MISCELLANEOUS MAP SERIES

DEPTH TO BEDROCK OF CHIPPEWA COUNTY, WISCONSIN

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Data compilation assistance by E.C. Lawson and T.E. Fekete

1988

A part of the Chippewa County Groundwater Resource Investigation, a joint project of the Wisconsin Geological and Natural History Survey and the Chippewa County Board of Supervisors.

This map shows the thickness of material overlying the bedrock, which in Chippewa County consists of Cambrian and Precambrian rocks.

Explanation

Depth to bedrock below surface, shown in feet, dashed where approximate

Depth to bedrock categories

0-10 ft	Bedrock is at or near the surface; excavations commonly intersect bedrock
10-50	Isolated bedrock highs may come close to the surface
50-100	Bedrock is not commonly intersected by shallow excavations or borings
100-150	This zone usually occurs as isolated areas within shallower depth zones, reflecting hills of surficial material or erosion of the bedrock surface beneath surficial deposits
150-200	This zone occurs in areas of rugged surface topography, particularly where glacial landforms are present. Depth to bedrock is usually greater under hills, and lesser in low areas
≥200	Only one such zone occurs, in north-central Chippewa County, in a topographicallly high area. Unconsolidated surficial materials reach a maximum known thickness of 270 feet

Please note:

In Chippewa County, the Cambrian bedrock (sandstone) is weathered in places and poorly lithified. This weathered material is considered bedrock for the purpose of this map, although well drillers may commonly report sand when drilling this material. Therefore, we have reinterpreted some of the well constructor's reports, primarily on the basis of the geologic interpretations of the area north of latitude 45° N by Mudrey and others (1987) and south of latitude 45° N by Brown (in preparation). In areas where outcrops or wells that reach bedrock are sparse, interpretation is based on wells that do not reach bedrock. Therefore, depth to bedrock may be underestimated in these areas.

This map is intended to be a general guide to the depth to bedrock and the thickness of surficial deposits in Chippewa County. Where detailed site-specific information is required, users are advised to verify depth to bedrock with test borings or geophysical studies.

Map Symbols

- × outcrop
- ● well that reaches bedrock
- ○ well that does not reach bedrock
- ◐ well that has been reinterpreted

Data have not been field checked.

Sources of data

* Wisconsin Department of Natural Resources well constructor's reports (1936-1986).

* Wisconsin Geological and Natural History Survey published and unpublished geologic logs (1896-1986).

* United States Geological Survey quadrangles (7.5-minute series, topographic; 1971-79).

* Bedrock Geology of Wisconsin, Northwest Sheet, by M.G. Mudrey, Jr., G.L. LaBerge, P.E. Myers, and W.S. Cordua, 1987, Wisconsin Geological and Natural History Survey Regional Map Series (Map 87-11), scale 1:250,000.

* Bedrock Geology of Wisconsin, West-Central Sheet, by B.A. Brown, in preparation, Wisconsin Geological and Natural History Survey Regional Map Series, scale 1:250,000.

* Soils of Chippewa County and Their Ability to Attenuate Contaminants, by A.W. Sutherland and F.W. Madison, 1987, Wisconsin Geological and Natural History Survey Map 87-3, scale 1:100,000.

* Wisconsin Geological and Natural History Survey Geology of Wisconsin Outcrop Descriptions.

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SCALE 1:100 000

1 0 1 2 3 4 5 6 7 8 9 10 KILOMETRES

1 0 1 2 3 4 5 MILES

Base map from U.S. Geological Survey
County Map Series (Topographic), 1985