

Hesquiat Mine
Hesquiat, V.I.

Apr 11
1941

Set 30.70

Over Camp 120

Σ Top Tunn 400
N 47 E 40' to fc
dip 52-60 NW



Tunn ± 18' ft lower
N 55 E ± 40' to face

See also Report by
Norman Brooks

8/1
2/5
0/0

West cuts El 500
Strike $N 30 E$ dip $60^\circ E$

at toe
a 567 E 45 face
40 to wh RK f.w.
 $\frac{17}{\sqrt{3}}$ to portal

a 560 E $+33^\circ$ 30' to B at toe

B 567 E 15' to NW of hole
thence $\pm 8'$ to face

#4 Tunnel

Portal to face $\pm 55^\circ W$

hinge seam
 $\pm N 50 E$ dip
with white RK
4 to 5 gropy



Around $N 30 E$
to #1 Tunnel

Property File

C. C. Starr.

092E 016

006298

REPORT ON PRELIMINARY EXAMINATION
of the PROPERTY of
Hesquiat Mining Company Ltd.,
HESQUIAT, V.I.

Zeballos, B. C.
April 21, 1941.

Don't type
The President and
Board of Directors,
Heno Gold Mines Ltd.,
Vancouver, B. C.

Gentlemen:

I am submitting herewith my report on the preliminary examination I made of the Hesquiat property on April 17th, accompanied by Messrs. C. C. Starr, A. D. Coggan, and George Simpson. The last-named is one of the owners of the property and acted as guide. The trip was made by plane from Zeballos which permitted a stay of only four hours on the ground.

This length of time would have been sufficient for a fairly complete examination, had the property been as represented; namely, possessing one definite vein four feet in width and carrying fairly consistent values approximating 0.5 ounce gold per ton. However, this did not prove to be the case, as instead of one vein, there are at least two, and the widths are much greater, and the values much lower than represented.

It is evident that the property has little or no chance of becoming a small-scale producer of medium grade ore. It is just possible, however, that a sufficient quantity of low-grade ore might be developed to warrant a medium to large-scale operation, but before even a speculative statement could be made on this subject, a much more thorough examination would be required.

LOCATION.

Hesquiat Lake is on the west coast of Vancouver Island, near Estevan Point, and is about 30 miles northwest of Tofino, and about 40 miles southeast of Zeballos, both airline distances. This fresh water lake is about three miles long and half a mile wide and is at an elevation of just a few feet above sea-level. It is separated from the salt water Hesquiat Harbor by a short narrows or rapids.

The property consists of eight unsurveyed mineral claims which are adjacent to the east shore of the lake near its south end. The claims are said to extend into the lake itself and range over a steep hillside to elevations of over 1,000 feet.

The property can be reached by flat-bottomed boat from Hesquiat, the nearest steamship stop, a distance of seven miles. In favorable weather, seaplanes can land on Hesquiat Lake right at the foot of the trail to the showings; the trip from Zeballos takes 35 minutes.

The topography is fairly steep, but is not unduly rugged or precipitous. There is an abundant supply of timber of various evergreen species. A small creek on the property should suffice for domestic and mining purposes, but water for milling might have to be pumped from the lake. In the event of the expenditure ever being justified, a road could be bulldozed at moderate cost to a suitable site for a steamer wharf in Hesquiat Harbor.

ms.

HISTORY AND OWNERSHIP.

The Hesquiat property is believed to have been staked originally as the "Brown Jug", sometime prior to 1914. After two or three short prospect tunnels were driven by the original owners, the claims were allowed to lapse. The property was restaked a few years ago and was referred to as the Paterson Group. Ownership is now vested in the Hesquiat Mining Company, Ltd., a private company composed of a few individuals, most of whom reside in and around Port Alberni, V. I.

In 1939, the owners built a shake cabin near the lake, built a good trail to the showings, cleaned out the old tunnels, and did a little open-cut work.

In 1940, the property was optioned to a group known as the Windsor Gold Mines Company or Syndicate. The optionees did a little haphazard tunnelling before relinquishing their option.

GEOLOGY AND MINERALIZATION.

The only rocks seen in the small area traversed, were typical West Coast volcanics. Although no granite or limestone float was noted, it is possible that the claims are not wholly underlain by volcanic rocks, and the showings may not be far from a contact.

The mineralization occurs in silicified shear-zones, or replacement veins, which attain widths of 15 feet. There is some evidence to suggest that this replacement may have been preceded by pegmatitic intrusion.

The vein matter includes: included host-rock in varying stages of silicification, crystalline quartz, calcite, zinoblende, pyrite, chalcopyrite, and galena.

The predominant sulphide is sphalerite, or zinoblende, which occurs (1) finely and sparsely disseminated throughout the vein, and (2) massive in small lenses or pockets which appear to be scattered irregularly in the vein. Pyrite is relatively scarce and appears only near concentrations of the zinoblende. Galena appears to be rare, it only being noticed in one specimen. Chalcopyrite occurs in minor quantities only, and is not important.

In the twenty samples assayed, gold values ranged from a trace to 0.64 oz. per ton. Of five samples assayed for silver, the average was just under 2.0 oz. per ton, with the lowest one yielding 0.70 oz. per ton. No assays have yet been made to determine the zinc content of the samples taken, but it is not likely to exceed 2 or 3 per cent. In view of limited marketing facilities and possible metallurgical complications, it is doubtful if the zinc factor is important enough to be considered in any preliminary calculations.

m.s.d.

VEINS.

The showings are reached by a good foot trail which follows the bottom of a small ravine for about 1,000 feet from the lakeshore in a southeasterly direction. There are five short tunnels and about as many open cuts in an estimated horizontal distance of 300 feet.

The terminology, if any, used by the owners is unknown, so for the sake of convenience, letters will be assigned to the veins, and numbers to the workings.

"A" Vein.

This, the most promising showing known on the property, is exposed on the rocky sidehill which forms the northeast bank of the ravine. Two short tunnels have been driven just within the hanging wall side of a silicified shear-zone, or replacement vein. The upper, or No. 1, tunnel is at an elevation of about 400 feet, and is 40 feet long. The No. 2 Tunnel is only 20 feet below No. 1, and is also 40 feet in length.

The vein is 9 feet wide, strikes North 50 degrees East, and dips 60 degrees to the north-west. In addition, there is a sheeted zone of partial silicification on the hanging wall side which is 6 feet wide; this brings the total width of the shear to 15 feet.

Seven samples were taken from the "A" Vein in and near Nos. 1 and 2 Tunnels, as follows:

<u>No.</u>	<u>Place</u>	<u>Width</u>	<u>Oz. Au.</u>	<u>Oz. Ag.</u>	<u>Remarks</u>
4200	Floor, outside No.1 T.	2.5	0.01	0.70	Gouge and decomposed shear-zone rock.
4201	Ditto, Footwall fraction	6.5	0.04		
4202	Open cut at portal No.1	3.0	Trace		Sparsely mineralized siliceous rock.
4203	No. 1 Tun. SE wall	5.0	0.64	2.00	Almost pure ZnS from small lense.
4204	No. 1 Tunnel Face-Top.	3.5	Trace		Top Fraction.
4205	Ditto -Bottom.	2.0	0.60		Soft, rusty quartz with zinblende.
4206	No. 2 Tunnel Face	3.0	0.28		

It will be noted that only three of the above samples ^{are} of commercial grade and due to the sporadic nature of the values, the vein would have to be sampled systematically before it could be evaluated. The owners claim to have shipped 12 tons from No. 1 Tunnel which returned \$37.50 per ton in gold. This average is higher than the best of my samples, including #4203 which was almost pure zinblende.

Northeasterly from No. 1 Tunnel, the "A" Vein can be seen to outcrop ~~risings~~ up the steep hillside for about 100 feet, where it ~~disappears~~ under shallow overburden. Further trenching and cutting could be done to good advantage in this direction.

A few feet down the hill (southwesterly) from No. 2 Tunnel, the "A" vein appears to end abruptly against a northerly striking fault.

ms

"B" Vein.

At a distance of about 150 feet in a southerly direction from No. 2 Tunnel, and just above the creek bed, there is another old tunnel. This tunnel, No. 3, is about 35 feet long and was driven in an easterly direction. At about 20 feet from the portal it cross-cuts a mineralized zone which strikes North 15 degrees East and dips steeply to the east.

This zone, called the "B" Vein, is 15 feet wide where out, the hanging wall being exposed in the face of the tunnel. The mineralization consists of zincblende sparsely disseminated in a siliceous gangue. A sample taken across the full 15 feet assayed: Gold, a trace; Silver, 1.24 oz. per ton.

"C" Vein.

From No. 3 Tunnel, the trail continues for about 600 feet. In this distance, it climbs the southwest bank of the ravine and levels out along a sidehill parallel to the lake shore.

The "C" Vein is similar to the "B" Vein in character and attitude, and might be a southerly extension of it, but it is more likely parallel to, and slightly west of, the "B" Vein.

No. 4 Tunnel follows the vein for 70 feet to the face, and is at an elevation of 350 feet. No. samples were taken in this drift, but the vein matter is similar to that exposed in two neighboring open cuts where values of 0.02 and 0.03 oz. gold were obtained.

At an elevation of 500 feet, an open cut exposes a vein (probably the "C"), with a width of 15 feet. Although fairly well mineralized with zincblende, and rather impressive in appearance, the vein carries only very low gold values. A pit about four feet deep has been dug in the eastern half of the vein, and a 25 foot cross-cut has been driven to cut the vein not over six or seven feet below the bottom of the pit.

Five samples were taken in this vicinity, as follows:

<u>No.</u>	<u>Place</u>	<u>Width</u>	<u>Oz. Gold</u>	<u>Silver</u>	<u>Remarks</u>
4211	North wall of cut	2.0	0.20		Hang. wall fraction
4212	South wall of cut	6.0	0.04		Centre fraction
4213	North wall of cut	4.7	0.16	3.80	Part cen. fraction
4215	North wall of cut	5.5	0.05		Footwall fraction
4214	South wall No. 5 Tunnel	3.0	0.03		Balance of vein is ahead of the face.

An additional four samples assayed from well mineralized specimens, including two taken from material sacked presumably for shipment, yielded very low values, the highest of which was 0.16 oz. gold per ton.

W.D.

CONCLUSION.

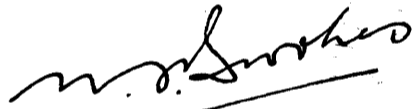
The "B" and "C" Veins are not worthy of further work, or at least not before the existence of commercial ore elsewhere on the property is proven. The "A" Vein, however, contains some interesting, although erratic, values, and is worth further work towards the ultimate goal of developing a medium to large low-grade mine.

The owners are asking \$50,000.00 for a 90 per cent interest in the property, and convenient terms might be arranged. The vein is fairly soft, and cheap mining and milling costs should be obtained if sufficient ore could be developed to warrant a production rate of from 250 to 500 tons per day.

To any company looking for such a property, this prospect can be recommended as being worth further investigation. The first step would be to spend about \$300.00 on a complete examination of the "A" Vein. This sum would cover the cost of a thorough sampling of the tunnels and outcrop, together with some investigation of probable extensions of the vein beyond the limits of the outcrop. This work should suffice to eliminate the property entirely, or to justify an exploration programme which would cost a minimum of \$15,000.00. If successful results attended both of these steps, the purchasers would then be faced with a construction and development programme which might easily cost \$500,000.00.

Although our Company might be able to handle a proposition of this size, it is clearly not the type that we are looking for, especially in view of the ~~possibility~~ ^{uncertainty} of its chances for success. It is therefore recommended that we give the property no further consideration.

Yours very truly,



N. F. Brookes.