Ground-Water Resources of KNOX COUNTY

by
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Explanation

AREAS IN WHICH YIELDS OF 100 TO 500 GALLONS, OR MORE, PER MINUTE MAY BE DEVELOPED.

Areas having greatest potential for the development of municipal and industrial ground-water supplies. Thick permeable deposits of sand and gravel yield 500 to more than 1000 gallons per minute at depths ranging from 55 to 135 feet.

Yields ranging from 100 to more than 350 gallons per minute are developed from permeable sand and gravel encountered at depths ranging from about 60 to 155 feet. Test patterns are necessary to locate the more permeable deposits which partially fill these ancestral drainage channels.

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

Water-bearing deposits of sand and gravel may be encountered at average depths ranging from 66 to 165 feet. Yields for farm and household supplies are readily available to drilled wells. Extensive test drilling is necessary to develop small public supplies. Deep drilling through as much as 345 feet of sandy clay may only encounter small domestic supplies.

AREAS IN WHICH YIELDS OF LESS THAN 25 GALLONS PER MINUTE MAY BE DEVELOPED.

Ground-water supplies developed from the sandstone and shale formations of the Cuyahoga Group. Yields of 10 to more than 20 gallons per minute are readily available. Drilling contractors may encounter thick deposits of clayey till interbedded with thin lenses of permeable sand and gravel in the morainal areas in the western portion of the county. Small supplies may be available, but most wells are drilled to depths ranging from 60 to 290 feet. Wells may be drilled deeper than 325 feet to encounter small supplies in the extreme eastern portion of the county.
Industrial and municipal supplies with yields of more than 250 gallons per minute have been reported for properly constructed large diameter wells at depths of less than 350 feet.

Thin lenses of sand and gravel interbedded in thick layers of fine silty sand and sandy clay yield adequate domestic supplies at depths ranging from about 70 to 320 feet. If water-bearing deposits are not encountered wells may be developed in the underlying shaly sandstone bedrock.

AREAS IN WHICH YIELDS OF LESS THAN 10 GALLONS PER MINUTE MAY BE DEVELOPED.

Adequate domestic supplies are usually developed from the sandy shale formations at depths of less than 140 feet.

Scale in miles
0 1 2 3 4

Contour Interval: 10 feet

Index Map

Symbols

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

•Water Well Industrial Well Municipal Well

Location of Ancestral Buried Bedrock Channel

S-Sand SS-Sandstone
FS-Fine Sand CL-Clay
G-Gravel SH-Shale
SG-Sand & Gravel

MORROW CO. RICHLAND CO. ASHLAND CO. HOLMES CO. DELAWARE CO. LICKING CO. COSHOCTON CO.

BERLIN MIDDLEBURY NORTH KOKOSING RESERVOIR KNOX LAKE FREDERICKTOWN WAYNE MORRIS PIKE BROWN JEFFERSON APPLE VALLEY LAKE DANVILLE BRINKHAVEN HOWARD MONROE ACADEMIA MT. VERNON LIBERTY GAMBIER MILLWOOD UNION COLLEGE CLINTON MT. LIBERTY HARRISON PLEASANT BUTLER HILLIAR CENTERBURG MILFORD MILLER MORGAN CLAY MARTINSBURG JACKSON

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