GEOLOGICAL SURVEY TERRELL IRON PROJECT

Parkman Township
Timiskaming Mining Division
Ontari



INTRODUCTION

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A group of 86 claims in Parkman Township, Ontario, is presently owned by Ventures Claims Limited. The results of a geological survey of 6 of these claims were previously submitted for assessment work credit in a report by the present author dated September 1, 1960. A geological survey of an additional portion of the property was made following the survey noted above, and the results of this second survey are herewith submitted for assessment work credit.

The claims covered by the survey which forms the basis of this report are listed in the appendix to this report. Dates upon which the survey was carried out are also listed in the appendix.

LOCATION AND ACCESS

The property is located in the central portion of Parkman Township, approximately 13 miles northwest of the village of Thorne.

Access is via automobile from Thorne to Opimika Camp on Troutbait Lake, whence a trail leads to the property. Alternatively an automobile may be driven to McLaren Point, from which a bush road leads to a point on Opimika Creek approximately 1/2 mile east of the property.

GENERAL GEOLOGY

Introduction

The property is underlain by a conformable sequence of Precambrian metasedimentary rocks. These rocks strike north-easterly and dip gently to the west. A table of formations appears below. The subdivision of the metasediments has been based primarily upon lithology, with only secondary emphasis upon age and genesis. Thus the numbers employed to denote particular rock types have no necessary chronological significance.

Table of Formations

(1935)

Biotite schist (5)
Granite gneiss (4)
Granite gneiss with feldspar porphyroblasts (4p)
Limestone, crystalline and silicated (3)
Iron formation (2)
Muscovite gneiss (1)

Muscovite Gneiss (1)

The muscovite gneiss is a coarse-grained, grey-coloured rock, consisting very largely of alternating bands of muscovite and quartz. Biotite is a minor accessory.

Blebs of quartz with a maximum diameter of approximately 1 foot are common throughout the muscovite gneiss.

Iron Formation (2)

This rock is very fine-grained, and consists of alternating bands of chert, magnetite, and green amphibole. Some magnetite is disseminated throughout the chert and amphibole bands.

The weathered surfaces are black if chert bands are absent, or exhibit alternating bands of black and white. Fresh surfaces exhibit alternating white, black, and green bands.

Limestone (3)

Both crystalline and silicated limestone occur in the northwestern portion of the property. These rocks are brown in colour on weathered surfaces, grey-white on fresh surfaces.

The crystalline limestone consists of coarse-grained carbonate. The silicated limestone consists largely of coarse-grained carbonate, with minor amounts of coarse-grained phlogopite.

Granite gneiss (4)

The granite gneiss is grey in colour, both on fresh and weathered surfaces. It is medium-grained, and consists of approximately equal amounts of quartz, feldspar, and biotite.

A characteristic feature of this rock type is the presence of numerous small lenses of granite pegmatite, which constitute approximately 5 percent of the rock. These lenses attain a maximum length of approximately 2 feet, a maximum thickness of 6 inches, and consist almost entirely of quartz and feldspar. Pyroxene and magnetite are minor accessories.

Granite gneiss with feldspar porphyroblasts (4p)

This rock is pink in colour on both fresh and weathered surfaces. Porphyroblasts of feldspar, which attain maximum lengths of about 1 inch, occur in a medium-grained matrix of quartz, feldspar, and biotite. The proportion of porphyroblasts varies widely, from about 5 to 15 percent.

Small pegmatitic patches of quartz and feldspar are a common, but not characteristic, constituent of the rock.

Biotite schist (5)

The biotite schist is fine-grained, and consists very largely of biotite. Small lenticles of quartz comprise a minor portion of the rock. The rock is black in colour on both fresh and weathered surfaces.

STRUCTURAL GEOLOGY

Throughout the greater portion of the property the rocks strike approximately N 35° E and dip to the west at an average angle of 40°.

Small drag folds occur in muscovite gneiss and limestone in the southern part of the property. They plunge south-westerly at approximately 35°.

The outcrop pattern of the major lithologic units suggests that the gross structure on the property is that of an isoclinal syncline, overturned to the east, with its axial plane dipping to the west at about 40. The evidence of the drag folds indicates that the major fold may plunge gently to the south-west.

The lack of conformity of observed strikes in the iron formation, with its assumed boundary near the nose of the major fold, may be attributed to the previously noted local contortions in the iron formation.

SUMMARY OF EXPLORATION WORK TO DATE

A magnetometer survey of a portion of the property was carried out during July and August, 1960.

Diamond drilling has been carried out upon claims T-44085, 44086, 44087 and 47602. Six holes with an aggregate length of 1,658 feet were drilled during July and August, 1960.

, P. E. Giblin

October 13, 1960 Toronto, Ontario

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