

# High-Purity "Ohio Slip" Clay Rare in Ohio

*November 21, 2011*—Geologists are always intrigued with interesting new and rare geologic deposits, especially those that act as unique resources. And even today, the Ohio Geological Survey continues to learn about such places around the state. Recently, long-time friend of the Survey and nationally-known sedimentologist Dr. Paul E. Potter (Emeritus Professor from the University of Cincinnati, Department of Geology) informed the Survey about a site with unique geology south of the village of New Hope (Brown County)—an area of the state where the Survey has not extensively researched and mapped the glacial geology.



Survey geologist Mike Angle (left) and A&K Clay proprietor Gary Adkins hold a chunk of the highly pure "Ohio Slip" clay.  
Photo: Paul Potter.

Staff geologists Mark Wolfe and Mike Angle joined Dr. Potter for a visit to the site, which sits on a property owned by Gary and Pam Adkins. The Adkinses discovered a clay-rich deposit in a stream cut-bank behind their home. The stream is a tributary of White Oak Creek. The Adkinses also noticed the same clay deposit at the bottom of a small farm pond that they were excavating. After receiving enthusiastic responses from potters and craftsmen about the unique properties of the clay, they did more research, had a number of analyses performed on the clay, and ultimately opened A&K Clay Co.

The Adkinses refer to their clay deposit as "[Ohio Slip](#)." The very uniform, nearly 6-feet-thick deposit underlies Illinoisan-age glacial till and a thin sand deposit. The clay exhibits extremely high purity, lacking almost any sand or silt particles, organics, varves, laminations, or impurities. Consensus is that such a uniform, fine-grained deposit

must have formed in a quiet water environment. Wolfe and Angle speculate that perhaps an ancient tributary stream was dammed and backed-up, creating a deep pond. Another possibility is that the ancient lake formed in a saddle or depression between the high bedrock ridges, and the lake existed until stream drainage evolved and eventually drained the lake over time. Input into the pond appears to have been only the finest clayey particles washed in by precipitation and derived from clay sediments eroded from the surrounding fine-grained Illinoisan tills and Ordovician shale bedrock. Mr. Adkins, who has walked a number of streams and augered surrounding upland farm fields, reports that this deposit is widespread and consistently found at the same elevation.

Chemical composition of the clay makes the deposit ideal for low-temperature pottery and glazing. The Adkinses frequently allow pottery students from nearby universities to visit the site. They also [process](#) and supply raw, powdered clay materials to the ceramics industry and potters throughout the country.

More information on the uses of "Ohio Slip" can be obtained from the A&K Clay Co. website at [www.akclay.com](http://www.akclay.com).

### *Further Information*



[Clay and Shale in Ohio](#), Educational Leaflet 12 [503 KB PDF]

[Report on Ohio Mineral Industries](#)—Compiled annually, this report includes information on clay usage, production, and sales.

[Quaternary Geology of Ohio](#), Map SG-1