

Prepared in cooperation with
NEW HOPE BOROUGH AND BRIDGETON, BUCKINGHAM, NOCKAMIXON, PLUMSTEAD,
SOLEBURY, SPRINGFIELD, TINICUM, AND WRIGHTSTOWN TOWNSHIPS,
BUCKS COUNTY, PENNSYLVANIA

EXPLANATION

The mapped area is underlain by layered sedimentary rocks chiefly consisting of shale, sandstone, siltstone, and argillite and by a diabase sheet that has intruded the sedimentary rocks. The sedimentary rocks adjacent to the diabase are thermally altered to hornfels. Water levels in shallow wells completed in the unaltered and hornfelsed sedimentary rocks are generally similar. In shallow wells in sedimentary rock also penetrate this system. Water levels in deep wells, which are drilled through the diabase sheet and penetrate the hornfelsed sedimentary rocks, are generally lower than in the unaltered sedimentary rocks. Some deep wells are unconfined or confined aquifer systems. Deep wells in sedimentary rock also penetrate the lower aquifer system. The aquifer systems are undifferentiated and are all unconfined. The hydraulic head in the unconfined aquifer system penetrates multiple water-bearing zones; hydraulic head in each zone may differ. Water levels in deep wells are a composite of the hydraulic heads of

TOWNSHIP AND STUDY AREA BOUNDARY

POTENTIOMETRIC CONTOUR--SHOWS altitude of potentiometric surface as defined by measured water levels. Dashed where approximate. Located on potentiometric surface representing the upper aquifer system except in deep wells that tap the lower aquifer and un differentiated system. Contour interval is every 10 feet. Coffeen Hill was not contoured above 625 feet. Due to lack of data. Altitude in feet above National Geodetic Vertical Datum of 1929.

SITE USED FOR WATER-LEVEL MEASUREMENT--Symbol gives location of site.
Number is altitude of water level in feet above National
Geodetic Vertical Datum of 1929. Wells and springs outside
the study area are shown where they were used to contour the
potentiometric surface.

Altitude of static water level measured in drilled or dug
well.

Altitude of land surface at site of well that was flowing during April 1981 through April 1992.

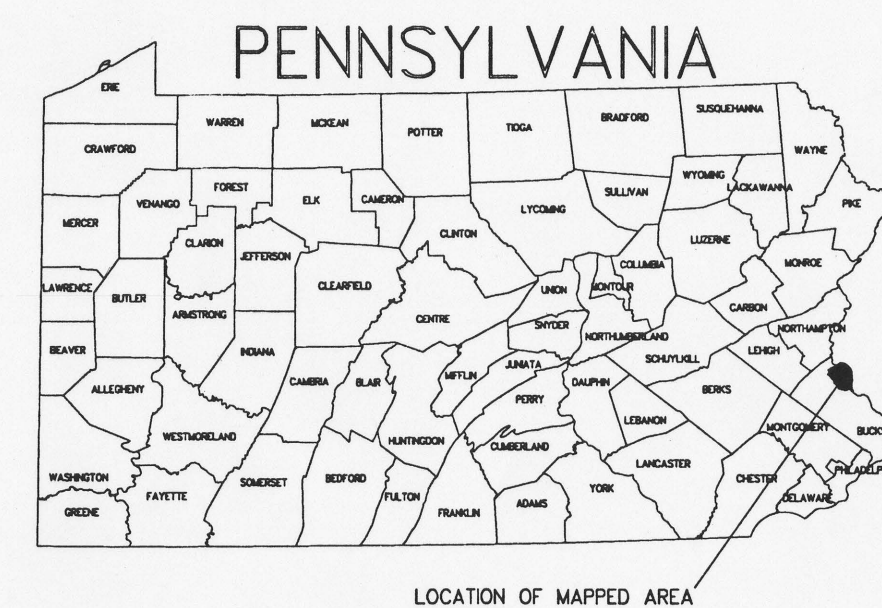
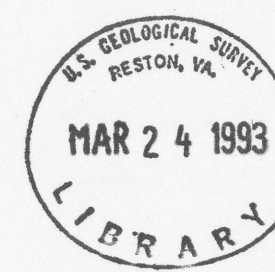
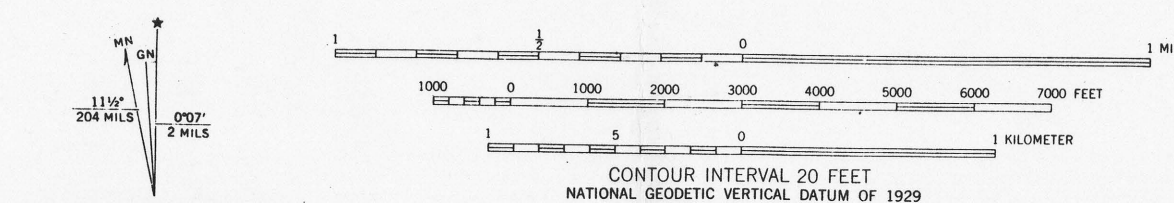
Altitude of static water level that represents a potentiometric surface deeper than the lower potentiometric surface because measuring points include wells that may penetrate a deeper semiconfined zone, data may reflect a composite head. These data were not used to contour the potentiometric

The differences between the minimum and maximum depth to water for monthly measurements at three observation wells in Stockton and Pinole Townships 4.10 to 12.52 feet (median was 11.56 feet) from April 1991 through April

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LOCATION OF MAPPED AREA

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