

## Section Description

D-D' is a dip-oriented section running along the central part of the State. Originating at a water well in northern Richland County, the section runs in a southeasterly direction passing through Sumter, Clarendon, and Berkeley Counties, and terminating at a core hole in the northeastern corner of Charleston County. Five 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 northernmost well (**RIC-613**) is an irrigation well drilled in 2001 for Spring Valley High School in Columbia and completed in the McQueen Branch aquifer. An aquifer test of the well yielded a transmissivity of 880 ft<sup>2</sup>/d (feet squared per day) pumping at a rate of 100 gpm (gallons per minute). Moving downdip, the next well on the section is core hole **RIC-585**, which was drilled by the U.S. Geological Survey (USGS) and the South Carolina Department of Natural Resources (SCDNR) in 1996 at Horrell Hill Elementary School in central Richland County. After tagging bedrock, the borehole was backfilled and completed as a monitoring well in the McQueen Branch aquifer. The water level in the well is currently monitored by SCDNR. Continuing to the southeast, well **RIC-543** is a core hole drilled to bedrock by the USGS and SCDNR in 1995 at Webber Elementary School in Eastover. The borehole was backfilled and completed as a well in the McQueen Branch aquifer and is currently monitored by SCDNR for water levels. **RIC-62** is an abandoned industrial well drilled at the Hercules Industrial Site in Eastover in 1974. Completed in the McQueen Branch aquifer, an aquifer test of the well yielded a transmissivity of 8,700 ft<sup>2</sup>/d pumping at a rate of 2,000 gpm.

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 WRIR 93-4185](#)). **CLA-56** was a test hole drilled for a crop irrigation well in 1985 at Flowers Farm near the Town of Summerton in the western part of Clarendon County. **BRK-644** is a core hole drilled by the USGS and SCDNR in 1998 at St. Stephen Middle School in northern Berkeley County. Upon reaching bedrock, the borehole was backfilled and completed as a monitoring well in the unconfined Gordon aquifer and is currently monitored by SCDNR for water levels.

Well **BRK-89** is a public supply well drilled in 1971 for the Town of Jamestown. The well is completed in both the Crouch Branch and McQueen Branch aquifers. **CHN-182** is a domestic well drilled in 1974 for Hampton Plantation that is completed in the Crouch Branch aquifer. **CHN-820** is a core hole drilled by the USGS and SCDNR in 2000 for stratigraphic information at the Santee Coastal Reserve in the northeastern part of Charleston County. A shallow core hole (CHN-803) was originally drilled at the site in 1996 to a depth of 545 ft. That hole was backfilled and completed as a monitoring well in the unconfined Gordon aquifer. The USGS returned to the site in 2000 and cored a second hole (**CHN-820**) next to the first one to a depth of 1,536 ft.

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