

GEOLOGICAL REPORT LIBERATOR PROSPECTING SYNDICATE CLATES 37 37 HORWOOD TOWNSHIP SUDBURY MINING DIVISION ORVARIO.

INTRODUCTION:

Following is a Geologic report covering Claim S.37134, located in Horwood Township of the Sudbury Mining Division.

This claim is held by the Liberator Prospecting Syndicate, the business address of which is Room 711, 320 Bay Street, Toronto.

The line cutting and mapping were done during October 1948 and the map and report were prepared in November 1948.

The mapping was done by, and the report was prepared by J.P. McGregor, B.A., M.A., Geologist for Mosher Long Lac Gold Mines Limited.

ACCESS TO PROPERTY:

The claim lies approximately one mile north of the Dale-Horwood township line and approximately one-quarter of a mile west of the south arm of Horwood Lake.

It may be reached by going up the Groundhog River from Groundhog Station on the C.N.R. to Horwood Lake. However, the property is most conveniently reached from Horwood Lake Station (at mileage 128.6) on the main line of the C.N.R. From the station, a truck road some four miles in length runs south to a mill on Horwood Lake operated by the Pineland Timber Company. This Company will haul equipment from the track to the lake for a nominal charge.

From the mill site, it is approximately ten miles in a southerly direction up the lake to an old cabin which was used as a camp while the work was being done. A good trail, 1/4 mile in length, leads west from the cabin to the No. 2 post of Claim S.37134.

HISTORY OF WORK ON THE CLAIM:

This claim has had a considerable amount of work done on it in former years. The original discovery is credited to S. Gifford of Cobalt, and this claim, as one of group of twelve, was staked in Sept. 1933.

The twelve claim group was held by the Moramo Prospecting Syndicate who did considerable surface work. In 1934, it was optioned to the Connel Exploration Company, but their option was allowed to lapse. In 1936, it was optioned by the Prospectors Airways, who systematically sampled the property and then allowed their option to lapse. In January, 1937, # Teck Hughes optioned the property and conducted a drilling campaign during which fifteen diamond drill holes were drilled. The drilling results are unknown but they must have been discouraging as they allowed their option to lapse.

It appears that the claims were allowed to go open by the Gifford interests after Teck Hughes dropped their option. Early in 1945, the Liberator Prospecting Syndicate obtained control of the ground but have retained only one claim, namely 5.37134.

TOPOGRAPHY:

Generally speaking, the shore line rises abruptly from Horwood lake. Inland from the west shore in the vicinity of Claim 8.37134, the area is relatively flat; however, it does show numerous relatively prominent general outerop areas with rock being exposed above the shallow mantle of overburden.

Steep walls are common on the coutcrop edges.

Overburden consists mainly of boulder clay in the eastern part of the claim, however, to the west a prominent sand plain is present.

Timber growth on the claim is poor and wery few trees are over 10s in the butt.

The timber is composed mainly of poplar and birch. Jackpine becomes quite prominent on the west part of the claim where the sand plain is located. A heavy growth of tag alders and moose maple is associated with the timber growth over the whole claim.

SURVEY PROCEDURE:

The magnetic declination was taken from the Horwood-Dale township line as being North 80 West. Astronomical north was used as a direction basis.

On the claim, picket lines were run along the line of the trenches and along the line of the dissond drill holes. Using the picket line over the trenches as a base line, north-south picket lines spaced at 400 intervals were run across the claim.

The rock outcrops were tied in by east west traverses, spaced at 50° intervals, between the picket lines.

GEOLOGY:

The claim is underlain by Keewatin Greenstones (Andesite and Basalt) which possess a general regional schistosity of N 70° E to N 80° E and dip steeply to the northwest.

The greenstone varies in grain size from fine grained to medium grained. Locally, poorly developed pillow lavas and anygalaloidal lavas were observed. No bed top determinations were made.

In the south east extremity of the claim, the greenstones are cut by a shear zone which varies in width from 15' to 70'. Generally speaking, this zone conforms to the strike and dip of the regional schistosity, but within itself it shows many variations in both strike and dip.

The shear zone carries at least two zones of spotily mineralized quartz. The quartz veins are lenticular and are discontinuous. The mineralization consists of pyrite, pyrrhotite, and lesser amounts of chalcopyrite. Traces of galena and sphalerite were also observed. Also contained within the shear are numerous lenses of sheared quartz porphyry.

In addition to the mineralized quartz veins there are several other quartz veins associated with minor shear zones. These sheers and veins follow the regional achistosity. The veins are composed of milky-white quartz and are unmineralized except for occasionaly sulfide nests.

Toward the western edge of the claim, outcrops of medium grained diorite were located. All contacts were obscured by overburden, however, the shear zones do not seem to show any definite relation to the Diorite.

In the north part of the property, quartz porphyry dike cutting the greenstone were located.

ROCK FORMATION:

Cuartz veins:

Includes both mineralized and mi ky-white unmineralized quartz.

Cuartz porphyry:

Have prominent quartz eyes, weather a bright buff

color and are greenish white on a fresh break.

Haileyburian:

Diorite:

Medium-grained massive rock and contains a inconspicuous amount of hormblende.

Keewatin:

Andesite and Basalt. Fark Green rock often shesing poorly developed pillows and amydaloidal structure.

CONCLUSION:

It is recommended that Claim S.37134 should be retained by the syndicate as long as possible as a nucleus for any future developments which may take place in this area.

J. P. M. Suga

