

Hydrology - Open-File Report 37

Preliminary Investigation of Water-Level Declines in Wells Near Estill, Hampton County, South Carolina, Spring 1990

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ABSTRACT

An investigation of pumping-interference problems in upper Floridan aquifer wells was conducted in the vicinity of Estill, Hampton County, S.C. during the spring of 1990. The investigation consisted of a well inventory to obtain water-level observation wells and to identify major points of ground water use, a 120-hour aquifer test, review of historical water-level data, and a series of computer-generated drawdown simulations. Six high-capacity wells discharging 130,000 to 2,000,000 gallons per day were identified. Aquifer test data indicated transmissivities of about 92,000 gallons per day per foot and storage coefficients of about 0.0004. The computer simulations predicted drawdowns of more than 8 feet within ½ mile of 2,000,000 gallons per day discharge, and drawdowns on the order of 1 to 2 feet at a distance of 3 miles.

Copies of this report are available in the SCDNR's Columbia office.