

**EXPLANATION**

— TOWNSHIP AND STUDY AREA BOUNDARY

— 300 — POTENTIOMETRIC CONTOUR—Shows altitude of potentiometric surface as defined by measured water levels, altitudes of streams and springs, and topography. Dashed where approximately located. Intermittent streams are discharge areas during periods of high ground-water levels. Hachured contour lines estimate depression in potentiometric surface due to quarry dewatering. Contoured potentiometric surface represents the water table except at wells that are completed in semiconfined zones in the aquifer. Contour interval is 20 feet. Altitude in feet above National Geodetic Vertical Datum of 1929.

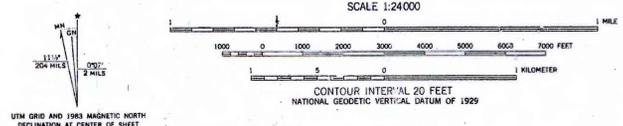
WATER-LEVEL MEASUREMENT SITE—Symbol gives location of site. Number is altitude of water level in feet above National Geodetic Vertical Datum of 1929. Wells and springs outside the study area are shown where they were used to contour the potentiometric surface.

- 184 Altitude of static water level measured in drilled or dug well.
- 115F Elevation of land surface at site of well that was flowing during October 1991 through April 1992.
- 170 Elevation of spring that was flowing during October 1991 through April 1992.
- ▲ 178 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 monthly measurements at two observation wells in Solebury Township was 5.56 feet and 11.17 feet during October 1991 through April 1992.

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

Base from U.S. Geological Survey  
Lumberville 1:24,000 1973  
Buckingham 1:24,000 1973  
Lumberville 1:24,000 1973  
Stockton 1:24,000 1981



**ALTITUDE AND CONFIGURATION OF THE POTENTIOMETRIC SURFACE  
IN NEW HOPE BOROUGH AND SOLEBURY TOWNSHIP,  
BUCKS COUNTY, PENNSYLVANIA,  
OCTOBER 1991 THROUGH APRIL 1992**

By Curtis i. Schreffler

