

### ACCESS

The area is reached from Lake Winnipeg by way of Pigeon, Berens, Leaf, and Poplar rivers. Of the smaller streams within the area canoe travel is possible on Etomami river, the North Etomami river, McPhail river, Gilchrist creek, and on Weaver creek to a point about 6 miles north of Weaver lake. The South Leaf river is not passable for canoes.

### PHYSICAL FEATURES

The land surface is an uneven plain rising gradually to the east. Local differences in elevation are small. In the western part of the area numerous large swamps occur. The bedrock outcrops occasionally as low ridges or knolls surrounded by muskegs. To the east outcrops are plentiful; easterly or south-easterly trending rock ridges rise 20 to 100 feet above intervening muskegs and lakes, and large areas of swamp are not numerous. The area was glaciated by ice moving southwestward. The glacial drift is not thick, but small accumulations of boulder clay, gravel and sand occur in many places. No pronounced drift ridges or hills occur. Glacial lake Agassiz covered the area during late stages of the lake and extended an unknown distance eastward. Lake Agassiz clays form nearly level areas along the watercourses in the western part of the area. The watercourses are broken by numerous rapids and falls. Good stands of jackpine, spruce and poplar are small and few in number. North of McPhail river for about ten miles east of Weaver lake the country is well wooded.

### 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 (1) grade from granodiorite to 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. The granites (2) 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. Grey or white granites occur in minor amounts, as do fine-grained and very coarse-grained porphyritic types. Aplite dykes and pegmatite dykes containing chiefly quartz and feldspar occur in many places and cut all the other intrusives. Contacts between the granites and older intrusives are generally irregular. Throughout wide areas (4) two or more types are intermingled, each type making up a considerable proportion of the bedrock. Granites in the form of dykes and irregularly shaped masses invade the more basic intrusives. Occasional inclusions of older rocks occur in the granite, granodiorite and diorite, and are most prevalent in the basic intrusives. Inclusions range from small, rounded or angular blocks to large masses. They are usually schistose or gneissic, chlorite schists, quartz-biotite-garnet schists or quartz-feldspar-mica-gneisses, but blocks of massive greywacke and amphibolite are common. Gneissic and schistose structures trend southeasterly. Inclusions are prevalent in zones (3) but even where most numerous constitute a minor portion of the bedrock.

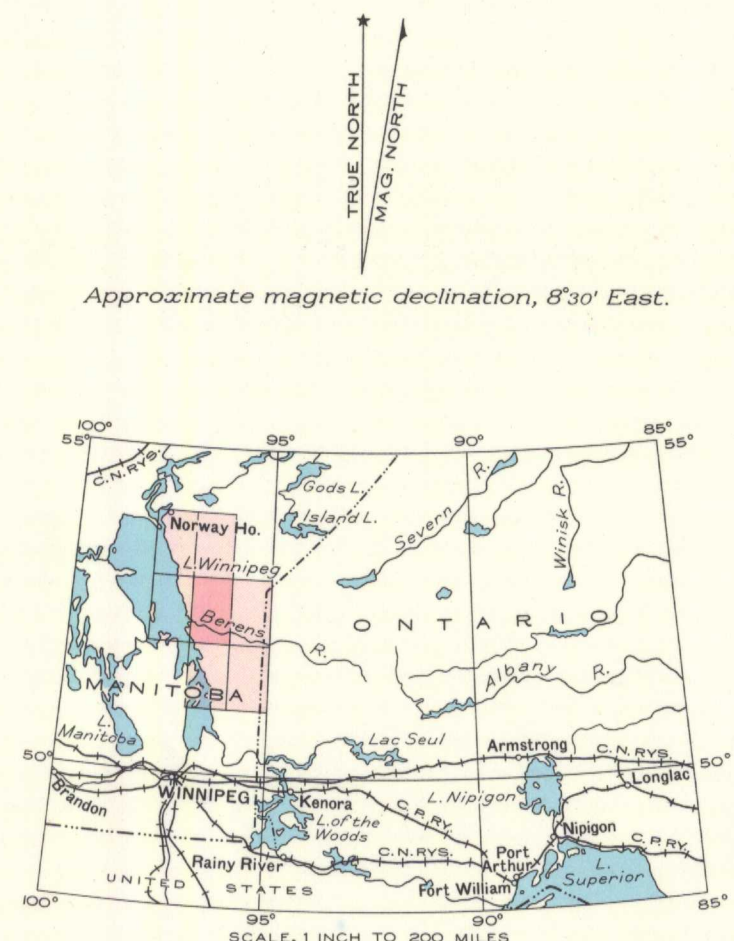
### LEGEND

2	Granite	4	Granite, granodiorite, diorite
1	Granodiorite, diorite	3	Granite, granodiorite and diorite with subordinate chlorite schist, quartz-biotite-garnet schist, quartz-mica-garnet gneiss, amphibolite, greywacke

Geological boundary (approximate, assumed) .....  
Schistosity (dip uncertain) .....  
Glacial striae .....  
Outcrops where observed ..... x x  
Portage .....  
Township boundary (surveyed, unsurveyed) .....  
Indian Reserve boundary .....  
Fall or rapid .....  
Height in feet ..... 718'

### 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.



MAP 426A  
**BERENS RIVER SHEET**  
(EAST HALF)  
MANITOBA  
Scale, 253,440 or 1 inch to 4 miles  
Miles  
Kilometres

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