

## Section Description

K-K' is a strike-oriented section that traverses the lower part of the Coastal Plain. Originating at a core hole in northern Jasper County, the section runs in a northeasterly direction passing through Colleton, Dorchester, Berkeley, and Georgetown Counties, terminating at a water well in Horry County. Two core holes and nine water wells were used to construct the section. One inch on the vertical scale is equivalent to 200 feet of depth. The distance, in miles, between two adjacent wells is provided on the section.

Moving from west to east along the section line, the first well on the section is **JAS-0426**, a deep core hole drilled in 1996 by the South Carolina Department of Natural Resources (SCDNR) at the C-15 well-cluster site in northern Jasper County. The site is one of eight C-well sites that was funded by the U.S. Department of Energy to delineate and map the hydrogeologic units around and downgradient of the Savannah River Site (SRS). Each of the C-well sites has a core drilled to bedrock, geophysical logs, and up to 10 monitoring wells. A continuous core was prohibitively expensive to drill at the site owing to the thickness of the Coastal Plain (2,800 feet); consequently, only sidewall cores at 10- to 30-foot intervals were obtained. An aquifer test of the Middle Floridan aquifer produced a transmissivity 452 ft<sup>2</sup>/d pumping at a rate of 96 gpm. Four monitoring wells were drilled at the site and are currently monitored by SCDNR for water levels.

Well **COL-382** was drilled to fill a duck pond along the Salkehatchie River in western Colleton County and **COL-248** is an abandoned test hole drilled by the U.S. Army Corps of Engineers for the purpose of conducting a seismology study. Core hole **DOR-37** was drilled between 1975 and 1977 and was part of a U.S. Geological Survey (USGS) study of tectonics, seismicity, and stratigraphy of the area. Much has been written about this core hole, which is considered a benchmark stratigraphic test hole for the southeastern United States ([USGS Professional Paper 1518](#); [USGS/1994/2273/report](#); [USGS Open File 049](#)). Well **DOR-52** is an abandoned test hole drilled for the Town of Summerville in 1978.

An industrial well drilled in 1981 for Celanese Corporation, **BRK-430** is completed in the Charleston and Gramling aquifers. An aquifer test of the well yielded a transmissivity of 600 ft<sup>2</sup>/d (feet squared per day) pumping at a rate of 135 gpm (gallons per minute). Well **BRK-89** is a public supply well drilled in 1971 for the Town of Jamestown and completed in both the Crouch Branch and McQueen Branch aquifers.

Well **GEO-90** is a public supply well drilled in 1974 for the Town of Andrews in northern Georgetown County. Completed solely in the McQueen Branch aquifer, an aquifer test produced a transmissivity of 1,740 ft<sup>2</sup>/d pumping at a rate of 351 gpm. Well **GEO-277** is a public supply well for Browns Ferry Water Company in Georgetown County. Drilled in 1991 and completed in the Crouch Branch aquifer, an aquifer test yielded a transmissivity of 1,086 ft<sup>2</sup>/d pumping at a rate of 200 gpm. Well **GEO-249** is a public supply well drilled in 1989 for Georgetown County Water and Sewer. Completed in the both the Crouch Branch and McQueen Branch aquifers, an aquifer test of the well produced a transmissivity of 2,500 ft<sup>2</sup>/d pumping at a rate of 2,000 gpm. **HOR-287** is a public supply well drilled in 1973 for the City of Conway. Completed in the Charleston aquifer, an aquifer test of the well produced a transmissivity of 3,300 ft<sup>2</sup>/d pumping at a rate of 517 gpm.

Hydrogeology by Joseph A. Gellici, SCDNR  
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