





SYMBOLS

 1231/6
Bedrock well
Location of water well that intersects bedrock. Red number to left of slash is the elevation of the top of bedrock, and blue number to right of slash is the drift thickness, both in feet.

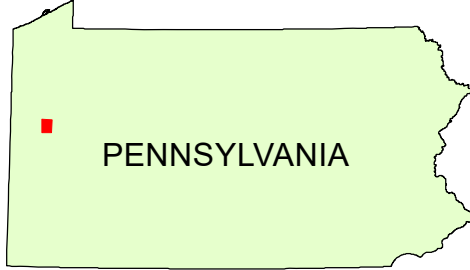
 1302/19+
Drift well
Location of water well that did not reach bedrock. Red number to left of slash is the elevation at the bottom of the well, and blue number to right of slash is the depth of the well, both in feet. Minus sign indicates that top of bedrock is lower than the bottom elevation, and plus sign indicates that drift is thicker than the well depth.

 1200
Bedrock-topographic contour
Elevation of the top of bedrock, in feet. Contour interval 100 ft.

 100
Drift-thickness contour
Thickness of drift, in feet. Contour interval 50 ft. Drift includes all Quaternary deposits, such as glacial sediments, lake sediments, colluvium, and alluvium.

MERCER CO.		VENANGO CO.
Mercer	Grove City	Barkeyville
Slippery Rock		West Sunbury
Harlansburg	Prospect	Mount Chestnut

ADJOINING 7.5-MINUTE QUADRANGLES
Showing locations of PaGS sonic borehole (X).



QUADRANGLE LOCATION



Hillshade created from DEMs derived from lidar elevation data published by the Pennsylvania Geological Survey PAMAP program in 2006 and distributed through the Pennsylvania Spatial Data Access (PASDA) website.

Most base map data modified from the U.S. Geological Survey combined vector file for the Slippery Rock 7.5-minute quadrangle, which was published July 31, 2016, and is available online from The National Map. County lines created from Pennsylvania Department of Transportation municipal data published in May 2019 and distributed through the PASDA website.

Private and public water well data from the Pennsylvania Groundwater Information System (PaGWIS) were used to draw the bedrock-topographic and drift-thickness contours. Only private wells are shown on the map.

From 2019-21, Stuart Reese and Gary Fleegeer (retired) of the Pennsylvania Geological Survey reviewed the well data. As a result of that review, some well data were corrected, and some wells with suspect data were omitted.

In areas that lacked water well data, Reese and Fleegeer used topography, and information from Poth (1963) and White and others (1969) as a guide. They also checked contours extending to the western edge of the map against data presented by Schagrin (2019).

Digital map production by Caron E. Pawlicki and Stuart Reese, Pennsylvania Geological Survey, 2021.

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Poth, C. W., 1963, Geology and hydrology of the Mercer quadrangle, Mercer, Lawrence, and Butler Counties, Pennsylvania: Pennsylvania Geological Survey, 4th ser., Water Resource Report 16, 149 p.

Schagrin, Zachary, 2019, Bedrock-topographic and drift-thickness map of the Harlansburg 7.5-minute quadrangle, Butler, Lawrence, and Mercer Counties, Pennsylvania: Pennsylvania Geological Survey, 4th ser., Progress Report 19-01.0, scale 1:24,000.

White, G. W., Totten, S. M., and Gross, D. L., 1969, Pleistocene stratigraphy of northwestern Pennsylvania: Pennsylvania Geological Survey, 4th ser., General Geology Report 55, 88 p.

Progress Report 21-02.0 (this map plate) is a publication of the Pennsylvania Geological Survey. It was reviewed in-house but did not have an external peer review. The report can be downloaded from the bureau's list of publications, which is available on its website at dcnr.pa.gov/Geology/PublicationsAndData.

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BEDROCK-TOPOGRAPHIC AND DRIFT-THICKNESS MAP OF THE SLIPPERY ROCK 7.5-MINUTE QUADRANGLE, BUTLER, LAWRENCE, AND MERCER COUNTIES, PENNSYLVANIA

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PENNSYLVANIA GEOLOGICAL SURVEY
2021