U.S. DEPARTMENT OF THE INTERIOR
U.S. GEOLOGICAL SURVEY

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

OPEN-FILE REPORT 93-27

EXPLANATION

TOWNSHIP AND STUDY AREA BOUNDARY

500 POTENTIOMETRIC CONTOUR--Shows altitude of potentiometric surface as defined by measured water levels, altitudes of streams, and topography. Dashed where approximately located. Intermittent streams are discharge areas during periods of high ground-water levels. Contoured potentiometric surface represents the water table except at wells that are completed in semiconfined zones in the aquifer. Contour interval is 20 feet except along Tohickon Creek and the Delaware River, where the contour interval is 20 feet down to an altitude 300 feet and then 50 feet to an altitude 100 feet. Altitude in feet above National Geodetic Vertical Datum of 1929.

WATER-LEVEL MEASUREMENT SITE--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.

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

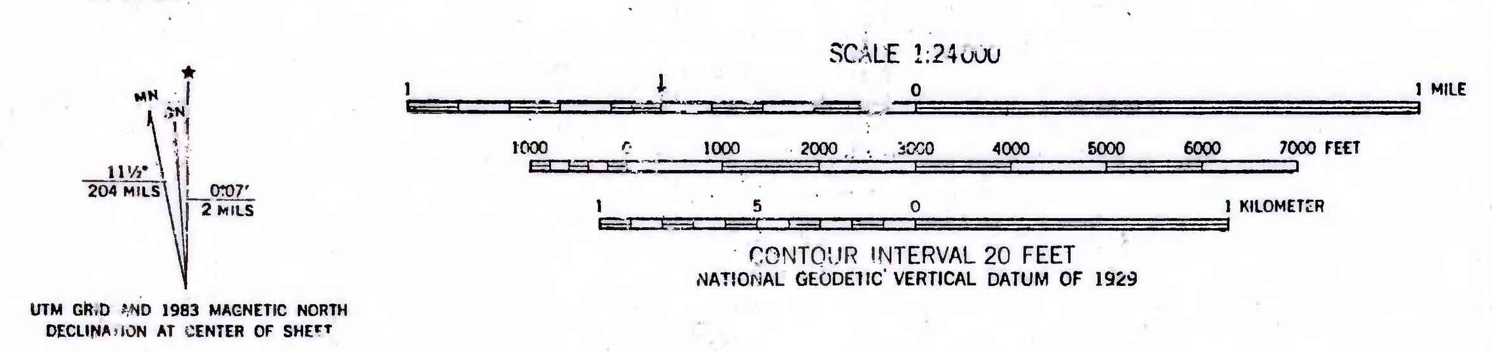
460 F Elevation of land surface at site of well that was flowing during June through November 1991.

450 Altitude of static water level that represents a potentiometric surface other than the water table. Measuring points include wells that may penetrate a deeper semiconfined zone, and data may reflect a composite head. These data were not used to contour the potentiometric surface and are included for information only.

The difference between the minimum and maximum depth to water for an observation well equipped with a continuous water-level recorder in Plumstead Township was 5.04 feet for the period October 1991 through September 1992.

The mapped area is underlain by layered sedimentary rocks chiefly consisting of shale, mudstone, siltstone, and argillite and by a diabase dike that has intruded the sedimentary rocks.

Base from U.S. Geological Survey
Lumberville 1:24,000 1973
Doylestown 1:24,000 1983
Buckingham 1:24,000 1973
Bedminster 1:24,000 1983

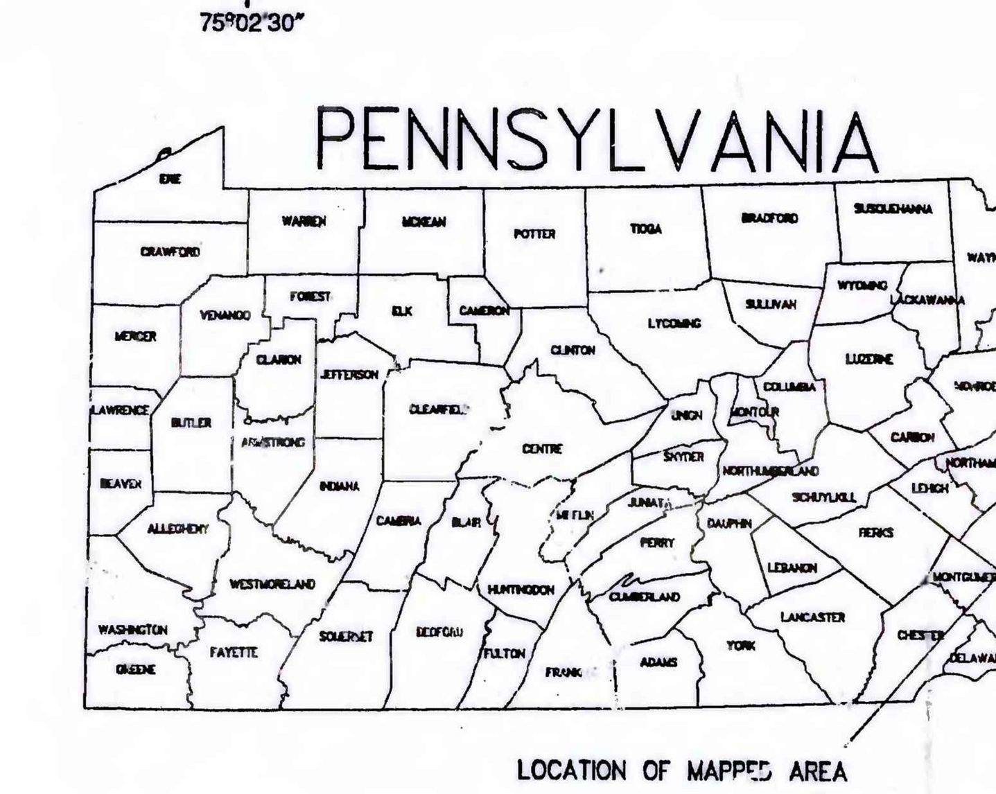


CONTOUR INTERVAL 20 FEET
NATIONAL GEODETIC VERTICAL DATUM OF 1929

ALTITUDE AND CONFIGURATION OF THE POTENTIOMETRIC SURFACE IN PLUMSTEAD TOWNSHIP, BUCKS COUNTY, PENNSYLVANIA, JUNE 1991 THROUGH NOVEMBER 1991

By Curtis L. Schreffler

1993



LOCATION OF MAPPED AREA