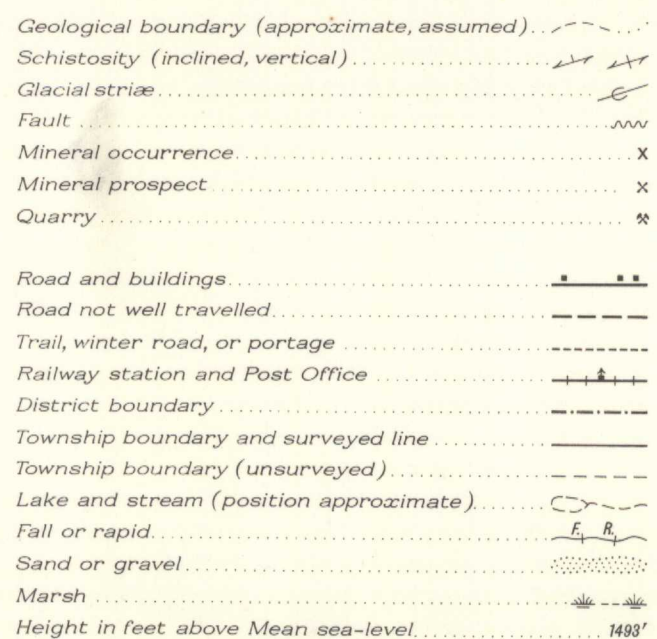
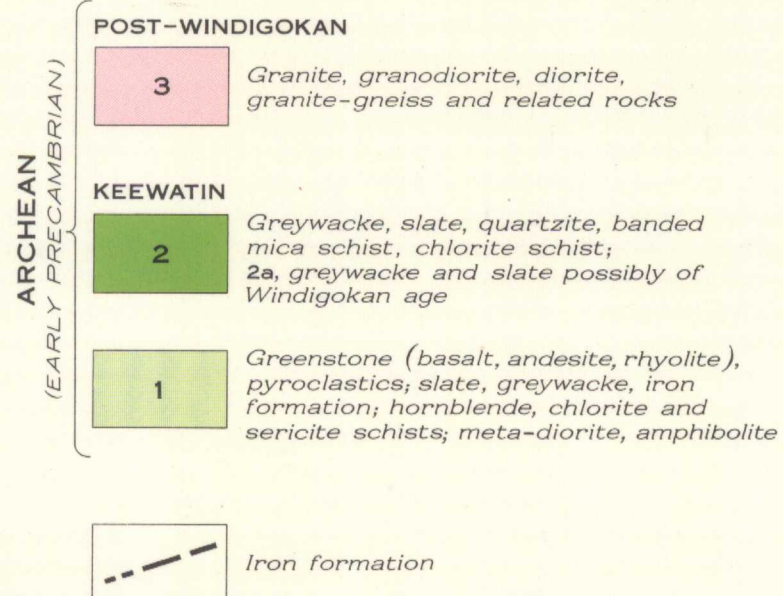


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LEGEND

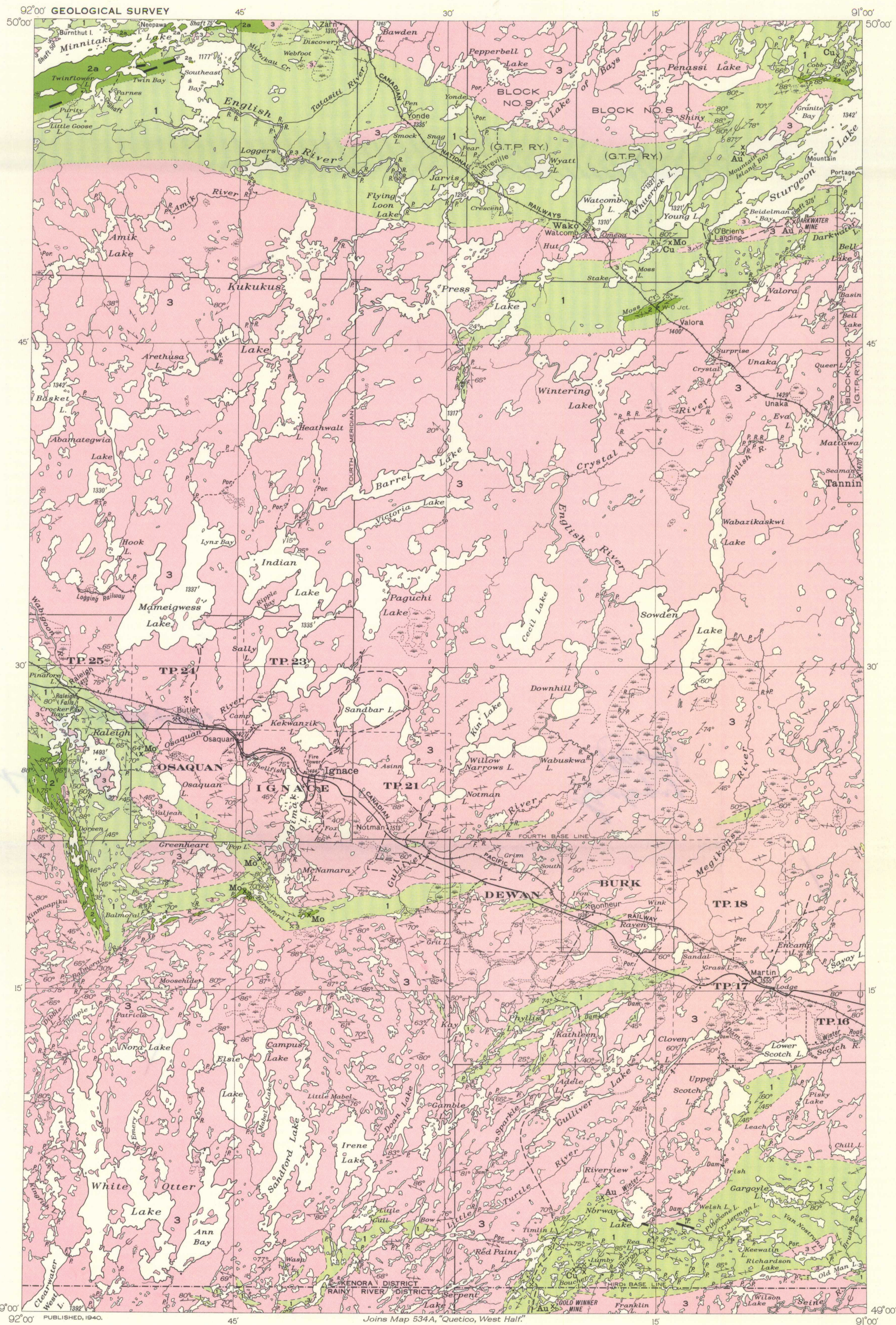
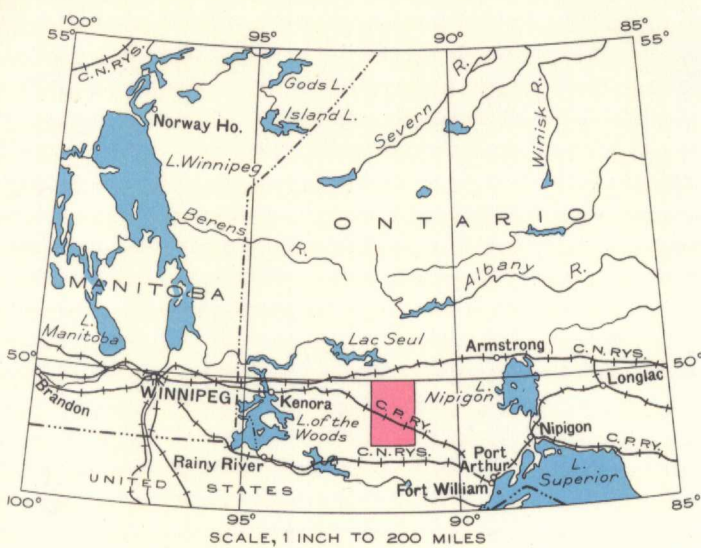


Geology compiled from surveys by the Geological Survey, and from maps published by the Ontario Department of Mines.

Base-map prepared by the Topographical Survey, 1933, from Federal Government map published in 1932. Cartography by the Drafting and Reproducing Division, 1939.

MINERAL OCCURRENCES

Au Gold
Cu Copper
Mo Molybdenum



MAP 557A

WATCOMB

KENORA AND RAINY RIVER DISTRICTS
ONTARIO

Scale, 253,440 or 1 inch to 4 Miles

Approximate magnetic declination, 2° to 4° East.

DESCRIPTIVE NOTES

The area is a succession of hummocky, rocky hills and ridges rising 100 feet or less above drift-covered, rolling plains and areas of muskeg. The area as a whole varies in elevation from 1177 feet to 1850 feet. It is in the Hudson Bay drainage basin and its eastern border is but a few miles west of the height of land. The numerous lakes and rivers provide excellent canoe routes through almost all parts of the area.

The oldest rocks compose the Keewatin group consisting in large part of hornblende, chlorite and mica schists and other metamorphic rocks; associated with these are remnants of volcanic and sedimentary formations that have been highly folded. It has not been found practicable to determine the succession within the Keewatin and the subdivision that has been made is solely based on lithological differences. The age relative to the Keewatin, of belts of greywacke and slate east of Minnitaki lake and west of Sturgeon lake has not been satisfactorily determined. It is possible that they are younger than Keewatin and correlative with Windigokan strata found elsewhere in this region.

The batholithic bodies of granite, granodiorite, diorite, granite-gneiss and related rocks (3) are intrusive into all of the Archean (Early Precambrian) strata with which they have been found in contact. They exhibit many variations in composition, colour, texture and internal structure and there are gradations between the several varieties. Throughout extensive masses of these rocks, and particularly along contact zones, inclusions of schistose, altered country rocks are common.

Irregular and oval areas of massive granitic rocks occur irregularly distributed through the assemblage of batholithic intrusives. In such areas in the vicinity of Butler and Ignace, medium-grained, biotite granite, for the most part pale-grey and at some places pink, has been found suitable for ornamental and structural building stone. Numerous bodies of intrusive rocks, including quartz porphyry and quartz diorite, probably related in age to the batholithic intrusives occur within the Keewatin in areas too small to be represented on a map of this scale. Intrusives of this sort occur at or in the vicinity of all localities where metalliferous deposits have been observed.

Granite for structural purposes and ornamental building stone has been produced since 1915 from quarries at Butler; and there has been some production also from quarries near Ignace and Bonheur.

Gold has been found at many places in the Keewatin and, south of Beidelman bay, Sturgeon lake, in an intrusive body of granodiorite. In the latter, gold with small amounts of pyrite and arsenopyrite occurs in veins of quartz, tourmaline and ferruginous carbonate. In the Keewatin areas gold has been found in quartz veins traversing quartz porphyry intrusives and adjacent chlorite and sericite schists, ferruginous carbonate and siliceous replacement bodies. At one property the gold-bearing veins are visibly mineralized with pyrite, chalcopyrite and galena.

Chalcopyrite occurs associated with pyrite in veins and replacement bodies of quartz and ferruginous carbonate, in quartz porphyry, sericite and chlorite schists in the Keewatin area west of Lumby lake. The copper-bearing veins contain gold and silver values. Chalcopyrite and pyrite occur in disseminated grains, irregularly distributed, in a dyke 50 feet wide of quartz porphyry cutting Keewatin greenstones on the west shore of the southwest arm of Cobb bay, Sturgeon lake.

Molybdenite occurs in quartz veins and pegmatite dykes and, associated with pyrite, pyrrhotite and small amounts of galena, zinc blende and chalcopyrite, in replacement bodies at several localities in the Keewatin area southeast of Raleigh. Some of the molybdenite-bearing veins contain small amounts of gold and silver. Molybdenite and chalcopyrite occur in a sulphide replacement body in Keewatin greenstone south of Young lake.

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