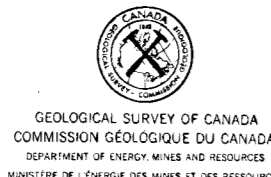


SURFICIAL GEOLOGY



SURFICIAL DEPOSITS QUATERNARY

NONGLACIAL ENVIRONMENT

7 ORGANIC DEPOSITS: lichen-moss, sedge, and woody peat; 1.5 to 3 m thick; may occur at or up to 3 m above the water table; includes both bog peat and fen peat. Peat mantles most geological features.

6 FLUVIAL DEPOSITS: material deposited by streams within active drainage systems since the retreat of the sea, proglacial lakes, or glacial ice.

NONGLACIAL AND GLACIAL ENVIRONMENT

MARINE/GLACIOMARINE DEPOSITS: well sorted, stratified sand to stony silt deposited in Tyrrell Sea, and glacial deposits modified by marine processes during offlap; commonly overlain by peat.

- * 5c Deltaic sediments: sand, pebbly sand, and gravel deposited in Tyrrell Sea by glacial or nonglacial streams.
* 5b Nearshore sediments: well sorted silt, sand, and gravel; up to 3 m thick; occurs as a series of ridges in the form of beaches, bars, spits, and ice-pushed ridges, or as a flat plain.
* 5a Offshore sediments: poorly sorted clayey silt, stony silt, and sand with pockets of nearshore sand and gravel and windblown sand; probably a till plain levelled by filling of depressions and planation by wave action; thicknesses of up to 2 m near marine limit and increasing towards Hudson Bay to a maximum of 7 m; may contain marine fossils and is commonly overlain by organic materials.

LACUSTRINE/GLACIOLACUSTRINE DEPOSITS: massive to bedded silt-clay with granules, overlain by a veneer of sand. Deposited in glacial Lake Agassiz; where deposits are thin, they mirror the underlying glacial and bedrock structures, and where thick, they form a flat plain.

- 4b Nearshore sediments: well sorted sand and gravel; occurs as a ridge or series of ridges with 1 to 4 m of relief; includes beaches, bars, spits, and ice-pushed ridges.
4a Offshore sediments: well sorted clay, silt, and sand; thickness ranges from a thin veneer up to 20 m; surface characterized by iceberg scours and extensive areas of peat.

GLACIAL ENVIRONMENT

GLACIOFLUVIAL DEPOSITS: water sorted, stratified sand and gravelly sand deposited in, around, or near a glacier, largely as a result of meltwater flow.

- 3 Outwash sediments: well rounded, cross-stratified sands and gravels, 3 m to 20 m thick, characterized by braided channels and kettle depressions; occurs along the flanks of eskers or in the bottom of subglacial and proglacial meltwater channels; surfaces are commonly terraced and hummocky.
2 Ice contact stratified drift: well sorted, poorly stratified sand and gravel kame deposits, 10 to 30 m high, stratified sand and minor gravel esker deposits, 5 to 20 m high, and recessional, end, or interlobate moraines. Kames occur as irregular mounds flanking eskers. Eskers occur as elongate ridges, generally parallel to the direction of ice movement.

GLACIAL DEPOSITS (TILL): poorly sorted debris deposited at the front of or beneath glaciers or under ice shelves. The tills of the western side of the province are sandy to silty sand and have a high percentage of clasts derived from granitic terrain; the tills of the eastern side are generally silty and highly calcareous.

- 1b Till blanket: silty to sandy, 1 to 10 m thick; masks most of the bedrock features; surface features include drumlins, fluting, ribbed moraine, and hummocks.
1a Till veneer: sandy, usually less than 1 m thick, interspersed with areas of thicker till, bedrock, marine or lacustrine sediments. Surface reflects the underlying bedrock structure.

BEDROCK PRE-QUATERNARY

- * R2 Paleozoic rock: sedimentary carbonate rocks; dolomitic limestone and dolomite.
R1 Precambrian rock: largely massive granitic and gneissic rock with isolated bands of volcanic rock.

- x small bedrock outcrop
* striae (ice flow direction known, unknown)
drumlin
fluting
crag and tail (direction of ice flow known)
recessional, lateral, or end moraine ridge
ribbed moraine
esker (direction of flow known, unknown)
meltwater channel (large, small)
beach ridge
trimline or terrace slope break
* Tyrrell Sea limit

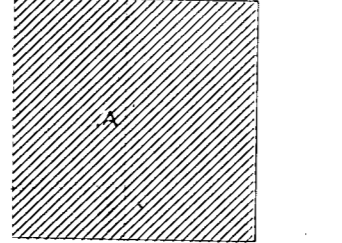
* unit or symbol does not appear on this map

Geology by M.D. Clarke, 1984-1985, based mainly on airphoto interpretation with limited field checking.

Reference:

Neilsen, E. 1980: Quaternary geology and gravel resources of the Island Land Lake - Red Sucker Lake area; Manitoba Department of Energy and Mines, Geological Report GR80-3.

MAP - CROQUIS D'EXACTITUDE



Map compiled from 1954-56 aerial photographs

Compiled, 1983, by the SURVEYS AND MAPPING BRANCH, DEPARTMENT OF MINES AND TECHNICAL SURVEYS. Field surveys 1954 and 1982. Printed 1985.

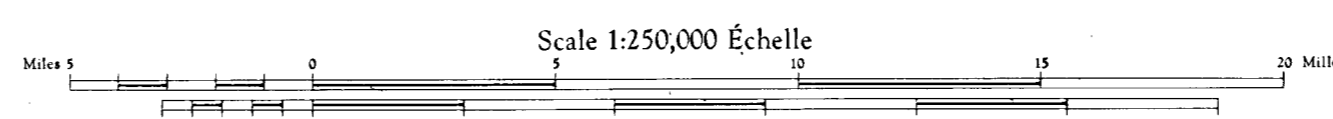
- Road, all weather: Chemin, route saison
Wagon or winter road: Chemin de terre ou d'hiver
Trail or portage: Sentier ou portage
Town: Ville
Village or settlement: Village ou hameau
Post office: Bureau de poste
Horizontal control point: Point géodésique

Some names on this map are not yet official. Corrections or additions are invited by the Surveys and Mapping Branch.

- Interim corrections 1977
Magnetic declination 1984 varies from 08°15' easterly at centre of west edge to 09°00' easterly at centre of east edge. Mean annual change is 0.9' minutes easterly.

OXFORD HOUSE MANITOBA

Scale 1:250,000 Échelle



Transverse Mercator Projection North American Datum 1927 Contour Interval 100 feet Elevation in feet above Mean Sea Level

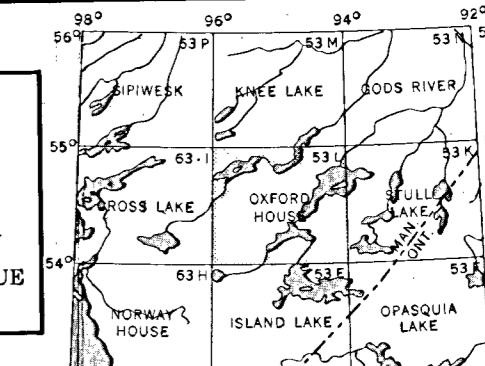
Certain names inscribed on this map are not yet official. Corrections or additions are invited by the cartographer or surveyor in charge of the original collection at 505-107.

Projections Transverse de Mercator Niveau de référence nord-américain, 1927 Équidistance des courbes: 100 pieds Élévation en pieds au-dessus du niveau moyen de la mer

Rédigée en 1983, par la DIRECTION DES LEVÉS ET DE LA CARTOGRAPHIE, MINISTÈRE DES MINES ET DES RESSOURCES TECHNIQUES. Levés sur le terrain en 1954 et 1982. Imprimée en 1985.

La déclinaison magnétique pour 1984 varie de 08°15' Est au centre de la limite Ouest à 09°00' Est au centre de la limite Est. Variation moyenne annuelle 0,9' Est.

OPEN FILE DOSSIER PUBLIC 1227-2 1986 GEOLOGICAL SURVEY COMMISSION GÉOLOGIQUE OTTAWA



Index to adjoining sheets of National Topographic System Tableau d'assemblage du système National de Réseaux et Cartographie

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SURFICIAL GEOLOGY

