PUMPING TESTS OF THE COASTAL PLAIN AQUIFERS IN SOUTH CAROLINA

WITH A DISCUSSION OF AQUIFER AND WELL CHARACTERISTICS

by

Roy Newcome, Jr.

STATE OF SOUTH CAROLINA

WATER RESOURCES COMMISSION

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ABSTRACT

Results of more than 470 pumping tests are available for determining aquifer and well characteristics in the Coastal Plain aquifers of South Carolina. Only one-tenth of these are multiwell tests that permit calculation of the storage coefficient. All the tests provide values for aquifer transmissivity, and nearly all provide well specific capacity and well efficiency.

Counties of the Coastal Plain are unevenly represented in numbers of pumping tests, Horry County having the most (95) and Chesterfield County the fewest (2). All the significant aquifers are represented, with sand beds in the Middendorf and Black Creek Formations of Cretaceous age and limestone in the Floridan aquifer of Eocene age yielding most of the ground water pumped and having the most tests.

Practically all the tests were made at wells in confined aquifers. The Floridan aquifer in Beaufort and Jasper Counties (southern tip of the State) has the highest transmissivity, in places reaching 500,000 gpd/ft (gallons per day per foot of aquifer width). The second-best water-bearing unit, and the one having the greatest areal extent, is the Middendorf Formation. Tests of multiscreened wells in its aquifers have produced transmissivity values with a median of 21,000 gpd/ft. In pumping tests of the Black Creek aquifers the median transmissivity was 12,000 gpd/ft. Median values for the remaining aquifers generally were less than 5,000 gpd/ft.

Various shortcomings, in procedures as well as in test conditions, render many tests unusable. Most of the shortcomings can be overcome or avoided relatively easily, leading to a higher percentage of "good" and "excellent" tests. Currently (1992), half the tests analyzed are rated as "poor" and another quarter as only "fair" by the rating system presented.

INTRODUCTION

Pumping tests, sometimes called aquifer tests, are the principal means of ascertaining the capacity of aquifers and wells to produce water. A pumping test can be simple or sophisticated in its procedure, but basically it involves pumping a well at a constant rate while measuring the drawdown of the water level in that well and/or in one or more observation wells that tap the same aquifer(s) as the pumped well. Most pumping tests for which records are available to the public are made in public-supply wells. In South Carolina, the State Department of Health and Environmental Control requires that a pumping test be made in each well for which a public-supply operating permit is issued. The Water Resources Commission requires pumping tests of wells installed in designated Capacity Use Areas. The resulting information, along with the construction data on the wells, constitutes an important body of knowledge relating to the State's ground-water resources. Other sources of pumping-test data are industries, government agencies, commercial enterprises, and irrigators.

Hydrologic Setting

South Carolina contains two distinct physiographic and hydrologic entities, the Coastal Plain and the Uplands, the latter comprising the Piedmont and the Blue Ridge Mountains (Fig. 1). The Fall Line, which trends northeasterly across the State from the midpoint of the western margin, marks the inland extent of sedimentary rock formations. These formations, consisting of sand, clay, and limestone, form a seaward-thickening wedge whose deposition began late in the Cretaceous Period and has continued for nearly 100 million years. Beneath this wedge of mostly unconsolidated permeable materials is crystalline bedrock, the deeply eroded roots of the eastern part of the Appalachian mountain chain. Sedimentary beds laid down in the early Paleozoic Era were deformed, metamorphosed, and intruded by magma as the mountains formed. Rivers draining toward the sea wore away vast amounts of the highland material and redeposited it in coastal areas and in shallow seas that

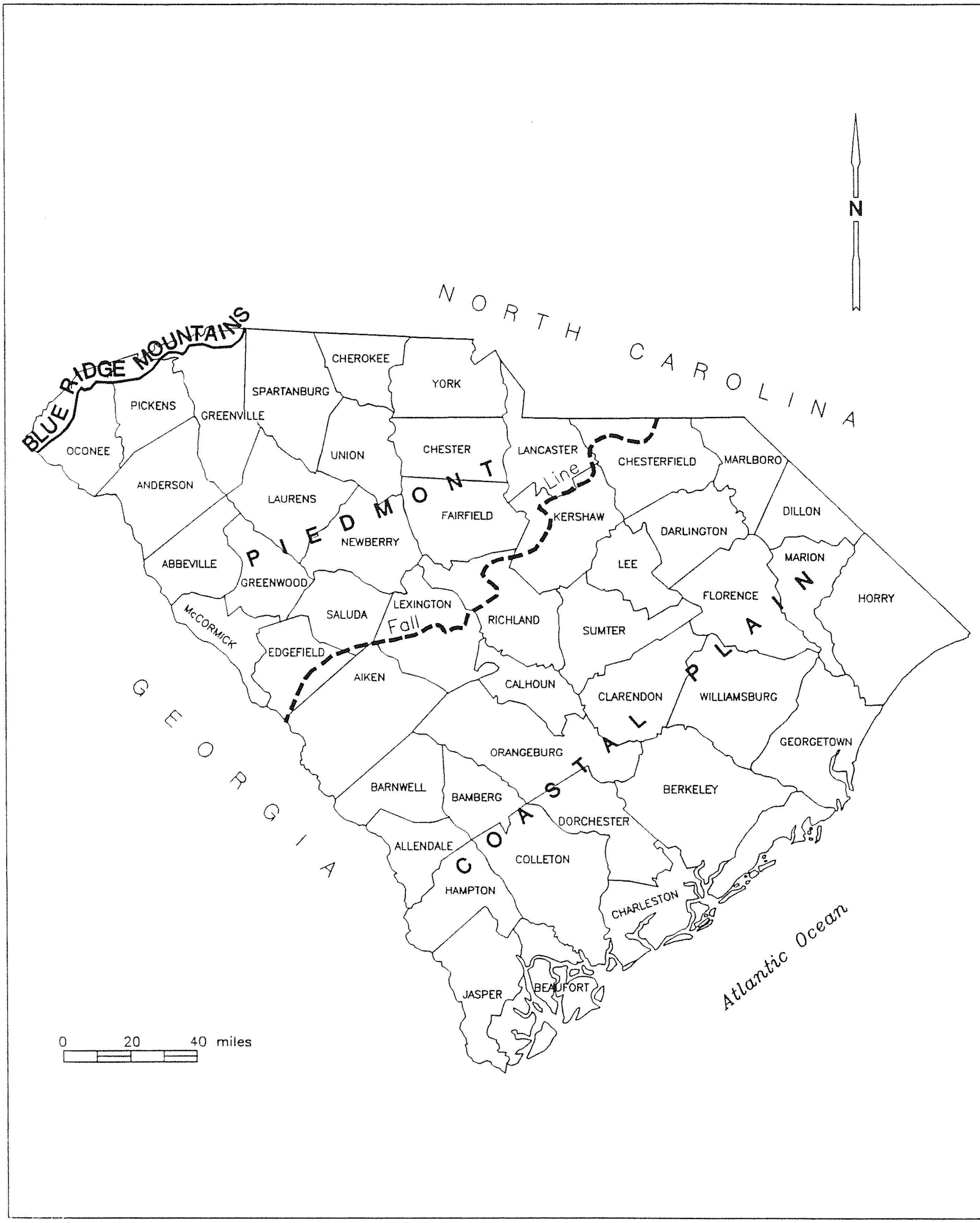

Figure 1. Counties and physiographic provinces of South Carolina.

once lapped against the mountain front. With declines in sea level, or additional uplift of the land, erosion progressed to its present extent—in which the northwestern third of South Carolina has been denuded of sedimentary material and the other two-thirds of the State southeastward from the Fall Line is occupied by the aforementioned wedge, 0 to 4,000 feet thick, of sand, clay, and limestone (Figs. 2 and 3).

The hydraulic character of the aquifers in the Coastal Plain deposits is so different from that of the aquifers in the Piedmont rocks that separate discussions are required, probably even separate concepts. Wells screened in the sandy aquifers throughout most of the Coastal Plain produce as much as 3,000 gpm (gallons per minute). Unscreened (open-hole) wells that are completed in the permeable limestone aquifers at the south end of the State also yield large amounts of water. In the Piedmont region, on the other hand, the water occurs in cracks and joints in the hard crystalline bedrock and overlying saprolite, where few wells yield more than 50 gpm—the great majority less than 30 gpm—and dry holes are common. Pumping tests made in the Piedmont wells produce data plots that generally are incompatible with the hydraulic solutions routinely applied in porous-medium environments. This report will deal only with Coastal Plain pumping tests.

Previous Studies

Pumping tests to determine aquifer and well hydraulic characteristics and pumping effects have been a part of several areal investigations in South Carolina. Data and analyses were included in reports by Hayes (1979), Hughes and others (1989), Meadows (1987), Newcome (1989), Park (1980), and Siple (1957, 1967, and 1975). Several other reports touched briefly on aquifer and well hydraulics. The only previous report to deal specifically with pumping-test results was by Aucott and Newcome (1986). The present study is an enlargement of the last-named above.

Acknowledgments

The cooperation of the consulting engineers, well drillers, and public-supply water managers of the Coastal Plain region in South Carolina is gratefully acknowledged. They graciously supplied the writer with copies of pumping-test and well-construction data even though they had previously submitted these data to another State agency. Without the help of these people, many of the tests would have been obtained only with difficulty, if at all. It is hoped that this report will be of significant use to the groups here acknowledged.

PUMPING TESTS

Number and Types of Tests

At the time of this writing, the files of the Water Resources Commission contain approximately 475 interpretable pumping tests made at Coastal Plain wells. Another 100 tests are uninterpretable. The tests that provide useful hydraulic values contribute to our knowledge of:

(1) how much water the aquifers can be expected to yield to wells,
(2) how much water wells can be expected to produce,
(3) the effects wells will have on one another, and
(4) the efficiency of wells.

About one-tenth of the pumping tests are interference tests, involving a pumped well and one or more observation wells; the remainder are one-well tests in which the discharge and all water-level measurements were made in the pumped well. Both kinds of test produce an equally reliable value for aquifer transmissivity; however, the interference test can also provide a value for confined-aquifer storage coefficient. In addition, the more observation wells there are, the more precisely can be determined the location of hydrologic boundaries. The one-well test identifies a boundary as to whether it is recharging (source of more water) or discharging (barrier to flow) and implies whether it is nearby or distant. In some interference tests the drawdown in the pumped well was not measured. Thus was lost the opportunity to determine specific capacity and well efficiency and to verify the transmissivity value indicated by water-level changes in the observation well(s).

It is held by some workers that a one-well test cannot be used to measure aquifer transmissivity unless the well is fully efficient—that is, the water levels in the well and in the aquifer immediately outside the well are the same during pumping. This is an erroneous belief. The effect of less-than-full efficiency, which is a result of head loss as water moves from the aquifer into and up the well, is to lower the pumping level. For example, a well with 50-percent efficiency would have

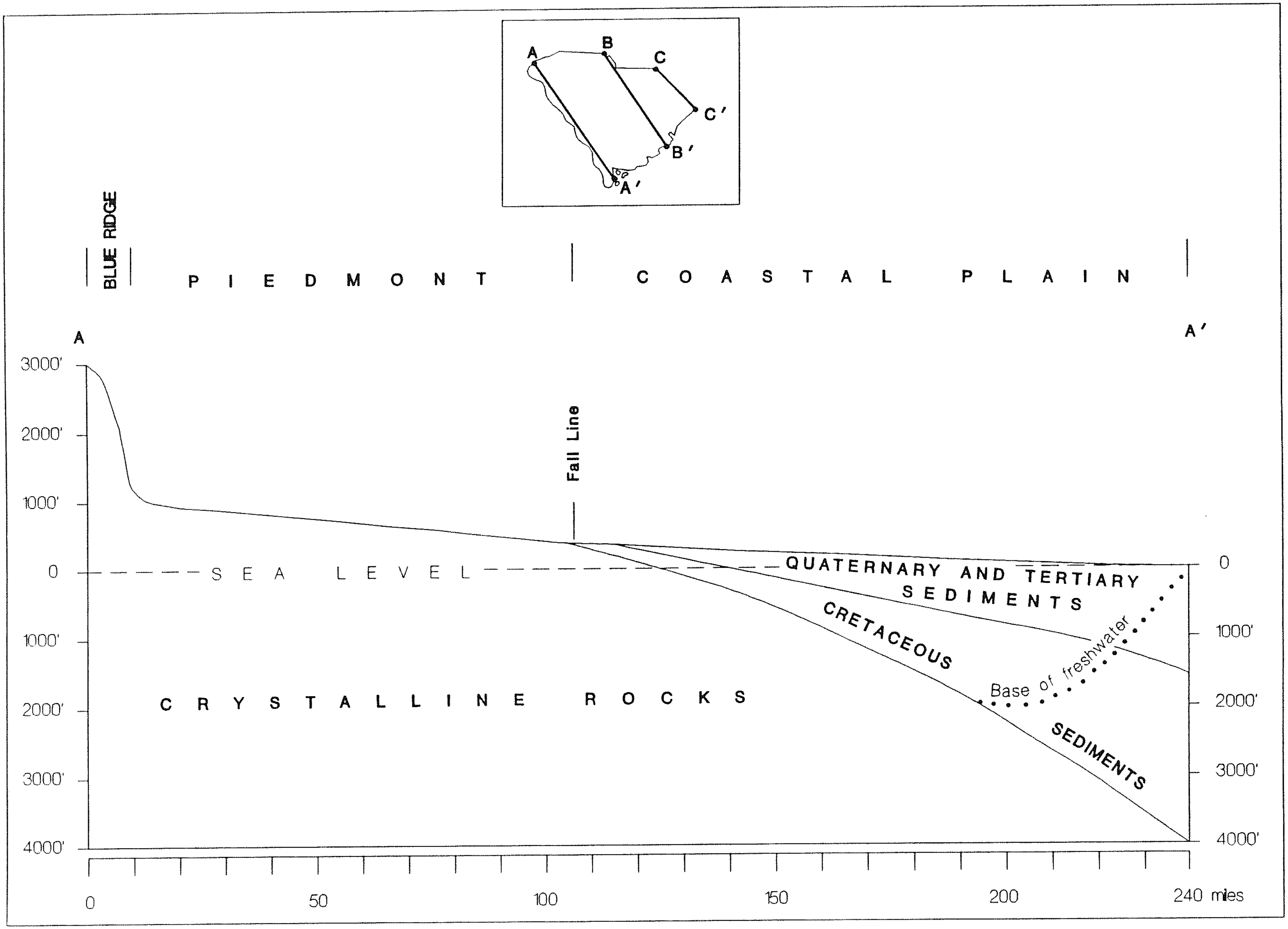

Figure 2. General geologic section along the western edge of South Carolina.

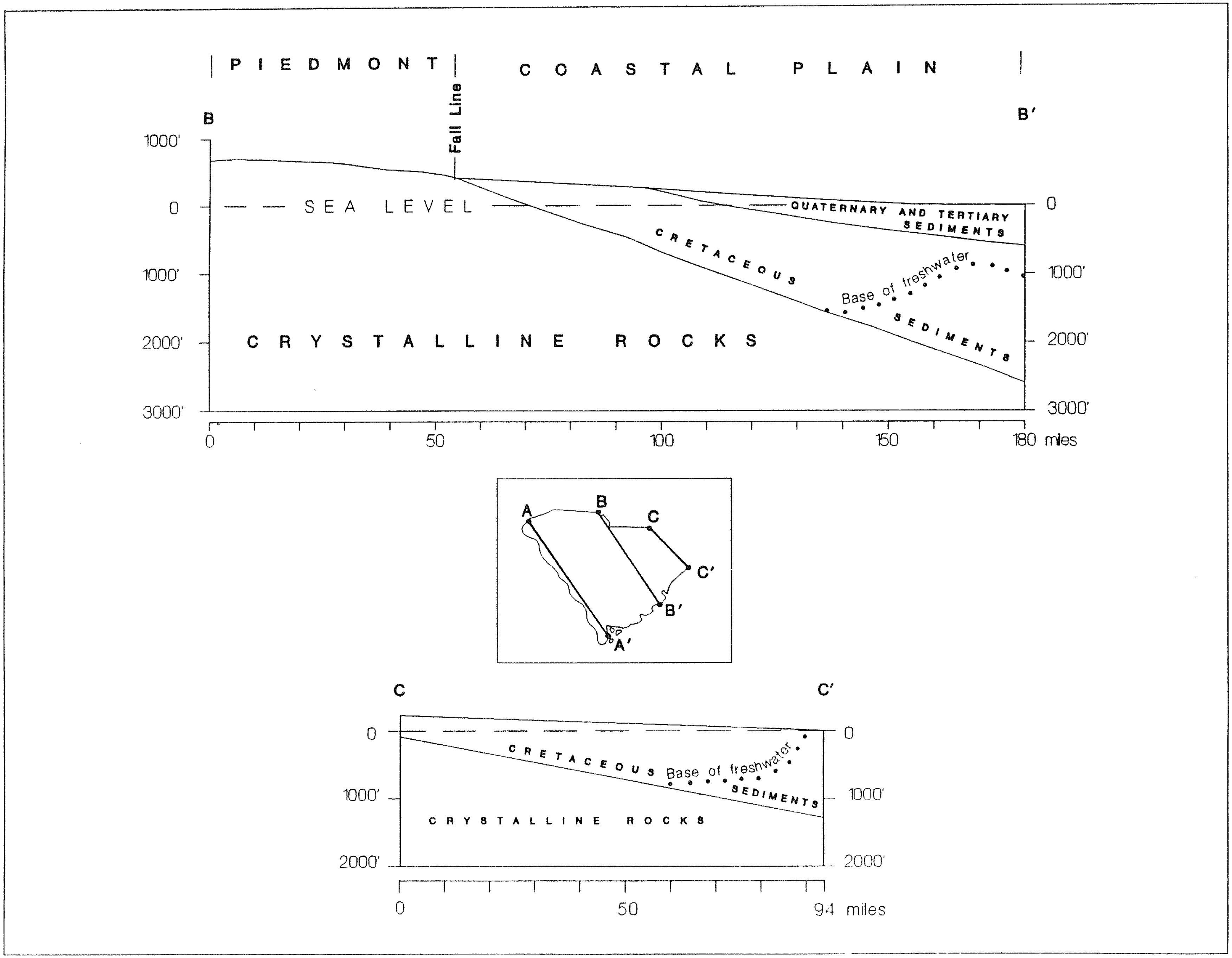

Figure 3. General geologic sections through central and eastern South Carolina.

twice the drawdown of a fully efficient well for the same pumping rate.

When a well pump is started, the water level in the well rapidly falls most of the total distance it will fall, regardless of how long pumping continues. Various factors influence this decline; discharge, aquifer transmissivity and storage coefficient, and well efficiency. Any effect of inefficiency is reflected in the first few minutes of pumping, and the rate of water-level decline after that is irrespective of well efficiency. Thus, the plotting of water level versus the logarithm of elapsed time is a straight line after a few minutes of pumping and is merely displaced vertically on the graph by well inefficiency. This straight-line plot can be analyzed by the modified nonequilibrium formula of Jacob (1950):

$$T = 264Q/\Delta s$$

in which

- T is transmissivity, in gallons per day per foot of aquifer width,
- Q is the pumping rate, in gallons per minute, and
- Δs is the drawdown or recovery across a log cycle of time.

A hydrologic boundary can be identified on a data plot by the doubling or halving of the slope of the drawdown plot. Doubling reflects a discharging boundary, which might be a pinchout, blocking, or other limitation of the aquifer; and halving reflects a recharging boundary, which might be a nearby surface-water body or leakage from another aquifer.

Other plotting methods and variations of the Jacob formula are available for analyzing pumping-test data. The Theis nonequilibrium formula of 1935 is commonly used for analyzing observation-well data. Additional methods are included in the referenced sources.

Distribution of Tests

Recorded pumping tests are fairly well distributed, regionally, in the Coastal Plain (Fig. 4). Among the counties, Horry, where until recently Myrtle Beach was one of the State's heaviest users of wells, has the most (95). Chesterfield and Clarendon Counties have the fewest tests (2 and 3, respectively). Other counties with a large number of tests are Beaufort (48), Georgetown (33), and Florence and Sumter (31 each). The concentration of tests is not always representative of the quality of the hydraulic information; several nearby tests of the same aquifer may provide little more information than one test. Multiple tests may, however, verify or refute one another and thereby serve as a useful check.

Distribution of pumping tests among the aquifers is very uneven—the Cretaceous aquifers account for nearly three-quarters of the tests. The reasons for this are obvious: Cretaceous aquifers are the only ones represented virtually throughout the Coastal Plain (Fig. 5); and, except for the areally restricted Floridan aquifer, they are the most productive and hence the most developed for large water supplies. The Floridan, despite the small area in which it is available in South Carolina, accounts for 15 percent of the tests. Other aquifers (see the stratigraphic column) are each represented in 5 percent of the tests, or less.

It should be noted here that designation of the Cretaceous formations as Peedee, Black Creek, Middendorf, and Cape Fear in the stratigraphic column and in the pumping-test table (first three only) is in accordance with general usage in South Carolina. Authorities differ considerably on placement of the formational contacts. For this report the geologic sections and structure contour maps of Colquhoun and others (1983) were used in assigning aquifer names to the tests. Practically, a general designation that differentiates only between the upper and lower parts of the Cretaceous section in the State seems adequate from a hydrologic standpoint. Breakdown of the Floridan aquifer in its updip area follows Logan and Euler (1989).

Meaning and Application of Transmissivity

The transmissivity of an aquifer is the number of gallons of water per day that would flow through a section of that aquifer that is 1 ft wide and the full saturated height of the aquifer, under a hydraulic gradient of 1 ft per foot (unit gradient). Obviously, hydraulic gradients in nature are only a small fraction of the unit gradient, so when a transmissivity value is used to estimate how much water is moving through an aquifer it may be done by use of the formula $Q = TIL$, in which

- Q is the number of gallons per day,
- T is the transmissivity, in gallons per day per foot of aquifer width,
- I is the hydraulic gradient, in feet per mile, and
- L is the width of the aquifer section, in miles, through which the water is flowing.

STRATIGRAPHIC COLUMN FOR THE COASTAL PLAIN

IN SOUTH CAROLINA

<table>
<tr><th rowspan="2">SYSTEM</th><th rowspan="2">SERIES</th><th colspan="3">FORMATION</th></tr>
<tr><th>UPDIP AREA 1/</th><th colspan="2">DOWNDIP AREA</th></tr>
<tr><td rowspan="2">QUATERNARY</td><td>HOLOCENE</td><td>Valley alluvium</td><td colspan="2">Shallow coastal deposits</td></tr>
<tr><td>PLEISTOCENE</td><td colspan="3">Terrace deposits</td></tr>
<tr><td rowspan="7">TERTIARY</td><td>PLIOCENE (?)</td><td>(Missing)</td><td colspan="2">Waccamaw
(Northeast coastal area)</td></tr>
<tr><td>MIOCENE</td><td>(Missing)</td><td colspan="2">Hawthorn
(Southwestern two tiers of counties)</td></tr>
<tr><td>OLIGOCENE</td><td>(Missing)</td><td colspan="2">Cooper</td></tr>
<tr><td rowspan="3">EOCENE</td><td>Barnwell</td><td rowspan="3">Floridan aquifer</td><td>Ocala Limestone</td></tr>
<tr><td>McBean / Santee Limestone</td><td rowspan="2">Santee Limestone</td></tr>
<tr><td>Congaree</td></tr>
<tr><td>PALEOCENE</td><td colspan="3">Black Mingo</td></tr>
<tr><td>CRETACEOUS</td><td>UPPER CRETACEOUS</td><td colspan="3">Peedee
Black Creek
Middendorf
Cape Fear</td></tr>
<tr><td colspan="5">CRYSTALLINE ROCKS</td></tr>
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1/ Mostly from Logan and Euler, 1989.

Note: Major aquifers are underlined. Minor formations of little hydrologic significance are not included.

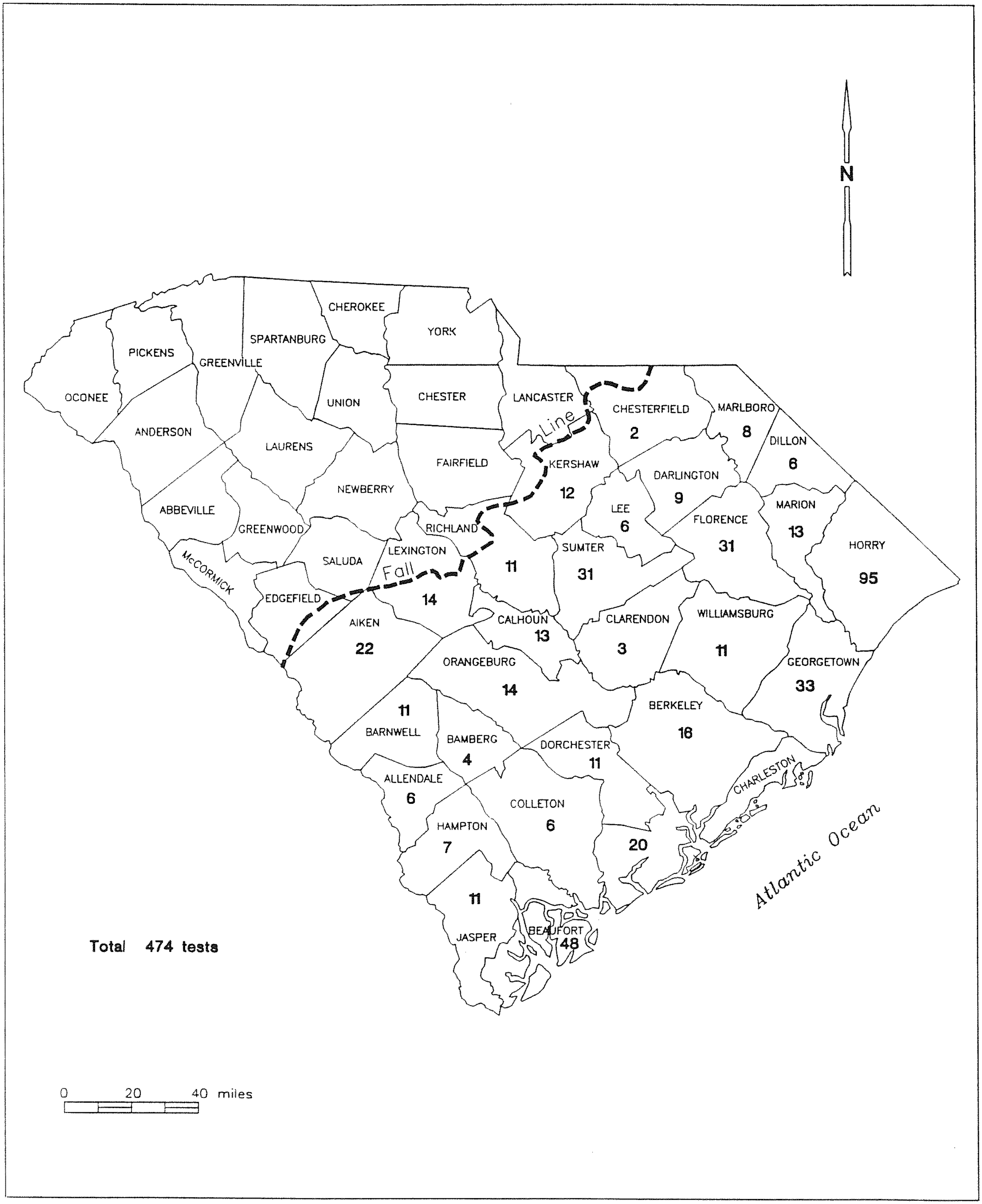

Figure 4. Distribution of pumping tests in the Coastal Plain counties.

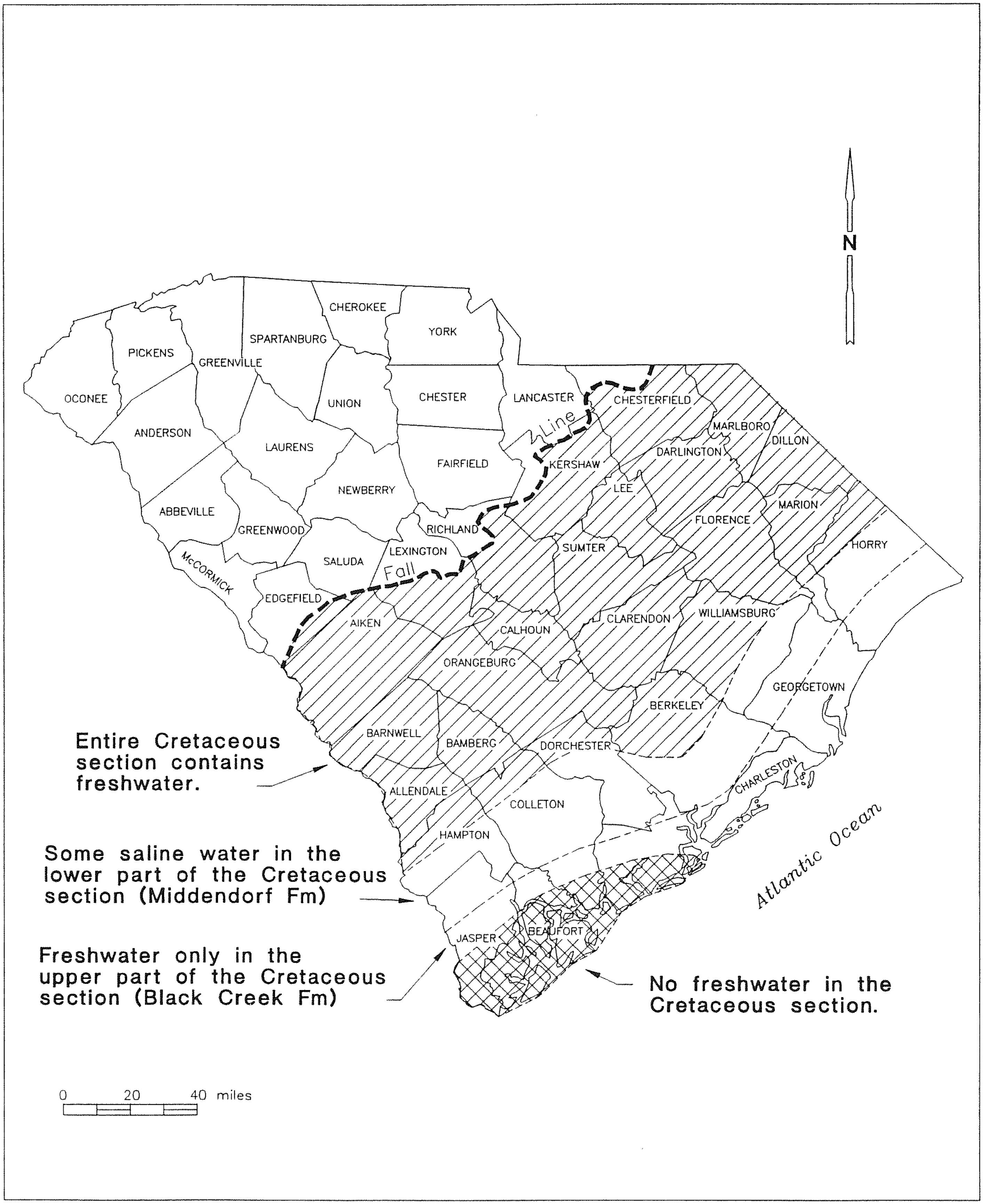

Figure 5. Distribution of freshwater in the Cretaceous section.

A more common use of transmissivity is in calculating how much water can be obtained from wells. The specific capacity of a well is the number of gallons per minute it will produce for each foot the water level is drawn down. This quantity is chiefly a function of the aquifer transmissivity, with the aquifer storage coefficient and well efficiency having important influences. A useful rule-of-thumb has it that the specific capacity of a fully efficient well in a confined aquifer having a transmissivity below 100,000 gpd/ft will be about 1/2,000th of the transmissivity. For aquifer transmissivities above 100,000 the ratio gradually becomes smaller. Of course, the specific capacity to be expected for any combination of transmissivity, storage coefficient, and well size can be calculated from the Theis equation. Once the specific capacity of a well is known, it is a simple matter to multiply it times the available drawdown (number of feet between the static water level and the top of the aquifer) to obtain the maximum feasible well yield.

Note again the important effects of well efficiency on specific capacity. If a well has poorly sized screen openings or faulty gravel-pack design, if it has insufficient screen length, or if it is incompletely developed, it can be expected to be less than fully efficient—meaning that more head outside the well is required to push water into the well. Because specific-capacity determinations are subject to the effects of inefficiency, they should not be used (multiplied by 2,000) to calculate aquifer transmissivity, except to obtain a conservative value for planning purposes.

A third use of transmissivity is for predicting the effects that wells will have on one another. This is a vital concern for well-field planning, so that interference between wells can be kept to an acceptable degree. The variables employed with transmissivity for predicting pumping effects are storage coefficient, pumping rate, distance, and time. Specific capacity of wells does not enter into these calculations, since it is a well property and not an aquifer property.

Variation in Transmissivity

A simple analysis of the transmissivity values reveals how the several aquifers differ from one another and vary areally in their water-yielding capacity. This is illustrated on the maps of Figures 6-11 for the formations that can be considered to contain major aquifers. They are discussed here from oldest to youngest.

Middendorf Formation (lower part of Cretaceous section)

This unit underlies the entire Coastal Plain and contains freshwater (dissolved-solids concentration less than 1,000 milligrams per liter) to within 10-25 miles of the coast (Fig. 5). A quarter of the pumping tests on which this report is based were made at Middendorf wells; another 7 percent (33 tests) were made at wells that most likely tap both the Middendorf Formation and the overlying Black Creek Formation.

The range in transmissivity calculated from 125 Middendorf pumping tests is 950 to 230,000 gpd/ft (gallons per day per foot), and the median value is 21,000. Median values and ranges, by county, are given on Figure 6, which shows the Aiken-Orangeburg Counties area with the highest values, suggesting that here is where the Middendorf is the most transmissive. The Richland-Sumter-Lee-Clarendon Counties area appears to be the second-most favorable, but a large untested area between Aiken-Orangeburg Counties and the downdip limit of freshwater in the Middendorf may also reveal high transmissivities.

Black Creek Formation (upper part of Cretaceous section)

The Black Creek underlies all of the Coastal Plain except for a narrow strip just southeast of the Fall Line (Fig. 7). It contains freshwater everywhere but the southern parts of Jasper, Beaufort, Colleton, and Charleston Counties (Fig. 5). A third of the pumping tests were made at wells tapping the Black Creek aquifers. The wells testing the Black Creek and Middendorf together were mentioned earlier, and there are a few tests (less than 10) in which the wells tap the Black Creek and overlying aquifers. Two thirds of the Black Creek tests were made in Horry and Georgetown Counties.

The range in transmissivity indicated by 156 pumping tests is 370 to 170,000 gpd/ft, and the median is 12,000. Horry and Georgetown Counties account for 107 of the 156 Black Creek tests, but the median value without those tests remains the same. Median values and ranges, by county, are given on Figure 7. As with the Middendorf Formation (lower part of Cretaceous section), the highest transmissivity appears to be in the northwestern quadrant of the Coastal Plain, specifically Orangeburg and Calhoun Counties and the area to

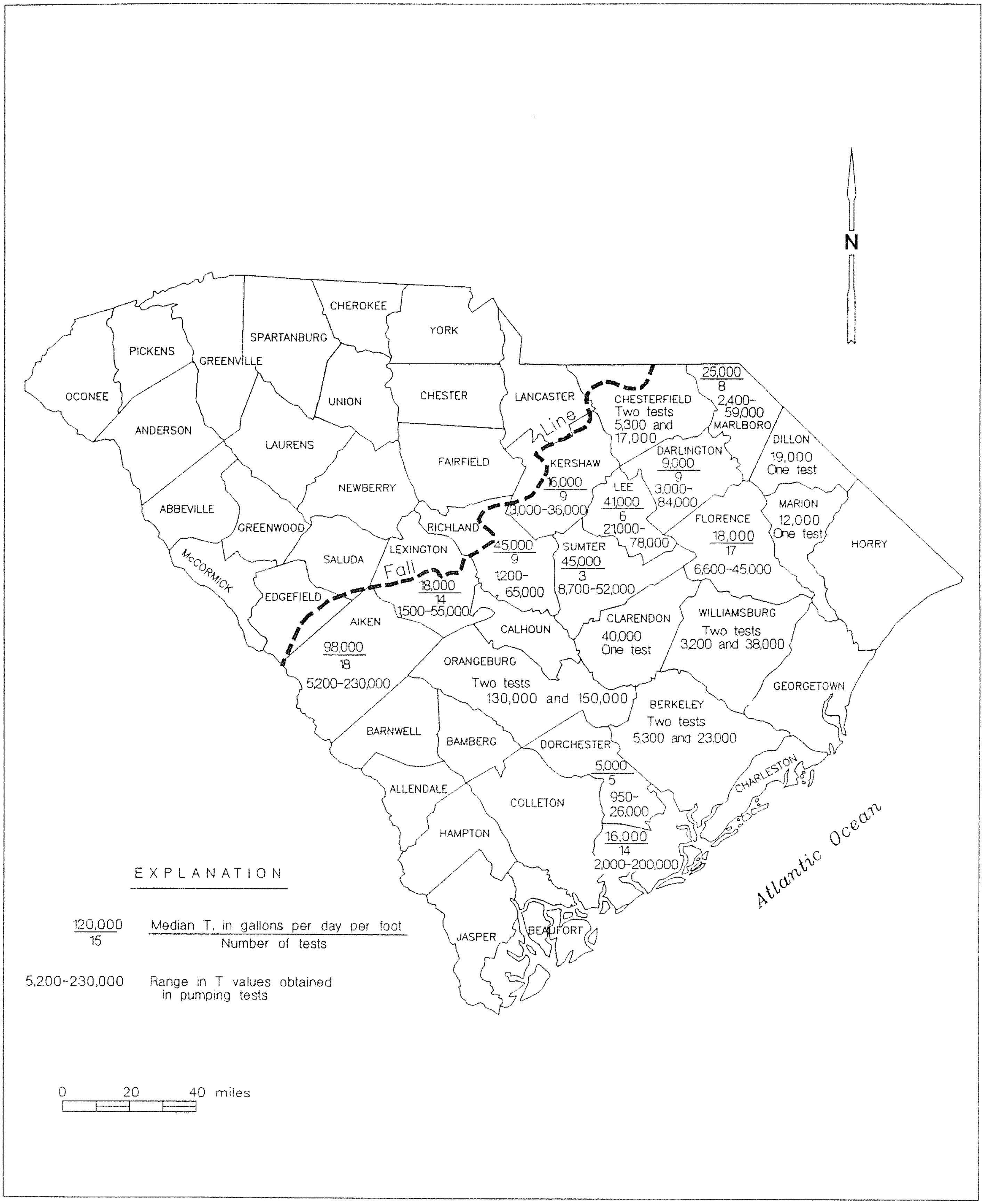

Figure 6. Median transmissivity and range indicated by pumping tests of wells in the Middendorf Formation.

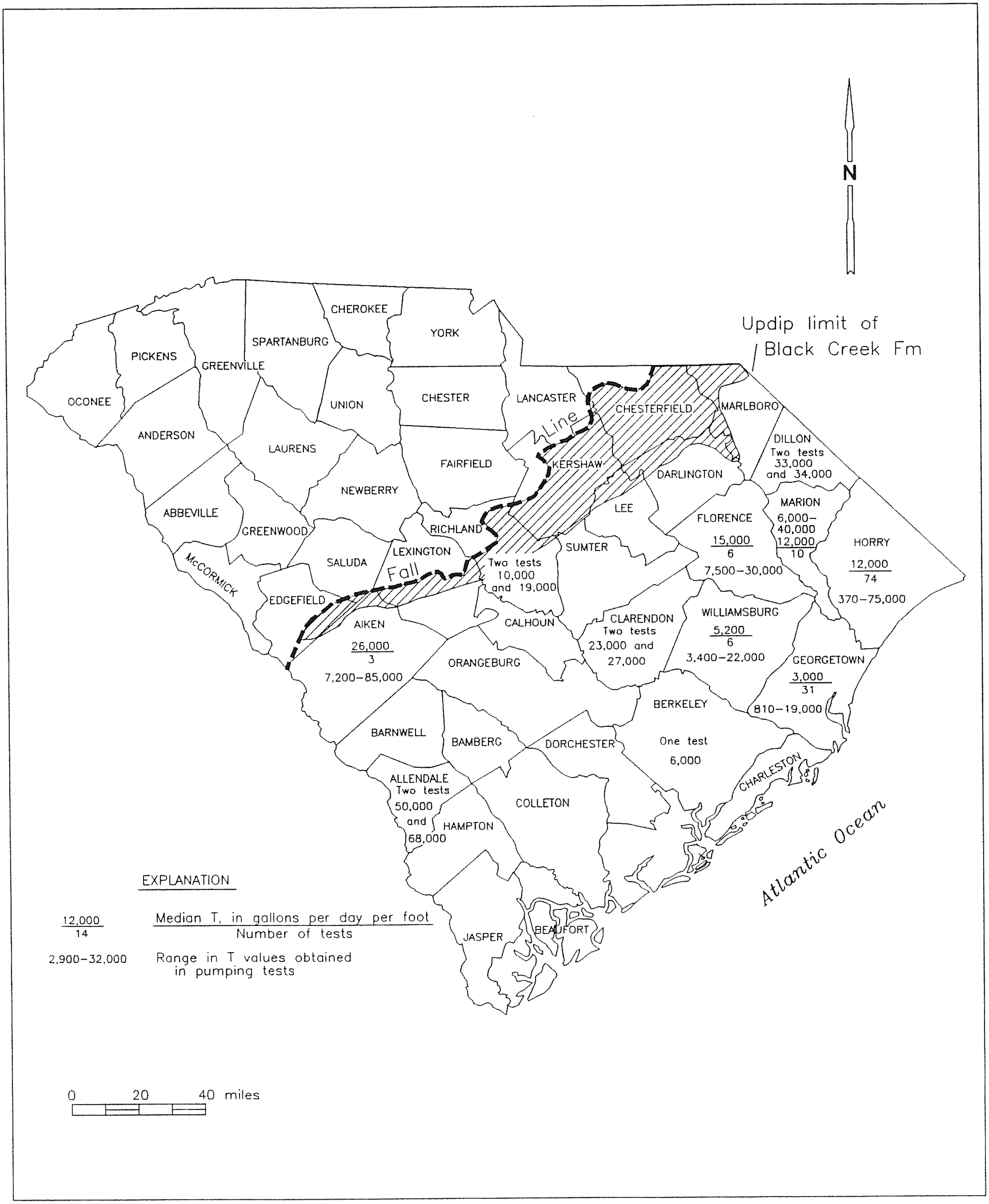

Figure 7. Median transmissivity and range indicated by pumping tests of wells in the Black Creek Formation.

the west. The large area between the one just mentioned and the downdip limit of freshwater is untested and might show high transmissivities in the Black Creek aquifers as well.

More than 20 tests are available for wells that tap aquifers in both the Black Creek and Middendorf Formations in Sumter and Florence Counties (Fig. 8). These tests indicate composite transmissivities ranging from 7,700 to 100,000 gpd/ft, with the median at 40,000. A few other dual-formation tests are available in scattered localities. One worthy of mention is in Barnwell County, where a transmissivity of 110,000 gpd/ft was indicated.

Peedee Formation

The Peedee is the uppermost Cretaceous unit. It usually functions as a confining bed and rarely contains significant water-producing zones. Six pumping tests indicate transmissivities ranging from 1,000 to 32,000 gpd/ft, with a median of 2,300. Minor aquifers in the Peedee are occasionally screened in combination with those in the next higher Black Mingo Formation.

Black Mingo Formation

The Black Mingo is an important source of water supplies in a limited area in the central part of the Coastal Plain. As often as not it is screened in combination with the overlying Santee Limestone (lower part of the Floridan aquifer). Tests of 15 wells screened only in the Black Mingo revealed transmissivities ranging from 1,200 to 30,000 gpd/ft, with a median value of 6,200. The greatest transmissivity appears to be in the Calhoun County area (Fig. 9), but more pumping tests are needed to substantiate this. The Black Mingo is missing in the northeastern third of the Coastal Plain in South Carolina.

Floridan Aquifer

The Floridan aquifer is present in the southwestern half of the Coastal Plain. In the inland half of this area, only the lower part of the Floridan (Santee Limestone and its equivalents) is present. In the seaward half, both lower and upper parts of the Floridan are present, but nearly all water-well development is in the upper part (Ocala Limestone and its equivalent, the Barnwell Formation).

High transmissivities are typical of the Floridan aquifer, especially the Ocala Limestone portion. Pumping tests at 77 wells indicated a range in transmissivity from 2,400 to 740,000 gpd/ft for the Floridan, with a median of 120,000. Ranges and medians for individual counties are given on Figure 10. The aquifer is most prolific in Beaufort and Jasper Counties.

The Bamberg-Berkeley-Colleton-Dorchester Counties area has a number of wells that tap both the Santee Limestone and the underlying Black Mingo Formation. Results of 13 pumping tests show a range in composite transmissivity from 1,000 to 20,000 gpd/ft and a median value of 6,800.

Shallow Aquifers

Near-surface aquifers in the Hawthorn and Waccamaw Formations of Tertiary age and in coastal deposits of Quaternary age are important sources of water in some places. Water in these deposits may be under confined or unconfined conditions, depending on the geologic situation. Many wells in the coastal counties tap these aquifers. Pumping tests at 23 sites, mostly in Horry County, indicate transmissivities ranging from 1,000 to 40,000 gpd/ft, with a median of 4,600. See Figure 11 for test data by county. A limiting feature of wells in the shallow aquifers is the lack of sufficient available drawdown to support large yields.

Shortcomings of Tests

Considering all the deficiencies that are apparent in pumping tests, aside from the failure of all hydrologic situations in nature to conform with the rigid requirements of the hydraulic theories, it may seem surprising that we obtain what we consider to be useful values from our efforts. There are several responses that can be offered to partially allay doubts.

First, we learn to compromise. Realizing that we are most unlikely to ever have the complete control of the situation that the equations in textbooks specify, we do the best we can with what we have—hopefully trying not to delude ourselves as to the reliability of our findings.

Second, we—wittingly or not—deal in relative values. We evaluate aquifers and areas in relation to one another and rely not completely on absolute numbers. This is only natural in a region such as South Carolina's

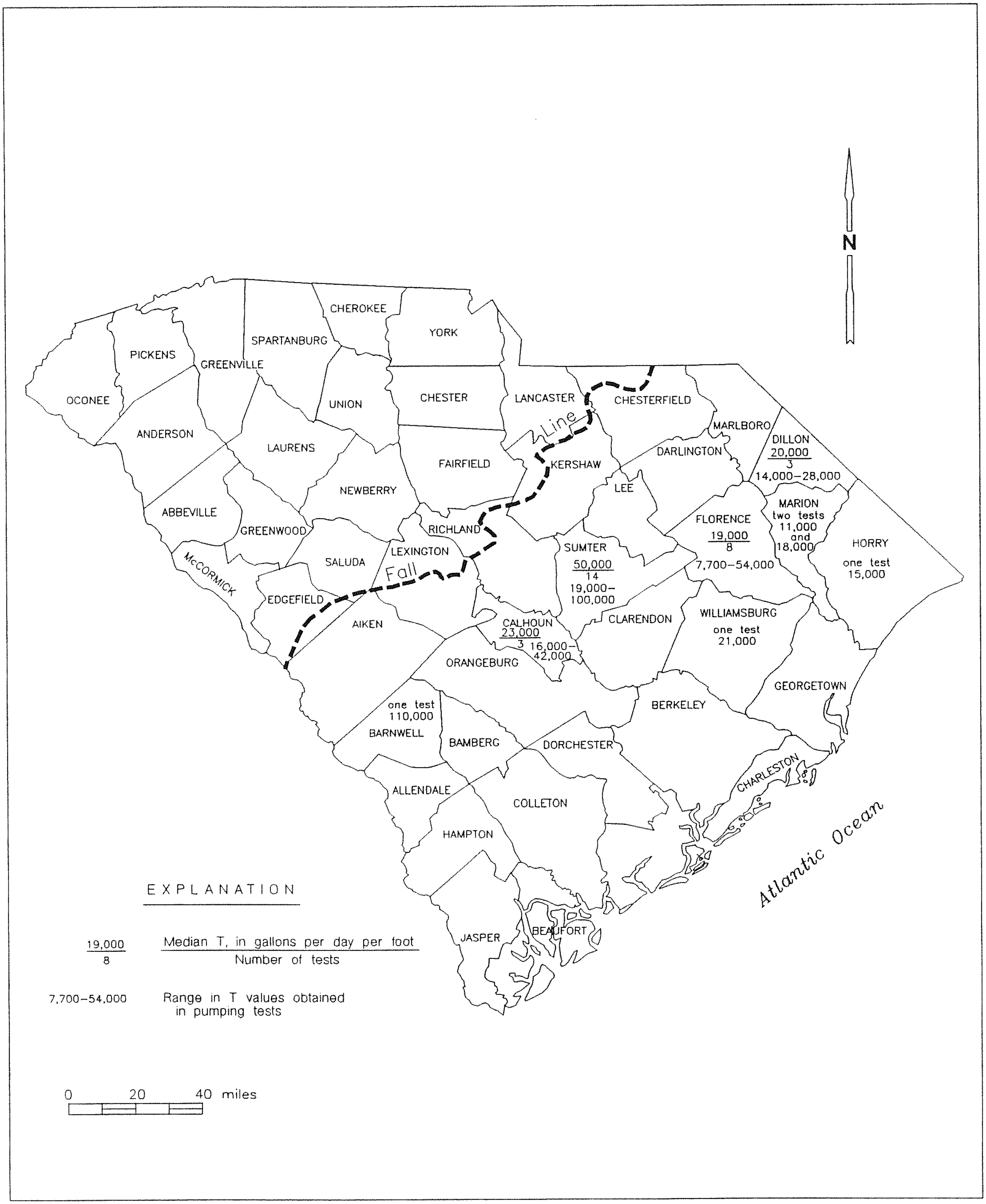

Figure 8. Median transmissivity and range indicated by pumping tests of wells tapping aquifers in both the Black Creek and Middendorf Formations.

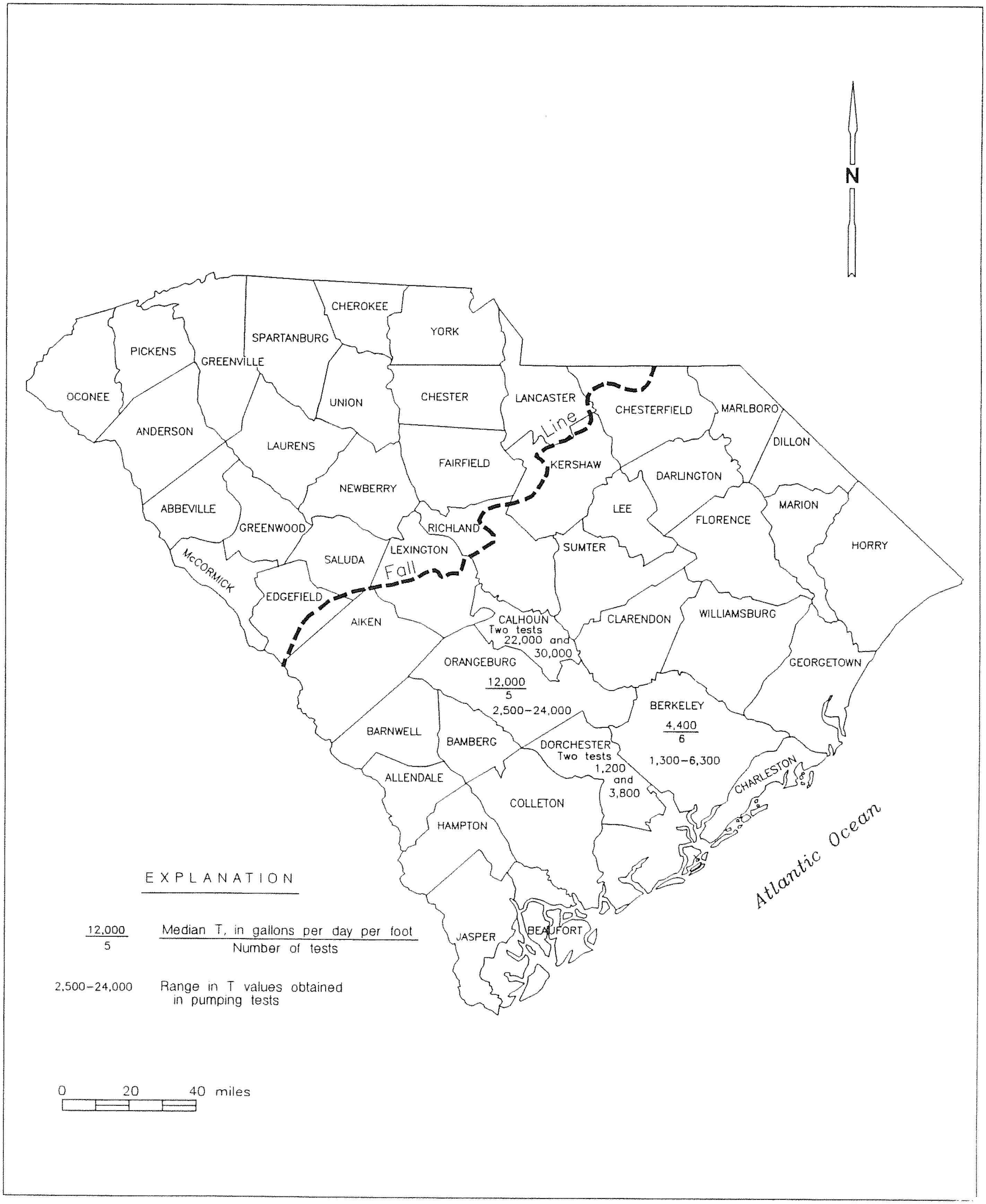

Figure 9. Median transmissivity and range indicated by pumping tests of wells in the Black Mingo Formation.

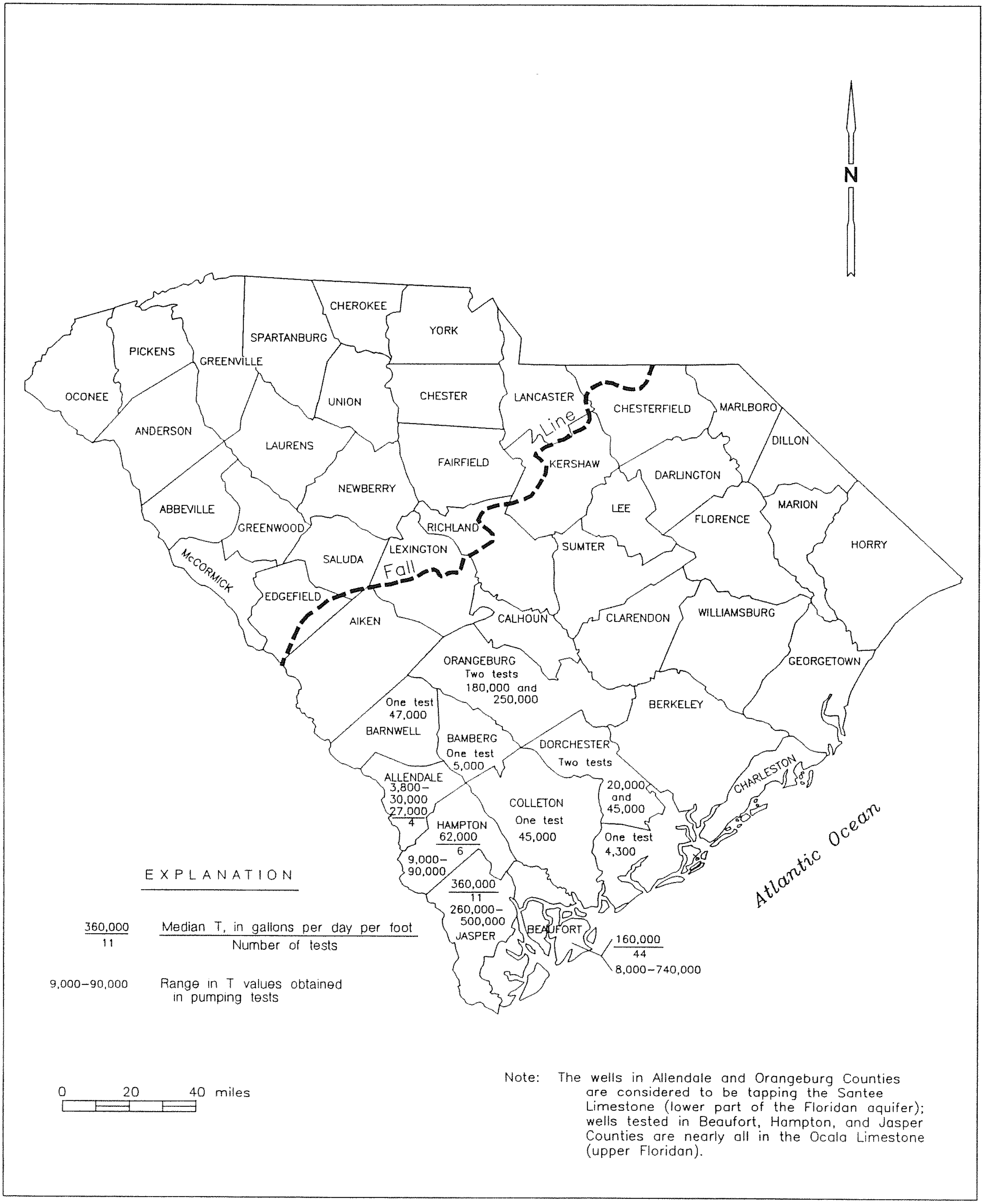

Figure 10. Median transmissivity and range indicated by pumping tests of wells in the Floridan aquifer.

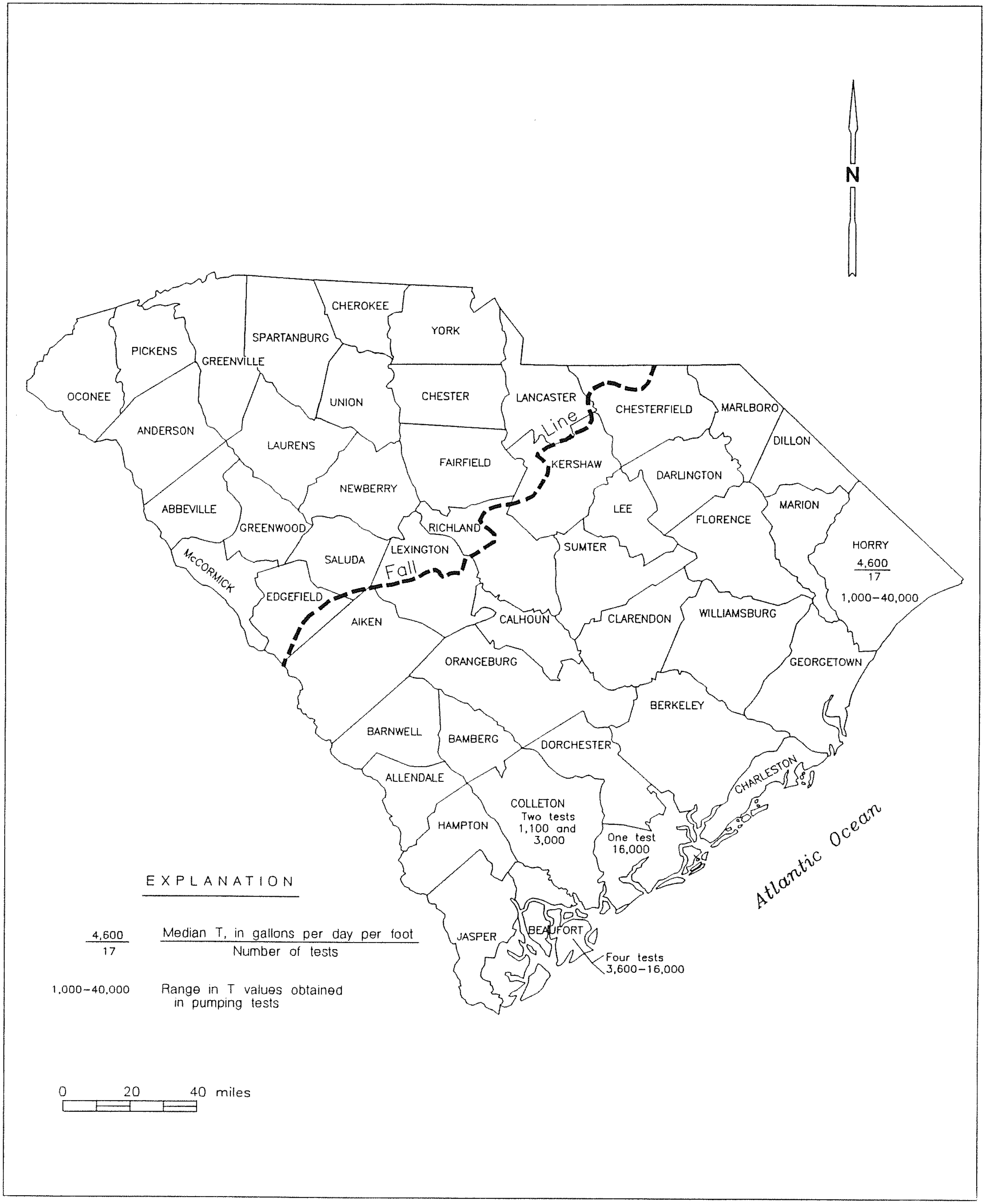

Figure 11. Median transmissivity and range indicated by pumping tests of wells in the shallow aquifers.

Coastal Plain, where the aquifers that are commonly tapped for critical water supplies range in transmissivity from a few hundred to more than half a million gallons per day per foot. Just comparing numbers like this requires rationalizing.

Third, we look for reasonable numbers, weighing them against our knowledge of the geology and well construction in each situation, and we use the tests to verify or refute one another.

Having presented the philosophical setting, we can discuss the specific shortcomings of pumping tests and their effects on hydraulic analysis. What follows is a summary of this author's observations and conclusions gained as a result of directing and analyzing several hundred pumping tests over three decades in three southeastern states. Little of it will be found in textbooks and some of it may be technically indefensible. It is left to the reader to decide what is useful and take the rest with the proverbial grain of salt.

Effects of Multiaquifer Screening

It is the general practice in South Carolina's Coastal Plain to screen several aquifers in a large or deep well. This has the advantage of providing the most water possible from the well. In some wells there are more than 15 screened intervals, and 4 or 5 is almost a rule. Where a thick aquifer contains several short screen lengths distributed through the full aquifer interval, the well owner probably is receiving the best value for his cost, and pumping tests provide the most reliable hydraulics data. Where two or more aquifers are screened in the same well, however, especially if they are separated by many feet of clay or unscreened aquifer material, there sometimes are difficult-to-explain pumping-test effects. These frequently take a recharging form on the drawdown plot but not always the slope-halving effect (on the semilog graph) of a true recharging boundary. They are usually not present on the recovery plot, and this is disconcerting to the analyst.

Here is the scenario envisioned by this writer: The static water levels of two well-separated aquifers are likely to differ by several feet. In addition, the hydraulic conductivities are likely to be different, perhaps greatly different. These two parameters could induce the aquifers to function in conjunction or in opposition, when a well is pumped, to produce the anomalous effects described. For example, the good aquifer would produce most of the discharge but the poor aquifer may undergo the most water-level decline. Or the poor aquifer may produce nothing until the head in the good aquifer has been reduced a given amount, then the poor aquifer comes in as a source of recharge. The composite transmissivity of the two (or more) aquifers should be that indicated after the advent of the recharge effect. This should be corroborated by the recovery plot, which, contrary to normal pumping tests, could not be expected to duplicate the entire drawdown plot, because the hydraulic relationship of the two (or more) aquifers has changed during the drawdown phase. This is an important reason to always measure recovery in a pumping test.

There can be little doubt that multiaquifer screening in wells results in reduced validity of pumping-test data. Aside from the confusion that can result from different static water levels and/or different hydraulic conductivities, there is the likelihood of different efficiencies among the screened intervals. Unless each screened interval is isolated by packers and developed individually, there might be expected great differences in the degree of development among the producing aquifers—for the interval that most readily responds to the development process may absorb most of the development, leaving the other intervals incompletely developed and with impaired efficiencies.

There is some evidence that the foregoing situation can be so extreme as to result in no production at all from some minor screened intervals, particularly where an exceptionally prolific aquifer is one of those screened. The evidence for this is the unreasonably low hydraulic conductivity that frequently is calculated when the transmissivity indicated by the pumping test is divided by the aggregate thickness of the aquifers as shown on electric logs. A hydraulic conductivity less than 100 gpd/ft^2, where a well contains several screens, should lead one to suspect that some of them are nonproducing.

Calculation of hydraulic conductivity probably should be restricted to situations in which only one aquifer is screened, preferably through a large percentage of the aquifer thickness.

For a discussion of the complicating effects of multiaquifer screening, see Papadopulos (1966).

Partial Penetration

Screening less than the full thickness of an aquifer reduces the rate at which a well will produce water for a given drawdown; in other words, it results in a lower specific capacity. For example, a well in which 50 percent of the aquifer is screened should produce 65-70 percent of the water that it would if fully screened. Screening 80 percent of the aquifer should produce about 90 percent of the available flow. This is based on the assumption of an isotropic aquifer. Since most of South Carolina's clastic aquifers are far from isotropic, the values given above are generous. Therefore, it behooves well constructors to set screen opposite a high proportion of the aquifer, probably 75 percent or more. Furthermore, it usually is better to set several short sections throughout the interval than, for instance, a single section in only the upper or lower portion.

The effects of partial penetration on pumping tests mainly concern well efficiency—as indicated by lower specific capacity than the transmissivity would suggest. The transmissivity value itself ordinarily should not be affected by partial penetration; although if clay partings or hard layers within an aquifer are sufficiently thick and extensive, part of the aquifer might be isolated if the screen ends above or below it. Then, the transmissivity would not reflect the entire aquifer.

Failure to Measure the Water Level in the Pumped Well

The water level during pumping and recovery should, if at all possible, be measured in the pumped well. There will be situations where it cannot be done, but they are very few. With innovative planning, practically every pumping well can be measured. Failure to measure it results in loss of well-performance values and verification of the aquifer transmissivity indicated by the observation well(s).

Where there is only one observation well and it indicates a transmissivity different from that indicated by the pumped well, this writer would usually place more credence in the pumped-well value. Distant observation wells, for example, often have different lithology or different construction from the pumped well. Measurements in very close observation wells may be affected by distorted flow lines. Of course, the reason for the discrepancy should be sought out.

Failure to Measure the Recovery

The most common shortcoming of pumping tests, and one of the most serious, is the failure to measure recovery of the water level following pumping. Recovery should be measured, in the pumped well and all observation wells, for a period of time equal to the pumping period. This permits the best possible check of the drawdown analysis. The recovery data ordinarily can be considered more reliable than the drawdown data, since the latter may be distorted by variations in pumping rate and by difficulties in measuring the water level in the pumping well.

The effects of partial penetration and of multiaquifer screening also are likely to distort drawdown data more than recovery data, as mentioned in the preceding sections.

Observation Well too Near the Pumped Well

An observation well nearer to the pumped well than the equivalent of twice the aquifer thickness should not be relied on to accurately reflect the aquifer's hydraulic characteristics. This is because flow lines, especially in our nonisotropic aquifers, are likely to be distorted in the vicinity of the pumped well.

The hazard is that erroneous results can mislead the analyst unless there are more distant observation wells or pumping-well measurements to alert him.

Failure to Maintain Constant Discharge

A very common and often test-nullifying shortcoming is fluctuating or constantly declining well discharge. Every effort should be made to maintain the discharge within 5 percent of the selected rate, and the closer to zero fluctuation, the better.

The worst situation is a constantly declining pumping rate—few tests can survive that. Also damaging to the pumping test is a sudden increase or decrease in discharge near the end of the test. This makes it very difficult, if not impossible, to properly analyze the recovery data—because the effective discharge is not known.

The average of several pumping rates during a test is of no value in the hydraulics formulas, because pumping effects are logarithmic, as witness the straight-line plots on log-time graphs.

In summary, the discharge must be maintained as nearly constant as it is possible to do so; and frequent, precise measurements of the discharge rate should be recorded.

Water Draining into the Well from the Surface

Pumping tests sometimes are ruined by the discharge draining back into the pumping well. This happens when care is not taken to provide adequate drainage away from the well. If the topographic situation prevents rapid natural drainage, ditching and/or piping must be provided. In some situations, plastic sheeting on the ground provides adequate protection from surface drainage.

If observation wells are in use, special care must be taken to insure that surface drainage, from the pumped-well discharge or other source, does not get into the well(s).

Failure to Measure Positive Head

Many, many good pumping tests of wells having flowing head fail to measure that head. A simple pressure-gage reading or, if the head is low, a water hose can provide that important information. Without it, there can be no direct computation of specific capacity and, consequently, no reliable value for well efficiency.

There is a way to approximate the shut-in head if the free-flow rate is known and the drawdown during pumping is measured. It can be assumed that the difference between the natural flow and the pumping discharge is the cause of the segment of drawdown below the well head. A specific-capacity value calculated from this can be applied to the free-flow rate to determine the shut-in head.

Pressure-Gage Measurements

Many wells are equipped with pressure gages to facilitate water-level readings by the operators. Where the air-line length is known and the gage and air line are in good condition, the readings can be reasonably accurate if not precise, and they may be adequate for pumped-well water levels. Such installations, however, are notoriously unreliable—because of deterioration of materials or because of unrecorded changes made during well and pump work subsequent to the original installation.

When using a pressure gage to measure the water level in a pumping well, the tester should

(1) know and record the length of the air line,

(2) be satisfied that the air line has been evacuated and is not leaking,

(3) note whether the gage is direct-reading or requires subtraction of air line length or conversion from pounds per square inch to feet, and

(4) check gage reading against a tapedown measurement, if possible.

Falsified Water-Level Measurements

The shortcomings of pumping tests so far discussed can largely be overcome; falsified measurements should never occur in the first place. The reason they occur appears to be the misguided belief by some testers that once a pumping-well drawdown has slowed to a few tenths or hundredths of a foot per hour the well can be considered "stabilized" and no further drawdown is to be expected. The same water level is then recorded for the rest of the test, usually many hours, evidently without the benefit of actually being measured. This has even happened for 23 1/2 hours of a 24-hour test.

Most of the 100 or so uninterpretable tests in the Water Resources Commission files are in the category just described. Many of the usable tests also were cut short but had a sufficient period of legitimate measurements (several hours) for some analysis to be possible.

A few things well testers should understand are listed below:

(1) Drawdown does not cease as long as pumping continues. Although on a cartesian plot the water level may appear to level off with time, it really does not. The same data plotted as a semilogarithmic graph will show that, after the early minutes while the effects of well-entrance losses and casing storage are being absorbed, drawdown proceeds in a straight line. If no hydrologic boundaries are intercepted, the drawdown will be the same across each log cycle of time—that is, it will be the same amount from 100 to 1,000

minutes that it is from 1,000 to 10,000 minutes, from 10,000 to 100,000 minutes, and so on. There is no point at which it levels off and plots as a horizontal line on this graph.

(2) The effects of hydrologic boundaries, while often not observable on a cartesian plot of water level versus time, are identified on a semilog plot by the halving (for a recharging boundary) or doubling (for a discharging boundary) of the slope of the straight line described in (1). The effect on the recovery plot should be same. If the recovery plot does not duplicate the drawdown plot, something is amiss and the cause should be sought out.

(3) The terms "stabilized," "equilibrium," and "steady state" do not mean what many workers in the hydrology field, including some textbook writers, think they mean and are better left unused in day-to-day field testing of water wells.

(4) It is immediately obvious to an experienced pumping-test analyst when measurements have been falsified. It is a poor bargain for a tester to trade his integrity for a night's uninterrupted sleep or an early end to the day's work.

(5) The interval between water-level measurements in a pumping test can be stretched out as the test progresses. As few as 17 measurements in a 24 hour pumping period (and the same for recovery) can provide a good set of test data. If the tester will obtain an 8 1/2 x 11 inch sheet of 4-cycle semilog graph paper and mark off every 1/2 inch from the left margin, it will show him a good measuring schedule that will apply whether the time scale begins at 1 minute or 10 minutes. Near the end of 1 day's pumping the measurements would be 6 to 7 hours apart. Many tests have more measurements than necessary, probably because it seems easier to think in terms of measuring every 10 minutes or every hour than to set up a schedule as just described. If the tester feels that 17 measurements in 24 hours is too few, he can halve the interval and still be making only 33 measurements, the last few 3-4 hours apart.

Tests that require correction for tidal influence must have more frequent water-level measurements, generally the more the better, and there should be prepumping water-level measurements through several tidal cycles.

EXPLANATION OF TABLE OF PUMPING-TESTS RESULTS

The 28 South Carolina counties that are entirely or partly in the Coastal Plain are arranged alphabetically. Only the pumping tests of wells tapping Coastal Plain aquifers are described.

County well no.: The sequential number of the pumped well, by county, in Water Resources Commission files.

SCWRC no.:	The number indicating location of the pumped well on the Water Resources Commission grid. Wells are accessed in the SCWRC files by this number.
Location:	The town or locality where the pumping test was made. Distances and directions are from town centers.
Elec. log:	Marked with "X" if an electric log is available.
Depth:	Completed depth of well, in feet.
Aquifer/thick.:	Abbreviation for formation or other unit tapped by pumped well/thickness of aquifer, in feet

The following abbreviations are used -

Al, alluvium

Shal, shallow

C, Congaree

F, Floridan

S, Santee

BM, Black Mingo

E, Ellenton

PD, Peedee

BC, Black Creek

M, Middendorf

Assignment of aquifers is, in general, based on maps and sections by Colquhoun and others (1983); however, assignments in Allendale, Bamberg, and Barnwell Counties rely on Logan and Euler (1989) and those in Calhoun County on work in progress by Teresa Greaney of the Water Resources Commission.

Date of test: Month/day/year

Duration (dd/recov):	Hours of drawdown phase/hours of recovery phase. Given to nearest half-hour.
Static WL:	Water level, in feet below surface measuring point, before test began.
Pumping rate:	Pump discharge, in gallons per minute, during test. Not always constant.
Transmissivity:	Calculated from drawdown and/or recovery plots. In gallons per day per foot of aquifer width.
Storage coefficient:	Dimensionless. Calculated from data plots in multiwell tests.
Specific cap.:	Well yield, per foot of drawdown, for a 1-day period or projected to the end of 1 day to provide comparative values.
Well effic.:	The specific capacity determined by the test divided by the ideal specific capacity for the well at that site gives the well efficiency.
Hydrol. bound.:	R, recharging boundary; D, discharging boundary. No entry if no boundary indicated.
Rating of test:	E (Excellent) - Drawdown and recovery plots agree closely, or if only one plot is available it provides a definite value for transmissivity. Boundaries, if any, appear at close to same time on drawdown and recovery plots. Specific capacity is believable (well efficiency not above 100 percent). No unexplainable extraneous effects. Discharge effectively constant.

G (Good) - Narrow range in possible solutions for transmissivity. Discharge held reasonably constant. If drawdown and recovery plots do not agree closely, the reason is apparent. Specific capacity is believable. Few unexplainable extraneous effects.

F (Fair) - Plot of one phase may be clear but other unclear, or where only one plot is available it may have significantly different possible interpretations. Discharge may not have been controlled well.

P (Poor) - Plot(s) difficult to interpret or drawdown and recovery do not agree reasonably well. Extraneous effects distort plots. Discharge not held constant. Discharge substantially increased or decreased near end of test, so recovery cannot be analyzed properly. There may be a substantial range in possible interpretations of the plots.

Results of pumping tests in the Coastal Plain of South Carolina

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
AIKEN COUNTY							
AIK-419	41V-k1	Beech Island		457	M/	1/4/67	6/1.5
AIK-432	41U-a2	Graniteville (Greenfield well)		235	M/	11/17/78	24/2
AIK-440	41U-u4	Burnettown		205	M/80	5/22/69	24/3
AIK-452	39W-x1	Savannah River Site	X	695	M/200	7/7/77	12/2
AIK-460	39U-p1	Houndslake Country Club	X	283	BC/100	7/13/78	2.5/
AIK-474	42U-u1	Clearwater		269	M/	4/26/78	24/3
AIK-476	41U-v2	Burnettown		174	M/50	6/5/69	24/2.5
AIK-478	39U-k2	Aiken, 3 mi SE		200	C/	6/29/82	13/
AIK-483	37V-c1	Aiken	X	380	BC/100	8/4/78	24/4
AIK-508	40Y-i3	Savannah River Site		186	BC/	4/21/77	4/
AIK-516	39X-k6	Savannah River Site	X	855	M/110	9/3/82	24/5
AIK-538	38X-n2	Savannah River Site		860	M/	2/23/52	12/
AIK-648	38X-g2	Savannah River Site		417	M/	10/30/84	24/
AIK-821	36U-f1	Aiken State Park (Campground)		182	M/	4/14/86	24/
AIK-822	39T-b1	Aiken, 6 1/2 mi NNE	X	180	M/	11/20/84	5/1.5
AIK-830	39U-y1	Aiken (Woodside well)		473	M/	12/11/86	23/3
AIK-831	39U-y2	Aiken (Silverbluff Road well)	X	485	M/400	3/16/87	48/13
AIK-832	39U-r4	Aiken (Pinelog Road well)	X	450	M/280	5/25/87	48/2
AIK-841	41U-a5	Graniteville, 2 mi W	X	300	M/	2/5/92	24/
AIK-899	38X-n71	Savannah River Site		849	M/200	10/5/88	25/5
AIK-900	41U-r2	Burnettown, 1 mi NW		240	M/	1/27/92	24/
AIK-901	39X-k37	Savannah River Site		797	M/	9/15/86	24/2
ALLENDALE COUNTY							
ALL-27	36AA-o1	Martin (Sandoz Plant)	X	794	BC/165	11/29/77	72/3
ALL-48	33Z-y1	Ulmer		310	S/?	1/12/79	24/
ALL-66	372-q3	Martin (Creek Plantation)	X	720	BC/200	2/12/79	24/4
ALL-310	34AA-q2	Allendale		329	S/130±	5/29/80	24/3
ALL-326	33BB-p1	Fairfax	X	344	S/100±	5/4/83	24/2
ALL-353	34AA-y5	Allendale	X	343	S/?	1/23/79	24/2
BAMBERG COUNTY							
BAM-22	32X-g2	Denmark (Voorhees Road)	X	302	S,BM/135	2/22/73	24/4.5
BAM-23	32X-d1	Denmark (Tennis courts)	X	296	S,BM/75	3/22/78	24/4
BAM-24	31X-m5	Bamberg (Calhoun Street)	X	364	S,BM/110	2/19/75	4±/
BAM-26	31Z-t1	Ehrhardt	X	225	S/125	5/ /78	26/3

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
219	311	13,000		5.4	85		P
173	250	11,000		7.2	95?	R	P
104	197	95,000		11	25		P
180	2,005	70,000		31	90		F
84	120	> 26,000		22		D?	P
176	115	8,200		1.8	45		P
72	197	120,000		10	20?		P
150	77	2,400		3.0	100	D	P
138	402	85,000		12	30		P
+ 18	30	7,200		.3	10		P
148	1,005	95,000		14	35		P
111	560	200,000		60	60		F
100	374	160,000		32	40		F
Flow	88	5,200		< .8	< 30		p
	450	54,000		15	65		P
189	1,005	150,000		43	60		F
204	1,001	230,000	0.002	37	35	R	P
159	1,507	120,000		33	90	D	P
185	450	14,000		6.4	90		F
135	1,507	210,000		42	45		P
155	600	100,000		14	25	D	P
121	1,500	200,000		56	65		G
+ 5	2,150	68,000		18	50		P
22	700	30,000		14	95		P
36	1,500	50,000		16	65		P
22	752	25,000		7.4	70		G
8	298	3,800		1.3	70		P
47	550	29,000		13	90		F
28	500	6,000		3.4	100		P
48	503	10,000		4.1	80		F
+ 7	500	5,000		2.5	100		P
10	300	5,000		2.5	100		P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
BARNWELL COUNTY							
BRN-57	35Y-c4	Barnwell (Clinton Street)		320	C/145	7/25/62	24/.5
BRN-60	35Y-b8	Barnwell (Burlington Mills)		327	C,BM/125	/68	12/
BRN-61	35Y-c7	Barnwell (Burlington Mills)		315	C,BM/145	68	12/
BRN-72	36Y-e1	Barnwell Nuclear Fuel Plant	X	768	PD,BC/380	11/26/71	1,440/368
BRN-75	34W-s4	Blackville (water tank)	X	470	C,BM,PD/150	9/2/75	24/3
BRN-79	35W-f1	Williston (West and Elko Streets)	X	685	BC,M/160	1/27/78	17/6
BRN-268	37Y-f2	Savannah River Site		605	BM,E,PD/160	11/3/51	24/8
BRN-269	38Y-o1	Savannah River Site		605	PD,BC/130	12/14/52	
BRN-295	33Z-n1	Ulmer, 3 mi NW	X	200	S/100	12/12/84	3.5/26
BRN-310	38Y-d1	Savannah River Site		585	E,BC/	10/12/77	12/
BRN-369	35X-a1	Blackville, 4 mi SW	X	450	E/40	9/ /89	24/2
BEAUFORT COUNTY							
BFT-22	28HH-t7	Parris Island		84	F/	1/27/56	6/
BFT-114	27HH-o3	Parris Island		100	F/	7/1/55	235/61
BFT-115	28HH-t2	Parris Island		95	F/	1/4/75	25/
BFT-310	29LL-l1	Daufuskie Island (Haig Point)		192	F/	10/8/85	24/14
BFT-449	24JJ-c1	Fripp Island		150	F/	3/19/74	8.5/7
BFT-499	28JJ-y2	Port Victoria	X	209	F/	5/14/70	186/124
BFT-652	27KK-h1	Hilton Head Island (Hospital)		200	F/	6/7/75	8/1
BFT-671	27LL-d2	Hilton Head Island (Mariott Hotel)		221	F/	12/10/80	12/.5
BFT-758	27KK-x8	Hilton Head Island (Palmetto Dunes)		200	F/	1/26/73	24/1.5
BFT-795	27II-l5	Port Royal Clay Company		94	F/	8/27/76	5/8
BFT-985	27KK-g1	Hilton Head Plantation	X	630	F/	8/6/92	24/66
BFT-1326	28KK-d2	Bluffton, 3 mi E (Moss Creek Plantation)		200	F/	7/81	12/1
BFT-1389	28JJ-n2	Victoria Bluff	X	192	F/	3/28/83	24/
BFT-1418	29JJ-q2	Bluffton, 3 1/2 mi NNW		200	F/	6/23/82	12/1
BFT-1438	29LL-l2	Danfuskie Island		140	F/	8/7/87	10/2
BFT-1452	29JJ-m2	Bluffton, 3 1/2 mi N		200	F/	6/30/84	12/3
BFT-1560	25HH-p6	Datha Island (Alcoa Golf Course)		58	F/	11/17/83	4/1.5
BFT-1561	25HH-p8	Datha Island (Alcoa Golf Course)		50	Shal/	11/10/83	1.5/1
BFT-1566	25HH-p12	Datha Island (Alcoa Golf Course)		66	F/	11/16/83	4/.5
BFT-1570	25HH-p17	Datha Island (Alcoa Golf Course)		59	F/	11/18/83	4/.5
BFT-1589	27KK-q5	Hilton Head Island (Shelter Cove)		198	F/	4/17/86	24/1
BFT-1590	27LL-e11	Hilton Head Island (Palmetto Dunes)		198	F/	2/20/86	24/2
BFT-1591	27KK-h4	Hilton Head Island (Palmetto Headlands)	X	200	F/	2/20/86	24/9
BFT-1630	28JJ-f4	Spring Island Plantation		200	F/	11/11/85	25/2.5
BFT-1652	27KK-m46	Hilton Head Island (Southwood Park)	X	200	F/	1/3/85	12/10

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
29	536	35,000		8.2	45		P
66	495	82,000		16	40		P
60	530	44,000		15	70		F
57	2,000	140,000	0.0002	32	50		E
62	703	31,000		6.9	45		F
129	1,404	110,000		11	20		G
131	540	50,000		25	100		F
92	567	110,000		38	75		F
54	80	47,000		4.7	20		F
109	754	72,000		13	40		F
76	170	24,000		6.1	50		P
16	680	94,000	0.0001	50	100		F
12±	225	26,000	.00004				P
20	608	92,000	.0001			D	F
35	503	300,000	.0001	97	75		P
+ 1	280	14,000		6.7	100		P
24	2,900	420,000	.0002	145	85		G
19	1,500	480,000		200	100		P
18	2,225	600,000		80	25		P
20	1,230	540,000	.0001	123	50		F
	260	120,000	.0003	54	100		F
25	600	200,000		52	50		P
30	1,500	180,000		150	100		P
20	1,205	140,000 ?		120			P
37	1,950	170,000		65	75		P
34	100	17,000		8.3	100		P
23	977	170,000		31	35		P
17	40	18,000		8.3	95		G
20	30	6,600		4.2	100	R	F
23	40	33,000		10	60		F
17	40	22,000		9.8	100		G
17	1,213	380,000		145	80		P
20	1,200	630,000		200	80		P
22	1,200	700,000		150	50	D	P
25	1,500	340,000	.0004	136	90		G
16	1,212	600,000		240	100		P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
BFT-1685	27KK-n15	Hilton Head Island (Indigo Run Plantation)		200	F/	4/16/85	12/12
BFT-1731	28HH-k12	Port Royal Island		112	F/	10/20/86	1/2
BFT-1756	28GG-a10	Lobeco, 1 1/4 mi NW	x	224	F/	5/8/85	11/12
BFT-1766	29JJ-e11	Indigo Plantation		215	F/	8/21/85	8/7.5
BFT-1784	25II-e4	St. Helena Island (Frogmore)		78	F/	5/5/86	10/1
BFT-1787	26II-l3	St. Helena Island (Orange Grove Plantation)		66	F/	4/1/86	2/3
BFT-1788	26II-s5	St. Helena Island (Orange Grove Plantation)		70	F/	3/28/86	8/11
BFT-1790	28GG-x1	Big Barnwell Island	X	140	F/	9/19/88	7/4
BFT-1793	26II-w16	St. Helena Island (SW end)		120	F/	1/9/86	12/25
BFT-1794	29LL-s1	Daufuskie Island (Melrose Utility Co.)		240	F/	8/14/86	24/
BFT-1800	29JJ-v2	Bluffton, 1 1/2 mi N	X	205	F/	10/17/89	29/2
BFT-1809	27JJ-q2	Hilton Head Island (Dolphin Head)	X	890	F/	/92	24/
BFT-1813	27KK-j5	Hilton Head Island (Ft. Walker)		600	F/	8/4/92	24/8
BFT-1820	27KK-o10	Hilton Head Island (Indigo Run)		320	F/	8/ /92	24/
BFT-1840	27JJ-i4	Parris Island	X	602	F/	8/ /92	24/
BFT-1845	28JJ-p5	Victoria Bluff	X	600	F/	/92	24/
BFT-1853	29LL-k3	Daufuskie Island (International Paper Co.)	X	72	Shal/30	1/21/86	24/5.5
BFT-1870	29KK-a3	Bluffton	X	205	F/	2/21/90	23/22
BFT-1947	27LL-e12	Hilton Head Island (Palmetto Dunes)		200	F/	11/8/89	27/3
BFT-1973	27II-l30	Port Royal	X	88	F/	4/91	47/21
BFT-2032	28JJ-n11	Bluffton, 4 3/4 mi NE		50	Shal/37	3/16/92	96/97
BFT-2036	28JJ-m4	Bluffton, 5 1/4 mi NE		57	Shal/44	3/16/92	96/96
BFT-2038	30JJ-k1	Bluffton, 4 mi NW	X	220	F/	9/91	24/1
BERKELEY COUNTY							
BRK-26	15X-l5	Jamestown	X	885	BC/60	6/28/81	30/15
BRK-96	19Y-k4	Moncks Corner, N edge		185	S,BM/	5/28/78	48/
BRK-167	18Y-d1	Moncks Corner, 4 mi NNE	X	137	S,BM/	2/6/86	2.5/
BRK-175	18AA-u1	Goose Creek, 6 mi E	X	280	BM/60	8/26/73	24/7
BRK-193	19Y-v7	Moncks Corner (Conifer Hall Subdivision)		251	S,BM/	11/25/86	24/1
BRK-245	18W-b1	St. Stephen	X	1,260	M/	7/21/80	24/
BRK-301	18Y-q2	Moncks Corner, 2 mi E		340	BM/	11/12/80	8/4
BRK-430	18AA-e2	Mount Holly, 4 mi NNE	X	1,965	M/50?	11/20/81	24/
BRK-443	18AA-e3	Mount Holly, 4 mi NNE		260	S,BM/	4/23/82	22/8
BRK-444	18AA-e4	Mount Holly, 4 mi NNE		1,660	M/80?	7/23/82	72/
BRK-457	19Z-b3	Moncks Corner, 3 mi SSW	X	256	BM/50	1/27/84	24/
BRK-458	19Z-b4	Moncks Corner, 3 mi SSW	X	320	BM/	4/6/84	24/
BRK-459	19Z-b5	Moncks Corner, 3 mi SSW	X	315	S,BM/90	3/26/84	24/
BRK-556	19Y-c3	Pinopolis	X	225	S,BM/50	5/15/86	3/2
BRK-559	18Y-o2	Moncks Corner, 1 1/2 mi E	X	257	BM/40	1/15/87	24/1
BRK-593	18Y-x2	Moncks Corner (East edge)		234	BM/	10/18/91	24/3

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
19	1,500	500,000		170	75		F
27	96	12,000		11	100		F
25	76	8,000	0.0001	1.8	50		F
17	704	400,000	.0003	54	45		F
7	175	40,000	.0016	16	80		G
9	390	150,000	.0001	81	100		P
8	1,190	120,000	.0003	55	100		P
13	505	180,000	.0002				P
15	380	130,000	.0001	44	75	D	G
41	457	300,000		108	90	D	P
39	1,500	260,000		84	70		G
19	150	50,000		13	50		F
18	100	50,000		22	90		P
18	150	40,000		11	50	R	F
14	150	9,000		3.1	65	R	F
20	150	66,000		9	25	D	P
6	50	16,000		10	100		F
31	1,339	380,000		167	100		F
	1,200	740,000		181	70	D	P
1	330	100,000	.0001	57	100	R	G
14	32	3,600	.0004	1.8	100	R	E
16	52	8,400	.00004?	4.2	100	R	F
33	840	320,000		123	100		F
18	160	6,000		2.1	70		P
38	55	1,000	0.0004	1.2	100	R	P
16	93	5,000					P
5	130	6,300		2.7	85		P
51	285	9,400		4.3	90		P
+ 5	305	23,000		13	100		P
34	177	1,300		1.1	100		P
+ 83	135	4,500		.8	35	R	F
20	60	4,500		1.4	60	R	P
+ 79	800	31,000	.0002	18	100		G
33	350	5,300		2.0	70	R	F
47	410	3,400		1.9	100		P
30	480	9,000		6.6	100	D	P
38	90	10,000		4.6	90		G
46	340	6,000		3.1	100		F
26	255	1,400		1.1	100		P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
CALHOUN COUNTY							
CAL-27	30R-j2	Near Saylors Lake	X	410	M/100	12/13/76	24/4.5
CAL-29	27U-h1	Cameron	X	285	PD/60	5/24/78	24/2
CAL-30	28T-b1	St. Matthews (Bynum and Pou Streets)	X	416	BM,PD,BC/200	4/10/80	26/3
CAL-41	28S-k1	St. Matthews, 3 mi NNE	X	770	BC,M/300	7/26/78	5/2
CAL-42	26S-o1	Fort Motte, 2 1/2 mi SE	X	300	PD,BC/120	2/17/81	14/
CAL-43	27S-s2	Fort Motte, 3 mi SSE	X	340	PD,BC/170	12/5/80	10/.5
CAL-48	28T-b2	St. Matthews (Bynum and Pou Streets)	X	220	BM/50	9/2/81	24/1
CAL-78	28S-v7	St. Matthews (Church Street)	X	155	BM/90	10/20/86	24/2
CAL-115	30R-g2	Sandy run, near Beulah Church	X	341	BC,M/70	313/90	24/16
CAL-116	30R-m2	Sandy Run, near Sandy Run Church	X	287	BC,M/90	2/28/90	24/18
CAL-117	29S-h1	St. Matthews, 7 mi NW	X	381	PD,BC/100	3/20/90	24/24
CHARLESTON COUNTY							
CHN-44	19DD-o1	Charleston, 7 1/2 mi W	X	434	S/	3/25/80	1/
CHN-152	17DD-g8	Mount Pleasant (Mathis Ferry Road)	X	515	S,BM/	3/14/91	98/
CHN-163	17DD-m5	Mount Pleasant (Water Plant)	X	1,912	M/70	2/3/83	24/
CHN-167	17DD-g7	Mount Pleasant (Mathis Ferry Road)	X	1,986	M/135	4/18/90	24/.5
CHN-172	19CC-x1	North Charleston, SW edge	X	1,840	M/28	4/19/71	12/12
CHN-173	16CC-y1	Mount Pleasant (Snee Farm)	X	1,870	M/100	1/23/88	24/
CHN-174	20GG-e1	Seabrook Island	X	2,261	M/70	1/31/89	47/
CHN-185	17DD-a4	Mount Pleasant (Venning Road)	X	1,980	M/90	8/29/86	24/23
CHN-186	20FF-v1	Kiawah Island (Water Plant)	X	2,210	M/95	2/28/77	24/
CHN-187	16DD-m2	Isle of Palms (Palm Blvd.)	X	2,023	M/90	9/4/75	24/
CHN-219	15DD-f1	Isle of Palms (Beach and Racquet Club)	X	1,990	M/135	5/25/79	24/
CHN-559	17DD-a6	Mount Pleasant (Wando High School)	X	1,960	M/150	8/16/84	24/2
CHN-601	17DD-u7	Sullivans Island	X	1,955	M/100	5/29/86	24/1
CHN-603	16DD-q2	Isle of Palms (Drawbridge)	X	2,030	M/125	10/16/86	24/
CHN-604	16DD-j1	Isle of Palms (Wild Dunes)	X	2,200	M/100	5/20/85	12/1
CHN-634	19FF-t1	Kiawah Island (Sandy Point)	X	2,150	M/50	3/26/89	24/5
CHN-639	18CC-d1	Hanahan (Tank farm)		381	F/	12/16/91	24/10
CHN-640	16CC-d1	Whitehall Terrace, 3 1/2 mi NW	X	296	S,BM/	8/24/89	8/
CHN-682	12Z-w4	McClellanville (Middle School)		115	S/	7/28/90	24/
CHN-694	18DD-w4	Charleston, 7 1/2 mi SW		35	Shal/	3/15/88	100/100
CHESTERFIELD COUNTY							
CTF-49	19I-w1	Patrick, 5 mi S (Plain View)		240	M/31	3/14/69	24/
CTF-62	18G-u1	Cheraw, 3 mi SW	X	135	M/28	8/9/77	24/5

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
40	402	28,000		9	85	D	P
42	250	32,000		11	70	R	F
144	500	37,000		26			P
159	1,120	42,000		14	65		P
146	540	98,000		27	55		P
151	535	94,000		22	50	D	P
67	450	22,000		7.1	70		F
30	506	30,000		10	65	R	F
22	403	16,000		3.2	40		P
3	431	23,000		5.0	45		E
225	250	28,000		6.6	45		P
19	13	6,200		2.5	80		P
49	72	1,600		1.3	100		P
+ 27	750	12,000		4.7	80		G
59	1,500	18,000		7.7	85		F
+ 88	250	2,000		.7	70		F
+ 2	716	16,000		5.0	55		F
Flowing	920	24,000				D	P
2	920	10,000	0.0002	5.3	100		F
+ 76	475	28,000		2.1	15		F
+ 155	510	30,000		1.9	10		P
+ 97	1,421	170,000		7.7	< 10	R	P
Flowing	1,204	11,000		6.5	100		E
+ 27	400	16,000		1.3	15		P
+ 52	1,500	61,000		15	55		F
+ 51	1,000	7,000		3.8	100		P
+ 3	807	8,700		3.8	90		F
62	50	4,300		2.3	100	R?	G
11	250	11,000		5.3	100		F
5	105	32,000		11	70		P
4	21	16,000	.002	8.8	100		G
85	60	17,000		4.2	50	D	F
52	105	5,300		5.3	100	R	G

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
CLARENDON COUNTY							
CLA-29	21S-y1	Manning (west of town)	X	717	M/105	11/7/74	24/1
CLA-30	19Q-j1	Turbeville	X	420	BC/65	3/2/76	24/1
CLA-61	18R-b1	Turbeville, 6 mi SE	X	393	BC/50	8/86	19/
COLLETON COUNTY							
COL-232	30AA-c4	Lodge	X	510	S,BM/30	10/19/81	24/3
COL-275	27DD-b1	Hendersonville, 3 mi NE		575	S,BM/	4/15/87	23/23
COL-330	22GG-x29	Edisto Beach	X	530	S/	5/3/85	23/
COL-338	22GG-p1	Edisto Island (The Neck)		58	Shal/	3/21/87	24/1
COL-339	22GG-p2	Edisto Island (The Neck)		56	Shal/	3/22/87	24/1
COL-349	26AA-h5	Canadys	X	660	BM,PD/	2/12/92	26/25
DARLINGTON COUNTY							
DAR-71	20K-t1	Hartsville (Magnolia Cemetery)	X	297	M/100	1/3/63	23/
DAR-80	19K-f1	Hartsville (Sonoco Products Company)		239	M/70	3/5/70	14/
DAR-87	19M-y1	Lamar	X	486	M/160	11/10/72	24/48
DAR-89	16L-q1	Darlington, 4 1/2 mi SE	X	663	M/85	4/16/73	8.5/36
DAR-94	19K-o2	Hartsville (South 5th Street)	X	316	M/150	9/9/76	24/5
DAR-96	17I-v3	Society Hill	X	380	M/125	11/13/75	24/8
DAR-112	16L-x1	Darlington, 4 1/2 mi SE	X	645	M/135	10/13/78	24/41
DAR-226	21K-l1	Ashland, 2 mi NNE	X	417	M/120	12/5/89	24/2
DAR-229	17L-m4	Darlington (U.S. 52 bypass)	X	600	M/40	1/28/87	25/37
DILLON COUNTY							
DIL-73	12K-u1	Latta		235	BC/	1/4/61	6.5/
DIL-74	11J-j2	Dillon, 4 mi NNE		415	BC,M/	1/30/56	20/15
DIL-85	11J-k6	Dillon, 4 mi NNE		243	BC/	10/5/65	24/
DIL-86	11J-j5	Dillon, 4 mi NNE	X	323	BC,M/70	12/13/73	24/
DIL-96	11J-j4	Dillon, 4 mi NNE	X	288	BC,M/67	7/16/63	24/
DIL-98	11J-w1	Dillon (First Ave. and Jackson Street)	X	338	M/60	2/11/88	25/7
DORCHESTER COUNTY							
DOR-88	21BB-m3	Summerville, 4 1/2 mi SSW	X	1,760	M/67	11/17/91	48/2
DOR-103	24Y-i9	Harleyville		59	F/16	3/27/80	1/
DOR-206	21AA -r2	Summerville (Industrial Road)	X	1,755	M/45	1/13/92	48/2

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
23	754	40,000		15	75		F
13	503	23,000		13	100		F
26	608	27,000		4.8	35	R?	P
13	240	15,000-20,000		5.3	55-75	D	P
54	206	6,800		2.6	75		P
13	393	45,000		12	55		P
14	53	1,100		1.9	100		P
13	75	3,000		4.4	100		P
40	30	3,500		2.4	100	D	F
29	700	84,000		37	90		P
Flowing	530	10,000		< 5			P
12	626	57,000		8.0	30		P
85	600	9,000	0.0002	3.9	85		F
35	1,022	39,000		16	80		E
118	250	3,000		2.7	100		P
154	951	10,000		4.9	100		G
99	900	68,000		30	90		F
94	501	5,100		3	100	R	P
20	650	34,000		12	70		P
36	360	20,000	0.0002	13	100		F
90	525	33,000		12	75		F
70	521	28,000		8.8	70	D	P
56	626	14,000		9.1	100		F
64	704	19,000		17	100		F
63	1,240	22,000		7.1	65		G
13	15	20,000		6.8	70		P
60	480	5,000		2.1	100	D	F

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
DOR-221	20BB-o4	Summerville, 4 1/4 mi SSE	X	1,764	M/65	11/21/91	48/2
DOR-227	21AA-u1	Summerville, 1 mi S	X	1,760	M/75	3/10/87	24/24
DOR-228	21BB-d1	Summerville, 3 1/2 mi SW	X	1,830	M/80	7/8/87	24/18
DOR-229	22Z-x4	Ridgeville	X	345	S/90	4/17/90	16/2
DOR-230	21BB-g1	Summerville, 4 1/2 mi SW	X	450	S,BM/100	1/12/91	14/
DOR-240	21AA-r3	Summerville, 2 mi NW	X	390	S,BM/32	9/24/90	24/1
DOR-241	24Y-m2	Harleyville, SW part	X	282	BM/40	12/7/90	24/1
DOR-256	21AA-y2	Summerville, 3 1/2 mi W	X	435	BM/12	10/25/91	24/30
FLORENCE COUNTY							
FLO-5	16M-s1	Florence, near center of town		630	M/150±	4/6/54	4/
FLO-33	16M-l1	Florence (Darlington Street)		722	M/	4/5/54	4/
FLO-103	16M-w2	Florence (Treatment Plant)		705	M/	7/29/54	24/18
FLO-112	16M-t3	Florence (Ballard Street)	X	388	BC,M/120	12/11/58	240/
FLO-126	13M-p1	Mars Bluff	X	705	BC,M/80	4/24/59	480/104
FLO-140	16M-v1	Florence (Gully Branch)	X	680	M/150	6/2/61	336/
FLO-146	16M-w1	Florence (S. Edisto Street)	X	660	M/	4/23/62	24/
FLO-147	13P-d1	Pamplico	X	300	BC/65	2/3/65	12/
FLO-154	16M-r1	Florence (W. Darlington Street)	X	712	M/150	12/4/67	26/3
FLO-155	12R-b2	Johnsonville, 1 mi N	X	880	M/50	10/8/76	2/
FLO-156	18P-v1	Olanta (water tank)	X	225	BC/30	5/3/68	36/
FLO-161	16M-x1	Florence (McCown Street)	X	663	M/170	7/13/71	71/1
FLO-178	12R-g1	Johnsonville, 1 1/2 mi SW		391	BC/90±	10/16/73	12/
FLO-187	16N-b2	Florence (Dexter Drive)		460	M/	10/19/79	24/2
FLO-190	15N-o1	Florence, 5 mi SSE	X	550	BC,M/100	10/7/77	24/
FLO-194	15M-n4	Florence, 2 mi ENE		386	BC,M/	6/27/69	72/
FLO-201	13N-d2	Peedee, 4 mi SSE	X	123	BC/35	12/8/80	26/
FLO-204	18N-i5	Timmonsville	X	486	M/85	3/12/81	7/3
FLO-221	13N-d3	Peedee, 4 mi SSE		123	BC/	12/20/80	4/
FLO-247	15Q-p3	Lake City (Hwy 341E)	X	618	BC,M/120	8/3/83	24/7.5
FLO-250	16Q-s1	Lake City, 1 1/2 mi SW	X	584	BC,M/	8/12/82	24/14
FLO-265	16M-y1	Florence (Santiago Drive)	X	662	M/60	3/6/89	24/2
FLO-266	14M-p4	Florence, 6 mi E	X	688	M/100	2/13/89	24/16
FLO-267	16M-m1	Florence (Harmony Street)	X	713	M/100	1/23/89	24/6
FLO-269	14M-p5	Mars Bluff, 1 1/2 mi SSW	X	725	M/60	3/20/89	24/6
FLO-270	16M-d7	Florence, 4 mi NW	X	407	M/70	5/2/90	24/3
FLO-271	17M-k1	Florence, 4 mi W	X	428	BC,M/90	7/5/90	24/5.5
FLO-273	14M-x1	Florence, 7 miE	X	737	BC,M/100	9/24/90	24/5.5
FLO-275	16N-c1	Florence (South Park)	X	712	M/100	10/22/90	25/2
FLO-281	17M-w2	Florence, 7 mi WSW		598	M/	6/30/87	24/22
FLO-288	14M-p6	Mars Bluff, 1 1/2 mi SW		130	BC/50±	7/1/92	26/18

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
59	1,410	26,000		7.6	60		P
46	305	950		1.0	100	R	F
20	703	2,900		2.2	100	R	G
35	300	45,000		12	55		F
80	350	20,000		4.5	45		P
104	289	2,600		1.5	100		F
39	280	3,800		1.5	80		P
149	93	1,200		.5	80	R	P
100	520	28,000		4.3	30	D	G
107	694	32,000		9.6	60		F
10	600	22,000		10	90		G
39	475	54,000	0.002			D	P
36	510	22,000	.0006			D	G
49	2,100	40,000	.001	21	100	D	P
45	1,400	23,000		11	100		F
40	536	30,000		7.0	50		P
123	1,469	17,000		14	100		F
56	620	18,000		10	100		P
5	300	7,500		3.3	85		P
86	1,250	15,000		9.5	100		F
92	408	11,000		4.6	85		P
161	855	11,000		6.7	100		P
52	759	7,700		8.7	100		P
130	187	16,000		2.0	25		P
47	116	14,000	.0003	2.4	35		F
54	530	6,600	.0004	3.7	100		F
45	118	16,000		2.4	30		F
33	751	26,000		15	100		G
36	751	47,000		10	45		G
175	1,100	18,000		10	100		F
97	1,055	10,000		5.7	100		P
215	1,000	11,000		7.0	100		F
85	1,107	12,000	.0003	8.1	100		F
170	506	19,000		9.5	100		G
160	710	12,000		9.4	100		F
92	1,050	11,000		8.0	100	R	F
181	1,000	33,000		16	95	D	P
107	1,708	45,000		20	90	D	E
0	500	15,000	.0004	6.4	100	D	F

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
GEORGETOWN COUNTY							
GEO-30	10X-d1	Maryville		805	BC/	2/20/56	4/
GEO-65	9W-k1	Georgetown, 6 mi E	X	648	BC/100	1/6/75	24/1.5
GEO-73	7U-q1	Murrells Inlet, 1 1/2 mi SW	X	615	BC/105	3/2/83	5/
GEO-87	8V-j1	Litchfield Beach	X	560	BC/100	12/17/74	24/
GEO-90	13V-s1	Andrews	X	820	BC/70	9/10/74	48/
GEO-94	9U-r1	Plantersville, 2 mi S	X	580	BC/105	5/4/76	26/
GEO-95	11W-v1	Georgetown, 5 mi SW	X	680	BC/60	4/1/76	26/1
GEO-105	7U-n1	Murrells Inlet	X	770	BC/30	5/12/77	24/
GEO-112	8V-l1	Litchfield Beach	X	710	BC/40	11/19/76	12/
GEO-114	11U-v1	Oatland	X	701	BC/	1/2/73	8/
GEO-117	8V-a1	North Litchfield Beach	X	557	BC/55	2/9/79	7/2
GEO-125	7U-j1	Murrells, Inlet, 2 mi NE	X	600	BC/105	2/8/77	24/2
GEO-148	8V-w3	Pawleys Island South		555	PD/	6/8/77	4/
GEO-173	11U-i1	Oatland, 4 mi N	X	682	BC/60	3/17/80	25/2
GEO-185	11W-r1	Georgetown, 4 mi W	X	655	BC/40	9/26/80	6/
GEO-185	11W-r1	Georgetown, 4 mi W	X	790	BC/100	11/19/80	24/2
GEO-188	12W-r1	Andrews, 8 mi SE		810	BC/35	6/1/79	24/2
GEO-210	8V-n1	Pawleys Island	X	612	BC/165	10/17/82	24/24
GEO-211	9V-u2	Pawleys Island (Hagley Plantation)	X	696	BC/195	10/13/82	23/4
GEO-214	12W-r2	Andrews, 8 mi SE	X	825	BC/110	2/28/83	24/6
GEO-217	11S-w1	Oatland, 3 1/2 mi S	X	477	BC/40	9/21/83	24/6
GEO-218	9W-k4	Georgetown, 6 mi E	X	650	BC/140	4/10/84	24/12
GEO-220	11S-s2	Oatland, 3 mi SE	X	430	BC/50	8/16/83	24/
GEO-222	13V-o3	Andrews (Elmwood Street)	X	810	BC/100	9/14/84	22/2
GEO-227	9U-r2	Plantersville, 2 mi S	X	650	BC/145	11/17/84	24/12
GEO-228	10V-v1	Georgetown, 3 1/2 mi N	X	694	BC/190	3/20/85	24/12
GEO-234	7U-j2	Murrells Inlet, 2 mi NE	X	702	BC/125	7/12/86	14/4
GEO-235	9W-m2	Plantersville, 1 mi SE	X	680	BC/135	11/12/86	24/12
GEO-237	7U-o1	Murrells Inlet, 2 mi W	X	672	BC/140	5/4/88	24/6
GEO-249	9T-e1	Yauhannah, 4 MI NW	X	739	BC/140	11/7/89	24/1.5
GEO-277	10U-p1	Oatland, 2 mi NE	X	705	BC/80	4/16/91	24/7
GEO-281	8V-x2	Pawleys Island, S edge	X	625	BC/110	7/30/91	24/12
GEO-282	8V-u8	Pawleys Island, 2 1/2 mi WNW	X	657	BC/100	11/12/91	24/24
HAMPTON COUNTY							
HAM-162	32CC-l15	Hampton (Southland Energy)		120	F/	1/23/86	26/24
HAM-191	32CC-m1	Hampton (Jackson Avenue)	X	890	PD/	7/13/87	24/2
HAM-195	33EE-c4	Estill, 2 mi E		251	F/	5/9/90	47/73
HAM-207	33DD-y8	Estill (Wilcox and Hendrix Streets)	X	195	F/	9/18/84	24/5.5
HAM-208	33EE-v3	Furman		280	F/	12/1/89	22/2

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
27	310	2,300		1.6	100		P
38	300	3,600		.6	40	D	P
56	100	13,000		4.7	70		F
23	250	810		.6	100		F
65	351	13,000		4.6	70	D	F
24	20	880		.3	70		P
84	28	2,800		.7	50		P
36	250	5,000		2.3	85		P
17	30	2,300		2.3	100	R	P
20	250	3,000		2.8	100	R	P
39	21	9,000		4.2	95		F
29	188	4,400		1.2	55		F
15	66	1,800		1.2	100		F
31	201	8,500		3.4	80		F
80	38	1,600		.4	55		G
73	75	1,800		.6	65		P
76	94	4,000		.4	20		P
55	230	2,000		1.0	90		F
52	300	3,000		1.5	90		P
88	210	3,000	0.00001	1.0	65	R?	P
48	95	2,200		.5	45	D	P
58	150	1,100		.5	90		G
42	112	6,000		1.3	45	D	P
151	380	7,400		2.4	65		P
51	200	4,600		2.0	85	R	F
85	517	4,600		2.1	90		F
98	754	10,000		3.9	80		G
82	200	1,600		.8	100		P
100	450	11,000		4.2	75		E
66	200	19,000		6.9	75	R	P
74	200	8,100		2.5	60		F
91	250	2,600		1.2	90		P
113	201	2,500		.8	65		G
6	100	9,000	0.0001	3.3	75		F
50	709	29,000		8.1	55		G
22	1,500	90,000	.0002				G
18	603	90,000		22	50		E
47	471	25,000		12	85	R	F

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
HAM-209	33CC-p2	Gifford		175±	F/	6/16/77	24/2
HAM-211	33EE-f2	Estill, 1 1/2 mi S	X	160	F/	4/22/91	24/8
HORRY COUNTY							
HOR-230	3R-i1	North Myrtle Beach (9th Avenue S)		560	BC/	5/5/77	8/
HOR-246	4R-y1	Myrtle Beach (79th Avenue N)	X	771	BC/200	12/21/65	15/
HOR-248	5S-i2	Myrtle Beach (48th Avenue N)		714	BC/	5/1/66	6/
HOR-261	3R-n1	North Myrtle Beach (41st Avenue S)		696	BC/	2/22/68	26/
HOR-270	5S-l1	Myrtle Beach (25th Avenue N)	X	714	BC/200	1/29/74	47/12
HOR-271	5S-y1	Myrtle Beach (13 Avenue S)	X	638	BC/140	10/3/80	3/
HOR-272	5S-j1	Myrtle Beach (Ocean Forest)		750	BC/	2/20/74	48/71
HOR-280	3R-b1	N Myrtle Beach (Bay St. and 2nd Ave. S)	X	702	BC/200	1/15/70	26/1
HOR-284	6T-q2	Surfside Beach (Poplar Drive)	X	624	BC/160	1/6/72	7.5/
HOR-287	7Q-p1	Conway (WLAT)	X	737	BC/38	4/4/73	23/1
HOR-289	6S-h1	Myrtle Beach, 4 1/2 mi NW	X	675	BC/90	6/30/78	2/
HOR-298	2Q-j4	Little River, 2 mi ENE		516	BC/70	12/4/73	26/24
HOR-304	5S-q2	Myrtle Beach (3rd Avenue S extension)	X	620	BC/45	3/24/75	48/9
HOR-309	6R-q3	Conway, 6 1/2 mi SE	X	375	BC/55	8/29/77	188/353
HOR-314	5O-g5	Loris (Spring Street)	X	325	BC/40	8/8/73	24/1
HOR-332	5S-n2	Myrtle Beach (21st Avenue N)	X	766	BC/210	2/7/72	32/13
HOR-333	6T-i1	Myrtle Beach (near Pirateland)	X	755	BC/200	5/12/72	24/4
HOR-335	3R-b2	North Myrtle Beach (near Crescent Beach)	X	710	BC/250	5/15/74	24/7.5
HOR-335	3R-b2	North Myrtle Beach (near Crescent Beach)	X	412	BC/105	5/22/74	8/4
HOR-336	3Q-u1	North Myrtle Beach (near 11th Avenue N)	X	600	BC/150	8/22/74	24/8
HOR-340	5S-o2	Myrtle Beach (Pine Island Road)	X	712	BC/130	12/13/74	72/2
HOR-344	7U-b1	Near Garden City Beach	X	594	BC/160	4/18/75	24/10
HOR-353	6T-m5	Ocean Lakes Campground	X	490	BC/85	3/25/75	24/23
HOR-372	2Q-o6	Little River, 2 mi W	X	317	BC/20	9/16/75	24/8.5
HOR-396	5S-y2	Myrtle Beach (48th Avenue N)	X	584	BC/	10/2/80	3/.5
HOR-409	6S-q1	Socastee, 1 mi E	X	611	BC/120	1/12/77	24/2.5
HOR-410	6S-s1	Myrtle Beach, 3 1/2 mi W	X	463	BC/90	11/4/76	26/3.5
HOR-412	7S-u1	Socastee	X	560	BC/118	4/5/77	24/
HOR-415	6T-h2	Lakewood		397	BC/	5/8/75	5/1.5
HOR-416	6T-h1	Lakewood	X	690	BC/160	4/6/77	24/23
HOR-440	7Q-v1	Conway, 2 mi ENE	X	789	BC,M/80	7/17/78	24/2
HOR-446	5P-b1	Loris, 5 mi ESE		220	PD/	9/8/77	24/
HOR-450	2Q-j7	Little River, 2 mi NE	X	56	Shal/40	4/ /73	7/2
HOR-463	2Q-y4	North Myrtle Beach (Interchange)	X	607	BC/110	9/3/80	24/
HOR-467	3Q-p1	Wampee	X	400	PD,BC/110	9/24/79	24/5
HOR-473	3R-g1	North Myrtle Beach (Deer Street)	X	540	BC/70	12/2/80	24/2
HOR-475	4P-u1	Longs, 1 1/2 mi SW	X	374	BC/85	7/25/79	26/1
HOR-482	4R-s1	Between Myrtle Beach and N Myrtle Beach	X	634	BC/140	4/24/80	24/8

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
	548	43,000					P
30	845	80,000		40	100		G
43	201	12,000		3.2	50		P
25	508	20,000		10	100		P
26	408	14,000		7.4	100		F
13	350	45,000		8.0	35		P
63	437	19,000	0.001 ?	7.7	80		P
131	400	13,000		4.1	65		P
44	367	25,000	.001 ?	6.0	50		P
27	500	17,000		8.5	100		P
45	570	16,000		5.8	75		G
14	517	25,000		10	80		E
68	503	12,000		4.6	75		P
19	30	5,000		.9	35		F
73	515	6,000		5.2	100	R	F
63	32	4,600	.0002	1.1	50		G
62	400	8,100		1.9	45		P
54	500	40,000		10	50		F
46	500	14,000		6.3	90		P
26	503	22,000		9.6	75		F
29	305	11,000		4.6	85		E
17	503	15,000		5.8	75		E
68	503	11,000		4.9	90		P
47	200	3,000		1.4	95		G
48	300	5,700		2.2	75		G
27	30	4,000	.0002	1.2	60		G
119	400	11,000		5	90		P
47	495	12,000		5.3	90		F
72	201	3,000		1.4	95		F
58	300	7,100		2.4	65		P
73	55	2,400		0.7	60		P
74	400	20,000		5.9	60		G
24	503	15,000		8.1	100	R	G
40	16	1,000		.6	100		F
12	30	2,000	.0002	1.0	100	R	G
29	508	10,000		4.6	90		F
18	300	45,000		11	50		G
67	390	5,200		28	100		G
35	246	5,000		3.2	100		P
81	450	9,500		3.7	80		E

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
HOR-483	4R-x2	Myrtle Beach, NE edge	X	640	BC/130	6/21/80	24/8
HOR-505	5S-i6	Myrtle Beach (38th Avenue N)		62	Shal/36	3/5/80	121/23
HOR-513	8R-l1	Conway, 4 1/2 mi SW	X	605	BC/125	5/27/81	26/2
HOR-538	6R-p1	Conway, 5 1/2 mi SE		780	BC/	7/3/62	24/
HOR-571	7Q-o1	Cochran Town, 3/4 mi W	X	800	BC/80	9/18/78	24/2
HOR-596	7T-h1	Surfside Beach, 4 mi WNW		758	BC/	10/15/79	24/23
HOR-600	7U-a7	Garden City (Atlantic Avenue)	X	610	BC/125	10/2/80	6/
HOR-659	6R-e26	Conway, 3 mi ESE		47	Shal/37	2/22/78	26/20
HOR-663	6T-p5	Surfside Beach (Hollywood Drive)	X	650	BC/140	3/5/81	25/2
HOR-666	8S-r4	Bucksport, 1 mi NW	X	585	BC/100	8/20/81	24/2
HOR-672	6R-m1	Myrtle Beach National Golf Club	X	610	BC/90	10/17/81	12/
HOR-683	5S-g1	Myrtle Beach, 2 mi NNW	X	706	BC/17	10/4/81	3/
HOR-683	5S-g1	Myrtle Beach, 2 mi NNW		640	BC/180	12/10/81	24/7
HOR-688	6T-b4	Myrtle Beach Air Force Base	X	610	BC/135	8/17/82	24/9
HOR-696	7R-t5	Conway, 5 mi SSE	X	812	BC/150	2/9/82	24/6
HOR-730	5S-i8	Myrtle Beach (38th Avenue N)	X	665	BC/160	10/14/82	24/3.5
HOR-742	3R-f2	Windy Hill Beach	X	640	BC/210	2/23/83	24/23
HOR-751	5O-h1	Loris (Van Neva Street)	X	327	BC/60	6/23/83	24/1
HOR-752	3R-o7	Atlantic Beach, W edge	X	670	BC/200	6/2/83	24/23
HOR-851	4R-k4	Atlantic Beach, 1 1/2 mi W	X	640	BC/235	9/27/83	24/1.5
HOR-857	6T-q3	Surfside Beach (Myrtle Drive)	X	620	BC/75	9/24/84	24/2
HOR-858	5S-y10	Myrtle Beach, 1 1/2 mi SW	X	640	BC/165	4/11/84	24/12
HOR-859	7T-u4	Surfside Beach, 2 mi SW	X	704	BC/200	7/11/84	24/24
HOR-861	3R-a13	North Myrtle Beach (Ocean Drive)	X	627	BC/100	9/18/85	25/6
HOR-862	3R-h12	Crescent Beach	X	662	BC/85	10/31/85	24/5
HOR-863	5S-a1	Myrtle Beach (67th Avenue N)	X	614	BC/120	10/11/84	24/12
HOR-867	3Q-b2	Longs, 3 mi SE	X	377	BC/90	11/16/83	35/22
HOR-870	2Q-y10	Cherry Grove Beach, 1/2 mi NW	X	133	Shal/75	5/22/85	24/12
HOR-871	7T-i1	Surfside Beach, 3 1/2 mi NW	X	715	BC/200	3/8/85	21/12
HOR-873	5S-y17	Myrtle Beach AFB (Golf Course)	X	40	Shal/12	8/28/86	24/4.5
HOR-874	6T-c2	Lakewood, 1/2 mi N	X	700	BC/210	5/2/85	24/12
HOR-875	5S-h2	Myrtle Beach, 2 1/2 mi NNE	X	670	BC/165	9/4/85	24/12
HOR-931	4Q-a1	Longs, 2 1/2 mi SW	X	355	BC/55	10/24/85	24/12
HOR-934	6S-b1	Myrtle Beach, 4 1/2 mi NW	X	700	BC/100	12/12/85	24/9.5
HOR-936	7T-d1	Bucksport, 3 1/2 mi ESE	X	710	BC/200	4/3/86	24/12
HOR-938	4R-q1	Atlantic Beach, 4 1/2 mi WSW	X	654	BC/100	5/20/86	24/12
HOR-944	6R-g2	Conway, 4 1/2 mi SE	X	605	BC/100	5/6/86	24/12
HOR-945	5R-d1	Nixonville, 1 mi SW	X	705	BC/180	12/3/86	24/12
HOR-946	6T-o19	Surfside Beach, 1 mi NW	X	655	BC/110	9/9/86	24/12
HOR-967	2Q-m5	Little River, 1/2 mi SW		73	Shal/	9/13/87	24/4
HOR-968	2Q-m6	Little River, 1/2 mi SW	X	75	Shal/	8/25/87	24/5
HOR-970	2Q-r5	Little River, 1 mi SW		43	Shal/	10/7/87	24/5

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
69	450	11,000		5.4	100		E
6	30	10,000		3	60		P
44	205	16,000		5.5	70		E
14	500	75,000		13	35		P
38	503	29,000		14	95		G
45	200	7,000		3.0	85		G
74	135	2,000		1.7	100		P
3	46	12,000	.0002	8.2	100		E
92	573	8,500		2.3	55		P
26	226	9,500		4.6	95		E
63	600	18,000		5.1	60		F
162	25	370		.2	100	D	G
125	503	15,000		5.7	80	R	G
134	498	8,800		3.1	70		E
71	525	15,000		10	75		G
136	503	15,000		5.8	75		G
61	510	7,500		3.8	100		G
95	402	10,000		2.6	50		P
74	502	19,000		5.4	55		E
107	351	26,000		7.3	60	D	P
131	506	8,100					P
152	503	14,000		7.9	100		G
104	760	9,100		4.3	100		E
76	543	13,000		5.2	80		F
113	500	15,000		3.2	45		F
117	614	12,000		4.1	70		F
30	372	10,000		2.5	45		F
17	584	40,000		30 ?	100	R	F
86	900	20,000		9.2	95		F
4	42	3,500		2.0	100		P
154	759	16,000		7.5	90		F
174	602	19,000		6.5	70		F
39	200	10,000		4.7	90		E
114	1,000	13,000		6.1	95		G
86	1,000	19,000		6.9	75		E
122	508	15,000		5.6	70		G
88	450	17,000		5.8	70		G
91	560	11,000		4.2	75	R	F
147	400	15,000		5.6	75		G
18	83	6,300		3.6	100		G
7	82	3,000		2.4	100	R	G
13	25	1,000		1.6	100		G

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
HOR-974	6S-u2	Myrtle Beach AFB (Bldg. 212)	X	642	BC/145	6/26/88	25/6
HOR-975	6S-v3	Myrtle Beach AFB (Bldg. 633)	X	706	BC/120	7/10/88	24/8
HOR-976	3P-o1	Longs, 1 1/2 mi NNW	X	362	BC/40	5/18/88	24/7
HOR-977	7N-j2	Greensea, 2 1/4 mi NW	X	258	BC/85	2/16/87	24/6
HOR-1015	7R-j2	Conway, 2 mi SE	X	565	BC/95	4/17/90	24/12
HOR-1024	2Q-r7	Little River, 1 mi SW		88	Shal/	2/24/89	24/21
HOR-1025	2Q-r8	Little River, 1 mi SW		46	Shal/	2/25/89	24/12
HOR-1027	2Q-r10	Little River, 1 mi SW		44	Shal/	7/24/90	24/24
HOR-1028	2Q-r11	Little River, 1 mi SW		34	Shal/	10/18/89	9/21
HOR-1029	2Q-r12	Little River, 1 mi SW		48	Shal/	10/26/89	5/3
HOR-1030	2Q-r13	Little River, 1 mi SW		48	Shal/	10/14/89	8.5/16
HOR-1031	2Q-r14	Little River, 1 mi SW		48	Shal/	10/19/89	18/25
HOR-1033	2Q-r16	Little River, 1 mi SW		520	BC/	7/21/90	24/24
HOR-1034	2Q-r17	Little River, 1 mi SW		33	Shal/	10/16/89	6/3.5
HOR-1035	2Q-r18	Little River, 1 mi SW		44	Shal/	2/14/90	16/24
JASPER COUNTY							
JAS-104	29II-o1	Ridgeland, 8 1/2 mi SSE	X	330	F/	5/2/57	607/209
JAS-342	32JJ-t1	Hardeeville (SW part)		400	F/	7/ /82	24/7
JAS-346	30HH-o1	Ridgeland, 1 mi SW	X	220	F/	7/9/84	10/10
JAS-372	32HH-s2	Tillman, 1 mi S	X	204	F/	4/2/88	12/
JAS-375	31HH-b3	Ridgeland, 3 mi W		220	F/	8/30/89	12/
JAS-384	31GG-x5	Ridgeland, 5 mi WNW		180	F/	4/27/88	21/4
JAS-386	31HH-m3	Tillman, 3 1/2 mi E		118	F/	3/28/89	12/
JAS-389	31GG-p5	Tarboro, 5 mi E		300	F/	4/7/89	24/3
JAS-390	31GG-o3	Tarboro, 5 mi E		500	F/	4/10/89	32/17
JAS-391	32GG-n1	Tarboro, 2 mi NE		545	F/	6/7/90	23/28
JAS-392	32GG-n2	Tarboro, 2 1/4 mi NE		555	F/	9/10/90	48/49
KERSHAW COUNTY							
KER-19	23J-u2	Bethune, 3/4 mi NE		194	M/60	9/2/53	46/20
KER-115	26M-c2	Camden, 1 1/2 mi SW (Dupont)		41	AL/15	7/6/77	4/
KER-116	26M-c1	Camden, 1 1/2 mi SW (Dupont)		40	AL/13	7/14/77	4/
KER-139	25M-g1	Camden, 3 1/2 mi SE		139	M/55	6/5/78	24/1
KER-140	28N-i1	Elgin, 2 1/2 mi S	X	145	M/90	12/15/76	24/1.5
KER-141	28N-j1	Elgin, 3 mi SE	X	150	M/40	4/20/77	24/1
KER-148	23K-i1	Bethune, 1 mi SSW		157	M/80	2/3/77	24/2
KER-159	25L-c1	Camden, 6 1/2 mi NE (Shepard)	X	175	M/30	1/18/83	24/.5
KER-168	26M-d2	Camden, 2 mi SW (Dupont)		41	AL/12	2/1/82	4/2
KER-258	25L-h2	Camden, 5 mi NE	X	165	M/55	2/ /86	24/
KER-262	24K-q3	Cassatt, 2 1/2 mi WSW	X	182	M/40	12/ /86	24/3
KER-270	23J-v4	Bethune, NW edge		150	M/	9/14/87	24/1

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
184	402	10,000		3.2	65		F
173	402	22,000		7.2	65		G
46	500	12,000		5.7	95		E
38	201	33,000		6.1	35		G
87	200	15,000		4.2	55		G
9	65	4,900		2.8	100		G
8	66	3,200		4.0	100	R	G
12	40	5,000		3.1	100		F
3	43	4,600		2.6	100		F
15	21	5,000		2.5	100		F
11	35	5,000		1.9			P
17	25	2,900		1.5	100	R	P
51	460	8,000 ?		4.3	100		P
2	26	3,600		1.2	65		P
14	12	2,400		1.4	100		P
19	1,600	360,000	0.0003	100	70		G
46	1,140	500,000		81	40		P
42	260	290,000		76	65		P
33	350	260,000		82	80		P
47	1,350	400,000		104	65	D	F
46	270	360,000		27	20	D	P
42	725	270,000		90	85		G
46	500	380,000	.0004	135	90		G
47	500	380,000		105	70		G
47	470	420,000		24	15		F
52	470	340,000		46	35		E
20	300	3,000	0.0002	2.6	100	R	E
26	225	160,000		16	20		P
25	295	290,000		69	35		P
15	102	6,400		3.0	95		P
51	150	8,600		2.4	55	R	P
53	150	3,400		2.3	100		P
42	300	36,000		7.5	40		E
102	250	16,000		9.3	100		P
24	302	40,000		21	100		P
78	410	30,000		15	100	R	F
97	375	24,000		10	80	R	F
20	178	17,000		4.1	45	R	P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
LEE COUNTY							
LEE-18	19O-g1	Lynchburg, NE edge	X	514	M/175	11/14/72	28/
LEE-19	19O-g2	Lynchburg, NE edge	X	544	M/150	3/13/73	24/
LEE-36	23L-k1	Lucknow (water tank)	X	263	M/100	5/18/78	21/
LEE-55	23N-b3	Mannville, 3 mi W		130	M/	1/ /81	24/1
LEE-69	23M-j1	Bishopville, 5 mi W		336	M/	9/ /85	24/3.5
LEE-73	21O-d1	St. Charles	X	458	M/	1/6/92	24/2.5
LEXINGTON COUNTY							
LEX-32	37Q-a8	Leesville (Granite Street)		88	M/	11/30/53	5/7
LEX-77	32Q-o1	Edmund, 2 mi NE		245	M/	7/12/61	77/29
LEX-88	37Q-a5	Leesville (Hall and Gregg Streets)		125	M/	3/17/76	12/8
LEX-89	37P-v2	Leesville (N. Main Street)		97	M/50	3/18/76	21/13
LEX-156	32R-b1	Gaston		326	M/50	5/16/72	24/2
LEX-169	32R-l1	Gaston, 2 mi S	X	410	M/100	9/22/75	24/.5
LEX-195	37P-u11	Leesville (City Hall)	X	53	M/30	4/7/76	46/7.5
LEX-249	32Q-k1	Pineridge, 2 1/4 mi SSE		388	M/	/81	22/
LEX-251	32S-a1	Swansea	X	350	M/100	8/4/82	24/2
LEX-600	34P-w2	Red Bank, 3 mi W		160	M/	4/ /80	12/
LEX-601	34P-w4	Red Bank, 3 mi W		123	M/	4/ /80	19/
LEX-602	34P-w3	Red Bank, 3 mi W		61	M/50	8/20/80	24/.5
LEX-766	33P-r3	Lexington, 3 1/2 mi SE	X	105	M/70	2/8/83	24/.5
LEX-823	32S-b3	Swansea	X	225	M/90	7/25/89	24/6
MARION COUNTY							
MRN-9	11M-p2	Marion (Withlacoochee Avenue)	X	633	BC,M/80	6/15/87	24/5
MRN-43	10M-k2	Mullins (Front Street)		375	BC/30	6/9/77	3/1
MAN-59	10M-k1	Mullins (Prevatte Street)		318	BC/	6/3/77	3/1
MRN-60	10M-t1	Mullins (Gapway Street)		375	BC/	6/3/77	5/
MRN-67	9M-p2	Mullins (Springs Mill)	X	365	BC/70	5/10/72	12/9.5
MRN-78	10Q-p2	Brittons Neck, 3 mi S	X	537	BC/22	4/30/82	?/60
MRN-78	10Q-p2	Brittons Neck, 3 mi S	X	768	M/38	4/24/82	?/.5
MRN-81	10M-q1	Mullins, 3 1/2 mi W	X	357	BC/	7/27/67	24/
MRN-83	10M-l1	Mullins, 2 mi W	X	330	BC/75	6/22/78	24/8
MRN-89	9M-p1	Mullins (Cleveland Street)	X	344	BC/65	7/23/79	24/2
MRN-90	13M-b1	Sellers, 3 1/2 mi SW	X	537	BC,M/110	10/20/78	24/2.5
MRN-91	10M-k3	Mullins (Dogwood Street)	X	352	BC/20	6/16/72	3/1.5
MRN-110	9M-h2	Mullins, 3 1/2 mi NE	X	394	BC/165	4/9/89	4/

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
Flowing	805	27,000		< 9	< 65		P
Flowing	798	22,000		< 6	< 50		F
42	268	21,000		2.4	25		P
35	454	36,000		17	100		P
49	500	78,000		22	65	D	F
7	403	62,000		16	50		P
35	150	18,000					P
82	500	22,000	0.0002	10	90	R	G
35	21	3,200		3	100		P
50	115	19,000	.002				G
184	200	24,000		13	100		P
128	305	35,000	.0002	6.9	40		F
27	60	30,000	.002	3.3	20		P
199	120	55,000		5.2	20		P
124	432	38,000		17	90		P
	46	5,900	.0002				P
	45	5,200	.001				P
11	60	13,000		2.4	25		P
51	30	1,500		.9	100		P
18	448	13,000		6.3	95		P
98	650	11,000		7.0	100		G
88	402	13,000		6.2	95		E
69	503	13,000		4.8	75		F
78	305	10,000		2.1	45	D	P
60	570	21,000		10	100		F
17	32	7,000		< 1	30±		P
25	35	12,000		<1.5	25±		P
50	402	13,000		6.8	100		P
60	400	6,000		3.8	100		P
60	602	12,000		5.5	95		G
22	1,500	18,000		14	100		F
61	372	7,000		2.9	85		G
54	700	40,000		30	100		P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
MARLBORO COUNTY							
MLB-51	15H-s3	Bennettsville (Fleet Street)	X	374	M/170	6/8/77	24/2
MLB-117	15J-d3	Blenheim, 4 mi WSW		167	M/	6/24/59	28/4
MLB-142	15H-j2	Bennettsville, 2 1/2 mi NNE	X	125	M/125	9/13/78	25/2
MLB-143	14G-l2	McColl, 4 mi NW		105	M/	11/2/77	24/
MLB-145	14K-a1	Brownsville, 1 mi NW		250	M/110	4/1/82	24/2
MLB-160	15H-r1	Bennettsville, SW part		145	M/84	1/3/80	24/2.5
MLB-171	13I-c1	Clio	X	311	M/117	5/30/84	24/1
MLB-180	13H-c2	McColl, 3/4 mi SE	X	217	M/78	9/6/84	2.5/1
ORANGEBURG COUNTY							
ORG-108	27W-u2	Bowman (water tank)	X	955	BC/	5/27/80	24/
ORG-200	29V-t1	Orangeburg, 3 mi SSE		950	M/	7/31/78	6/
ORG-217	24V-f1	Santee (water tank)	X	366	BM,PD/40	3/31/77	24/5
ORG-229	32T-s1	North (Stafford and Pou Streets)	X	481	BC/75	11/27/79	24/.5
ORG-240	24U-x1	Santee State Park		185	BM/19	4/22/71	24/1.5
ORG-280	23X-e4	Holly Hill (water tank)	X	499	BM/65	5/14/85	27/2
ORG-343	24V-h1	Santee, 1 mi SE	X	349	BM,BC/90	9/15/86	26/1.5
ORG-346	27W-a1	Bowman, 5 mi N	X	331	BM/17	6/2/87	24/
ORG-348	21W-p2	Eutawville, 6 1/2 mi ESE		96	S/	8/1/88	24/12
ORG-357	24X-l4	Holly Hill, 3 mi S		525	PD/	5/88	5/
ORG-359	32T-k1	North, 1 1/2 mi NE	X	230	BM/80	11/1/88	24/
ORG-368	29V-k4	Orangeburg, 2 1/2 mi SE	X	235	M/235	8/8/88	24/6
ORG-369	26V-m2	Elloree, 6 mi SSW		305	BM/40	4/13/88	24/
ORG-375	22W-a1	Eutawville, 5 1/4 mi ESE		80	S/	4/29/89	7/2
RICHLAND COUNTY							
RIC-52	27Q-l3	Eastover (water tank)		112	BC/50	4/28/76	2/2
RIC-62	26R-c2	Eastover, 4 1/2 mi SE	X	549	M/110	10/15/74	24/8
RIC-63	26R-c1	Eastover, 4 1/2 mi SE	X	547	M/100	8/6/74	24/20
RIC-301	26Q-x2	Eastover, 3 3/4 mi SE	X	250	BC/	3/ /70	9/
RIC-450	26Q-g1	Eastover, 3 mi ENE	X	604	M/185	11/2/82	24/12
RIC-452	26Q-g2	Eastover, 3 mi ENE	X	584	M/170	7/29/82	24/7
RIC-502	29N-h2	Pontiac, 1 1/2 mi NW		135	M/19	8/21/85	2.5/2
RIC-506	29N-p1	Pontiac, 3 1/2 mi SW	X	130	M/50	7/2/86	4/2.5
RIC-508	29N-p3	Pontiac, 3 mi WSW		222	M/	3/19/86	4/4
RIC-511	30N-t3	Pontiac, 3 3/4 mi WSW		180	M/	3/7/86	4/4
RIC-525	30N-k1	Pontiac, 3 1/2 mi WSW	X	100	M/30	8/7/88	2/9

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
22	350	4,300		4.0	100		P
23	362	36,000		21	100		G
42	401	10,000		6.1	100	R	F
26	151	15,000		5.4	70		F
48	1,002	59,000		33	100		G
25	200	52,000		12	50	D	G
63	506	35,000		17	100		F
20	403	2,400		2.1	100		P
+ 40	1,100	140,000		11	15		P
14	1,000	130,000		19	30		P
45	250	8,700		4.8	100		F
38	759	170,000		22	25		P
12	150	6,600		1.4	40		P
95	1,001	16,000		8.0	100	R	G
60	402	12,000		4.0	70		F
34	82	2,500		1.3	100	D	F
22	620	250,000	0.002	14	10	D	P
120	1,067	21,000		9.4	90		P
122	400	24,000		6.2	55		P
34	853	150,000		32	55	D	F
34	73	12,000		0.9	15		P
5	425	180,000	.002	12	15		F
31	120	10,000		3.2	65	R	F
24	2,000	65,000	0.0002	30	90		E
23	2,000	59,000		22	75		G
65	524	19,000		4.4	45	D	F
87	1,507	57,000	.0005	24	85		G
97	192	45,000		9.1	40		G
70	14	4,800		1.9	85		G
65	150	21,000		5.7	55		F
125	25	1,200		.6	100		F
109	22	11,000		1.6	30		F
71	26	14,000		4.1	60		F

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
SUMTER COUNTY							
SUM-71	22P-y3	Sumter (Water Plant 2)	X	747	BC,M/125	10/27/76	2/.5
SUM-111	23P-t6	Sumter (Water Plant 1)	X	620	BC,M/150	/63	16/
SUM-119	22P-y2	Sumter (Water Plant 2)	X	620	BC,M/130	10/22/76	2/
SUM-132	22P-y1	Sumter (Water Plant 2)	X	636	BC,M/180	5/2/68	20/
SUM-133	23Q-r6	Sumter (Water Plant 3)	X	694	BC,M/150	11/8/76	2/
SUM-134	23Q-r3	Sumter (Water Plant 3)	X	682	BC,M/155	10/8/65	24/
SUM-136	23Q-r2	Sumter (Water Plant 3)	X	678	BC,M/125	10/12/65	24/.5
SUM-141	25N-w1	Rembert		164	BC/20	2/9/70	24/
SUM-145	24P-e2	Shaw AFB, 1/2 mi NW	X	412	BC/	3/ /74	24/
SUM-153	23Q-r1	Sumter (Water Plant 3)	X	643	M/150	8/30/76	24/95
SUM-154	25Q-a2	Wedgefield, 1 1/2 mi N		237	BC/	5/20/69	24/
SUM-155	23Q-r5	Sumter (Water Plant 3)	X	704	M/165	11/8/77	72/23
SUM-156	25O-g1	Rembert, 3 mi S	X	321	BC,M/155	6/8/77	24/1
SUM-159	24P-g1	Shaw AFB (Lance Avenue)	X	252	BC/105	9/15/75	8/
SUM-161	22Q-e2	Sumter (Water Plant 2)		615	BC,M/	4/23/75	24/
SUM-165	23Q-i2	Sumter (Water Plant 4)	X	170	BC/78	1/27/78	4/1
SUM-167	25N-w2	Rembert		155	BC/20	3/2/70	24/
SUM-175	23Q-s1	Sumter (Water Plant 3)	X	682	BC,M/	3/4/65	24/
SUM-177	23O-w1	Sumter, 6 mi NNW	X	422	BC,M/180	4/9/79	26/.5
SUM-179	24O-k1	Dalzell, 2 mi N	X	440	BC,M/235	3/12/79	22/1
SUM-198	18P-q1	Woods Bay State Park		575	M/	9/8/76	8/
SUM-201	25Q-b1	Wedgefield, 1 1/2 mi N	X	291	BC/35	9/22/80	24/
SUM-222	23Q-j1	Sumter, 2 mi SSW		90	BC/	7/5/81	3.5/2
SUM-223	24P-k1	Sumter, 5 1/2 mi NW		89	BC/70	12/11/82	24/
SUM-225	19P-m1	Mayesville, 10 mi ESE		132	BC/	2/20/82	24/2
SUM-283	21Q-i1	Mayesville, 6 mi S	X	102	BC/20	8/1/83	24/24
SUM-284	24P-q1	Shaw AFB, 1/2 mi S		160	BC/	4/16/87	24/
SUM-285	24P-q2	Shaw AFB, 1/2 mi S		170	BC/	4/17/87	24/
SUM-289	25Q-b3	Wedgefield, 1 1/2 mi N		305	BC/	2/24/87	24/
SUM-326	23P-n1	Sumter (Water Plant 5)	X	547	BC,M/160	8/1/89	6/1
SUM-327	23P-n2	Sumter (Water Plant 5)	X	545	BC,M/220	10/17/89	24/24
WILLIAMSBURG COUNTY							
WIL-11	16S-y1	Kingstree (Brooks Street)		530	BC/	5/23/77	5/2
WIL-26	16S-g2	Kingstree, 5 mi NNE		755	BC,M/	1/4/61	24/
WIL-33	17U-r1	Lane (Seaboard Road)	X	641	BC/50	6/2/69	24/
WIL-73	13V-g1	Andrews, NW edge	X	768	BC/90	5/12/75	48/
WIL-75	16T-e2	Kingstree, SE part	X	670	BC/120	5/1/78	72/95
WIL-118	17S-u1	Kingstree, NW part	X	953	M/40	11/15/76	24/1
WIL-124	13S-f1	Stuckey, 3 1/2 mi W	X	260	PD/58	7/13/81	24/1.5

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
72	1,000	19,000		10	100		P
65	2,474	50,000		23	90		P
72	1,000	22,000		10	90		P
44	1,800	28,000		12	85		P
76	1,000	29,000		8.8	60		F
33	1,800	52,000		18	70		P
54	1,750	40,000		23	100		P
69	55	2,900		2.9	100		P
165	465	8,800		6.1	100		P
78	1,400	50,000	0.0004	14	100		F
139	100	5,300		2.4	90		P
80	2,104	52,000	.0002				G
25	1,212	86,000		35	80	R	F
75	650	32,000		12	70		F
55	1,500	40,000		15	75		P
7	20	20,000		3.4	35		P
63	60	3,200		3.9	100		P
37	1,520	26,000		12	95		P
15	2,060	68,000		30	90		F
67	1,302	100,000		22	45		F
27	115	8,700		3.1	70		P
160	225	13,000		3.8	60		P
18	76	20,000		3.1	30		F
19	20	8,800		1.2	25		P
12	24	11,000		16	100		P
24	151	11,000		4.6	85		F
37	140	18,000		4.8	50	D	P
35	140	18,000		50	55	R	P
139	207	14,000		5.6	80		P
12	1,500	50,000		10	40		G
14	2,100	74,000		30	80		E
34	153	5,500		3.5	100		P
+ 14	700	21,000		10	100		P
3	150	3,400		1.1	70		F
63	375	6,000		3.9	100		P
29	754	22,000		10	100	D	G
29	500	3,200		3.5	100	R	G
16	150	2,300		.9	80		P

County well no.	SCWRC no.	Location	Elec. log	Depth (ft)	Aquifer/ thick. (ft)	Date of test	Duration (dd/recov)
WIL-176	12S-h1	Hemingway, 1 1/2 mi SW	X	914	M/50	5/14/86	24/4
WIL-177	17U-q1	Lane, W side	X	694	BC/115	5/ /90	12/20
WIL-192	13V-o2	Andrews, NW corner	X	792	BC/95	1/7/75	48/2
WIL-193	13S-j2	Stuckey	X	610	PD,BC/105	2/27/91	24/1

Static WL (ft)	Pumping rate (gpm)	Transmissivity (gpd/ft)	Storage coef.	Specific cap. (gpm/ft)	Well effic. (percent)	Hydrol. bound.	Rating of test
42	753	38,000		13	70		E
16	250	3,700		1.3	70		F
71	354	5,000		2.3	90	R	P
57	250	37,000		5.8	30	D	F

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