



GIEOLOGICAL REPORT

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Claims 39370 - 39371 Penhorwood Township

Sudbury Mining Division

GENERAL. The property described is part of a larger group of claims under development by Nib Yellowknife

Mines Limited. Work has been continuing for the past five months under the direction of F. Joubin, geologist, and

L. Tessier, mining engineer. A crew of from two to five men has been employed.

After ten man-days of preparatory work consisting chiefly of line-cutting and stripping outcrops, ten man-days (July 28th to August 6th, inclusive, 1947) were spent in mapping the two claims. Two additional man-days were required in the preparation of the geological report and accompanying geological map.

Prior to the recent geological mapping and prospecting and some surface stripping by Nib Yellowknife Mines
Limited, no apparent exploration or development on these claims is believed to have been undertaken.

PROPERTY AND TITLE. The two mineral claims considered,
Nos. 39370 and 39371, are part of a
fourteen claim group under option to Nib Yellowknife Mines
Limited of 19 Melinda Street, Toronto, Ontario. Mr. Franc.
Joubin, consulting geologist for this company is the recorded

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trustee for the company. Mr. Joubin's address is 510-100 Adelaide Street West, Toronto, Ontario.

LOCATION AND ACCESS. The two claims considered are situated in the north central part (Range 9 and 10) of Penhorwood township, Sudbury Mining Division. They lie just to the north of Jehann Lake.

The claims may be reached by a six mile road and river route from Kukatush, a flag-stop on the Canadian National Railway or by a six mile road from Kukatush to Jehann Lake. From Jehann Lake the claims are traversed by two drill skid-roads as shown on the accompanying plans.

GEOLOGY. As shown on the accompanying plan, small outcrops are relatively numerous on the north and south portions of the two claims considered although the entire central portion is over-burden covered.

The rock types exposed are as shown on the plan.

These consist of agglomerate and rhyolite, argillite and an acid schist of indeterminate origin. This volcanic-sedimentary assemblage is intruded by diorite.

The rhyolite on the property (No. 1 in the map legend) is a dense, fine grained, pale grey acidic rock. It is generally massive and fractures in a brittle manner.

The agglomerate on the property (No. 2 in the map legend) is composed of small to large angular fragments of rhyolitic and andesitic material. The fragmental nature of this volcanic is only apparent on weathered surfaces. It is

noteworthy that the only quartz found on these two claims was present in rock of this type.

The schist on the property (No. 3 on the map legend) is a light coloured, sericitic rock. It was nowhere found to grade into a massive phase that might indicate its origin. It may be an intensely sheared phase of the rhyolite or a sheared porphyry not present on the claims in its massive form.

The argillite on the property (No. 4 on the map legend) is poorly exposed, there being only about six small outcrops. These exposures however, quite conclusively appear to be sediments. Although generally schistose, the bedding is, in places, recognizable and appears conformable to the schistosity. In places, near the acid schist the argillite is pyritized and silicified. Several such places sampled returned only traces in gold.

The diorite on the property (No. 5 on the map legend) is a fine to medium grained, in general massive, hornblende diorite. It occurs as two probably separate masses. The mass to the north is somewhat irregular in form and it is noteworthy that all vein quartz found on the property occurs in an embayment of the contact of this northerly mass.

Quartz on the two claims considered (No. 6 on the map legend) occurs at the points shown on the accompanying plan. The large outcrops to the east were sampled and returned only traces in gold. No work has yet been done to determine the form or size of this quartz mass. The quartz of these outcrops is unmineralized except for an occasional speck of pyrite. The

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quartz outcrop to the west returned some very low assays in gold. Trenching exposed a series of at least two sub-parallel quartz veins each about ten feet wide. A few specks of chalcopyrite was found in the quartz of these trenches but no gold values above 0.02 ounces per ton were secured.

The structure of the above-mentioned rock types is obscure and may remain so until some of the contacts are trenched and/or drilled, or until mapping on the surrounding claims provides a broader perspective for study. Schistosity is, in general, much more extensively developed on the southern claim. The trends of this schistosity are shown on the accompanying geological plan.

F. Joubin,

Geologist,

September, 1947, Toronto, Ontario. GEOLOGICAL PLAN

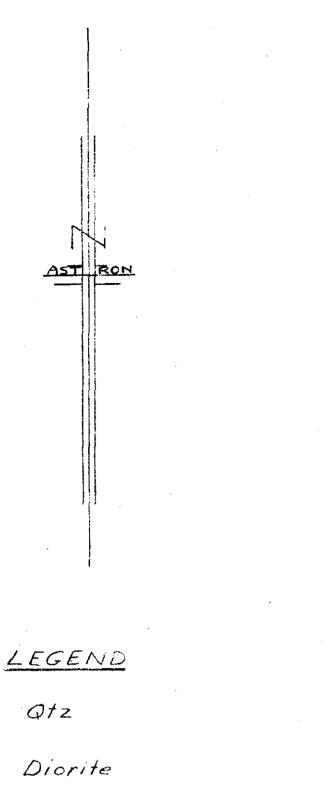
Scale 1" - 200'

to accompany.

GEOLOGICAL REPORT

Olaims 39370 - 39371

Penhorwood Township Sudbury Mining District



Argillite

Acid Schist

Agglomerate

Rhyolite

SYMBOLS

Picket Line

Claim Line

Claim Post

Outcrop

Contact Defined

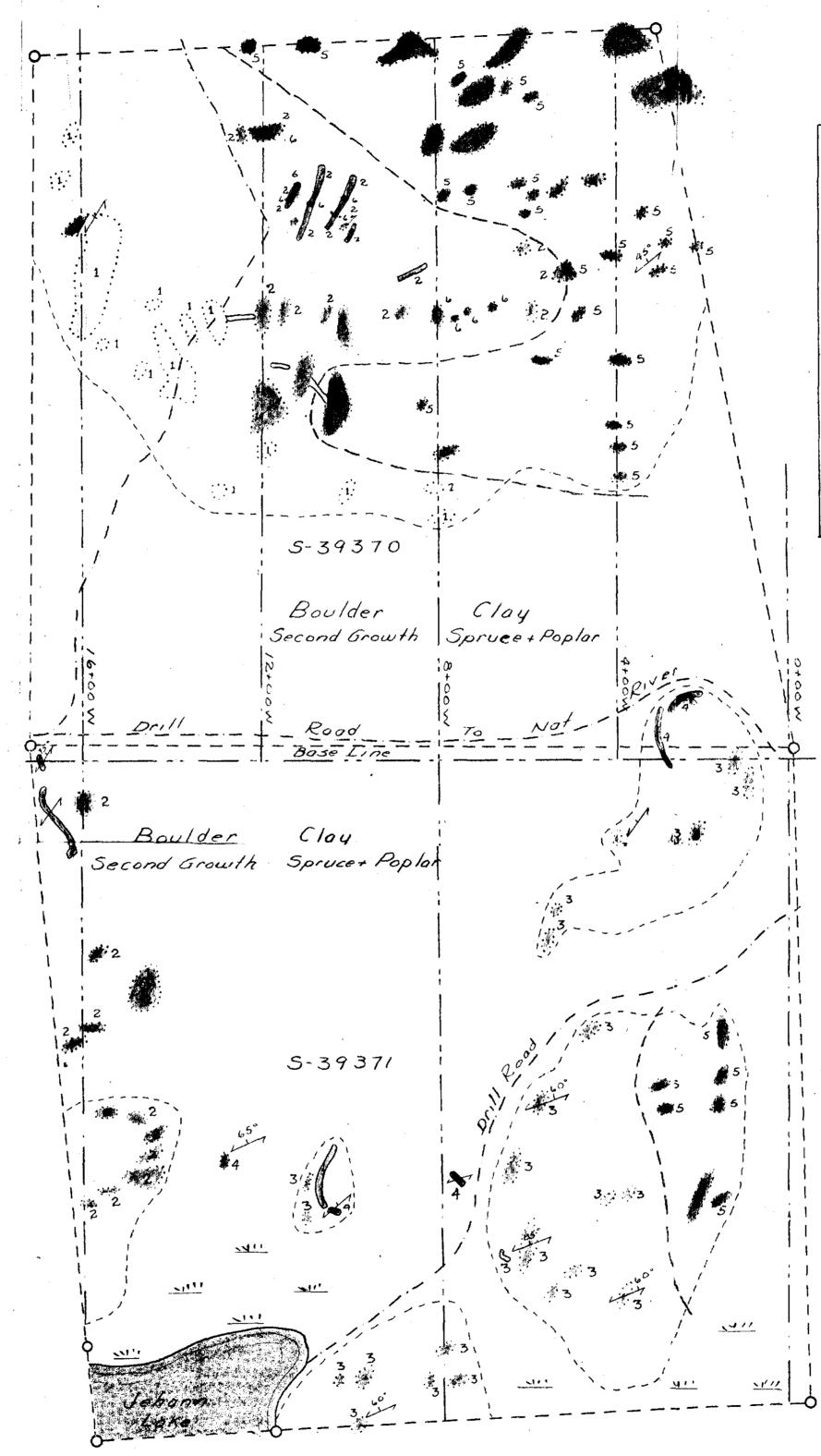
Schistosity

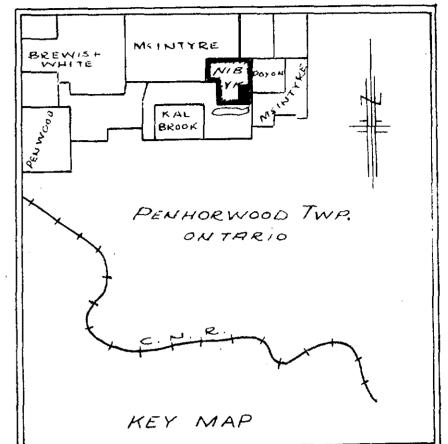
Trails or Roads

Swamp

Trench

HIGH Grouns





File 63A.9

