as it occurs sparingly in the vein at the surface and in the tunnel is mainly oxidized. In the unoxidized portions sulphides of pyrite, arsenopyrite, chalcopyrite and galena are sparingly distributed. The gold occurs very fine in the quartz and associated with the sulphides.

The gangue minerals consist of a white quartz, a little calcite, oxidization products and a gouge of quartz and pieces of country rock.

Assays and Production:

A few tons of ore have been milled in a small ball mill and were run over plates by Nearhouse this last year. The amount of gold in the amalgam is to date unknown. This ore was taken from the tunnel while drifting on the vein.

A total of nine channel samples taken at ten-foot intervals across full widths of the vein in the tunnel (note assay sheet on sketch) gave an average width of 16 inches and an average value of $15.77 per ton gold and silver.*

Two channel samples taken in the east shaft at 10 feet and 3 feet below surface gave values of $30.75 to $61.30 gold and silver on widths of 3'3" and 3', respectively.

Three samples taken by Tuck**of dumps from pits 500 feet west of the east shaft averaged $4.48 per ton gold and silver.

Machinery, etc.:

A small combined mill and bunk house above the Palmer Creek road contains a 3 to 6 ton Straub mill with plates. This is run by a 6 H. P. Wisconsin gas engine. At the tunnel a small shed is located with quarters for two men. Hand tools, otherwise comprise the mining equipment.

Timber is available in the valley below the Palmer Creek road. A small amount of water is possible during summer seasons below on Palmer Creek for hydroelectric. A small spring above the mill furnishes a small amount of water sufficient for present mill during the thawing months.

*Gold @ $35 and silver @ 50 cents.
**Op. cit., p. 504.