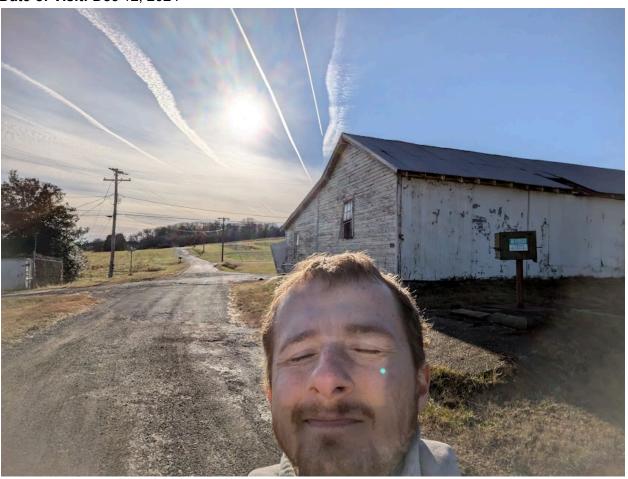
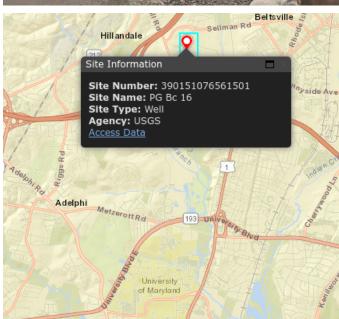
Date of Visit: Dec 12, 2024

Well Exploration

12/13/24



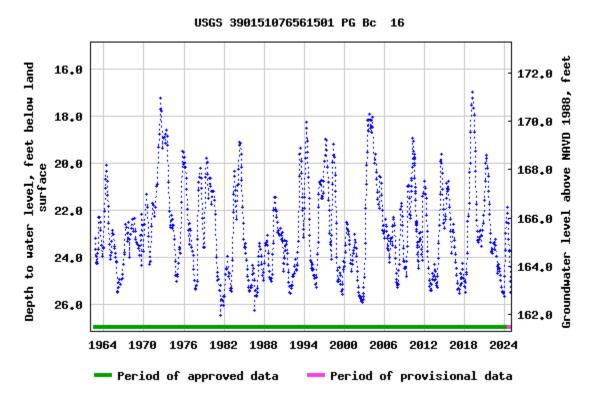


Prince George's County, MD, Hydrologic

Unit 02070010, at National Agricultural Research Center, Beltsville

Aquifer Identification and Data Exploration

This well was completed on the Patuxent Formation of the North Atlantic Coastal Plain aquifer. It is very close to the Piedmont fall line. This is an unconfined aquifer because the water table has been constantly changing over the past 60 years. Therefore, the layer is exposed to atmospheric pressure.



The depth of the well is 27.4 feet below land surface. The Patuxent formation is between 150 to 250 feet thick and made from primarily sand and gravel with minor amounts of clay¹. It can reasonably be inferred that by using a transmissivity of 20ft²/day the hydraulic conductivity falls near 0.1 ft/day². Storativity ranges from 3.4 x 10⁻⁵ to 0.0012 in the Patuxent formation². The aquifer level is at a relatively low point now compared to the last five years - provisional data says roughly 25.5 feet below land surface. This feels due to a long time with little precipitation. Supposedly, the summer is the wettest season in this area, but it scarcely rained this year.

¹ Brenner, G.J., 1963 The spores and pollen of the Potomac Group of Maryland: Maryland Geological Survey Bulletin, no. 27, 215 p.

² http://www.mgs.md.gov/groundwater/coastal_plain_aquifers_mobile.html