

NOTES ON THE TIDEWATER MINE

SIDNEY INLET, B. C.

Taken from Annual Reports of the Minister of Mines.

1916

The mine was worked at intervals since 1899.
400 Tons of 5% copper ore was shipped in 1917,

The orebodies are of the contact-metamorphic replacement type in limestone. Part of the ore shipped came from pockets and lenses of bornite on outcrops.

The rocks are limestone with intrusions of granodiorite and andesite. The limestone is silicified. The contacts are poorly exposed. There are two parallel dikes about 800 feet apart which dip about vertical and seem to mark the limits of the ore along an easterly and westerly strike. Some of the ore fills fissures in the metamorphosed limestone. There are two prominent deposits of low grade ore about 1500 feet apart, which are called the North and the South orebodies.

Some 1000 tons of ore were shipped in 1917 and a 100 ton mill was built, and considerable mine development done.

1919 Indian Chief Group (The main workings)

Granodiorite extends from the beach to 1300 feet altitude and there is in contact with altered limestones which contains bodies of bornite with traces of chalcopyrite and chalcocite. Part of the summit of the mountain is andesite which seems to be intrusive into the limestone.

There are two ore-zones, the North and the South. The South zone consists of lenses and veins which are developed by adits Nos. 1, 2, 3, Bonthrone and East, or Green adit. The North zone is developed by north-side adits Nos 1 and 2 which are comparatively short. The ore lies directly on the granodiorite-limestone contact.

The ore in the South zone lies in a series of swells in a vein of irregular strike and dip in limestone.

1923

There is probable ore enough to supply a 200-ton mill for two or three years. In 1923 around 40,000 tons of ore were milled, the feed averaging 2 to 2.6 percent copper. The ratio of concentration was 20 to 1.

The main orebody is 250 feet long, with a maximum width of 40 feet. This has been stoped for 87 feet above the No. 2 level.

The following taken from Mill Reports October 1938.

Average head assay 2.14% copper. Average concentrate assay 44.14 Cu.
Average tailing assay 0.27% copper.
Average recovery 87.2% Average ratio of concentration 25 to 1.

Taken from assays of fifteen samples submitted to J. R. Williams & Son by M. Tatsuno and S Yoshimoto, 1937.

Average gold 0.011 Oz. Avg. silver 2.08 Oz. Avg. copper 5.09%
Omitting one high sample -- " 1.44 " " 3.51%

Analysis of sample of copper ore-----

Silica (SiO ₂)	25.34%
Alumina	5.02
Iron (Fe)	21.11
Lime (CaO)	14.44
Magnesia (MgO)	2.90
Copper	15.92
Sulphur	7.67
Gold Oz/ton	0.016
Silver Oz/ton	4.20

Average of samples shown on print of Mine Map; samples on which widths were not given are omitted, also samples below 1% copper on margins of ore: ----

14 samples on main South orebody around stopes - width 17.8', 1.72% Cu
5 samples from "Prince" workings -short tunnels - " 3.5 2.18 "
7 samples in long North drift tunnel #2 --- 2.9 1.23 "

Verbal from H. E. Dendoff, 232 W. 2nd Ave., Vancouver. Phone Fair. 0521, and from maps he submitted.

Terminals of the aerial tramway are standing, but ropes etc are removed. Mill building is in good condition but the machinery has been removed. Other buildings are in various conditions.

The main mine portals are approximately 1500 feet vertically above camp at the shore, and 3500 feet distant.

The mine workings are in good condition and the ground stands well without timber.

The ore does not occur in "veins" but is a large low grade "deposit" occurring in garnetized and epidotised limestone and accompanied by considerable magnetite. The chief ore mineral is bornite with minor chalcopyrite.

The surface is generally masked by soil and thick brush.

Summary by C. C. Starr -

The data at hand does not give a very clear idea of the geology and extent of the deposit, and the good grade ore seems to be quite scattered. It is said that in 1938 some 2000 or more tons of dump ore were milled and the remainder stoped. At least one months run of the ore averaged little better than 2% copper and this might be assumed to be about

the grade that the mine would furnish in the future, at least for a limited tonnage. Probably at least 6000 feet of development work has been done.

There seems to be a rather doubtful possibility that a careful inspection of the property might indicate chances of the property being developed ~~to~~ into a quite large low grade mine. In which case a thorough geological examination and sampling would be required, followed by large scale diamond drilling and development.

I question if an inspection of the property is justified on the strength of the data at hand.