Section Description

J-J’ is a strike-oriented section that traverses the middle-lower part of the Coastal Plain. Originating at a public supply well in Hampton County, the section runs in a northeasterly direction passing through Colleton, Dorchester, Orangeburg, Berkeley, Williamsburg, and Marion Counties, terminating at a water well in northern Horry County. Three core holes and eleven 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 HAM-92, a public supply well drilled in 1978 for the Town of Estill. Completed in the Crouch Branch aquifer, the well was tested at a pumping rate of 800 gpm (gallons per minute). Continuing to the northeast, well HAM-191 is a public supply well drilled for the Town of Hampton in 1987. Screened mainly in the Crouch Branch aquifer, an aquifer test pumping at a rate of 709 gpm yielded a transmissivity of 3,900 ft²/d (feet squared per day).

Moving east into Colleton County, well COL-241 is an abandoned test hole drilled in 1984 in northern Colleton County as an exploratory oil and gas hole, and COL-349 is an abandoned test hole drilled in 1992 for South Carolina Electric and Gas (now Dominion Energy) at their Canady’s Station along the Edisto River. DOR-211 is a core hole drilled in 1982 by the U.S. Geological Survey (USGS) in northern Dorchester County near the Town of St. George as part of a regional study of tectonics, seismicity, and stratigraphy (USGS Open-File 96-684).

Well ORG-429 is an industrial well drilled in 1999 at the Holnam Cement Plant several miles south of the Town of Holly Hill in eastern Orangeburg County. No well completion information is available for the well. BRK-437 is a public supply well drilled in 1980 for the South Carolina Public Service Authority at the Cross Power Plant in northern Berkeley County, and BRK-644 is a core hole drilled by the USGS and the South Carolina Department of Natural Resources (SCDNR) in 1998 at St. Stephen Middle School in northern Berkeley County. Upon reaching bedrock, BRK-644 was backfilled and completed as a monitoring well in the unconfined Gordon aquifer and is currently monitored by SCDNR for water levels.

Continuing northeast into Williamsburg County, WIL-208 is a public supply well drilled in 2002 for Williamsburg County Water and Sewer. Completed in the McQueen Branch and Crouch Branch aquifers, an aquifer test yielded a transmissivity of 5,600 ft²/d pumping at a rate of 952 gpm. WIL-211 is also a public supply well for Williamsburg County Water and Sewer. Drilled in 2002 and located southwest of the Town of Stuckey in southern Williamsburg County, the well is completed in both the McQueen Branch and Charleston aquifers. An aquifer test of the well yielded a transmissivity of 8,300 ft²/d pumping at a rate of 700 gpm. Drilled in 1986, WIL-176 is a public supply well for the Town of Hemingway. Completed in the Charleston aquifer, an aquifer test resulted in a transmissivity of 5,040 ft²/d pumping at a rate of 753 gpm. WIL-213, also a public supply well for the Town of Hemingway, was drilled in 2003 and completed solely in the Charleston aquifer. An aquifer test yielded a transmissivity of 4,700 ft²/d pumping at a rate of 710 gpm.

Well MRN-78 is a core hole drilled by the USGS in 1982 to obtain stratigraphic and hydrostratigraphic information. A report was released by the USGS but, to the author’s knowledge, is not available online. The report is entitled “Hydrologic and Geologic Analysis of Two Wells in Marion County, South Carolina”, USGS Water-Resources Investigations Report 86-4102 by M.S. Reid, R.A. Renken, R.L. Wait, R.W. Aucott, and R.W. Lee. The last well on the section, HOR-998, is a public supply well drilled in 1989 for the Town of Aynor.

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