GEOHYDROLOGY AND SUSCEPTIBILITY OF MAJOR AQUIFERS TO SURFACE CONTAMINATION IN ALABAMA; AREA 8

By John C. Scott, Riley H. Cobb, and Rick D. Castleberry

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CONVERSION FACTORS

For use of readers who prefer to use metric (International System) units, conversion factors for inch-pound units used in this report are listed below:

Multiply inch-pound unit	By	To obtain metric unit
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
gallon per minute (gal/min)	0.06308	liter per second (L/s)
million gallons per day (Mgal/d)	0.04381	cubic meter per second (m^3/s)

National Geodetic Vertical Datum of 1929 (NGVD of 1929): A geodetic datum derived from a general adjustment of the first-order level nets of both the United States and Canada, formerly referred to as "mean sea level."

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ABSTRACT

The U.S. Geological Survey, in cooperation with the Alabama Department of Environmental Management, is conducting a series of geohydrologic studies to delineate the major aquifers and their susceptibility to contamination in Alabama. This report delineates and describes the geohydrology and susceptibility of the major aquifers to contamination in Area 8--Autauga, Chilton, Elmore, Lowndes, and Montgomery Counties.

The major aquifers in the study area are the Eutaw, Gordo, and Coker aquifers of Cretaceous age. One or more of these aquifers are sources of public water supply in each of the five counties. The recharge areas for these aquifers are in Autauga, Chilton, Elmore, and Montgomery Counties. The major pumping centers are at the cities of Montgomery and Prattville. Maximum ground-water use at Montgomery is more than 30 million gallons per day. Maximum ground-water use in the Prattville area is more than 8 million gallons per day. Estimated maximum ground-water withdrawal for all uses in the study area is about 65 million gallons per day.

Extensive depressions in the potentiometric surface of the Gordo aquifer have developed in the vicinities of Montgomery and Prattville. The potentiometric map of the Gordo aquifer indicates that the Alabama River may serve as a recharging boundary to the Gordo aquifer along the flood plain of the river in the Montgomery-Prattville area. Less-extensive cones of depression have developed in the Eutaw and Coker aquifers in the Montgomery area. The river also is acting as a recharging boundary to these aquifers where the potentiometric surfaces in the aquifers have been lowered.

All recharge areas for the major aquifers are susceptible to contamination from the surface. However, large parts of the recharge areas are in rural terrains that are used for timberlands, farms, and pastures, and are several miles from pumping centers; areas where there are few sources of contamination. The areas that are highly susceptible to contamination extend from Jemison to Clanton in Chilton County where the Coker aquifer generally is less than 100 feet below land surface, and the flood plains of the Alabama, Coosa, and Tallapoosa Rivers, which are underlain by alluvial deposits that are in hydraulic contact with the major aquifers. Within the highly susceptible areas, the areas especially susceptible to contamination are the flood plain of the Alabama River in the Montgomery area and the flood plain of the Tallapoosa River. Pumpage from the major aquifers in this area has significantly lowered the potentiometric surface in the aquifers resulting in a downward gradient between the major aquifers and the Alabama River and the alluvial deposits underlying the flood plain along the river.

INTRODUCTION

The Alabama Department of Environmental Management (ADEM) is developing a comprehensive program to protect aquifers in Alabama from surface contamination that are defined by the U.S. Environmental Protection Agency (EPA) as "Class I" and "Class II" aquifers (U.S. Environmental Protection Agency, 1984). The U.S. Geological Survey (USGS), in cooperation with ADEM, is conducting a series of geohydrologic studies to delineate the major aquifers in Alabama, their recharge areas, and areas susceptible to contamination. This report summarizes these factors for major aquifers in Area 8--Autauga, Chilton, Elmore Lowndes, and Montgomery Counties (see plate 1).

Purpose and Scope

The purpose of this report is to describe the geohydrology of the major aquifers and their susceptibility to contamination from the surface. Geologic and hydrologic data compiled as part of previous investigations provided about 75 percent of the data used to evaluate the major aquifers in the area. All wells used for municipal and rural public water supplies were inventoried, and water levels were measured in these wells where possible. Data on water use were compiled during the well inventory. Water-level data were used to compile generalized potentiometric maps of the aquifers. Areas susceptible to contamination from the surface were delineated partly from topographic maps and other available data, and partly from field investigation.

Location and Extent of the Area

The study area is in south-central Alabama and comprises an area of about 3,430 square miles. The area includes Montgomery, Prattville, Wetumpka, Tallassee, Hayneville, Fort Deposit, Clanton, Maplesville, and numerous other small towns and communities (plate 1). The total population of the five-county area was 316,552 in 1980. The area is partly urban, partly suburban, and partly rural. A large part of the population is dependent on ground water.

Physical Features

The study area includes parts of several physiographic districts (fig. 1). The northern part of Chilton County is in the Cahaba Valley and Coosa Valley districts of the Alabama Valley and Ridge physiographic section (Sapp and Emplaincourt, 1975). This area consists mainly of northeastward-trending ridges and valleys. The altitudes[1/] of valley floors are generally about 400 feet above National Geodetic Vertical Datum of 1929 (NGVD of 1929), and ridge tops generally range from 600 to 700 feet above NGVD of 1929. Drainage in the area is westward to the Cahaba River and northeastward to the Coosa River.

[1/] Altitudes, as used in this report, refer to the distance above the NGVD of 1929.

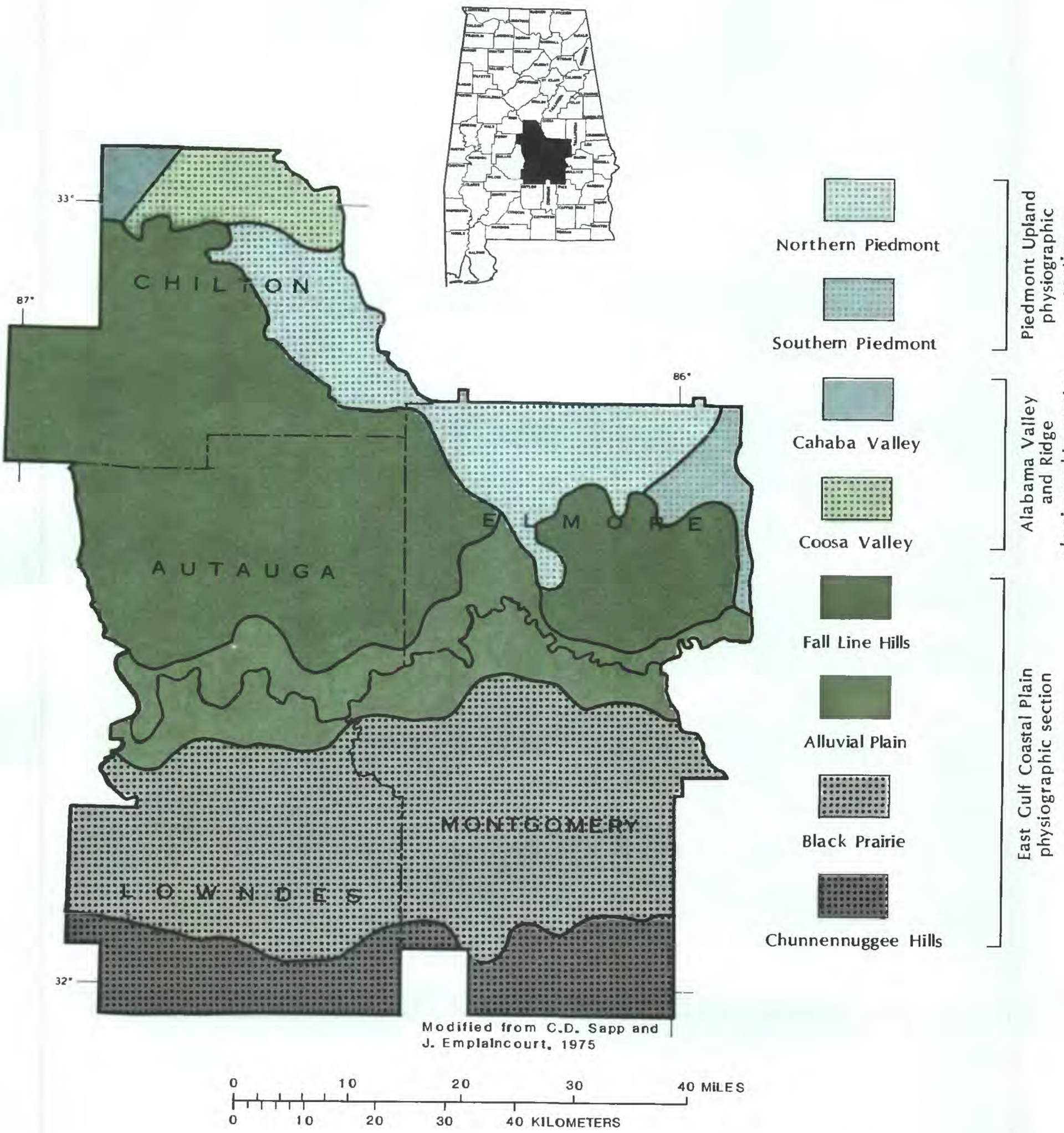


Figure 1.--Physiographic map of the study area.

The eastern part of Chilton County and the northern part of Elmore County are in the Northern and Southern Piedmont Upland districts of the Piedmont Upland physiographic section. The terrain in these areas is rolling to hilly, and some streams are deeply entrenched. Drainage in the Piedmont area of Chilton County is generally eastward to the Coosa River. Drainage in the Piedmont area of Elmore County is southward and westward to the Coosa River and eastward to the Tallapoosa River.

The western and southern parts of Chilton County, the southern part of Elmore County, and all except the southernmost part of Autauga County are in the Fall-Line Hills district of the East Gulf Coastal Plain physiographic section. These areas consist mainly of flat to moderately-rolling sandy, uplands dissected by deeply-entrenched southward-flowing streams. The land surface ranges in altitude from about 160 feet above NGVD of 1929 at the town of Wetumpka to about 850 feet in eastern Chilton County.

The southernmost parts of Autauga and Elmore Counties and the northernmost parts of Lowndes and Montgomery Counties are in the Alluvial-Deltaic Plain district of the East Gulf Coastal Plain physiographic section (fig. 1). This area is characterized by broad, flat flood plains and terraces. Much of the area is periodically inundated by floods on the Coosa, Tallapoosa, and Alabama Rivers. The land surface ranges in altitude from about 130 feet above NGVD of 1929 at the town of Benton in northwestern Lowndes County to about 200 feet on the flood plain of the Tallapoosa River south of the city of Tallassee.

The central parts of Lowndes and Montgomery Counties are in the Black Prairie district of the East Gulf Coastal Plain physiographic section. The Black Prairie, named for black soil that is common in the area, is a gently- to moderately-rolling prairie that is characterized by extensive grasslands, but very few trees. The land surface in the area ranges from about 150 to 420 feet above NGVD of 1929. Drainage in the Black Prairie is generally northward and northwestward to the Alabama and Tallapoosa Rivers.

The southern parts of Lowndes and Montgomery Counties are in the Chunnenuggee Hills district of the East Gulf Coastal Plain physiographic section. This area is characterized by sandy cuestas that have fairly steep northward-facing escarpments and gently- to moderately-rolling backslopes. The land surface in the area ranges from about 450 to 600 feet above NGVD of 1929. Drainage in the area is northward along the escarpments of the cuestas, but is southward along the backslopes.

Previous Investigations

Numerous reports that describe the geology and ground-water resources of the study area have been published. Information on the geology of the area was published as early as 1858 in the second biennial report of the Geological Survey of Alabama by Michael Toumey, the first State Geologist (Toumey, 1858). A detailed description of the geology of Alabama and a revised geologic map were published by the Geological Survey of Alabama in 1926 (Adams and others, 1926).

The first report on ground water in the area was published in 1907 (Smith, 1907). Other reports that contain information on the geology and ground-water resources of the area are "Notes on Deposits of Selma and Ripley Age in Alabama" (Monroe, 1941), "The Cretaceous of East-Central Alabama (Eargle, 1948), "Geologic Map of the Selma Group in Eastern Alabama" (Eargle, 1950), "Geology and Ground Water of the Piedmont Area of Alabama" (Baker, 1957), "Geology and Ground-Water Resources of Montgomery County, Alabama" (Knowles and others, 1963), "Ground-Water Resources of Lowndes County, Alabama" (Scott, 1957), "Ground-Water Resources of Autauga County, Alabama" (Scott, 1960), "Water Availability, Elmore County, Alabama" (Lines, 1975), and "Water Availability in Chilton County, Alabama" (Ellard and Willmon, 1980).

Acknowledgments

The authors wish to thank the many persons who have contributed information and assistance during the field investigation and during the preparation of this report. Special appreciation is extended to the waterworks managers of the ground-water systems in the study area who have helped locate public-supply wells and furnished information on well construction and water use. Appreciation also is extended to personnel of General Electric Corporation for supplying information on test wells at the General Electric Plant near Burkville in Lowndes County.

GEOHYDROLOGY OF THE STUDY AREA

Geologic formations that crop out in and underlie the study area range in age from Cambrian to Quaternary (fig. 2). Metamorphic and igneous rocks crop out in eastern Chilton and northern Elmore Counties and underlie all of the study area except the northwestern corner of Chilton County. Sedimentary rocks of Paleozoic age crop out in the northwestern corner of Chilton County. These rocks range in age from Cambrian to Mississippian. Unconsolidated sedimentary deposits of Late Cretaceous age crop out in central and southern Chilton County, western and southern Elmore County, all of Autauga County, and in all but southernmost parts of Lowndes and Montgomery Counties. Sedimentary deposits of Tertiary age crop out in the southernmost part of Lowndes County. Alluvial and terrace deposits overlie older rocks in and adjacent to the flood plains of the Alabama, Coosa, and Tallapoosa Rivers and larger streams in the study area. Generalized subsurface sections of formations that underlie the study area are shown in figures 3 and 4. The approximate locations of these sections are shown in figure 2. A summary of the thickness, lithology, and water-bearing properties of each geologic unit underlying the study area is given in table 1.

Igneous and Metamorphic Rocks

The igneous and metamorphic rocks exposed in the study area range in age from Precambrian to Pennsylvanian (Adams and others, 1926), and consist mainly of schist, gneiss, marble, quartzite, and granite. These rocks crop out in Chilton and Elmore Counties (see fig. 2) and underlie most of the study area. The rocks generally trend northeastward except in northeastern Chilton County where thrust faults and intrusive igneous rocks have resulted in an east-southeastward trend. Foliation planes in the metamorphic rocks generally dip southeastward, but dip northward and northwestward in some places.

The metamorphic rocks, except for marble and metamorphosed dolomite, are relatively impermeable, and do not comprise a major aquifer in the study area. Wells developed in schist or gneiss generally produce less than 20 gal/min (gallons per minute); however, wells developed in marble or dolomite may produce 100 gal/min or more at some places.

Paleozoic Rocks

Sedimentary rocks ranging in age from Cambrian to Mississippian crop out in the northwestern corner of Chilton County (fig. 2). Geologic units, from oldest to youngest, include the Brierfield, Ketona, and Bibb Dolomites of Cambrian age; part of the Knox Dolomite of Cambrian and Ordovician age; the Longview, Newala, and Little Oak Limestones of Ordovician age; and the Fort Payne Chert and Floyd Shale of Mississippian age (Adams and others, 1926). These rocks, which crop out in an area of about 50 square miles in northwestern Chilton County, are complexly folded and faulted and, except for the Floyd Shale, are deeply weathered. The rocks strike northeastward and generally dip southeastward. No large-capacity wells have been drilled in this part of Chilton County, but the limestones and dolomites are potential sources of large water supplies. For example, a municipal spring discharging

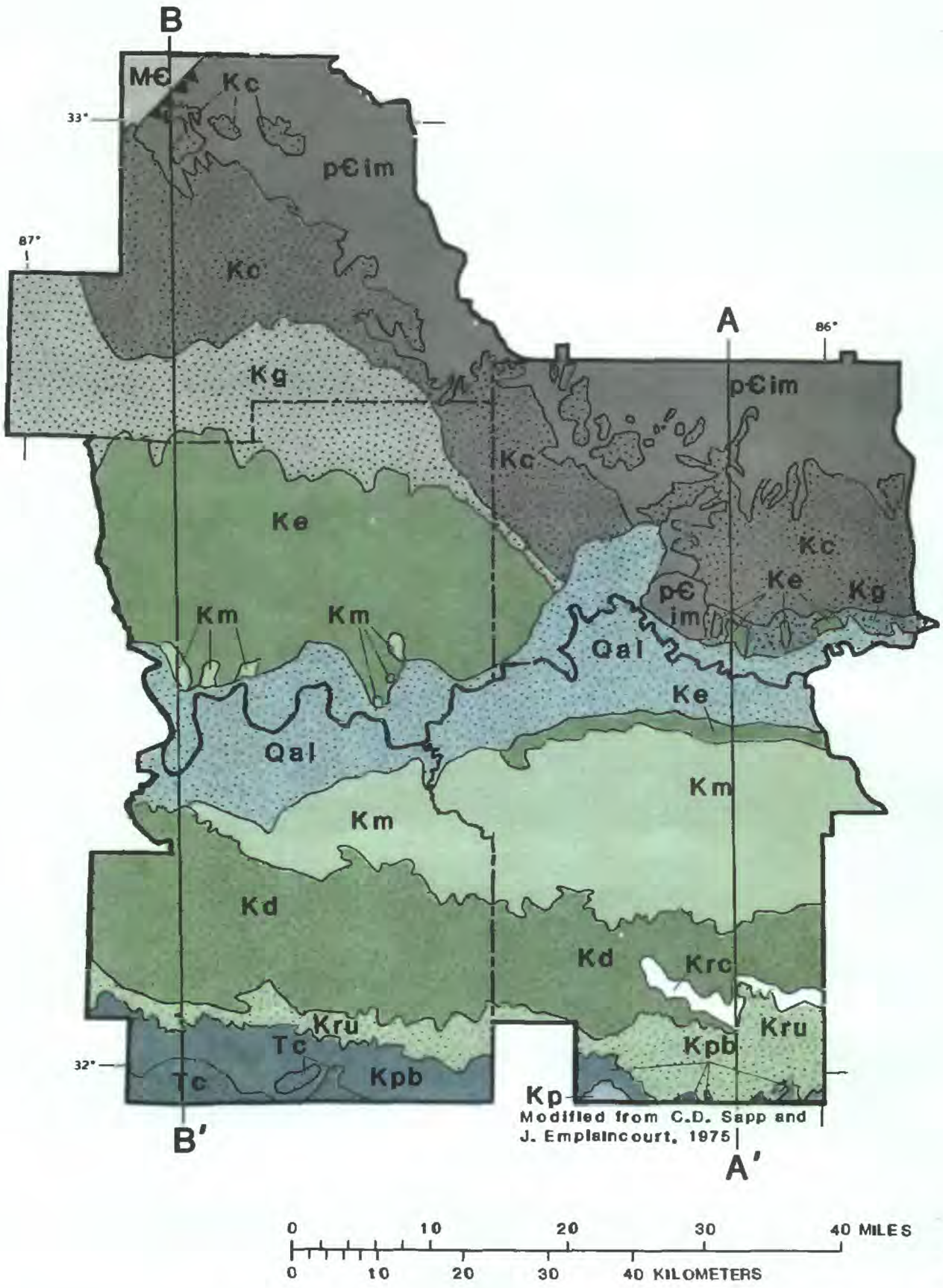


Figure 2.--Generalized geologic map of the study area.

EXPLANATION

GEOLOGIC UNITS

- **Qal** — Alluvium — Midway Group — Paleocene — Holocene — Tertiary — Quaternary
- **Tc** — Clayton Formation — Midway Group — Paleocene — Tertiary
- **Kp** — Providence Sand — Selma Group — Upper Cretaceous — Cretaceous
- **Kpb** — Prairie Bluff Chalk — Selma Group — Upper Cretaceous — Cretaceous
- **Kru / Krc** — Ripley Formation, Cusseta Sand Member — Selma Group — Upper Cretaceous — Cretaceous
- **Kd** — Demopolis Chalk — Selma Group — Upper Cretaceous — Cretaceous
- **Km** — Mooreville Chalk — Selma Group — Upper Cretaceous — Cretaceous
- **Ke** — Eutaw Formation — Upper Cretaceous — Cretaceous
- **Kg** — Gordo Formation — Tuscaloosa Group — Upper Cretaceous — Cretaceous
- **Kc** — Coker Formation — Tuscaloosa Group — Upper Cretaceous — Cretaceous
- **MЄ** — Mississippian to Cambrian rocks, undifferentiated — Mississippian
- **pЄim** — Metamorphic and igneous rocks

THRUST FAULT

LITHOLOGIC CONTACT--Dashed where inferred

A — A′ TRACE OF SECTION

from the Brierfield Dolomite at the city of Montevallo in adjacent Shelby County flowed at a rate of more than 1,000 gal/min in 1968; and a well developed in the Brierfield Dolomite at the University of Montevallo had a drawdown in water level of only 32 feet when pumped at 340 gal/min in 1962.

Cretaceous Formations

Sedimentary deposits of Late Cretaceous age overlie the metamorphic and igneous rocks or Paleozoic rocks throughout most of the study area (fig. 2). These deposits include, from oldest to youngest, the Coker and Gordo Formations of the Tuscaloosa Group (Drennen, 1953); the Eutaw Formation; and the Mooreville and Demopolis Chalks, the Ripley Formation, the Prairie Bluff Chalk, and the Providence Sand of the Selma Group (Drennen, 1953; Eargle, 1950). These formations strike generally eastward and dip southward 30 to 40 feet per mile (figs. 3 and 4).

Coker Formation

The Coker Formation crops out in western and southern parts of Chilton County and the central part of Elmore County (fig. 2). The Coker underlies all of the study area south of its area of outcrop, and is one of the major aquifers in the study area.

The Coker Formation consists of a basal zone of nonmarine gravel, sand, and clay and an upper zone of marine sand and clay beds. In most parts of the study area the basal zone is separated from the marine sand beds by 50 feet or more of clay. A clay zone is usually present at the top of the Coker. This clay is a confining layer between the Coker aquifer and the overlying Gordo aquifer (figs. 3 and 4). The Coker Formation ranges in thickness from less than 100 feet where only the basal beds remain to more than 1,000 feet in southernmost parts of the study area.

The basal gravelly zone in the Coker is developed for public water supplies for the towns of Jemison, Maplesville, and Thorsby, and the Chilton County Water Authority in Chilton County, and for the town of Billingsley in Autauga County. This zone is also tapped by municipal wells as far downdip as the city of Montgomery.

The marine sand beds in the Coker are tapped by numerous wells in the study area. Wells that supply the towns of Elmore, Holtville, Marbury, and Deatsville are developed in this zone. The Coker is tapped in conjunction with the Eutaw and Gordo aquifers at the cities of Montgomery, Prattville, and Millbrook. For this report, the upper and lower permeable zones in the Coker Formation comprise the Coker aquifer.

The Coker aquifer has not been developed as a source of water supply south of the Montgomery West Well Field. Available data indicate that the Coker is a source of potable water in central and southeastern parts of Montgomery County, but the water in southwestern Montgomery County and southern Lowndes County may contain more than 1,000 mg/L (milligrams per

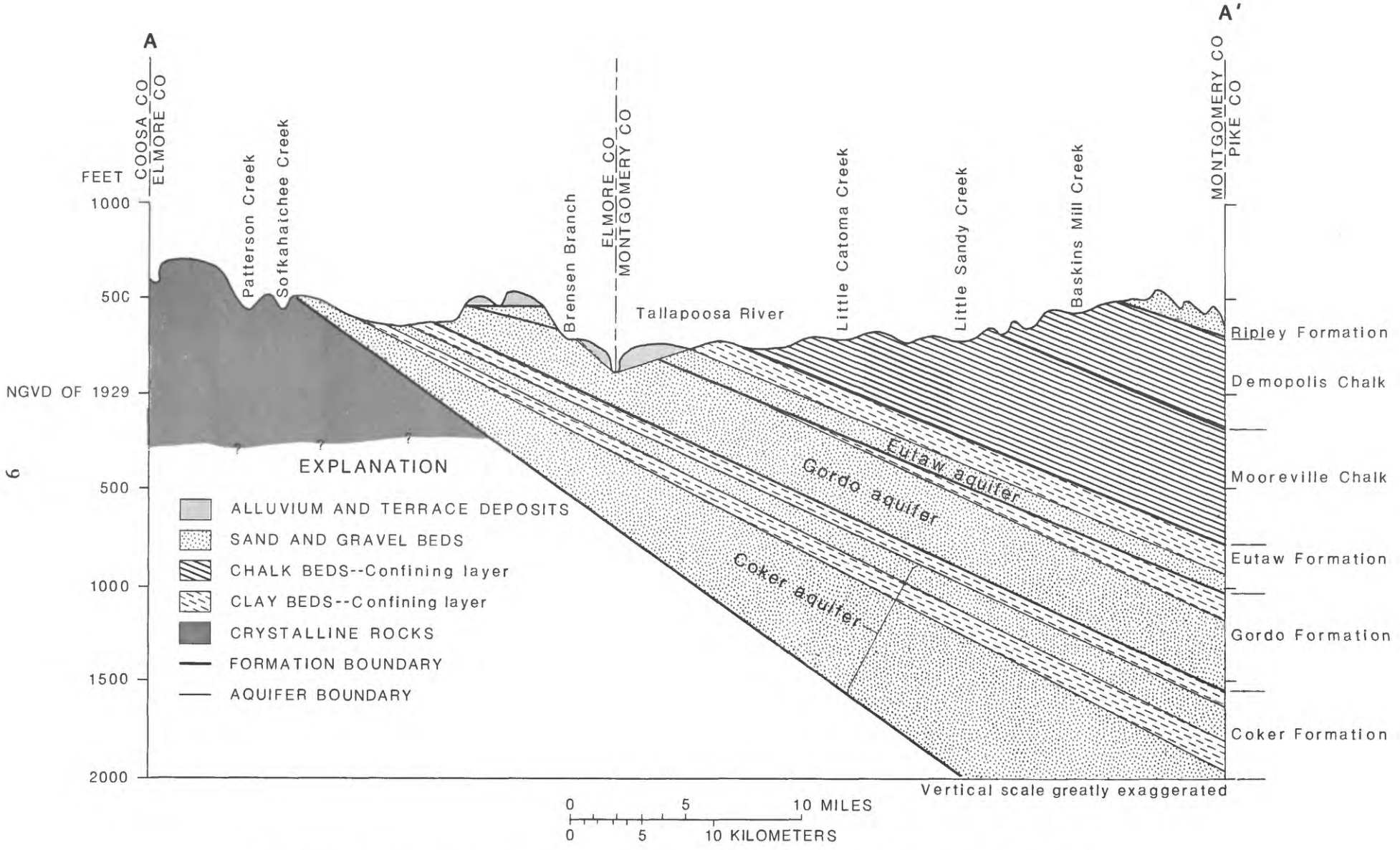


Figure 3.--Generalized subsurface section of the major aquifers in the eastern part of the study area (line of section shown on figure 2).

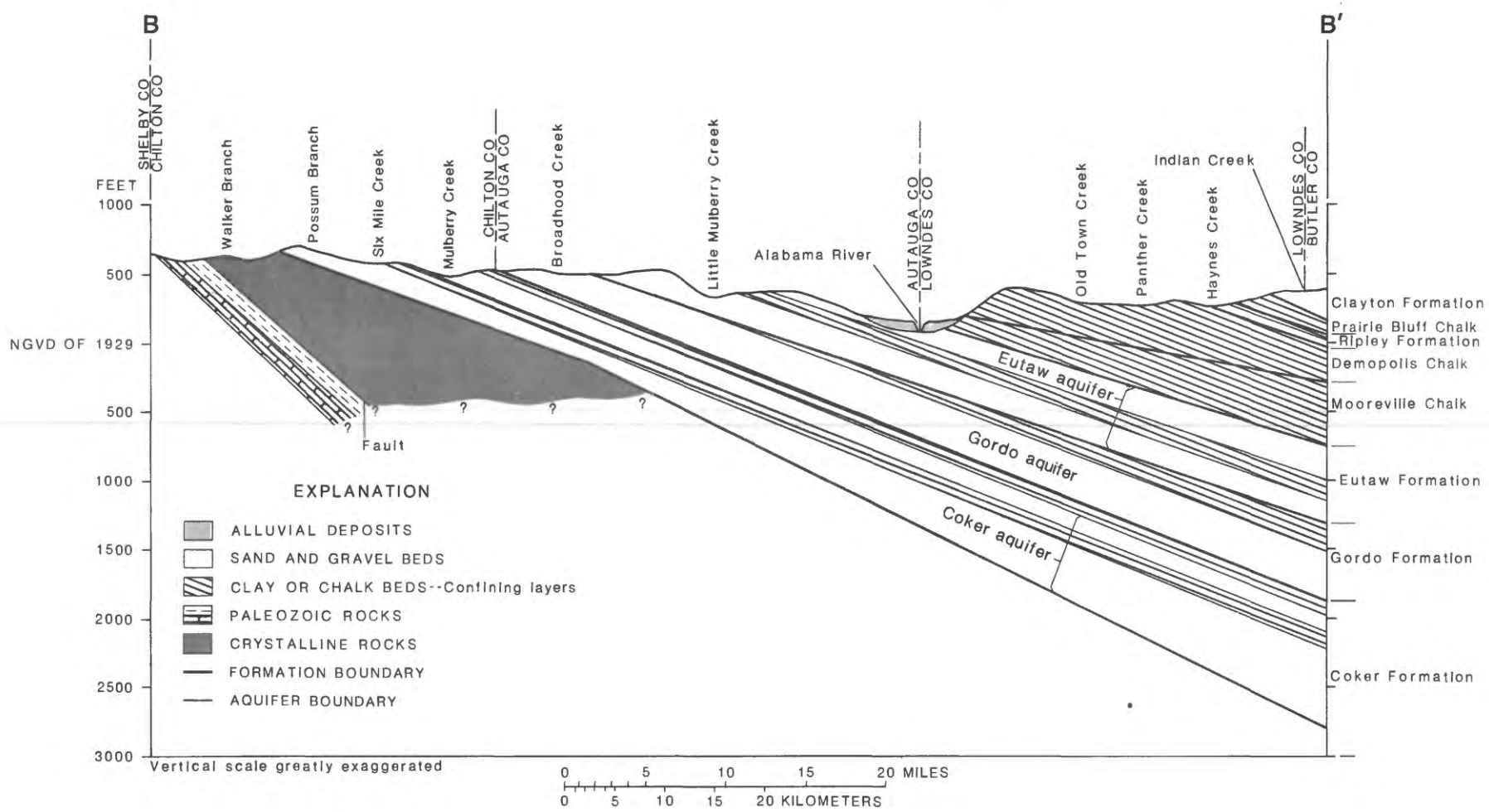


Figure 4.--Generalized subsurface section of the major aquifers in the western part of the study area. (trace of section shown on figure 2.)

liter) chloride. Wells developed solely in the Coker produce 500 gal/min or more at some places. Wells developed in the Coker in conjunction with the Gordo and Eutaw aquifers produce as much as 1,000 gal/min in the Montgomery West Well Field.

Gordo Formation

The Gordo Formation overlies the Coker Formation and crops out in the southern part of Chilton County, the western and southern parts of Elmore County, and the northern part of Autauga County (fig. 2). The Gordo consists of a basal zone of gravelly sand overlain by alternating lenticular beds of sand and varicolored mottled clay. The Gordo ranges in thickness from about 100 feet at outcrops to more than 300 feet in the subsurface in the southern part of the study area.

The Gordo Formation is one of the major aquifers in the study area. It is the principal source of water for the city of Prattville, a major source for the city of Montgomery, and is the sole source for the town of Autaugaville, Autauga Hills, and the Autauga County Water System. The Gordo is the source of all public water supplies in Lowndes County except the town of Fort Deposit. The Gordo is not a major aquifer in Chilton and Elmore Counties because of its proximity to the land surface.

Wells developed solely in the Gordo aquifer produce from 200 to 500 gal/min. Wells developed in the Gordo in conjunction with the Eutaw and Coker produce as much as 1,000 gal/min. Water in the Gordo aquifer in southern Lowndes County contains more than 1,000 mg/L chloride. Limited water-quality data for the Gordo aquifer in southern Montgomery County indicate that the water is potable in the vicinity of the town of Ramer. The water is probably potable in the southeastern part of the county.

Eutaw Formation

The Eutaw Formation overlies the Gordo Formation, and crops out over a large part of Autauga County, western and southern parts of Elmore County, and in the northern part of Montgomery County (fig. 2). The Eutaw consists of upper and lower zones of marine sand separated by a zone of clay. The Eutaw Formation ranges in thickness from about 200 to 400 feet where the entire formation is present. The lower part of the formation consists of 30 to 50 feet of glauconitic sand interbedded with sandy clay. The middle part consists of 50 to 150 feet of calcareous clay and sandy clay. The upper part consists of as much as 150 feet of massive glauconitic sand interbedded with calcareous sandstone and sandy limestone. The formation thins from 400 feet in the vicinity of Montgomery to about 250 feet in eastern Montgomery County, and the upper zone of sand is generally absent in this area.

The Eutaw Formation is a major aquifer in the vicinity of Montgomery, and is a potential aquifer throughout Montgomery County. For this report, the upper and lower permeable zones in the Eutaw Formation comprise the Eutaw aquifer. The upper sand zone in the Eutaw is a major aquifer for most public water systems in the county except the city of Montgomery.

The Eutaw Formation is not a major aquifer in Chilton and Elmore Counties because of its limited areal extent and thinness; is not in Autauga County because in most of this area water in the formation contains excessive concentrations of iron; and is not in Lowndes County because chloride concentrations in the water are more than 1,000 mg/L in most parts of the county.

Wells developed in the lower part of the Eutaw in the Montgomery area produce as much as 450 gal/min; wells developed in the upper part of the Eutaw reportedly produce as much as 500 gal/min. Wells developed in both the upper and lower parts of the Eutaw in central and southern parts of the county may have the capacity to produce 700 gal/min or more.

Mooreville Chalk

The Mooreville Chalk overlies the Eutaw Formation, and crops out in southern Autauga County, northern Lowndes County, and central Montgomery County (fig. 2). The Mooreville consists of about 400 to 500 feet of chalk, calcareous clay, sandy clay and limestone. The Arcola Limestone Member of the Mooreville, at the top of the unit (not shown in fig. 2), consists of two to four thin beds of limestone separated by clay and sandy clay. The Mooreville Chalk is relatively impermeable and is not a source of water in the study area. The chalk is an upper confining layer for the upper Eutaw aquifer.

Demopolis Chalk

The Demopolis Chalk overlies the Mooreville Chalk, and crops out in central Lowndes County and southern Montgomery County (fig. 2). The Demopolis consists of about 400 to 450 feet of chalk, calcareous clay, and sandy clay. The Demopolis merges laterally with the Cusseta Sand Member of the Ripley Formation in southeastern Montgomery County.

In a small area between the towns of Pine Level and Ramer the Demopolis underlies and overlies an eastward-trending tongue of the Cusseta Sand Member. Eastward from Pine Level the Demopolis thins and grades from chalk to calcareous sandy clay as the Cusseta thickens. The Demopolis is relatively impermeable and is not an aquifer in the study area.

Ripley Formation

The Ripley Formation overlies the Demopolis Chalk and crops out in southern Lowndes and Montgomery Counties (fig. 2). In Montgomery County the Ripley is divided into a lower Cusseta Sand Member and an upper unnamed member. The Cusseta Sand Member merges into the upper part of the Demopolis Chalk in southeastern Montgomery County, and is not present from U.S. Highway 331 westward. The Cusseta Sand Member consists of 100 to 120 feet of fossiliferous sand, calcareous sandstone and sandy chalk. The upper unnamed member of the Ripley overlies the Cusseta Sand Member in southeastern Montgomery County, and overlies the Demopolis Chalk in southwestern Montgomery County and southern Lowndes County. The upper member consists of sand, sandy clay, silty

fossiliferous clay, and calcareous sandstone beds. The Ripley ranges in thickness from about 200 feet in southwestern Lowndes County to 300 feet in southeastern Montgomery County.

The Ripley Formation is not a major aquifer in the study area, but is a major aquifer south of the study area. The town of Fort Deposit in the southern part of Lowndes County uses the Ripley aquifer, but the town's wells are located downdip in Butler County. Fort Deposit formerly pumped water from the Ripley using wells located in the town, but relocated their wells in Butler County to take advantage of the higher well production and less-mineralized water.

Prairie Bluff Chalk

The Prairie Bluff Chalk overlies the Ripley Formation and crops out in southern Lowndes and Montgomery Counties (fig. 2). The Prairie Bluff consists of fossiliferous sandy chalk and calcareous sandy clay. The Prairie Bluff is about 100 feet thick in south central Montgomery County, but thins eastward to about 40 feet in southeastern Montgomery County where it merges with the Perote Member of the Providence Sand. The Prairie Bluff also thins westward from south central Montgomery County, and is only about 60 feet thick in southwestern Lowndes County. The Prairie Bluff is relatively impermeable, and is not an aquifer in the study area.

Providence Sand

The Providence Sand overlies the Prairie Bluff Chalk, and crops out in southern Montgomery and southeastern Lowndes Counties (fig. 2). The Providence is divided into a lower Perote Member and an upper unnamed member. The Perote Member consists of laminated carbonaceous fossiliferous silty sand and silty clay. The Perote generally ranges in thickness from 60 to 100 feet in southern Montgomery County. The upper unnamed member consists of about 100 feet of coarse poorly sorted cross-bedded sand interbedded with thick beds of silty clay. Both members thin westward in Montgomery County, and are not present west of the town of Fort Deposit in Lowndes County.

The Providence Sand is not a major aquifer in the study area. The Perote Member is relatively impermeable, and is not considered to be a major aquifer in Alabama. The upper unnamed member is a major aquifer in southeast Alabama, especially in Coffee, Dale, Henry, and Houston Counties.

Tertiary Formations

Tertiary deposits in the study area are limited to the Clayton Formation of Paleocene age. The Clayton Formation overlies the Providence Sand in Montgomery County and the southeastern corner of Lowndes County, and overlies the Prairie Bluff Chalk westward from the town of Fort Deposit in Lowndes County. Only weathered basal beds of the Clayton are present in Montgomery County and are not shown in figure 2. These beds consist of deeply weathered

sand and residual sandy clay and chert fragments and boulders. In Lowndes County the Clayton consists of calcareous fossiliferous silty clay, chalk, and sandy limestone and siltstone. The Clayton is as much as 150 feet thick in southwestern Lowndes County (fig. 2).

The Clayton is not a major aquifer in the study area, but is a major aquifer in southeastern Alabama. The Clayton in southwestern Lowndes County is relatively impermeable and is not an aquifer. The unit grades eastward from silt, silty clay, and silty limestone to sand and relatively-pure limestone south and southeast of Montgomery County.

Quaternary Deposits

Quaternary alluvial deposits overlie older formations throughout a large part of the study area (fig. 2). These deposits, which underlie flood plains of present and ancestrial large streams, consist mainly of gravel, sand, silt, and clay. Alluvial deposits along the flood plains of the Alabama, Coosa, and Tallapoosa Rivers are shown on the geologic map (fig. 2). Remnants of older alluvial deposits (usually mapped as high terrace deposits) are not shown on the geologic map, but form relatively flat uplands in several parts of the study area. The alluvial deposits generally range in thickness from 30 to 50 feet, but are as much as 80 feet thick in some places.

The alluvial deposits are a potential source of large water supplies in the flood plains of the Alabama, Coosa, and Tallapoosa Rivers, but generally are not developed for public water supplies. A few municipal wells in Montgomery North Well Field are screened in the alluvium and the underlying basal part of the Eutaw Formation, which is hydraulically connected with the alluvium.

HYDROLOGY OF THE MAJOR AQUIFERS

The major aquifers in the study area are sand and gravel beds in the Eutaw, Gordo, and Coker Formations (figs. 3 and 4). These aquifers crop out in Autauga, Chilton, Elmore, and Montgomery Counties, and underlie most of the study area. Water in these aquifers occurs under artesian conditions in most parts of the study area. Recharge areas for the major aquifers and areas susceptible to surface contamination are shown on plate 1. Also shown on plate 1 are locations of public water-supply wells and areas of major withdrawals as indicated by depressions in the potentiometric surface, as near Montgomery and Prattville. Construction of wells, water levels, and other pertinent well data are given in table 2.

Recharge and Movement of Ground Water

The source of recharge to the major aquifers is rainfall. Average annual rainfall is about 50 inches per year, but a large part runs off during and directly after rainstorms. Most of the remainder is returned to the atmosphere by evaporation and transpiration of trees and other plants; a small part infiltrates to the water table to recharge aquifers. Knowles and others (1963) estimated that, based on the low flow of streams, recharge to the Coker, Gordo, and Eutaw aquifers in the Montgomery area is at least 4 to 5 inches per year. The recharge areas for the Eutaw and Gordo aquifers are in Autauga, Chilton, Elmore, and Montgomery Counties (plate 1). The recharge area for the Coker aquifer is mainly in Chilton and Elmore Counties (plate 1). These recharge areas consist largely of rolling sand hills, part of which are wooded and part cultivated. In Autauga and Elmore Counties remnants of high terrace deposits overlie significant parts of the recharge areas for the aquifers. These terrace remnants form relatively flat, permeable landscapes that enhance infiltration and increase recharge to the aquifers. Alluvial deposits overlie the major aquifers along the flood plains in the Alabama, Coosa, and Tallapoosa Rivers. These permeable deposits provide recharge to the aquifers, especially in areas where the potentiometric surface of the water in the aquifers is lowered by large withdrawals of ground water. Water moves downdip from areas of recharge to areas of natural discharge or areas of ground-water withdrawals, generally perpendicular to the potentiometric contour lines shown on plate 1.

Natural Discharge and Ground-Water Withdrawals

A large part of the recharge discharges through seeps and springs to provide the base (dry weather) flow of streams. This natural discharge is especially notable in Autauga County where southward-flowing streams have cut deeply into the recharge areas of the aquifers. A significant part of the recharge is also discharged to the rivers that are entrenched into the aquifers.

Most of the remainder of the recharge is discharged through wells, mainly at large pumping centers. The largest pumping center in the study area is the city of Montgomery. The combined capacity of Montgomery's North and West Well Fields (see figs. 5 and 6) is more than 30 Mgal/d. The average pumpage from the well fields in 1985 was about 11 Mgal/d; however, the well fields were pumped near capacity on peak-demand days during the year. Pumpage from the well fields will likely increase during the next 5 to 10 years because Montgomery's surface water plant, which has a capacity of about 20 Mgal/d, presently runs at capacity most of the time. The peak demand on the municipal system was about 50 Mgal/d in 1986.

Other large pumping centers and their estimated capacities are Prattville, 4 Mgal/d; Millbrook, 1 Mgal/d; Elmore, 1 Mgal/d; Chilton County Water Authority, 2 Mgal/d; Union Camp Corporation, 4 Mgal/d; General Electric Corporation, 4 Mgal/d; rural water systems in Montgomery County, 4 Mgal/d; public water systems in Lowndes County (exclusive of the town of Fort Deposit), 4 Mgal/d; and rural water systems in Autauga County, 4 Mgal/d. The town of Fort Deposit withdraws water from an aquifer that is outside the study area.

Water is also discharged by wells used for domestic stock, industrial, and irrigation purposes. The amount of water used for these purposes is estimated to be 5 to 10 Mgal/d. A significant amount of water is wasted through flowing wells. For example, about 1 Mgal/d was discharging through flowing wells in Autauga County in 1959 (Scott, 1960). Smaller amounts are discharged through flowing wells in Chilton, Elmore, Lowndes, and Montgomery Counties.

Total maximum withdrawals of ground water for all uses in the study area in 1986 are estimated to be about 65 Mgal/d. Converted to inches per year for the total recharge areas for the three major aquifers (estimated to be about 950,000 acres), these withdrawals are equal to about 0.9 inch of recharge per year.

Effects of Withdrawals from the Aquifers

Large long-term withdrawals of water from the major aquifers have resulted in formation of depressions on the potentiometric surface of the aquifers. Extensive depressions have formed in the Gordo aquifer in the vicinities of Montgomery's West Well Field and Prattville (see fig. 7). Less-extensive depressions have formed in the Eutaw and Coker aquifers in the Montgomery area (figs. 8 and 9) and a depression is forming in the Coker aquifer in the vicinity of the town of Elmore (fig. 9).

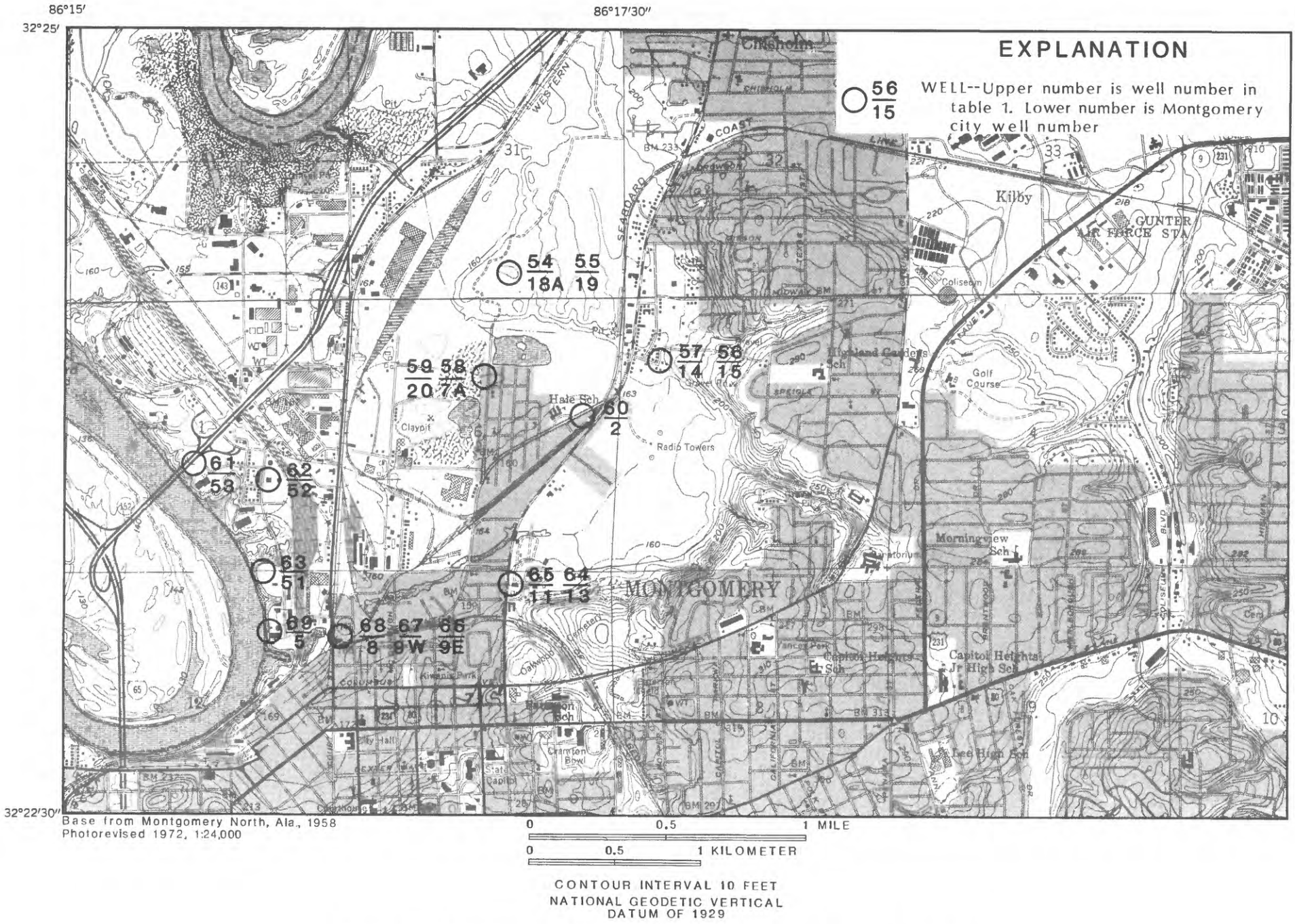


Figure 5.--Locations of wells in the Montgomery north well field.

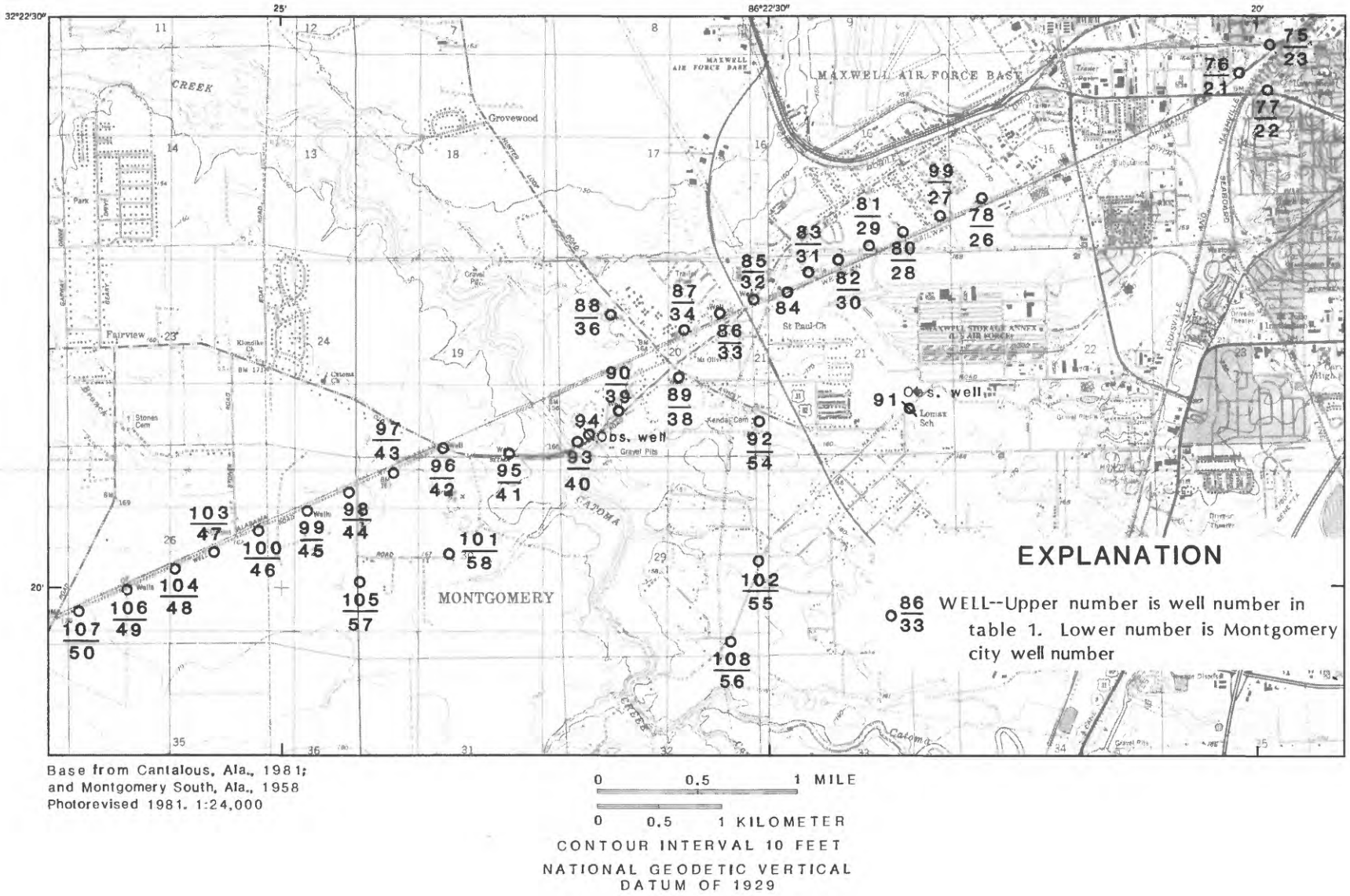
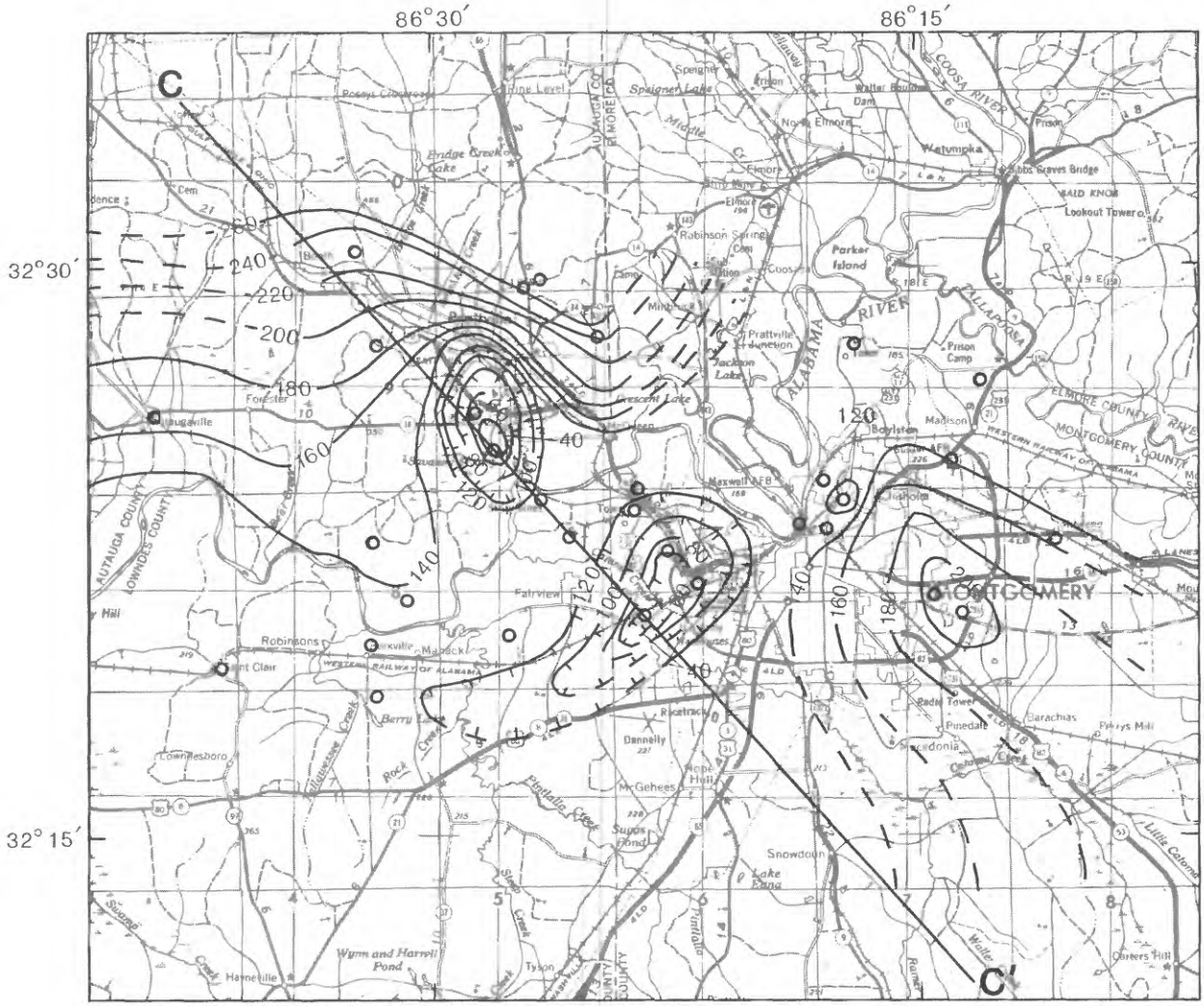


Figure 6.--Locations of wells in the Montgomery west well field.

The Alabama River and its flood plain appear to be a hydrologic boundary for the Gordo aquifer (fig. 7). The potentiometric map for the Gordo aquifer indicates that either a reduction in natural discharge from the aquifer to the river, vertical leakage from the river and the alluvium to the aquifer, or a combination of the two, is preventing convergence of the cones of depression that have developed in the Montgomery and Prattville areas. If the Gordo aquifer is being recharged from the river and the flood plain, the Eutaw aquifer is also being recharged in the Montgomery area where the potentiometric surface in the Eutaw has been lowered by pumpage (fig. 10). The Coker aquifer also may be affected by recharge entering the aquifer system from the river and the flood plain in the Montgomery area where the potentiometric surface has been lowered by pumpage.

Outside the Montgomery and Prattville areas the potentiometric surfaces of the Gordo and Coker aquifers are similar, and potentiometric contour lines show the combined potentiometric surface of the Gordo and Coker aquifers (see plate 1).



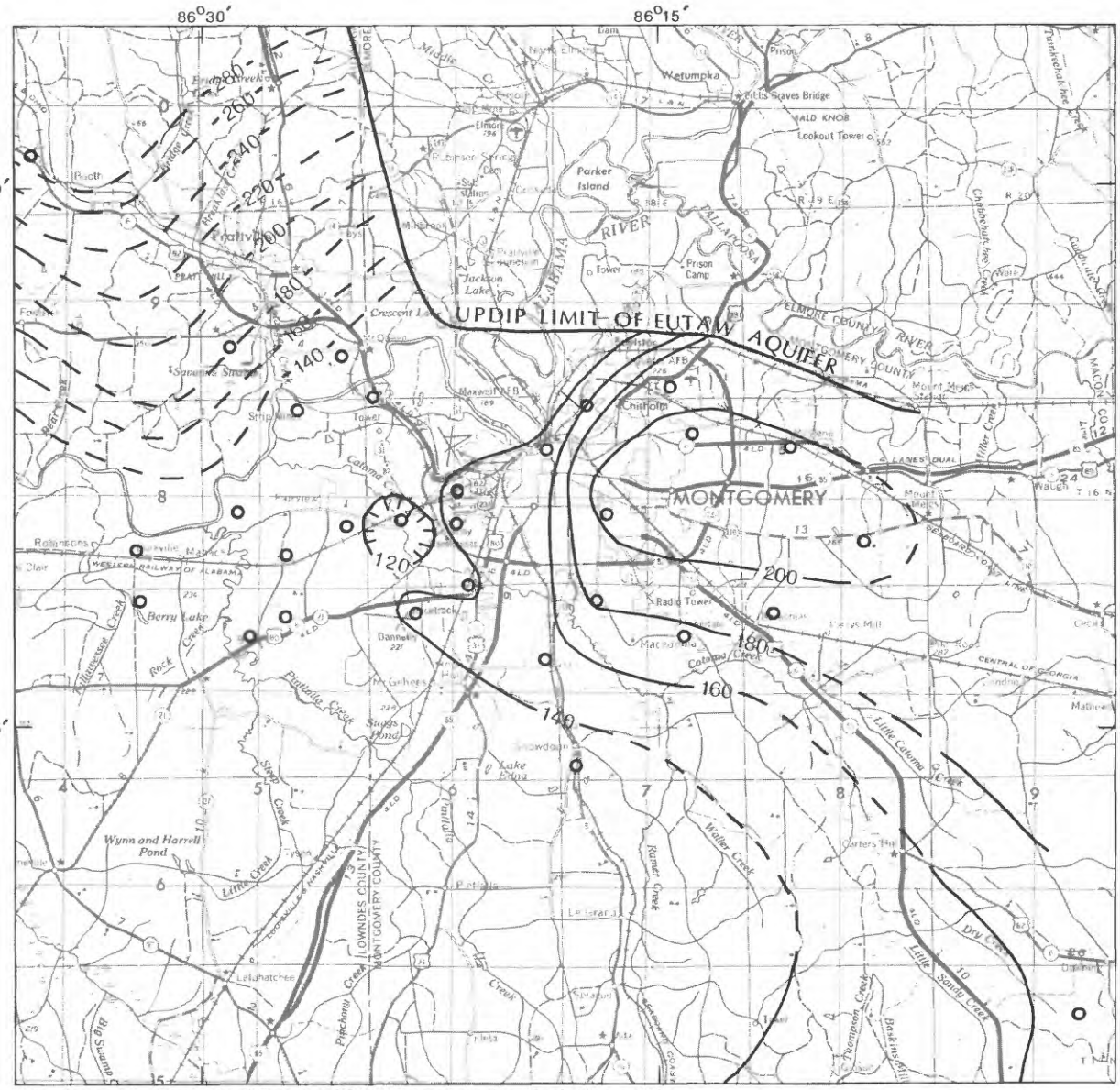
EXPLANATION

—— 120 — — POTENTIOMETRIC CONTOUR--Shows altitude of the potentiometric surface for the Gordo aquifer. Dashed where inferred. Hachures indicate depression. Contour interval 20 feet. National Geodetic Vertical Datum of 1929

o Well in which water level was measured in 1985

C——C′ TRACE OF GENERALIZED SUBSURFACE SECTION SHOWN ON FIGURE 10

Figure 7.--Configuration of the potentiometric surface in the Gordo aquifer in the vicinities of Montgomery and Prattville in 1985.

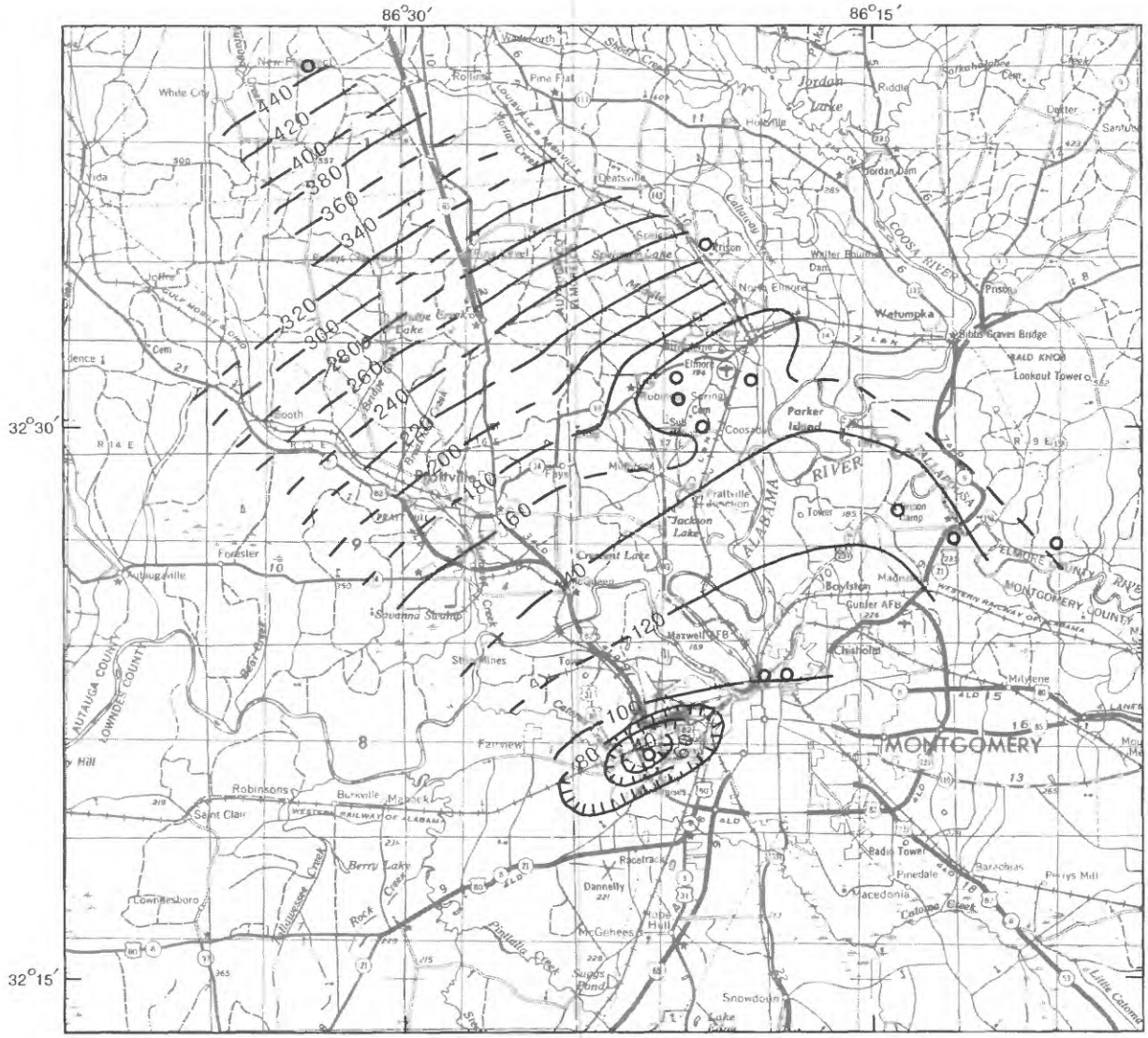


EXPLANATION

——120— — POTENTIOMETRIC CONTOUR--Shows altitude of the potentiometric surface for the Eutaw aquifer. Dashed where inferred. Hachures indicate depression. Contour interval 20 feet. National Geodetic Vertical Datum of 1929

o Well in which water level was measured in 1985

Figure 8.--Configuration of the potentiometric surface in the Eutaw aquifer in the vicinity of Montgomery in 1985.



EXPLANATION

——120— — POTENTIOMETRIC CONTOUR--Shows altitude of the potentiometric surface for the Coker aquifer. Dashed where inferred. Hachures indicate depression. Contour interval 20 feet. National Geodetic Vertical Datum of 1929

o Well in which water level was measured in 1985

Figure 9.--Configuration of the potentiometric surface in the Coker aquifer in the vicinity of Montgomery in 1985.

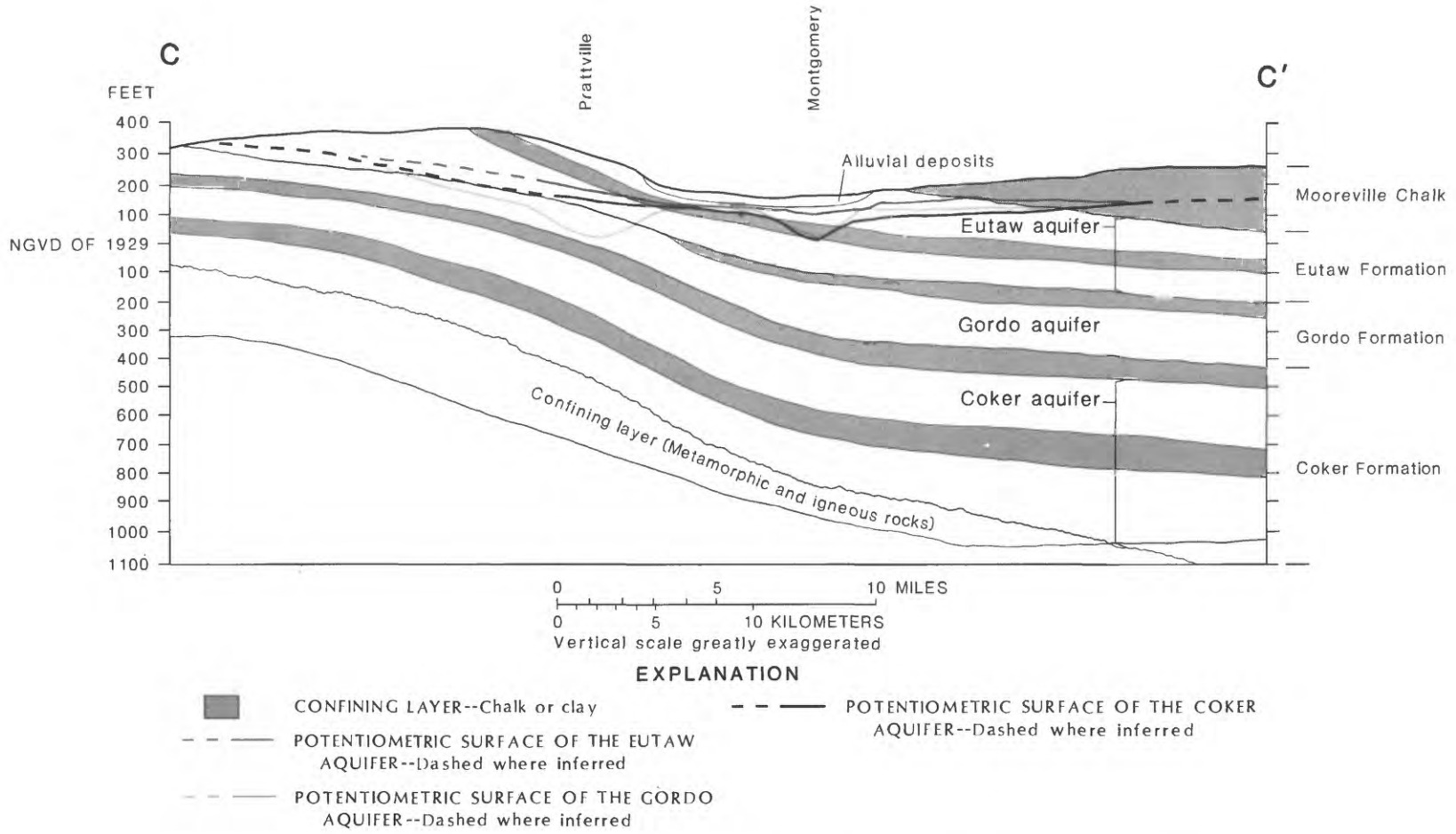


Figure 10.--Generalized subsurface section through the Montgomery-Prattville area showing configurations of the potentiometric surfaces of the major aquifers (line of section shown on figure 7).

SUSCEPTIBILITY OF THE AQUIFERS TO SURFACE CONTAMINATION

All of the areas of recharge for the major aquifers in the study area are susceptible to surface contamination (plate 1). However, throughout a large part of the study area, the recharge areas are in rural terrains that are used for timberlands, farms, or pastures. These recharge areas are several miles from areas where withdrawals are being made, and consist of sand hills and intermediate streams except where high terrace deposits have resulted in relatively-flat landscapes.

The areas highly susceptible to contamination from the surface are 1) the area from Jemison southeastward to Clanton, and 2) the flood plains of the Alabama, Coosa, and Tallapoosa Rivers (see plate 1). The Jemison-Clanton area is a relatively flat terrain that is underlain by the basal part of the Coker aquifer. Public water-supply wells in Jemison and Thorsby are screened in this aquifer less than 100 feet below land surface (see table 2). Some beds of clay are present between the surface and the top of the aquifer. However, depressions on the water surface in the aquifer caused by pumpage could induce vertical leakage from the surface to the aquifer.

The flood plains of the Alabama, Coosa, and Tallapoosa Rivers are low, flat terrains that are underlain by alluvial gravel, sand, and clay. The Eutaw, Gordo, and Coker aquifers underlie the alluvial deposits in the area between Wetumpka and Montgomery, and along the flood plain of the Tallapoosa River (plate 1). The Eutaw aquifer underlies the alluvial deposits along the flood plain of the Alabama River from Montgomery westward to Benton. The major aquifers are overlain by, and are in hydraulic contact with the highly-permeable alluvial sand and gravel. The alluvial sediments permit water to move downward from the land surface to the aquifers, especially in areas where the potentiometric surfaces in the aquifers have been lowered by pumpage.

Depressions have formed on the potentiometric surfaces of all three major aquifers in the Montgomery area. Several municipal wells less than 100 feet deep and screened in river alluvium and the Eutaw aquifer are pumped in the Montgomery North Well Field, and several wells in the Montgomery West Well Field are screened in the Eutaw aquifer at depths of 150 to 200 feet. Some of the public water-supply wells in the vicinities of Millbrook and Elmore are screened at depths just below 100 feet.

Pumpage along the flood plain of the Alabama River west of Montgomery and along the flood plain of the Tallapoosa River is presently minimal. However, future pumpage in these areas could result in the formation of depressions in the potentiometric surfaces of the major aquifers. Therefore, these areas are assumed to be especially highly susceptible to contamination from the surface.

SUMMARY AND CONCLUSIONS

The major aquifers in Area 8 in south-central Alabama are the Eutaw, Gordo, and Coker aquifers. The recharge areas for these aquifers are in Chilton, Autauga, Elmore, and Montgomery Counties. The aquifers underlie most of the study area. The aquifers consist of sand and gravel beds, and water in the aquifers occurs under artesian conditions in most parts of the area.

The Eutaw aquifer is a major source of public water supplies in Montgomery County. The aquifer is a partial source of water for the city of Montgomery, and the exclusive source of water for rural public water supplies in central and southern parts of the county.

The Gordo aquifer is a major source of public water supplies in Autauga and Montgomery Counties, and is the exclusive source of public water supplies in Lowndes County. The Gordo is pumped extensively at the cities of Montgomery and Prattville, and is the sole source of water for the Autaugaville, Autauga Hills, and Autauga County water systems.

The Coker aquifer is pumped extensively in conjunction with the Eutaw and Gordo aquifers at Montgomery and Prattville. It is used exclusively by the Billingsley, Jemison, Maplesville, and Thorsby water systems, and by the Chilton County water system. The Coker is also the source of water for the towns of Elmore, Holtville, Marbury, and several other water systems in Elmore County.

The largest pumping centers in the study area are Montgomery and Prattville. Maximum ground-water pumpage at Montgomery is more than 30 Mgal/d. Maximum pumpage in the Prattville area is more than 8 Mgal/d. Maximum ground-water withdrawals for all uses in the study area was estimated to be about 65 Mgal/d in 1985.

Extensive depressions have developed in the potentiometric surface of the Gordo aquifer in the vicinities of Montgomery and Prattville. Vertical leakage from the Alabama River and alluvial deposits on the flood plain of the river has apparently prevented convergence of these depressions. Less-extensive depressions have developed in the Eutaw and Coker aquifers in the Montgomery area.

All the recharge areas for the major aquifers are susceptible to surface contamination. Throughout a large part of the study area, however, the recharge areas are in rural terrains that are used for timberlands, farms, and pastures, and are several miles from pumping centers. The areas highly susceptible to contamination are 1) from Jemison to Clanton in Chilton County where the Coker aquifer is generally less than 100 feet below land surface, and 2) the flood plains of the Alabama, Coosa, and Tallapoosa Rivers which are underlain by alluvial sediments that are in hydraulic contact with the major aquifers. Within the highly susceptible areas, the areas that are especially susceptible to contamination are the flood plain of the Alabama River in the Montgomery area and the flood plain of the Tallapoosa River. In this area pumpage from the major aquifers has significantly lowered the potentiometric surface in the aquifers. The lowering of the potentiometric surface in the major aquifers has resulted in vertical leakage from the river and the alluvial deposits to the major aquifers.

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Table 1.--Generalized section of geologic formations in the study area and their water-bearing properties

System	Series	Stratigraphic unit			Thickness (feet)	Lithology	Water-bearing properties
Quaternary	Holocene	Alluvium			30-80+	Gravel, sand, silt, and clay	Potential source of large water supply in the flood plains of the Alabama, Tallapoosa, and Coosa Rivers, but generally is not developed for public water supply.
Tertiary	Paleocene	Midway Group	Clayton Formation		150	Deeply weathered sand and residual sandy clay and chert fragments and boulders in basal beds; calcareous fossiliferous silty clay, chalk, and sandy limestone and siltstone in south Lowndes County.	Not a major aquifer in the study area, but is a major aquifer in southeastern Alabama.
Cretaceous	Upper Cretaceous	Selma Group	Providence Sand	Upper Member	100+	Coarse, poorly sorted cross-bedded sand interbedded with thick beds of silty clay.	Not a major aquifer in the study area, but is a major aquifer in southeastern Alabama.
				Perote Member	60-100	Laminated carbonaceous fossiliferous silty sand and silty clay.	Relatively impermeable; not a source of ground water.
			Prairie Bluff Chalk		60	Fossiliferous sandy chalk and calcareous sandy clay.	Relatively impermeable; not a source of ground water.
			Ripley	Upper Member	200-300	Sand, sandy clay, silty fossiliferous clay, and calcareous sandstone beds.	Not a major aquifer in the study area because of low well production and highly-mineralized water; downdip from the study area the Ripley is a major aquifer.
				Cusseta Sand Member	100-120	Fossiliferous sand, calcareous sandstone, and sandy chalk.	Not a major aquifer in the study area because of low well production and highly-mineralized water; downdip from the study area the Ripley is a major aquifer.
			Demopolis Chalk		400-450	Chalk, calcareous clay and sandy clay.	Relatively impermeable; not a source of ground water.
			Mooreville Chalk	Arcola Limestone Member	5-10	Thin beds of limestone separated by clay and sandy clay.	Relatively impermeable; not a source of ground water.
				Lower Member	400-500	Chalk, calcareous clay, sandy clay, and limestone.	Relatively impermeable; not a source of ground water.

		Eutaw Formation		200-400	Upper and lower zones of marine sand separated by a zone of clay; lower part consists of glauconitic sand interbedded with sandy clay; middle part consists of calcareous clay and sandy clay; upper part consists of massive glauconitic sand interbedded with calcareous sandstone and sandy limestone.	Source of large water supplies in Montgomery County; may produce as much as 700 gal/min. Not a major aquifer in Chilton and Elmore Counties because of limited areal extent and thinness. Water in Autauga County contains excessive concentrations of iron. Water in most of Lowndes County contains more than 1,000 mg/L chloride.
		Tuscaloosa Group	Gordo Formation	100-300±	Basal zone of gravelly sand overlain by alternating lenticular beds of sand and varicolored mottled clay.	Wells produce 200 to 500 gal/min. Not a major aquifer in Chilton or Elmore Counties because of proximity to land surface. Water in southern Lowndes County contains more than 1,000 mg/L chloride.
			Coker Formation	100-1000±	Basal zone of non-marine gravelly sand and clay; upper zone of marine sand and clay beds.	Wells produce 500 gal/min or more at some places. Water in southwestern Montgomery County and southern Lowndes County may contain more than 1,000 mg/L chloride.
Mississippian to Cambrian		Floyd Shale, Fort Payne Chert, Little Oak Limestone, Longview Limestone, Newala Limestone, Knox Dolomite (part), Bibb Dolomite, Ketona Dolomite, and Brierfield Dolomite		1,000+	Dolomite, limestone, chert, and shale.	Potential source of large water supplies from limestones and dolomites; no large-capacity wells have been drilled in the study area.
Paleozoic and Precambrian		Igneous and metamorphic rocks		1,000+	Schist, gneiss, marble, dolomites, quartzite, and granite.	Relatively impermeable; wells drilled in schist or gneiss generally produce less than 20 gal/min; however, wells drilled in marble or dolomite may produce 100 gal/min or more at some places.

Table 2.--Records of public water-supply wells in the study area

NOTE: Well numbers correspond to those shown on plate 1.

Geographic coordinate number: Lat (DDMMSS) Long (DDMMSS) sequential number (xx).

Depth of well and water level: Depth of well given in feet; reported water levels are in feet above (-) or below land surface; measured water levels are in feet and tenths.

Well diameter: casing diameter in inches.

Water-bearing unit: pCim, Pre-Cretaceous rocks; Kc, Coker Formation; Kg, Gordo Formation, Ke, Eutaw Formation; Qal, alluvial deposits; Qt, Quaternary Terrace deposits.

Altitude of land surface: Altitudes given in feet above National Geodetic Vertical Datum of 1929, from topographic map or determined by aneroid barometer; altitudes given in feet and tenths determined by instrumental leveling.

Method of lift: N, none; S, submergible; T, turbine.

Use of well: N, none; O, observation well; P, public water supply.

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
1	325738086451001	Town of Jemison	H. W. Peerson 1954	99	12 6	Kc	715	40 37.2	1954 04/10/85	S	P	Well 4: Casing: 12 in. from surface to 70 ft; and 6 in. from 70 to 89 ft; 6 in. screen from 89 to 99 FT; reported drawdown 38 ft after 12 hrs pumping 40 gal/min.
2	325737086450201	Town of Jemison	H. W. Peerson 1965	91	12 6	Kc	720	43 55	1965 06/27/79	S	P	Well 3: Casing: 12 in. from surface to 70 ft; and 6 in. from surface to 71 ft; 6 in. screen from 71 to 91 ft; reported drawdown 27 ft after 24 hrs pumping 60 gal/min.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
3	325737086445401	Town of Jemison	Graves Well Drilling Co., Inc. 1977	100	16 8 6	Kc	710	64.3	09/30/77	S	P	Well 2: Casing: 16 in. from surface to 70 ft; and 8 in. from surface to 85 ft; 6 in. screen from 85 to 100 ft; reported drawdown 24.7 ft after 24 hrs pumping 35 gal/min.
4	325734086444701	Town of Jemison	Graves Well Drilling Co., Inc. 1977	100	16 8 6	Kc	720	45.5	09/15/77	S	P	Well 1: Casing: 16 in. from surface to 67 ft; and 8 in. from surface to 85 ft; 6 in. screen from 85 to 100 ft; reported drawdown 20 ft after 24 hrs pumping 50 gal/min.
5	325457086430201	Town of Thorsby	Graves Well Drilling Co., Inc. 1973	94	12 6	Kc	670	42.2	07/19/73	S	P	Well 1: Casing: 12 in. from surface to 84 ft; 6 in. from surface to 84 ft; 6 in. screen from 84 to 94 ft; reported drawdown 37 ft after 24 hrs pumping 33 gal/min.
6	325452086425501	Town of Thorsby	-------- 1944	95	6	Kc	690	50	06/08/44	S	P	Well 2: Casing: 6 in. from surface to 85 ft; 6 in. screen from 85 to 95 ft.
7	325443086424601	Town of Thorsby	Weldon Drilling Co., Inc. 1984	82	8 6 4	Kc	680	34	02/08/84	S	P	Well 3: Casing: 8 in. from surface to 60 ft; and 6 in. from 40 to 60 ft; 4 in. screen from 60 to 82 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
8	325430086422701	Town of Thorsby	Graves Well Drilling Co., Inc. 1979	115	12 6 4	Kc	700	64.8 63.0	05/24/79 01/06/86	S	P	Well 4: Casing: 12 in. from surface to 84 ft; and 6 in. from surface to 85 ft; 4 in. screen from 85 to 115 ft.
9	324743086523701	Town of Maples-ville	Acme Drilling Co., Inc. 1951	252.5	8 6	Kc	380	45 51.2	06/04/51 01/07/86	T	U	Formerly supply well for Maples-ville. Casing: 8 in. from surface to 209 ft; and 6 in. from 199 to 211 ft; 6 in. screen from 211 to 252.5 ft; reported drawdown 14 ft after 25 hrs pumping 115 gal/min
10	324544086512801	Chilton Co. Water and Fire Protection Authority	Layne Central Co. 1979	320	16 8 6	Kc	340	43 58.3	08/28/79 01/06/86	T	P	"Osburn Well" Casing: 16 in. from surface to 275 ft; 8 in. from 225 to 280 ft; and 6 in. from 320 to 330 ft; 8 in. screen from 280 to 320 ft; reported drawdown 129 ft after 24 hrs pumping 608 gal/min on 08/28/79.
11	324433086501701	Chilton Co. Water and Fire Protection Authority	Layne Central Co. 1979	361	16 8 6	Kc	330	70	09/24/79	T	P	"Chambers Well" Casing: 16 in. from surface to 281 ft; 8 in. from 231 to 285 ft; 340 to 356 ft; and 6 in. from 361 to 366 ft; 8 in. screen from 285 to 340 ft; and 356 to 361 ft; reported drawdown 112 ft after 24 hrs pumping 503 gal/min on 09/24/79.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
12	324427086494301	Chilton Co. Water and Fire Protection Authority	Layne Central Co. 1979	305	16 8 6	Kc	390	71 93.2	08/24/79 01/06/86	T	P	"Miller Well" Casing: 16 in. from surface to 225 ft; 8 in. from 175 to 230 ft; 255 to 270 ft; and 6 in. from 305 to 315 ft; 8 in. screen from 230 to 255 ft; and 270 to 305 ft; reported drawdown 122 ft after 24 hrs pumping 402 gal/min on 08/24/79.
13	324423086494801	Chilton Co. Water and Fire Protection Authority	Layne Central Co. 1979	346	16 8 6	Kc	390	95	09/24/79	T	P	"Roebuck Well" Casing: 16 in. from surface to 256 ft; 8 in. from 206 to 261 ft; 296 to 311 ft; and 6 in. from 346 to 356 ft; 8 in. screen from 261 to 296 ft; and 311 to 346 ft; reported drawdown 95 ft after 8 hrs pumping 503 gal/min on 09/24/79.
14	324346086301801	Chilton Co. Water and Fire Protection Authority	Patton Contracting Co. 1969	184	10 6	pCim	440	FLOWING 4.7	1969 01/06/86	S	U	Formerly South Chilton Co. Water and Fire Protection Authority well. Casing: 10 in. from surface to 42 ft; 6 in. from surface to 118 ft; open hole below.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
15	323938086294001	Town of Marbury	Tom Smith Artesian Well Co. 1971	190	6 2	Kc	402	-13	07/15/71	S	P	Well 1: Casing: 6 in. from surface to 158 ft; 2 in. from 130 to 160 ft; 2 in. screen from 160 to 190 ft; reported drawdown 81 ft after 96 hrs pumping 180 gal/min.
16	323925086291601	Town of Marbury	Acme Drilling Co. 1975	201	8 6	Kc	396	-12	12/16/75	T	P	Well 2: Casing: 8 in. from surface to 183 ft; 6 in. from 151 to 181 ft; 6 in. screen from 181 to 201 ft; reported drawdown 60 ft after 7.2 hrs pumping 201 gal/min.
17	323901086434701	Town of Billingsley	Powell Drilling Company 1967	351	12 4	Kc	300	27	04/27/67	T	P	Supply well: Casing: 12 in. from surface to 300 ft; 4 in. from 257 to 300 ft; and 351 to 355 ft; 4 in. screen from 300 to 351 ft.
18	323813086012001	Town of Eclectic	H.W. Peerson Drilling Co. 1946	286	10 8	pCim	542	115 252	05/23/65 1985	N	N	Well 1: Formerly used for water supply. Casing: 10 in. from surface to 20.5 ft; and 8 in. from surface to 43 ft; open hole below.
19	323813086012002	Town of Eclectic	Adams-Massey Co. 1965	340	8	pCim	542	119	05/23/65	S	P	Well 2: Casing: Unknown.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
20	323752086002601	Town of Eclectic	Interstate Drillers, Inc. 1966	345	8	pCim	560	2.5	10/06/66	T	P	Well 3: Casing: 8 in. from surface to 14 ft; open hole below.
21	323625086014501	Town of Eclectic	Interstate Drillers, Inc. 1966	348	8	pCim	415	25 16.8	09/27/66 10/10/66	S	P	Well 4: Casing: 8 in. from surface to 25 ft; open hole below.
22	323607086240201	Town of Deatsville	Tom Smith Artesian Well Co. 1971	121	6 2	Kc	275	2	08/01/71	S	P	Supply well: Casing: 6 in. from surface to 110 ft; and 2 in. from 80 to 111 ft; 2 in. screen from 111 to 121 ft.
23	323538086212101	Town of Holtville	Graves Well Drilling Co., Inc. 1974			Kc	278	50	01/24/74	T	P	Well 2: Casing:
24	323528086205801	Town of Holtville	Graves Well Drilling Co., Inc. 1973	158	12 6	Kc	284	18.6	09/01/73	T	P	Well 1: Casing: 12 in. from surface to 126 ft; and 6 in. from 104 to 126 ft; 6 in. screen from 126 to 158 ft.
25	323504086210301	Town of Holtville	Graves Well Drilling Co., Inc. 1978	171	12 8 6	Kc	276	56.8	05/16/78	T	P	Well 3: Casing: 12 in. from surface to 140 ft; 8 in. from surface to 141 ft; 6 in. screen from 141 to 171 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
26	323446086200801	State of Alabama Draper Prison	Layne Central Drilling Co., Inc. 1969	194	18 10 8	Kc	265	42.5 38.8 43.6 38.2	07/15/82 11/16/82 10/23/85 04/07/86	T	P	Draper Prison supply well. Outside compound. Casing: 18 in. from surface to 100 ft; 10 in. from surface to 164 ft; 8 in. screen from 164 to 194 ft.
27	323438086200701	State of Alabama Draper Prison	Layne Central Drilling Co., Inc. 1946	200	18 8	Kc	265	58	10/23/69	T	P	Draper Prison supply well. Inside compound. Casing: 18 in. from surface to 165 ft; 8 in. from ___ to ___; 8 in. screen from 165 to 195 ft; open hole below.
28	323327086155501	Community of Gossum Switch	Tom Smith Artesian Well Co. 1970	111	4 3	Kc	180	22	10/03/70	S	P	Gossum Switch Water System well. Casing: 4 in. from surface to 101 ft; 3 in. from 98 to 101 ft; 3 in. screen from 101 to 111 ft.
29	323220086184201	Elmore Water and Fire Protection Authority	Acme Drilling Co. 1966	139	6 4	Kc	198	53.4 60.7 62.1 65.3	10/29/84 04/23/85 10/23/85 04/08/86	T	P	Well 2: Casing: 6 in. from surface to 114 ft; 4 in. screen from 114 to 139 ft.
30	323128086204901	Elmore Water and Fire Protection Authority	Acme Drilling Co. 1982	317	14 8	Kc	249	66.2 87.6 99.3	07/14/82 10/23/85 04/08/86	T	P	Well 5: Casing: 14 in. from surface to 185 ft; 10 in. from 143 to 185 ft; 8 in. from 200 to 212 ft; 232 to 291 ft and 317 to 320 ft; 8 in. screen from 185 to 200 ft; 212 to 232 ft; and 291 to 317 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
31	323114086200701	Elmore Water and Fire Protection Authority	Acme Drilling Co. 1978	283	12 6	Kc	191	23 100	07/12/78 04/08/86	T	P	Well 4: Casing: 12 in. from surface to 236 ft; 8 in. from 192 to 231 ft; 6 in. from 246 to 258 ft; and 283 to 293 ft; 6 in. screen from 231 to 246 ft; and 258 to 283 ft.
32	323114086200801	Elmore Water and Fire Protection Authority	Acme Drilling Co. 1966	131	6 4	Kc	191	20.2 21.8 19.4	07/15/82 10/23/85 04/08/86	T	P	Well 1: Casing: 6 in. from surface to 106 ft; 4 in. Screen from 106 to 131 ft.
33	323054086202801	Elmore Water and Fire Protection Authority	Acme Drilling Co. 1974	227	12 8 6	Kc	225	67.3 75.8	10/23/85 04/17/86	T	P	Well 3: Casing: 12 in. from surface to 196 ft; 8 in. from 158 to 196 ft; 6 in. screen from 196 to 227 ft.
34	323105086231201	Grandview Pines Utilities	Acme Drilling Co. 1976	284	12 8 6	Kc	393	172	09/30/76	T	P	Grandview Pines supply well. Casing: 12 in. from surface to 250 ft; 8 in. from 210 to 249 ft; 6 in. screen from 249 to 284 ft.
35	323108086234701	Town of Marbury	Weldon Drilling Co. 1980	460	16 8	Kc	296	106	06/18/80	T	P	Well 3: Casing: 16 in. from surface to 390 ft; 10 in. from 350 to 390 ft; 8 in. screen from 390 to 460 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
36	322936086265101	Prattville Water Works	Layne Central Drilling Co., Inc. 1984	276	12 8 6	Kg	355	*67 *69.9 71.6	11/10/82 10/31/83 10/26/84	T	P	Well 12: Casing: 20 in. from surface to 202 ft; and 12 in. from 162 to 206 ft; and 6 in. from 276 to 286 ft; 8 in. screen from 206 to 276 ft; *Water levels measured in test well at same site.
37	323005086275401	Prattville Water Works	Layne Central Drilling Co., Inc. 1976	305	20 12 8	Kg	470	108 134.8	05/27/76 09/27/83	T	P	Well 9: Casing: 20 in. from surface to 230 ft; 12 in. from 170 to 233 ft; and 8 in. from 244 to 250 ft; and 305 to 317 ft; 8 in. screen from 234 to 244 ft; and 250 to 305 ft.
38	323001086322801	Autauga County Water and Fire Protection Authority	Weldon Drilling Co., Inc. 1980	180	10 6	Kg	243	16.3 10.6 10.9 13.3	11/01/84 04/24/85 11/12/85 04/07/86	T	P	Well at Booth. Casing: 10 in. from surface to 120 ft; and 6 in. from 110 to 120 ft; 6 in. screen from 120 to TO 180 FT.
39	322925086271301	Prattville Water Works	Layne Central Drilling Co., Inc. 1984	278	20 12 10 6	Kg	355	75 76.2 79.9 86.1	02/16/84 10/26/84 04/23/85 04/08/86	T	P	Well 11: Casing: 20 in. from surface to 191 ft; 12 in. from 155 to 195 ft; 10 in. from 210 to 218 ft; and 6 in. from 278 to 288 ft; 10 in. screen from 195 to 210 ft; 8 in. screen from 218 to 278 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
40	322758086314701	Autauga Hills Water and Fire Protection Authority	Layne Central Drilling Co., Inc. 1977	370	16 8 6	Kg	327	130 147.3 145.5	06/29/77 07/22/82 11/14/85	T	P	Supply well Casing: 16 in. from surface to 298 ft; 8 in. from 248 to 320 ft; 6 in. screen from 320 to 370 ft.
41	322750086290501	Prattville Water Works	Layne Central Drilling Co., Inc. 1963	440	20 12 8	Kg Kc	192	12 27.8 40.1	08/30/63 11/29/82 10/30/84	T	P	Well 5: Casing: 20 in. from surface to 170 ft; 12 in. from 109 to 173 ft; and 8 in. from 183 to 257 ft; 267 to 306 ft; 326 to 380 ft; and 440 to 450 ft; 8 in. screen from 173 to 183 ft; 257 to 236 ft; 306 to 326 ft; and 380 to 440 ft.
42	322809086263901	Prattville Water Works	Layne Central Drilling Co., Inc. 1969	457	24 12 8	Kg Kc	320	96 110.5	1969 07/21/82	T	P	Well 7: Casing: 24 in. from surface to 230 ft; 12 in. from 180 to 235 ft; and 8 in. from 295 to 437 ft; 457 to 467 ft; 8 in. screen from 235 to 295 ft; and 437 to 457 ft.
43	322824086210801	Tri-Communities Water Works	Layne Central Drilling Co., Inc. 1963	310	18 10	Kg Kc	166	35 41.8 37.6 48.0 33.5	06/15/63 07/15/82 11/07/82 10/23/85 04/08/86	T	P	Well 1: Casing: 18 in. from surface to 170 ft; 10 in. from 130 to 175 ft; 8 in. from 190 to 260 ft; 270 to 280 ft; and 305 to 315 ft; 8 in. screen from 175 to 190 ft; 260 to 270 ft; and 280 to 305 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
44	322828086114001	Redland Water System	Acme Drilling Co. 1964	292	6 4	Kc	215	94	11/20/64	T	P	Formerly Blue Ridge Estates system well. Casing: 6 in. from surface to 266 ft; and 4 in. from 253 to 266 ft; and 292 to 312 ft; 4 in. screen from 266 to 292 ft.
45	322743086282801	Prattville Water Works	Layne Central Drilling Co., Inc. 1977	390	20 12 8	Kg Kc	193	53 63.0 67.7 65.1 63.2 60.2	11/07/77 07/21/82 10/25/84 10/26/84 04/23/85 10/22/85	T	P	Well 10: Casing: 20 in. from surface to 245 ft; 12 in. from 195 to 250 ft; 8 in. from 290 to 295 ft; 315 to 335 ft; and 390 to 405 ft; 8 in. screen from 250 to 290 ft; 295 to 315 ft; and 335 to 390 ft.
46	322730086273501	Prattville Water Works	Layne Central Drilling Co., Inc. 1963	435	20 12 8	Kg Kc	229	37 103.8 102.5 102.5 97.3	11/08/63 06/23/82 07/12/82 07/23/82 10/03/85	T	P	Well 4: Casing: 20 in. from surface to 188 ft; 12 in. from 150 to 191 ft; 8 in. from 201 to 213 ft; 233 to 338 ft; 348 to 402 ft; 412 to 420 ft; and 435 to 445 ft; 8 in. screen from 191 to 201 ft; 213 to 233 ft; 338 to 348 ft; 402 to 412 ft; and 420 to 435 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
47	322708086273401	Pratt-Ville Water Works	Layne Central Drilling Co., Inc. 1968	510	20 12 8	Kg Kc	286	120 160.5 166.8	11/15/68 10/11/82 10/22/85	T	P	Well 6: Casing: 20 in. from surface to 265 ft; 12 in. from 215 to 270 ft; 8 in. from 310 to 380 ft; 395 to 440 ft; 460 to 485 ft; and 510 to 520 ft; 8 in. screen from 270 to 310 ft; 380 to 395 ft; 440 to 460 ft; and 485 to 510 ft.
48	322718086265301	Pratt-ville Water Works	Layne Central Drilling Co., Inc. 1960	558	20 12 8	Kg Kc	315	135	11/07/60	T	P	Well 3: Casing: 20 in. from surface to 294 ft; 12 in. from 237 to 302 ft; 8 in. from 302 to 329 ft; 354 to 409 ft; 424 to 453 ft; 478 to 528 ft; and 528 to 538 ft; 8 in. screen from 329 to 354 ft; 409 to 424 ft; 453 to 478 ft; and 538 to 558 ft.
49	322733086224101	Tri-Communities Water Works	Layne Central Drilling Co., Inc.				162			T	U	Well 2: Not being used presently. Water quality problem.
50	322708086213501	Tri-Communities Water Works	Graves Well Drilling Co., Inc. 1979	540	12 8	Kc	158	20	12/05/79	T	P	Well 3: Casing: 12 in. from surface to 492 ft; 8 in. from 432 to 492 ft; and 512 to 522 ft; 8 in. screen from 492 to 512 ft; and 522 to 540 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
51	322724086281301	Prattville Water Works	Layne Central Drilling Co., Inc. 1954	355	16 8	Kg	178	7 68.8 72.4 71.7	06/00/84 10/11/82 11/12/85 04/08/86	T	P	Well 2: Casing: 16 in. from surface to 306 ft; 8 in. from 266 to 310 ft; 8 in. screen from 310 to 355 ft.
52	322612086381001	Town of Autaugaville	Alton Powell Drilling Co., Inc. 1973	342	8 4	Kg	155	-16.6 - 9.5 -9.5	11/19/73 07/23/82 11/14/85	T	P	Well 1: Casing: 8 in. from surface to 280 ft; 4 in. from 240 to 284 ft; 304 to 322 ft; and 342 to 346 ft; 4 in. screen from 284 to 304 ft; and 322 to 342 ft.
53	322616086282601	Prattville Water Works	Layne Central Drilling Co., Inc. 1972	310	20 12 8	Kg	210	85 142.5 154.7 126.9 150.3 170.7	08/03/72 07/21/82 11/01/84 04/24/85 10/24/85 04/08/86	T	P	Well 8: Casing: 20 in. from surface to 245 ft; 12 in. from 195 to 250 ft; and 8 in. from 310 to 320 ft; 8 in. screen from 250 to 310 ft.
54	322413086175501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	72	24 18 16	Qt	175	32.5 24.7	02/12/57 08/15/84	T	P	Well 18A: Casing: 24 in. from surface to 47 ft; 18 in. from surface to 52 ft; 16 in. from 72 to 82 ft; 16 in. screen from 52 to 72 ft.
55	322414086175201	Montgomery Water Works	W. Horace Williams 1937	610	14 12 10	Kc	164.9			T	P	Well 19E: Casing: 14 in. from surface to 190 ft; 12 in. from 145 to 257 ft; 10 in. from 257 to 539 ft; and 610 to 620 ft; 10 in. screen from 539 to 610 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
56	322358086171801	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	73	24 16	Ke	169.7	16 9.6	1957 08/15/84	T	P	Well 15: Casing: 24 in. from surface to 43 ft; 18 in. from surface to 53 ft; 16 in. from 73 to 83 ft; 16 in. screen from 53 to 73 ft.
57	322357086171901	Montgomery Water Works	W. Horace Williams 1937	644	14 8	Kg	167.8	64.4	08/13/84	T	P	Well 14E: Casing: 14 in. from surface to 313 ft; 12 in. from surface to 313 ft; 8 in. from 320 to 461 ft; 493 to 588 ft; and 644 to 650 ft; 8 in. screen from 313 to 320 ft; 461 to 493 ft; and 588 to 644 ft.
58	322352086180001	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	645	24 16 10	Kg Kc	160	148 62.3	09/10/57 08/14/84	T	P	Well 7A: Casing: 24 in. from surface to 332 ft; 16 in. from 272 to 337 ft; 10 in. from 347 to 378 ft; 386 to 411 ft; 431 to 465 ft; 485 to 499 ft; 504 to 543 ft; 553 to 564 ft; 569 to 585 ft; 595 to 625 ft; and 645 to 655 ft; 10 in. screen from 337 to 347 ft; 378 to 388 ft; 411 to 431 ft; 465 to 485 ft; 499 to 504 ft; 543 to 553 ft; 564 to 569 ft; 585 to 595 ft; and 625 to 645 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
59	322353086180002	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	74	24 18 16	Qt	160	30 20.2	09/19/57 08/14/84	T	P	Well 20A: Casing: 24 in. from surface to 48 ft; 18 in. from surface to 54 ft; 16 in. from 74 to 84 ft; 16 in. screen from 54 to 74 ft.
60	322347086173701	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	70	24 18 16	Qt	160	16.7 7.6	10/30/57 08/13/84	T	P	Well 2A: Casing: 24 in. from surface to 45 ft; 18 in. from surface to 50 ft; 16 in. from 70 to 80 ft; 16 in. screen from 50 to 70 ft.
61	322337086190401	Montgomery Water Works	Layne Central Drilling Co., Inc. 1956	600	24 16 10	Kg Kc	155	117 80.2	03/20/56 08/31/84	T	P	Well 53: Casing: 24 in. from surface to 365 ft; 16 in. from 305 to 370 ft; 410 to 430 ft; 460 to 570 ft; and 600 to 610 ft; 10 in. screen from 370 to 410 ft; 430 to 460 ft; and 570 to 600 ft.
62	322334086184501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1956	600	24 16 10	Kg Kc	155	113 76.7	02/22/56 08/15/84	T	P	Well 52: Casing: 24 in. from surface to 360 ft; 16 in. from 300 to 365 ft; 10 in. from 385 to 405 ft; 485 to 560 ft; and 600 to 610 ft; 10 in. screen from 365 to 385 ft; 405 to 485 ft; and 560 to 600 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
63	322317086184801	Montgomery Water Works	Layne Central Drilling Co., Inc. 1956	600	24 16 10	Kg Kc	160	116 70.4	01/06/56 08/15/84	T	P	Well 51: Casing: 24 in. from surface to 380 ft; 16 in. from 320 to 385 ft; 10 in. from 485 to 570 ft; and 600 to 610 ft; 10 in. screen from 385 to 485 ft; and 570 to 600 ft.
64	322315086175302	Montgomery Water Works	Layne Central Drilling Co., Inc. 1958	755	24 16 10	Kc	160	117 69.1 74.8 70.4 64.4 54.8	07/17/58 08/15/84 10/17/84 04/12/85 11/07/85 04/01/86	T	P	Well 13: Casing: 24 in. from surface to 300 ft; 16 in. from 240 to 475 ft; 10 in. from 485 to 534 ft; 549 to 558 ft; 598 to 630 ft; 645 to 740 ft; and 755 to 765 ft; 10 in. screen from 475 to 485 ft; 534 to 549 ft; 558 to 598 ft; 630 to 645 ft; and 740 to 755 ft.
65	322313086175202	Montgomery Water Works	Layne Central Drilling Co., Inc. 1959	270	30 16	Kg	160	50 32.4 33.4 35.4 33.3 25.2	06/12/59 08/15/84 10/17/84 04/12/85 11/07/85 04/01/86	T	P	Well 11: Casing: 30 in. from surface to 100 ft; 16 in. from surface to 180 ft; 200 to 250 ft; and 270 to 280 ft; 16 in. screen from 180 to 200 ft; and 250 to 270 ft.
66	322305086183002	Montgomery Water Works	Layne Central Drilling Co., Inc. 1962	74	24 18 16	Qt	160	49.9 28.2 30.4 30.2	06/22/62 08/14/84 10/16/84 04/05/85	T	P	Well 9E: Casing: 24 in. from surface to 37 ft; 18 in. from surface to 63 ft; 16 in. from 74 to 84 ft; 16 in. screen from 64 to 74 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (+) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
67	322305086183201	Montgomery Water Works	Layne Central Drilling Co., Inc. 1962	79	24 18 16	Qt	160	39	06/12/62	T	P	Well 9W: Casing: 24 in. from surface to 40 ft; 18 in. from surface to 68 ft; 16 in. from 79 to 89 ft; 16 in. screen from 69 to 79 ft.
68	322305086183001	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	695	24 16 10	Kg Kc	160	146 87.6	03/14/57 08/14/84	T	P	Well 8: Casing: 24 in. from surface to 379 ft; 16 in. from 319 to 384 ft; 10 in. from 404 to 414 ft; 474 to 523 ft; 533 to 595 ft; and 695 to 705 ft; 10 in. screen from 384 to 404 ft; 414 to 474 ft; 523 to 533 ft; and 595 to 695 ft.
69	322307086184701	Montgomery Water Works	Layne Central Drilling Co., Inc. 1957	699	24 16 10	Kg Kc	160	147 92.2	06/07/57 08/13/84	T	P	Well 5: Casing: 24 in. from surface to 383 ft; 16 in. from 323 to 387 ft; 10 in. from 397 to 425 ft; 435 to 451 ft; 486 to 509 ft; 514 to 524 ft; 529 to 599 ft; 619 to 643 ft; 663 to 679 ft; ard 699 to 710 ft; 10 in. screen from 387 to 397 ft; 425 to 435 ft; 451 to 486 ft; 509 to 514 ft; 524 to 529 ft; 599 to 619 ft; 643 to 663 ft; and 679 to 699 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
70	322248086050701	State of Alabama Kilby Correction Facility	Layne Central Drilling Co., Inc. 1968	575	16 8	Kc	190	30	06/11/68	T	P	Well 1: Casing: 16 in. from surface to 385 ft; 8 in. from 335 to 390 ft; 400 to 412 ft; 422 to 469 ft; 479 to 515 ft; 525 to 530 ft; 540 to 555 ft; and 575 to 583 ft; 8 in. screen from 390 to 400 ft; 412 to 422 ft; 469 to 479 ft; 515 to 525 ft; 530 to 540 ft; and 555 to 575 ft.
71	322255086051701	State of Alabama Kilby Correction Facility	Layne Central Drilling Co., Inc. 1968	400	16 8	Kc	190	46 70.1 71.0 59.4	04/26/68 04/02/85 11/04/85 04/03/86	T	P	Well 2: Casing: 16 in. from surface to 325 ft; 8 in. from 340 to 360 ft; 8 in. screen from 325 to 340 ft; and 360 to 400 ft.
72	322220086033301	Alabama Water Co.	Acme Drilling Co., Inc. 1965	198	8 4	Ke	200	22	02/23/65	S	P	Casing: 8 in. from surface to 165 ft; 4 in. from 147 to 168 ft; 4 in. screen from 168 to 198 ft.
73	322225086033001	Alabama Water Co.	Acme Drilling Co., Inc. 1964	222	4	Ke	200	25	09/08/64	S	P	Casing: 4 in. from surface to 180 ft; open hole below.
74	322156086030401		Acme Drilling Co., Inc. 1965	242	6 4	Ke	220	43	03/1965	N	U	Casing: 6 in. from surface to 179 ft; 4 in. from 161 to 182 ft; 4 in. screen from 182 to 242 ft; discontinued public water supply well; Knollwood Water System.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
75	322223086195601	Montgomery Water Works	Layne Central Drilling Co., Inc. 1942	164	18 12 10	Ke	182	52 45	06/12/42 1976	T	P	Well 23: Casing: 18 in. from surface to 100 ft; 12 in. from surface to 134 ft; 10 in. screen from 134 to 164 ft.
76	322215086200501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1951	155	18 12	Ke	179.8	52	09/11/81	T	P	Well 21: Casing: 18 in. from surface to 115 ft; 12 in. from surface to 115 ft; and 155 to 160 ft; 12 in. screen from 115 to 155 ft.
77	322212086195601	Montgomery Water Works	Layne Central Drilling Co., Inc. 1953	181	18 12 10	Ke	195.2	68.0 65 66.9	02/02/53 05/05/53 07/02/57	T	P	Well 22: Casing: 18 in. from surface to 100 ft; 12 in. from surface to 141 ft; and 10 in. from 181 to 191 ft; 10 in. screen from 141 to 181 ft.
78	322114086212402	Montgmery Water Works	Rowe Drilling Co., Inc. 1985	1010	24 16 10	Ke Kg Kc	170	87.8	01/17/85	T	P	Well 26: Casing: 24 in. from surface to 250 ft; 16 in. from 200 to 250 ft; 10 in. from 250 to 257 ft; 272 to 360 ft; 370 to 505 ft; 515 to 574 ft; 579 to 640 ft; 670 to 752 ft; 762 to 800 ft; 960 to 995 ft; and 1010 to 1020 ft; 10 in. screen from 257 to 272 ft; 360 to 370 ft; 505 to 515 ft; 574 to 579 ft; 640 to 670 ft; 752 to 762 ft; 800 to 960 ft; and 995 to 1010 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
79	322137086213703	Montgomery Water Works	Acme Drilling Co., Inc. 1953	676	18 12 10	Kg Kc	171.1	120 107.6	07/20/53 08/07/84	T	P	Well 27: (offset) Casing: 18 in. from surface to 264 ft; 12 in. from 223 to 264 ft; 10 in. from 291 to 485 ft; 492 to 502 ft; 516 to 534 ft; 546 to 560 ft; 608 to 641 ft; and 676 to 686 ft; 10 in. screen from 264 to 291 ft; 485 to 492 ft; 502 to 516 ft; 534 to 546 ft; 560 to 608 ft; and 641 to 676 ft.
80	322132086214802	Montgmery Water Works	Rowe Drilling Co., Inc. 1984	620	24 16 10	Ke Kg Kc	170	119	10/23/84	T	P	Well 28: Casing: 24 in. from surface to 225 ft; 16 in. from 175 to 225 ft; 10 in. from 245 to 280 ft; 295 to 315 ft; 325 to 385 ft; 405 to 430 ft; 440 to 470 ft; 490 to 515 ft; 520 to 555 ft; 560 to 575 ft; 585 to 610 ft; and 620 TO 630 ft; 10 in. screen from 230 to 245 ft; 280 to 295 ft; 315 to 325 ft; 385 to 405 ft; 430 to 440 ft; 470 to 490 ft; 515 to 520 ft; 555 to 560 ft; 575 to 585 ft; and 610 to 620 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
81	322130086215403	Montgomery Water Works	Layne Central Drilling Co., Inc. 1954	755	24 16 10	Kg Kc	172	117 110.4 94.3	03/24/54 08/15/84 11/07/85	T	P	Well 29AA: Casing: 24 in. from surface to 300 ft; 18 in. from 240 to 475 ft; 10 in. from 490 to 534 ft; 549 to 558 ft; 598 to 630 ft; 645 to 740 ft; and 755 to 768 ft; 10 in. screen from 475 to 490 ft; 534 to 549 ft; 558 to 598 ft; 630 to 645 ft; and 740 to 755 ft.
82	322125086220801	Montgomery Water Works	Layne Central Drilling Co., Inc. 1949	615	18 10	Kg Kc	172.4	57.3 115.6	04/01/49 08/07/84	T	P	Well 30: Casing: 18 in. from surface to 285 ft; 10 in. from 235 to 290 ft; 300 to 365 ft; 395 to 478 ft; 498 to 575 ft; and 615 to 627 ft; 10 in. screen from 290 to 300 ft; 365 to 395 ft; 478 to 498 ft; and 575 to 615 ft.
83	322120086222301	Montgomery Water Works	Layne Central Drilling Co., Inc. 1949	622	18 10	Kg Kc	170.1	71 117.7	1949 08/15/84	T	P	Well 31: Casing: 18 in. from surface to 296 ft; 10 in. from 246 to 301 ft; 311 to 368 ft; 398 to 482 ft; 502 to 582 ft; and 627 to 634 ft; 10 in. screen from 301 to 311 ft; 368 to 398 ft; 482 to 502 ft; and 582 to 622 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
84	322115086222701	U.S. Geological Survey	Black-belt Drilling Co., Inc. 1967	595	4 2	Kc	168.7	84.8 85.3 76.8 128.8 136.6 93.1 134.3 108.0 88.6	01/13/67 03/10/67 04/29/68 08/07/68 09/25/70 08/15/84 10/02/84 04/11/85 11/06/85	N	O	Observation well 7: Casing: 4 in. from surface to 285 ft; 2 in. from 279 to 590 ft; and 595 to 600 ft; 2 in. screen from 590 to 595 ft.
85	322116086223501	Montgmery Water Works	Layne Central Drilling Co., Inc. 1949	635	18 12 10	Ke Kg Kc	168	63.8 86.1	03/24/49 08/15/84	T	P	Well 32: Casing: 18 in. from surface to 200 ft; 12 in. from 152 to 205 ft; 10 in. from 225 to 302 ft; 322 to 387 ft; 417 to 570 ft; 580 to 590 ft; 610 to 625 ft; and 635 to 647 ft; 10 in. screen from 205 to 225 ft; 302 to 322 ft; 387 to 417 ft; 570 to 580 ft; 590 to 610 ft; and 625 to 635 ft.
86	322113086224501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1949	621	18 12 10	Ke Kg Kc	170	59.4 81.6	10/06/49 08/07/84	T	P	Well 33: Casing: 18 in. from surface to 208 ft; 12 in. from 158 to 214 ft; 10 in. from 219 to 246 ft; 266 to 306 ft; 316 to 397 ft; 427 to 581 ft; and 621 to 632 ft; 10 in. screen from 214 to 219 ft; 246 to 266 ft; 306 to 316 ft; 397 to 427 ft; and 581 to 621 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
87	322108086225501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1949	618	18 12 10	Ke Kg Kc	165	51 69.7	11/23/49 08/07/84	T	P	Well 34: Casing: 18 in. from surface to 185 ft; 12 in. from 137 to 185 ft; 10 in. from 185 to 193 ft; 208 to 235 ft; 260 to 318 ft; 338 to 415 ft; 435 to 598 ft; and 618 to 627 ft; 10 in. screen from 193 to 208 ft; 235 to 260 ft; 318 to 338 ft; 415 to 435 ft; and 598 to 618 ft.
88	322112086231801	Montgomery Water Works	Layne Central Drilling Co., Inc. 1950	629	18 12 10	Ke Kg Kc	161	64 58.6	09/02/50 08/07/84	T	P	Well 36: Casing: 18 in. from surface to 201 ft; 12 in. from 121 to 206 ft; 10 in. from 246 to 400 ft; and 430 to 596 ft; 10 in. screen from 206 to 246 ft; 400 to 430 ft; and 596 to 629 ft.
89	322056086225702	Montgomery Water Works	Rowe Drilling Co., Inc. 1985	618	24 16 10	Ke Kg Kc	157.5	103	07/03/85	T	P	Well 38: Casing 24 in. from surface to 220 ft; 16 in. from 170 to 220 ft; 10 in. from 235 to 250 ft; 265 to 332 ft; 342 to 353 ft; 363 to 391 ft; 396 to 415 ft; 430 to 580 FT; 590 to 608 ft; and 618 to 628 ft; 10 in. screen from 225 to 235 ft; 250 to 265 ft; 332 to 342 ft; 353 to 363 ft; 391 to 396 ft; 415 to 430 ft; 580 to 590 ft; and 608 to 618 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
90	322047086231601	Montgomery Water Works	Layne Central Drilling Co., Inc. 1952	688	18 12 10	Ke Kg Kc	153.4	80 70.7	1952 08/07/84	T	P	Well 39: Casing: 18 in. from surface to 190 ft; 12 in. from 130 to 195 ft; 10 in. from 215 to 243 ft; 273 to 326 ft; 336 to 415 ft; 440 to 458 ft; 473 to 580 ft; 600 to 614 ft; 634 to 678 ft; and 688 to 698 ft; 10 in. screen from 195 to 214 ft; 243 to 273 ft; 326 to 336 ft; 415 to 440 ft; 458 to 473 ft; 580 to 600 ft; 614 to 634 ft; and 678 to 688 ft.
91	322047086214301	U.S. Geological Survey	Layne Central Drilling Co., Inc. 1952	271	6 4	Ke	167.2			N	O	Observation well 3: Casing: 6 in. from surface to 210 ft; 4 in. from 195 to 210 ft; 215 to 220 ft; 225 to 265 ft; and 265 to 271 ft; screen from 210 to 215 ft; 220 to 225 ft; and 265 to 270 ft; water level recorded at this site from August 1952 to current year.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
92	322044086223201	Montgomery Water Works	Rowe Drilling Co., Inc. 1985	605	24 16 10	Kg Kc	165	124.0	07/11/85	T	P	Well 54: Casing: 24 in. from surface to 265 ft; 16 in. from 215 to 265 ft; 10 in. from 265 to 325 ft; 335 to 365 ft; 385 to 420 ft; 450 to 525 ft; and 540 to 595 ft; 10 in. screen from 325 to 335 ft; 365 to 385 ft; 420 to 450 ft; 525 to 540 ft; and 595 to 695 ft.
93	322040086232601	Montgomery Water Works	Layne Central Drilling Co., Inc. 1952	275	18 12 10	Ke	152.8	44 45.0 37.6	10/13/52 08/10/84 11/06/85	T	P	Well 40: Casing: 18 in. from surface to 190 ft; 12 in. from 140 to 195 ft; 10 in. from 275 to 285 ft; 10 in. screen from 195 to 275 ft.
94	322040086232501	U.S. Geological Survey	Layne Central Drilling Co., Inc. 1953	446	6 4	Kg	152.7	52.6 63.5 73.0 51.6 75.7	03/02/53 03/23/57 11/02/84 04/11/85 11/06/85	N	O	Observation well 4: Casing: 6 in. from surface to 404 ft; 4 in. from 394 to 408 ft; 413 to 424 FT; 429 to 441 ft; and 446 to 451 ft; screen from 408 to 413 ft; 424 to 429 ft; and 441 to 446 ft; water level recorded at this site from march 1953 to current year.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
95	322035086234801	Montgomery Water Works	Acme Drilling Co., Inc. 1953	296	18 12 10	Ke	157.1	36.5 46.7 25.4 41.9 29.8 37.3	07/02/53 07/03/57 08/08/84 11/02/84 04/11/85 04/04/86	T	P	Well 41: Casing: 18 in. from surface to 103 ft; 12 in. from 53 to 104 ft; 121 to 124 ft; and 141 to 144 ft; 10 in. from 161 to 239 ft; 246 to 249 ft; 271 to 274 ft; and 296 to 300 ft; 12 in. screen from 104 to 121 ft; 124 to 141 ft; and 144 to 161 ft; 10 in. screen from 239 to 246 ft; 249 to 271 ft; and 274 to 296 ft.
96	322038086240801	Montgomery Water Works	Acme Drilling Co., Inc. 1953	462	18 12 10	Ke Kg	156.9	67.3 68.0	08/25/53 08/10/84	T	P	Well 42: Casing: 18 in. from surface to 235 ft; 12 in. from 189 to 235 ft; 10 in. from 324 to 386 ft; 424 to 429 ft; and 462 to 465 ft; 10 in. screen from 235 to 324 ft; 386 to 424 ft; and 429 to 462 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
97	322031086242401	Montgomery Water Works	Acme Drilling Co., Inc. 1953	704	18 12 10	Ke Kg Kc	165.3	42 77.2	11/12/53 08/10/84	T	P	Well 43: Casing: 18 in. from surface to 270 ft; 12 in. from 228 to 272 ft; 10 in. from 296 to 299 ft; 311 to 326 ft; 337 to 340 ft; 361 to 441 ft; 454 to 650 ft; 670 to 673 ft; and 690 to 693 ft; 10 in. screen from 272 to 296 ft; 299 to 311 ft; 326 to 337 ft; 340 to 361 ft; 441 to 454 ft; 650 to 670 ft; 673 to 690 ft; and 693 to 704 ft.
98	322025086243801	Montgomery Water Works	Acme Drilling Co., Inc. 1954	740	18 12 10	Ke Kg Kc	162.6	42 72.7	01/05/54 08/10/84	T	P	Well 44: Casing: 18 in. from surface to 286 ft; 12 in. from 245 to 289 ft; 10 in. from 286 to 289 ft; 311 to 331 ft; 336 to 405 ft; 415 to 424 ft; 434 to 441 ft; 450 to 453 ft; 462 to 465 ft; 485 to 560 ft; 565 to 693 ft; 713 to 725 ft; and 740 to 742 ft; 10 in. screen from 289 to 311 ft; 331 to 336 ft; 405 to 415 ft; 424 to 434 ft; 441 to 450 ft; 453 to 462 ft; 465 to 485 ft; 560 to 565 ft; 693 to 713 ft; and 725 to 740 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
99	322021086245001	Montgomery Water Works	Acme Drilling Co., Inc. 1954	486	18 12 10	Ke Kg	165.1	25.5 44.0	02/05/54 08/13/84	T	P	Well 45: Casing: 18 in. from surface to 100 ft; 12 in. from 51 to 100 ft; 116 to 119 ft; 128 to 132 ft; 136 to 139 ft; 156 to 161 ft; 171 to 181 ft; 192 to 240 ft; 240 to 309 ft; 315 to 320 ft; 332 to 389 ft; 395 to 423 ft; 437 to 474 ft; and 486 to 490 ft; 12 in. screen from 100 to 116 ft; 119 to 128 ft; 132 to 136 ft; 139 to 156 ft; 161 to 171 ft; and 181 to 192 ft; 10 in. screen from 309 to 315 ft; 320 to 332 ft; 389 to 395 ft; 423 to 437 ft; and 474 to 486 ft.
100	322016086250501	Montgomery Water Works	Layne Central Drilling Co., Inc. 1955	700	24 16 10	Ke Kg Kc	164	64 75.7	07/20/65 08/14/84	T	P	Well 46: Casing: 24 in. from surface to 257 ft; 16 in. from 197 to 262 ft; 10 in. from 262 to 267 ft; 292 to 392 ft; 402 to 424 ft; 434 to 450 ft; 460 to 486 ft; 496 to 605 ft; 615 to 662 ft; 672 TO 690 FT; and 700 TO 710 FT; 10 in. screen from 267 to 292 ft; 392 to 402 ft; 424 to 434 ft; 450 to 460 ft; 486 to 496 ft; 605 To 615 ft; 662 to 672 ft; and 690 to 700 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
101	322008086240801	Montgomery Water Works	Rowe Drilling Co., Inc. 1985	750	24 16 10	Ke Kg Kc	165	67.6	05/02/85	T	P	Well 58: Casing: 24 in. from surface to 250 ft; 16 in. from 200 to 250 ft; 10 in. from 250 to 305 ft; 325 to 460 ft; 480 to 560 ft; 570 to 620 ft; 645 to 685 ft; 695 to 740 ft; and 750 to 755 ft; 10 in. screen from 305 to 325 ft; 460 to 480 ft; 560 to 570 ft; 620 to 645 ft; 685 to 695 ft; and 740 to 750 ft.
102	322007086223301	Montgmery Water Works	Rowe Drilling Co., Inc. 1985	1015	24 16 10	Kg Kc	155	78.7	02/04/85	T	P	Well 55: Casing: 24 in. from surface to 292 ft; 16 in. from 252 to 292 ft; 10 in. from 292 to 420 ft; 440 to 450 ft; 460 to 485 ft; 495 to 600 ft; 620 to 640 ft; 650 to 660 ft; 670 to 905 ft; 925 to 955 ft; 975 to 995 ft; and 1015 to 1020 ft; 10 in. screen from 420 to 440 ft; 450 to 460 ft; 485 to 495 ft; 600 to 620 ft; 640 to 650 ft; 660 to 670 ft; 905 to 925 ft; 955 to 975 ft; and 995 to 1015 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
103	322011086251901	Montgomery Water Works	Layne Central Drilling Co., Inc. 1955	702	24 16 10	Ke Kg Kc	163	55 65.0	08/10/55 08/14/84	T	P	Well 47: Casing: 24 in. from surface to 243 ft; 16 in. from 183 to 248 ft; 10 in. from 268 to 278 ft; 288 to 328 ft; 338 to 366 ft; 376 to 440 ft; 450 to 468 ft; 478 to 500 ft; 510 to 612 ft; 622 to 690 ft; and 700 to 710 ft; 10 in. screen from 248 to 268 ft; 278 to 288 ft; 328 to 338 ft; 366 to 376 ft; 440 to 450 ft; 468 to 478 ft; 500 to 510 ft; 612 to 622 ft; and 690 to 700 ft.
104	322006086253201	Montgomery Water Works	Layne Central Drilling Co., Inc. 1955	700	24 16 10	Ke Kg Kc	164.2	50 80.6	09/16/55 08/13/84	T	P	Well 48: Casing: 24 in. from surface to 283 ft; 16 in. from 225 to 288 ft; 10 in. from 303 to 357 ft; 372 to 397 ft; 402 to 445 ft; 455 to 496 ft; 506 to 616 ft; 636 to 675 ft; and 700 to 710 ft; 10 in. screen from 288 to 303 ft; 357 to 372 ft; 397 to 402 ft; 445 to 455 ft; 496 to 506 ft; 616 to 636 ft; and 675 to 700 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (+) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
105	322002086243601	Montgomery Water Works	Rowe Drilling Co., Inc. 1985	720	24 16 10	Ke Kg Kc	165	61.3	03/19/85	T	P	Well 57: Casing: 24 in. from surface to 250 ft; 16 in. from 200 to 250 ft; 10 in. from 250 to 310 ft; 350 to 445 ft; 455 to 485 ft; 505 to 615 ft; 625 to 690 ft; and 720 to 730 ft; 10 in. screen from 310 to 350 ft; 445 to 455 ft; 485 to 505 ft; 615 to 625 ft; and 690 to 720 ft.
106	322000086254701	Montgomery Water Works	Layne Central Drilling Co., Inc. 1955	704	24 16 10	Ke Kg Kc	165	46 58.2	1955 08/14/84	T	P	Well 49: Casing: 24 in. from surface to 268 ft; 16 in. from 208 to 272 ft; 10 in. from 282 to 298 ft; 308 to 360 ft; 380 to 454 ft; 464 to 475 ft; 485 to 495 ft; 515 to 684 ft; and 704 to 714 ft; 10 in. screen from 272 to 282 ft; 298 to 308 ft; 360 to 380 ft; 454 to 464 ft; 475 to 485 ft; 495 to 515 ft; and 684 to 704 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (+) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
107	321954086260201	Montgomery Water Works	Layne Central Drilling Co., Inc. 1955	716	24 16 10	Ke Kg Kc	164	42 62.0	1955 08/14/84	T	P	Well 50: Casing: 24 in. from surface to 236 ft; 16 in. from 176 to 240 ft; 10 in. from 250 to 276 ft; 286 to 302 ft; 312 to 368 ft; 388 to 440 ft; 450 to 460 ft; 480 to 510 ft; 520 to 586 ft; 596 to 642 ft; 652 to 706 ft; and 716 to 726 ft; 10 in. screen from 240 to 250 ft; 276 to 286 ft; 302 to 312 ft; 368 to 388 ft; 440 to 450 ft; 460 to 480 ft; 510 to 520 ft; 586 to 596 ft; 642 to 652 ft; and 706 to 716 ft.
108	321946086224301	Montgomery Water Works	Rowe Drilling Co., Inc. 1985	695	24 16 10	Ke Kg Kc	165	34.7	04/10/85	T	P	Well 56: Casing: 24 in. from surface to 262 ft; 16 in. from 212 to 262 ft; 10 in. from 262 to 270 ft; 280 to 290 ft; 300 to 405 ft; 410 to 430 ft; 435 to 445 ft; 455 to 470 ft; 475 to 552 ft; 557 to 600 ft; 630 to 670 ft; and 675 to 685 ft; 10 in. screen from 270 to 280 ft; 290 to 300 ft; 405 to 410 ft; 430 to 435 ft; 445 to 455 ft; 470 to 475 ft; 552 to 557 ft; 600 to 630 ft; 670 to 675 ft; and 685 to 695 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
109	321920086365301	Town of Lowndesboro	Powell Drilling Co., Inc. 1983	634	8 4 2	Kg	220	97 91.0 81.8 109.4	03/14/83 11/05/84 11/12/85 04/15/86	S	P	Well 2: Casing: 8 in. from surface to 634 ft; 4 in. from 594 to 634 ft; 659 to 664 ft; 669 to 679 ft; and 689 to 694 ft; 4 in. screen from 634 to 659 ft; 664 to 669 ft; and 679 to 689 ft; 2 in. screen from 634 to 659 ft; 664 to 669 ft; and 679 to 689 ft.
110	321632086364701	Town of Lowndesboro	Layne Central Drilling Co., Inc. 1964	998	8 6	Kg	410	276	1984	T	P	Well 1: Casing: 8 in. from surface to 965 ft; 6 in. from 948 to 968 ft; 6 in. screen from 968 to 998 ft.
111	321459086110201	Oak Hollow Subdivision (formerly Rolling Hills Golf and Racquet club)	W. J. Bozeman and Son 1975	457	8 6	Ke	260	97	10/16/75	T	P	Well 1: Casing: 8 in. from surface to 335 ft; 6 in. from 375 to 403 ft; 413 to 432 ft; and 442 to 447 ft; 6 in. screen from 335 to 375 ft; 403 to 413 ft; 432 to 442 ft; and 447 to 457 ft.
112	321403086174001	Snowdoun Water Works	Acme Drilling Co., Inc. 1971	504	8 4	Ke	285	143 159.4	01/12/72 10/30/84	T	P	Well 1: Casing: 8 in. from surface to 430 ft; 4 in. from 504 to 505 ft; 4 in. screen from 430 to 504 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
113	321424086205401	Pintlala Water Works	Acme Drilling Co., Inc. 1971	357	6 4	Ke	230	77	11/10/71	T	P	Formerly McClean Estates well: Casing: 6 in. from surface to 313 ft; 4 in. from 275 to 312 ft; 4 in. screen from 313 to 357 ft.
114	321356086440801	Black-belt Water System				Kg	215			T	P	Casing: 8 in. from surface to 450 ft; 6 in. from 410 to 960 ft; 3 in. screen from 960 to 990 ft.
115	321410086471801	Lowndes County Water and Fire Protection Authority					340			S	P	"Collirene Well" Casing:
116	321100086344501	Hayne-ville Water Department	Layne Central Drilling Co., Inc. 1949	1050	8 6	Kg	238	85 110 115.3 112.4	10/12/49 1975 10/27/81 11/04/82	S	P	Well 1: Casing: 8 in. from surface to 1012 ft; 6 in. from 972 to 1030 ft; 6 in. screen from 1030 to 1050 ft; well reworked 1975.
117	321100086350501	Hayne-ville Water Department	Layne Central Drilling Co., Inc. 1970	1055	12 6	Kg	230	89	03/03/70	T	P	Well 2: Casing: 12 in. from surface to 1010 ft; 6 in. from 950 to 1015 ft; 6 in. screen from 1015 to 1055 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (-) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
118	321033086221001	Pintlala Water Department	Acme Drilling Co., Inc. 1974	663	8 4	Ke	260	113	08/02/74	T	P	Well near fire-station: Casing: 8 in. from surface to 581 ft; 4 in. from 538 to 578 ft; 616 to 648 ft; and 663 to 66t ft; 4 in. screen from 578 to 616 ft; and 648 to 663 ft.
119	320928086403701	Mosses Water Department	W. J. Bozeman and Son 1977	1231	6 4	Kg	245	98.8 104	08/09/77 08/25/77	S	P	Supply well: Casing: 6 in. from surface to 430 ft; 4 in. from 408 to 1184 ft; 1204 to 1226 ft; and 1231 to 1235 ft; 4 in. screen from 1184 to 1204 ft; and 1226 to 1231 ft.
120	320908086424801	Crosby Water Department	W. J. Bozeman and Son 1955	1201	4 3 2	Kg	211			S	P	Supply well: Casing: 4 in. from surface to 191 ft; 3 in. from 191 to 1166 ft; 2 in. from 1166 to 1186 FT; 2 in. screen from 1186 to 1201 ft.
121	320752086401601	Lowndes County Water and Fire Protection Authority					270	123.2	01/13/86	S	P	Beechwood well: Casing:
122	320812086053301	Teasley's Mill Water and Fire Protection Authority	W. J. Bozeman 1974	859	4	Ke	320	151	12/04/74	S	P	Casing: 4 in. from surface to 790 ft; 4 in. screen from 790 to 862 ft.

Table 2.--Records of public water-supply wells in the study area--Continued

Well number	Geographic coordinate number	Well owner	Drilled by	Well depth (feet)	Well diam. (inches)	Water bearing unit	Altitude of land surface	Water level above (+) or below Land Surface Datum	Date of measurement	Method of lift	Use of well	Remarks
123	320351086033701	Pine Level Water and Fire Protection Authority	Alton Powell Drilling Co., Inc. 1970	1325	8 4	Ke	480	300	1970	S	P	Supply well: Casing: 8 in. from surface to 1134 ft; 4 in. from 1077 to 1136 ft; 1141 to 1207 ft; 1212 to 1276 ft; 1287 to 1303 ft; 1314 to 1320 ft; and 1325 to 1335 ft; 4 in. screen from 1136 to 1141 ft; 1207 to 1212 ft; 1276 to 1287 ft; 1303 to 1320 ft; and 1320 to 1325 ft; reported drawdown 415 ft after pumping 24 hrs at 159 gal/min.
124	320250086133201	Ramer Water and Fire Protection Authority	Acme Drilling Co., Inc. 1964	1248	8 4	Ke	405			S	P	Supply well: Casing: 8 in. from surface to 1142 ft; 4 in. from 1248 to 1250 ft; 4 in. screen from 1142 to 1248 ft.
125	320223086181501	Sellers Station Water System	Tom Smith Artesian Well Co. 1971	1197	8 4	Ke	295	143	04/08/71	T	P	Casing: 8 in. from surface to 987 ft; 4 in. from 800 to 1000 ft; 1005 to 1036 ft; 1051 to 1182 ft; and 1197 to 1200 ft; 4 in. screen from 1000 to 1005 ft; 1036 to 1051 ft; and 1182 to 1197 ft.

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