

## Section Description

H-H' is a strike-oriented section that traverses the upper Coastal Plain. Originating at a core hole in Georgia, the section runs in a northeasterly direction passing through Allendale, Barnwell, Bamberg, Orangeburg, Calhoun, Sumter, Lee, and Florence Counties, terminating at a core hole in Dillon County. Eight core holes and five 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.

The **Girard** well-cluster site was constructed in southeastern Burke County, Ga. between 1992-95 as part of a cooperative project between the U.S. Geological Survey (USGS) and the Georgia Geologic Survey ([USGS GGS-IC-100](#)). The site was constructed to characterize the geologic, hydrologic, and water-quality characteristics of the aquifers and confining units of the area. A core hole was drilled to bedrock and three monitoring wells were constructed at the site.

Drilled in 1992, well **ALL-357** is a core hole at the C-7 well-cluster site located just south of the Savannah River Site (SRS) in northern Allendale County. In addition to the core, there are nine wells at the C-7 site, all of which are monitored by the South Carolina Department of Natural Resources (SCDNR) for water levels ([SCDNR Open-File Report 3](#)). The C-well sites were funded by the U.S. Department of Energy and drilled by the South Carolina Water Resources Commission (SCWRC) in the late 1980s and early 1990s. Each of the sites—there are a total of eight—has a continuous core drilled to bedrock, geophysical logs, and up to 10 monitoring wells. Information from the cores and logs was used to delineate and map the hydrogeologic units along the outside perimeter of SRS, and wells were constructed in each major aquifer to determine vertical hydraulic gradients and to establish a permanent observational well network around SRS ([SCDNR Open-File Report 1](#)).

Well **BRN-349** is a core hole at the C-6 well cluster site, located in southern Barnwell County ([SCWRC Open-File Report 23](#)). In addition to the core, there are eight wells at the site, all of which are monitored by SCDNR for water levels. A crop irrigation well, **BAM-76**, was drilled in 1991 in eastern Bamberg County. Completed in the Crouch Branch aquifer, the well was tested at a pumping rate of 1,200 gpm (gallons per minute). Drilled in 2000, **BAM-83** is a public supply well for the Town of Bamberg. Screened in both the Crouch Branch and McQueen Branch aquifers, the well was tested at a pumping rate of 2,100 gpm. **ORG-380** is a monitoring well at Dominion Energy's Cope Power Station, a coal-fired power plant located near the Town of Cope in western Orangeburg County. Completed in 1994 in the McQueen Branch aquifer, an aquifer test of the well produced a transmissivity of 27,000 ft<sup>2</sup>/d (feet squared per day) pumping at a rate of 2,223 gpm.

Well **ORG-393** is a core hole drilled in 1997 in downtown Orangeburg by the USGS and SCDNR. The core was drilled to delineate the geologic and hydrogeologic units in the area ([SCDNR Report 42](#)). There are three wells completed at the site, all monitored by SCDNR for water levels. Well **CAL-190** is a core hole drilled by SCDNR in 2013 in southern Calhoun County to delineate hydrogeologic units and to establish a permanent groundwater monitoring site to address concerns about increased pumping in the county. There are five wells at the site, all of which are monitored by SCDNR for water levels. Well **SUM-296** is a core hole that was drilled by the USGS in 1988 at Manchester State Forest in Sumter County to delineate and map the geologic and hydrogeologic units at a hazardous waste site near the Town of Pinewood ([USGS WRI934185](#)).

Well **SUM-347** is a public supply well drilled in 2002 for the City of Sumter. Screened in the McQueen Branch aquifer, the well produces up to 1,000 gpm. **LEE-19** is a public supply well drilled in 1972 for the Town of Lynchburg in Lee County. Screened in the McQueen Branch aquifer, an aquifer test of the well yielded a transmissivity of 2,900 ft<sup>2</sup>/d pumping at a rate of 798 gpm. Well **FLO-268** is a core hole in the City of Florence that was drilled by the USGS in 1989 for stratigraphic information. **DIL-121** is a core hole at Little Pee Dee State Park in Dillon County that was drilled in 1996 by the USGS and SCDNR to delineate and map the geologic and hydrogeologic units of the area. Upon reaching bedrock, the core hole was backfilled and completed as a monitoring well in the McQueen Branch aquifer. In 2014, SCDNR constructed five additional wells at the site, all of which are monitored by SCDNR for water levels.

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