Ground-Water Resources of PORTAGE COUNTY

by

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DIVISION OF WATER
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Depth (ft.)-Water-bearing Formation-Yield (gpm)
Depth to Bedrock (ft.)

SH-Shale SS-Sandstone ⊙-Industrial Well
S-Sand SG-Sand & Gravel △-Test Well
⊙-Municipal

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AREAS IN WHICH YIELDS OF MORE THAN 500 GALLONS PER MINUTE CAN BE DEVELOPED.

Best ground-water areas in Portage County. Permeable sand and gravel deposits in deep buried valley. Wells may yield more than 1000 gallons per minute. Suitable for municipal and large industrial well field development.

AREAS IN WHICH YIELDS OF 300 TO 500 GALLONS PER MINUTE CAN BE DEVELOPED.

Good ground-water areas. Permeable sand and gravel deposits in deep buried valleys. Sustained yields of several hundred gallons per minute. Suitable for industrial and municipal well field development.

AREAS IN WHICH YIELDS OF 100 TO 300 GALLONS PER MINUTE CAN BE DEVELOPED.

Interbedded and interlensing sand, gravel, silt and clay in buried valleys. Yields of as much as 300 gallons per minute area available where sufficient coarse material is found. Exploratory drilling may be required to locate such deposits.

AREAS IN WHICH YIELDS OF 25 TO 100 GALLONS PER MINUTE CAN BE DEVELOPED.

Ground water obtained from sand and gravel lenses or layers interbedded with fine sand and clay. Farm and small industrial supplies available from wells ranging to 200 feet deep. Yields from underlying sandstones are described below.

Ground water obtained form sandstones of the Pottsville group. Principal aquifers are the Massillon sandstone and the Sharon conglomerate. Wells will produce sustained yields of as much as 50 gallons per minute. Greater yields, 100 or more gallons per minute, may be available for short periods of intermittent pumping. Generally, the bedrock is covered with less than 75 feet of glacial material.

Valley fill contains thick local deposits of sand and gravel. Wells encountering permeable deposits may yield as much as 100 gallons per minute.

0 1 2 3 4
Scale in miles

AREAS IN WHICH LESS THAN 25 GALLONS PER MINUTE CAN BE DEVELOPED.

Discontinuous bodies of sand and gravel in thick glacial drift. Wells may yield from 5 to 20 gallons per minute. Wells that do not encounter sand and gravel must be drilled into the bedrock (see below) to obtain ground water.

Ground water obtained from sandstones of the Pottsville group. Although occasionally yields of 100 gallons per minute have been reported; the maximum reliable yield is more likely to be 25 gallons per minute. Bedrock is covered with from 10 to 80 feet of unconsolidated deposits.

Valley fill containing sand and gravel deposits of limited thickness and extent. Wells encountering permeable deposits may yield from 10 to 30 gallons per minute.

Ground water obtained from Mississippian sandstones and shales beneath less than 50 feet of glacial drift. Yields from 5 to 15 gallons per minute.

AREAS IN WHICH YIELDS OF 3 TO 10 GALLONS PER MINUTE CAN BE DEVELOPED.

Ground water obtained from discontinuous sand and gravel lenses that occur locally in the predominantly fine grained glacial drift filling buried valleys. Unconsolidated material may be more than 200 feet thick. Exceptional yields of as much as 200 gallons per minute have been reported from isolated deposits of coarse gravel. Generally, only small yields with large drawdown, are available.

AREAS IN WHICH YIELDS SELDOM EXCEED 3 GALLONS PER MINUTE.

Buried valleys contain 200 to 300, or more, feet of fine sand, silt and some gravel deposits. Drilled wells usually yield meager supplies and additional storage may be necessary for domestic needs.

Note: The ground-water characteristics of Portage County have been mapped regionally, based upon interpretations of 10,000 water well records and the area's geology and hydrology.
Water well data on the map were selectd as typical for the areas shown. Information regarding specific sites may be obtained from the Division of Water.

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CARTOGRAPHY: TARRY A. CRUMLEY