2.644

TIMISKAMING NICKEL LIMITED

010

TIMISKAMING NICKEL LIMITED

OWL LAKE CLAIM GROUP

TYRRELL TWP. - DISTRICT OF TEMISKAMING, ONTARIO

The Timiskaming Nickel Limited Owl Lake Group consists of 18 unpatented mining claims

Nos. MR. 46419, 46420, 46800,
46801, 46802, 46803,
46804, 46805, 46806
46807, 46808, 46809,
46810, 46811, 46817
49444, 49445, 50309

situated in the south central part of Tyrrell Township, District of Temiskaming, Ontario.

Owl Lake, the most prominent topographic feature in the immediate vicinity, lies in the southeast corner of the claim group.

Access is readily made by the Department of Lands and Forests Access Road from Highway 560 to Spider Lake in Leonard Township. This road touches the north end of Owl Lake.

The forest cover and topography of this area is typical of the general region. Heavy stands of poplar are

found on the hills which for much of the part are glacial debris. The hills which contain the outcrop generally have jack pine cover. The swamps have cedar, black spruce and alder growth.

GENERAL GEOLOGY

The Owl Lake claim group is underlain by rocks of Precambrian age. These consist of basic Keewatin lavas overlain by Temiskaming sediments and acid volcanics; these rocks in turn have been intruded by Haileyburian serpentinite, minor acid Algoman intrusives, and Matachewan diabase dikes. The Nipissing diabase forms an irregular capping in the central and northeast part of the claims of the group.

Keewatin:

The Keewatin rocks consist of mainly andesite with some minor basalt, and occupy the greatest portion of the claim area. These volcanics are typically massive, pillowed, and locally sheared.

Temiskaming:

The Temiskaming sediments are the typical medium grained quartzite to arkosic quartzite of this general region. The acid volcanics are rhyolite with minor dacite and some tuff. Generally these rocks show an east-west trend except where locally contorted.

There is a definite limitation to the extent of each of the Temiskaming type rocks. The acid volcanics overly the Keewatin basic volcanics along the north flank of the north anticline. The sediments appear to be in direct contact with the basic volcanics along the south flank of the south anticline. Only in the intermediate syncline are both acid volcanics and the sediments found. Unfortunately there was no direct contact observed during the mapping program and it is not known which has the superior member.

One outcrop of Iron Formation was found in the northwest quarter of Claim 49455. This rock consists of narrow 1 to 1½" bands of quartzite separated by very narrow bands of ferriginous quartzite which merely accentuates the banding. There is little if any magnetite with this rock. The magnetometer station directly above the outcrop gave a general level reading only.

Haileyburian:

The Haileyburian serpentinite is a dark green highly serpentinized former dunite. The rock varies in texture from a greasy mass consisting almost entirely of antigorite to a semi crystalline rock in which the relict outlines of the original olivene crystals can be seen. The chrysotile asbestos content in restricted areas runs as high as 5 to 6%; rarely do the fibres extend 3/8" in length. There is an unusual pillow-like structure in the serpentinite on the hill north of the collars of Diamond Drill Holes O-1 and O-2.

The country rock surrounding the serpentinite is the basic volcanic except for a small area of contact with the acid volcanics on Claim 46807. The Nipissing diabase overlying this section obscures the actual relationship but it would appear beyond reasonable doubt that the serpentinite was post-Temiskaming in age.

Algoman

Two small outcrops of feldspar porphory were found on Claim 46802. One small outcrop of trachyte was found on the boundary line between Claims 46807 and 49455 - 450 feet east from their west boundary.

Matachewan:

The Matachewan diabase dikes are the typical basic diabase with little, if any, olivene and generally characterized by minor disseminated pyrite. These dikes are usually fine grained intexture but this is probably due to the size of the intrusive.

These diabase dikes are characterized by a sharp high in the magnetic survey. This feature has been used to establish the extent of these dikes, somewhat less continuous than normally seen.

Evidence from the mapping and the diamond drilling show these dikes to be intrusive into all the rock assemblage with the exception of the Nipissing diabase. Where seen, the contacts show the typical chilled edge in the diabase as expected.

Keweenawan:

Nipissing diabase overlies a large part of the central and northeast portion of the claims. This is the typical quartz diabase with its relatively low angle contacts. The diabase here cannot be very thick because of the numerous windows showing the underlying rock throughout its length.

There is little magnetic reaction from the Nipissing diabase. This feature was used to outline the contact between the two ages of diabase north from Claim 46802.

STRUCTURAL GEOLOGY

Folding:

There are two major east-west striking anticlines on the Owl Lake claim group. The Keewatin basic volcanics form the core of these folds and are overlain by the Temiskaming suite. The syncline between these two anticlines is marked by the sediments and acid volcanics through the centre of the group. There is not sufficient evidence available at present to determine the plunge but indications suggest that it is to the east.

Faulting:

There were no major offsets due to faulting found in this mapping program. The general faulting trend appears to be northeasterly; this is marked by the serpentinite intrusives on Claim 46817 and Claims 46810 and 46811.

ECONOMIC GEOLOGY

This area has been prospected primarily for gold and silver in the numerous exploration surges which make up the history of the Gowganda-Shiningtree region. The silver prospecting was concentrated in the Huronian sediments to the east where conditions somewhat anomalous to those found at Gowganda and Cobalt exist. Gold prospecting has been confined to the older rocks in which are found quartz and quartz carbonate veins which show a highly variable mineral content.

The asbestos potential of the main serpentine mass on Claim 46807 should be carefully examined. This would appear to be the most readily workable deposit of economic potential

Respectfully submitted,

K.F. O'Flaherty, P.Eng.

Box 358
Cobalt, Ontario.

Oct.12,1971.

ASSESSMENT WORK RECORD

Line Cutting

The line cutting took place from July 7th to August 29,1968, with the portion on the claim group being used here.

Edgar Anglehart,	Gowganda, Ont.	- 17 days
Wm. Fitzmaurice,	Gowganda, Ont.	- 17 days
Ronald McKechnie,	Timmins, Ont.	- 15 days
Harvey Plourde,	Timmins, Ont.	- 13 days
	Total	- 62 days

Mapping and Office Work

The whole area was mapped during the period July 29th to September 26th,1971.

K.F. O'Flaherty,	Cobalt, Ont.	- 36 days
R. Forcier,	Cobalt, Ont.	- 28 days
	Total 64 days at Factor 7	- 448 days

Trenching

R. Forcier,	Cobalt, Ont.	- 2 days
R. Gollain,	Blind River, Ont.	- 2 days
E. Anglehart,	Gowganda, Ont.	- 1 day
	Total 5 days Work equivalent 42 hrs. with power equipment	- 14 days
	Grand Total	524 days

MR 50309 - not covered - no credit

$\therefore \frac{510}{17} = 30$ days per claim

JWR

Note MR 49414-45 may be transposed on maps.

Knight Twp. - M.228

THE TOWNSHIP OF TYRRELL

Claim Map

DISTRICT OF TIMISKAMING

LARDER LAKE MINING DIVISION

SCALE: 1-INCH = 40 CHAINS

LEGEND

SURFACE RIGHTS ONLY

NOTES

400' Surface Rights Reservation around all lakes and rivers

DATE OF ISSUE
OCT 25 1971
ONT. DEPT. OF MINES AND NORTHERN AFFAIRS

PLAN NO. M.253

ONTARIO
DEPARTMENT OF MINES
AND NORTHERN AFFAIRS

Leonard Twp. - M.232

LEGEND

KEWEENAWAN

Nipissing Diabase

METACHEWAN

Diabase Dikes

ALGOMAN

Feldspar Porphyry

Trachyte

HAILEYBURIAN

Serpentinite

TEMISKAMING

Quartzite & Arkose

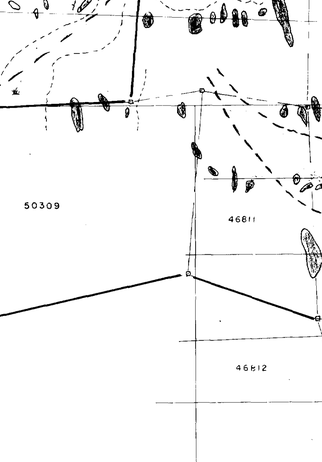
Acid Volcanics

KEEWATIN

Basic Volcanics

Property Outline

NOTE: standard geological symbols used



Location Sketch

1 in. = 4 mi.

210

TIMISKAMING NICKEL LIMITED		
TYRRELL TOWNSHIP GEOLOGY		
SCALE - 1 in. = 400 Ft.	OWL LAKE GRID	
DATE - Oct. 6, 1971	DRAWN BY G.E.	CHECKED BY

REGISTERED PROFESSIONAL ENGINEER
MINING
K. F. O'FLAHERTY
PROVINCE OF ONTARIO