

LEGEND

REWEENAWAN
Diabase and related rocks, sills and dykes

NIPIGON SERIES
Dolomitic limestone, and shale, sandstone, and conglomerate, variably interbedded with volcanic tuff

BATHOLITHIC INTRUSIVES
Granite, biotite and hornblende gneiss, syenite, pegmatite, etc.

CONTACT ZONE BETWEEN BATHOLITHIC INTRUSIVES AND SCHIST COMPLEX
Gneiss or granite with inclusions of hornblende schist or amphibolite

WINDIGOKAN SERIES
Mixture of batholithic intrusives and mica schists ranging from mica schist intruded by many dykes to granite or gneiss containing inclusions of mica schist

PRECAMBRIAN
Gneiss, mica, quartzite, and staurolite formation

BASEMENT COMPLEX
Iron formation, differentiated from the schist complex

SCHIST COMPLEX
Volcanic rocks of various compositions in large part altered to hornblende, chlorite and sericite schists, but also small amounts of iron formation and sediments

Symbols
Geological boundary (approximate)
Schistosity, dip and strike
Dip and strike
Glacial striae

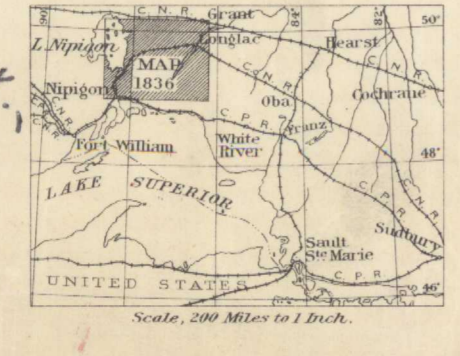
Approximate magnetic declination, 1921, but considerable variations occur near banded iron formation and parts of the diabase intrusives which are rich in magnetite.

Geographical position based on the latitude and longitude of the astronomical station established by the Department of the Interior at Grant, Canadian National Railways (Transcontinental) and at Nipigon, Canadian Pacific Railway.

- NOTES**
- Replacement bodies of pyrrhotite, pyrite, and chalcopyrite carrying very small amounts of gold and nickel.
 - Molybdenite is disseminated through a phase of the granite.
 - Molybdenite and chalcopyrite occur sparingly in pegmatite dyke.
 - Chalcopyrite in pegmatite quartz vein, trending N. 70° E.
 - Chalcopyrite and galena in small quartz vein, trending N. 65° E.
 - Gold in fragments of vein quartz in gravel.
 - Copper minerals occur in one-foot vein, trending N. 32° W.
 - Narrow calcite vein, trending N. carries chalcopyrite and small amount of silver.
 - Chalcopyrite and quartz fill a fractured zone 2 feet wide. An average sample from this assayed 1.52% copper. This is the largest of a number of chalcopyrite occurrences observed near the north shore of Overidge Lake.
 - Galena, chalcopyrite and sphalerite in quartz veins.
 - Chalcopyrite in calcite veins in diabase.
 - Chalcopyrite, pyrrhotite and tourmaline occur in small quartz-siderite veins.
 - Zone rich in pyrite. Not typical iron formation.
 - Siltstone and shales.
 - Chalcopyrite and galena in veinlet cutting diabase.
 - Dykes of mineralized porphyry cutting green schist.
 - Pierite, a basic phase of the great olivine diabase intrusive.
 - Showered agglomerate.

C. D. Semple, Geographer and Chief Draughtsman.
A. M. Geiger, Draughtsman.

FILED
Longlac - Nipigon, Ont.
Thunder Bay district
5-1-7
A. Geol.



PROPERTY OF LIBRARY
GEOLOGICAL SURVEY OF CANADA
Victoria Memorial Museum Bldg., Ottawa
LENT TO *D. H. Jones*
DATE *2/19/64* PLEASE RETURN

Explored Routes
in a belt traversed by the
CANADIAN NATIONAL RAILWAYS
(BETWEEN LONGLAC AND NIPIGON)
THUNDER BAY DISTRICT
ONTARIO

Scale, 253,446
Miles 0 1 2 3 4 5 6 7 8 9 10
Kilometres 0 1 2 3 4 5 6 7 8 9 10
4 MILES TO 1 INCH

SOURCES OF INFORMATION
Geology by T. I. Tanton, 1917, and from Maps No. 964 and No. 965 of the Geological Survey, and Map No. 269 of the Ontario Bureau of Mines.
Geographical base map from surveys by E. C. M. Donald, Topographical Division, 1913, and by other officers of the Geological Survey and from surveys by the Canadian National Railways and the Ontario Government.
Map compilation by W. H. Boyd, Chief Topographer.

NOT TO BE TAKEN FROM LIBRARY
NE PAS SORTIR DE LA BIBLIOTHEQUE