CANADA
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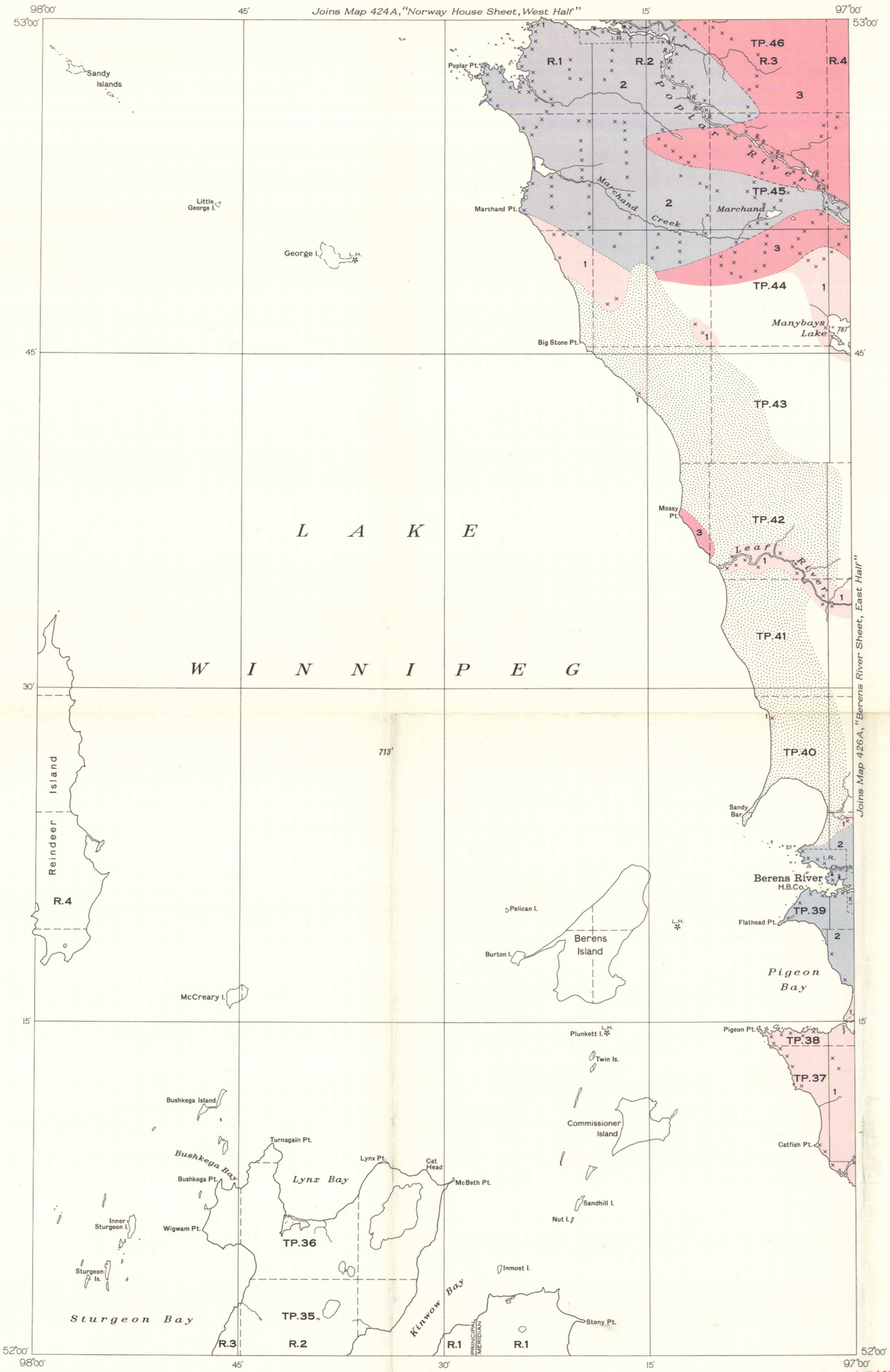
ISSUED 1938



LEGEND

ARCHEAN (EARLY PRECAMBRIAN)

- 1 — Granite
- 3 — Granite, granodiorite, quartz diorite
- 2 — Granite, granodiorite, quartz diorite with subordinate hornblende-biotite gneiss, biotite gneiss and biotite-chlorite schist

Drift covered, outcrops few or lacking

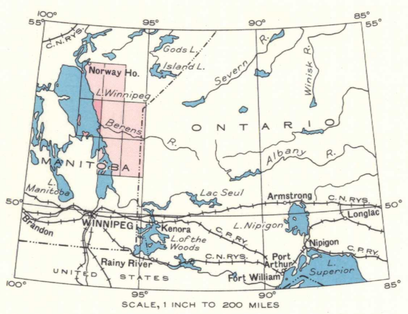
Geological boundary (approximate, assumed) .....
Outcrops where observed .....
Post office .....
Lighthouse .....
Township boundary (surveyed, unsurveyed) .....
Indian Reserve boundary .....
Fall or rapid .....
Height in feet .....

SOURCES OF INFORMATION

Compiled and reproduced by the Bureau of Geology and Topography from information supplied by Federal Government Departments. Geology by A. W. Johnston, 1936.

TRUE NORTH
MAG. NORTH

Approximate magnetic declination, 10° East.



SCALE, 1 INCH TO 200 MILES

MAP 427A

BERENS RIVER SHEET 63A

(WEST HALF)

MANITOBA

Scale, ~~1/253440~~ or 1 Inch to 4 Miles

Miles 4 0 4 8 12

Kilometres 5 0 5 10 15

ACCESS

During the summer months boat services are maintained between Winnipeg and Berens River. Calls are made at Poplar River when necessary. A weekly aircraft service between Winnipeg and Berens River is maintained throughout the year except during break-up and freeze-up.

PHYSICAL FEATURES

Lake Winnipeg has a low, rocky or sandy shoreline. The lake is shallow for a considerable distance off shore and where the shoreline is rocky, as about Berens and Poplar rivers, there are numerous small islands and reefs. From Big Stone point to Sandy bar much of the shoreline is sandy. The land surface is an uneven plain rising gradually to the east to elevations of about 80 feet above Lake Winnipeg in the northeastern part of the area. Much of the area is covered by large swamps and level areas of lake clays. The bedrock outcrops in the more rocky parts of the area as low knolls and ridges surrounded by swamps and clay flats.

The area was glaciated by ice moving southwestward. Glacial drift is not thick. Big Stone point, the only pronounced drift ridge or hill, is an accumulation of boulders. Glacial lake Agassiz covered the area during late stages of the lake and extended an unknown distance eastward. Lake Agassiz clays cover much of the bedrock in the area. The area is thinly wooded chiefly with spruce, jackpine and poplar.

GENERAL GEOLOGY

Intrusive rocks including granite, granodiorite and diorite, underlie the area. The granites cut the more basic intrusives. In some parts of the area the intrusives hold numerous inclusions of older gneisses and schists.

The older intrusives grade from granodiorite to quartz diorite. They are grey, medium to coarse grained rocks containing a considerable proportion of dark minerals and abundant grey or white oligoclase. Foliation is prominent in places and absent in other places. These intrusives occur as large and small masses intruded by many dykes and irregular bodies of granites (3).

The granites (1) are, as a rule, pink, medium to coarse-grained rocks containing a small proportion of dark minerals and abundant pink orthoclase or microcline. They are occasionally but not generally foliated. Aplite dykes and pegmatite dykes containing quartz, feldspar and mica occur in many places and cut all the other intrusives.

Occasional inclusions of older rocks occur in the granite, granodiorite and quartz diorite, and are most prevalent in the more basic intrusives. Inclusions range from small, rounded or angular blocks to large masses. They are usually gneissic or schistose, quartz-biotite-feldspar gneisses, hornblende-feldspar gneisses or chlorite-biotite schists but blocks of massive quartzite and amphibolite occur. Gneissic and schistose structures at most localities trend southeasterly. Inclusions are prevalent in certain zones (2) but even where most numerous probably constitute a minor portion of the bedrocks.