PASS

PRELIMINARY REPORT OF PORTAGE GOLD MINES, LTD.,
POE BAY, PRINCE WILLIAM SOUND DISTRICT, VALDEZ PRECINCT, PORT WELLS AREA
September 22, 1936.

Locations

The Portage Gold Mines, Ltd. has a small group of claims under option located 3½ miles inland from the head of Foe Bay on the north shore of Passage Canal in the northwest section of Prince William Sound. The valley extending north of Poe Bay is a U-shaped glacier valley with a receding glacier 3 miles from the beach. This group is staked along the west side of glacier on outcrops that have very recently been exposed by the retreating ice.

History & Development:

This discovery was made and a group of claims were staked a few years ago by Dominick Vietti. Very little work was done and the group was optioned and the Portage Gold Mines, Ltd. was formed in 1933-34. This is a Canadian organization with head office at Victoria, B. C. This company is capitalized at one million shares at one dollar, par value. The company started operations in the spring of 1934. A road 2 miles in length was built nearly to the end of the glacier where a camp was established. Last year machinery was installed and some tunneling was done by hand methods. This season underground development work has been in progress.

Operations are seasonal here due to weather conditions. There is a heavy snow fall in winter and the water supply freezes, making a lack of water for operations. Also, late in the spring large snow slides make work dangerous and the season is limited from May until the middle of October.

The total development to date of visit consists of a 278' crosscut tunnel which cut the vein 200' vertically below the surface outcrop. A total of 220' of drifting was done on the vein of which 80' extended west of crosscut tunnel and 140' east. On the east drift a raise was up 30' on the vein. A trail was constructed from the camp to tunnel site part way over the glacier.

Machinery:

This company owns a 20 H. P. diesel McCormick-Deering Tractractor which is used in hauling supplies from the beach to the camp and part way to the mine. The mine is operated with a 2-stage air-cooled Ingersoll Rand compressor. This is type 40M with 186' air displacement and delivers 150 cu. feet. This is run by a 30 H. P. Gardner

diesel with belt drive. Gardner-Denver machines with detachable bits are used in the mine. Timber is lacking in the vicinity of the mine. However, within half a mile of the beach an abundance is found. A seasonal water power site could be developed from the glacial stream which has approximately a 50' fall within 200' of the beach.



Looking north from head of Poe Bay showing graniteslate contact and 50' water fall.

Geology & Ore Deposits:

The geology in this area is very favorable for gold deposition due to the existence of a slate and granite contact that shows considerable mineralization. This contact is located (see above photograph) along the east side of the valley in a northerly direction cutting the schistosity of the slates at nearly a right angle. Several light greenish to gray dikes extend from the contact into the slates at various angles. The slates consist of wide bands of black graphitic slates, interbanded narrow graywacks and slates of a more argillaceous nature. Along and in the vicinity of these dikes small quarts veins

have been found. The main showing on this group consists of a banded quartz lense with an exposed length of 150° and an average width of 12 inches. The strike of this lense is N. 60° E. and dips 56° to 60° NW. The slate formation strikes N. 70° E. and dips 69° to 70° NW. This gives a difference of 100 in both strike and dip between vein and formation. The vein is inclosed in a strong shear which contains a gouge of highly crumpled slates 3 feet wide. This gouge contains the quartz lenses which vary between the walls of the gouge. The average length of these lenses are 20 to 25' and they vary in width from a few inches to 20 inches, as they occur along the drift. Usually barren spaces of 10 to 15' exist between the lenses. Where the crosscut tunnel hits the vein a dike of greenish color was found striking N. 40° E. and dipping NW. This dike was cut by the vein with only a few feet displacement. At a point 22' east of the crosscut a raise was started on a small lense. This raise is directly under the larger surface outcrop. The quartz widened from a few inches to 12 inches at the top 30' above. Later reports stated this raise encountered a dike of greenish nature paralleling the vein with the vein showing a greater width and higher values.

Mineralization & Assays:

The milky white banded graphitic quartz contains a 1% mineralization of (in order of abundance) pyrite, pyrrhotite, galena, sphalerite, chalcopyrite and free gold. The mineralization and also the gold values were spotty and occur both in the quartz and along the graphitic bands. The lense on the surface over its exposed length 150' and average 12" width was reported to average one and a half ounces of gold per ton. A 35' section of this exposed length was reported to average between 2 and 3 ounces. Free gold can be seen in several places along the drift and the average assay was reported good.

Development and conditions at this mine have been carried on in a very efficient manner. A small mill is to be installed next season but the kind and capacity had not been decided upon to date.

Months Dennis Dennis Start of Markandi Acaron from Strong of the Down Sto. Brief on the Carrete file of funte has acomment of prom, Med mid be liggered for the galet Deer Character 200.12 500 per godon hed over one onto to Correr plant - moder proceed as Politica Checker Cario. St. 40 head of Par 2- plage -Andread main amid from 3/2 to 6 of page hear you so of from Classifer - 20 x 20' x 8' high as the from

All mandy to more one in the major

12.5,15.3 E. 18 17 11 18 8 19 17

SUPPLEMENTARY REPORT TO ACCOMPANY PRELIMINARY REPORT
OF PORTAGE GOLD MINES, LTD., POE BAY,
PRINCE WILLIAM SOUND, ALASKA
August 16, 1938

The Portage Bay Gold Mines, Ltd., located on the Dominick Vietti property 32 miles inland from the head of Poe Bay on Passage Canal, started milling one shift, 6-ton capacity, on July 14 of this year. At the end of last season after the installation of the mill. a test run was made and eight ounces of gold was recovered. Since the writer's visit two years ago, the No. 1 raise, north drift, has been completed to the surface, a vertical distance of 160 feet. A short drift from near the top of this raise was driven to the surface under a small stream. The end section of the drift was bulkheaded and is used as a reservoir from which a 12-inch pipe line leads down the raise and out the crosscut tunnel to near the portal. Here at a point 30 feet in from the portal, a Pelton wheel has been installed and runs a two-stage Gardner-Denver compressor. Further development consisted of the starting of two stopes, one up 20 feet in the south drift and the other 50 feet in length and up 35 feet in the north drift. At the top of No. 1 raise at the surface, mining is being carried on in driving a tunnel with a 30-foot back on the vein to the north. This drift will attempt to follow the vein past the faulted section which shows on the surface. Present ore for the mill is obtained from this drift, and the north stope. The total drifting on the vein amounts to 345 feet, the crosscut tunnel is 275 feet in length, raises total 240 feet, and with the small amount of stoping, represents the total development.

The mill, erected last year, is located below the crosscut tunnel at an elevation of 1680 feet. It is constructed of wooden timbers covered with corrugated sheet iron. The ore is dumped over a 4x8 foot steel rail grizzly with 3/4-inch mesh into a 50-ton ore bin. The coarse material is fed to a Marcy crusher with 8x12 inch jaws. A belt feeder conveys the ore to a Marcy ball mill, 20-ton capacity. The flow from the ball mill passes through a Clark-Todd amalgamator and thence to a Dorr classifier and the overflow to a three-quarter size Wilfley table. The ore is ground to a 60-mesh and a 90 per cent recovery was reported. The mill is powered by a 30-H. P. diesel engine. Belt drives are used. A small generator is run by a $3\frac{1}{2}$ -H. P. gasoline engine and this generates lights for the mill and camp. The concentrate made is a 50 to 1 ratio and runs high in lead besides the gold-silver values. The ore milled has an average value of \$40 a ton in gold and silver. The camp consists of a combined shower room, dry room, store and cook house, and is located 150 feet east of the mill. A 1500-foot aerial tram operated by a tugger air hoist is used to pull up supplies from the glacier below to the camp site.

Safety Factors:

An unsafe factor, which has resulted from the bulkheading of the water from the creek at the top of the raise with two vertical drift posts and wooden bulkhead, is the water storage. This storage and bulkhead will be subject to freezing during winter months. At the present time no grave danger to men would come about as the lower tunnel would act as a drainage tunnel. However, this amount of water in coming down the raise and out the tunnel would cause considerable damage. Later, if sinking is undertaken below this level, a grave danger would exist. Other factors are the various unguarded belts in the mill. One severe injury has been due to an arm being caught in the crusher belt. First aid kits are kept both in the mill and bunk house. Another danger which could be serious is fire, for which no provisions have been made.