HYDROLOGY OF THE TERTIARY-CRETACEOUS AQUIFER SYSTEM IN THE VICINITY OF FORT RUCKER AVIATION CENTER, ALABAMA

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 84-4118

Prepared in cooperation with the

DEPARTMENT OF THE ARMY,
HEADQUARTERS UNITED STATES ARMY AVIATION CENTER,
AND FORT RUCKER

Cover

Photograph courtesy of Fort Rucker Aviation Center.

HYDROLOGY OF THE TERTIARY-CRETACEOUS AQUIFER SYSTEM IN THE VICINITY OF FORT RUCKER AVIATION CENTER, ALABAMA

By John C. Scott, Linda R. Law, and Riley H. Cobb

U.S. GEOLOGICAL SURVEY

Water-Resources Investigations Report 84-4118

Prepared in cooperation with the

DEPARTMENT OF THE ARMY

HEADQUARTERS UNITED STATES ARMY AVIATION CENTER and

FORT RUCKER

Montgomery, Alabama

UNITED STATES DEPARTMENT OF THE INTERIOR

WILLIAM P. CLARK, Secretary

GEOLOGICAL SURVEY

Dallas L. Peck, Director

For additional information write to:

District Chief
U.S. Geological Survey
520 19th Avenue
Tuscaloosa, Alabama 35401

Copies of this report can be purchased from:

Open-File Services Section
U.S. Geological Survey
Box 25425, Federal Center
Denver, Colorado 80225

CONTENTS

	Page
Abstract	1
Introduction	3
Purpose and scope	3
Previous geologic and hydrologic studies	5
Acknowledgments	5
Physical features	10
Geologic formations and their water-bearing characteristics	10
Ripley Formation	10
Providence Sand	13
Clayton Formation	13
Nanafalia Formation	14
Tuscahoma Sand	14
Hatchetigbee Formation	14
Tallahatta Formation	15
Lisbon Formation	15
Residuum	15
Terrace and alluvial deposits	16
Hydrology of the Tertiary-Cretaceous aquifer system	16
Source of ground water	16
Recharge and discharge	17
Aquifer tests	17
Withdrawals	23
Fluctuation of the potentiometric surface	25
Effects of withdrawals on the aquifer system	27
Quality of water	29
Summary	33
Selected references	34

ILLUSTRATIONS

Page

Figure 1. Map showing location of the area of study..... 4

2. Map showing locations of wells and stratigraphic cross sections..... 6

3. Generalized geologic map of the Cretaceous and Tertiary formations in southeastern Alabama..... 8

4. Stratigraphic cross section A-A' from Enterprise to Headland..... 11

5. Stratigraphic cross section B-B' from Cairns Airfield near Fort Rucker to about three miles north of Ozark..... 12

6. Generalized cross section of the aquifer system..... 18

7. Map showing locations of wells used in aquifer test at Fort Rucker..... 20

8. Fence diagram of production wells at Fort Rucker in 1983... 21

9. Drawdown in wells at Fort Rucker during aquifer test..... 22

10. Theoretical drawdown in the upper aquifer at Fort Rucker... 24

11. Fluctuation of the water level in well 24 (lower aquifer), average daily pumpage at Ozark, and total monthly precipitation at Eufaula Wildlife Refuge during 1982-83.. 26

12. Water-level trends in production wells at Fort Rucker from 1942 to 1983..... 28

13. Map showing the potentiometric surface of the upper aquifer in the study area in 1982..... 30

14. Areas of diversion and recharge for the upper aquifer.... 32

. . . . . .

TABLES

Table 1. Records of wells in the Fort Rucker area..... 36

2. Sample logs of wells in the Fort Rucker area..... 75

3. Driller's logs of wells in the Fort Rucker area..... 106

METRIC CONVERSION TABLE

The following factors may be used to convert the Inch-pound units published herein to International System of units (SI).

Multiply Inch-Pound units	by	To obtain SI units
Length		
inch (in.)	25.4	millimeter (mm)
foot (ft)	0.3048	meter (m)
mile (mi)	1.609	kilometer (km)
Flow		
gallon per minute (gal/min)	0.06308	liter per second (L/s)
million gallons per day (Mgal/d)	0.04381	cubic meters per second (m^3/s)
Transmissivity		
foot squared per day (ft^2/d)	0.09290	meter squared per day (m^2/d)

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 called mean sea level. This datum is referred to as sea level in this report.

HYDROLOGY OF THE TERTIARY-CRETACEOUS AQUIFER SYSTEM IN THE VICINITY OF THE FORT RUCKER AVIATION CENTER, ALABAMA

By John C. Scott, Linda R. Law, and Riley H. Cobb

ABSTRACT

Fort Rucker Aviation Center in southeast Alabama is dependent on ground water for its water supply. The original well field at Fort Rucker, constructed in 1941-42, consisted of six multi-aquifer wells spaced about 2,000 feet apart. Uppermost screens in all of the wells are in the basal part of the Tuscahoma Sand about 150 to 200 feet below land surface. Forty years of pumpage from the wells resulted in declines in water levels. By 1976, some pumps were breaking suction and the demand for water was greater than the well field could supply. The study area consists of Dale County and parts of Coffee, Geneva, Henry, and Houston Counties.

The Tertiary-Cretaceous aquifer system in the study area consists of the basal part of the Tuscahoma Sand, the Nanafalia Formation, and the Clayton Formation of Tertiary age, and the Providence Sand and Ripley Formation of Cretaceous age. For this report the system is divided into an upper and lower aquifer. The upper aquifer consists of the Tuscahoma Sand, the Nanafalia and Clayton Formations, and the upper part of the Providence Sand. The lower aquifer consists of the lower part of the Providence Sand and the Ripley Formation.

Water levels were measured in selected wells in June and July 1982 to prepare a potentiometric map of the upper aquifer. An aquifer test made at Fort Rucker during the study indicates that the upper aquifer has a transmissivity of about 7,800 ft^2/day (feet squared per day) and a storage coefficient of 3×10^{-4}. The aquifer test and a potentiometric map of the principal aquifer system indicate that the original wells at Fort Rucker are spaced too closely. New wells installed at Fort Rucker in 1981 and 1982 resulted in reduced pumpage from the old wells. The combination of reduced pumpage from the old wells and wider spacing between the new wells resulted in a temporary recovery of water levels in the area.

Field water-quality data were collected for most wells in the study area. Field determinations for pH, specific conductance, and temperature indicate that ground water is chemically suitable for most uses.

1 (page 3 follows)

INTRODUCTION

Fort Rucker Aviation Center is in the southern part of Dale County in southeast Alabama. The study comprises an area of about 1,660 square miles that includes all of Dale County and parts of Coffee, Geneva, Henry, and Houston Counties (see fig. 1). Principal cities in the study area are Dothan, Ozark, and Enterprise. The Fort Rucker military reservation comprises an area of about 90 square miles within the study area.

The original Fort Rucker well field was installed in 1941-42. Six wells were drilled about 2,000 feet apart in a cluster. The wells are multiaquifer, and screens were installed in all of the wells in the basal part of the Tuscahoma Sand 150 to 200 feet below land surface. As a consequence of development of the shallow aquifer and the cone of depression that resulted from 40 years of pumpage, the pumps began breaking suction in the 1960's and serious water shortages began to occur by the summer of 1976. Attempts were made to reconstruct the wells by removing the shallow well screens, but the reconstruction was essentially unsuccessful. In 1981, facilities engineers at Fort Rucker Aviation Center requested the U.S. Geological Survey to make a hydrologic and geologic study that would assist them in locating and designing a new well field to alleviate immediate and future water-supply problems at the center.

Purpose and Scope

The purpose of this study is to evaluate the hydrogeology of the Tertiary-Cretaceous aquifer system in the Fort Rucker area. The study was designed to identify hydrologic problems in the area that would aid facilities engineers in locating and designing a new well field for Fort Rucker.

Field work included inventory of all military, public water-supply, industrial, and irrigation wells in the study area and selected domestic wells where additional information was needed (see fig. 2). Water levels were measured where possible, and field determinations for pH, specific conductance, and water temperature were made at most sites. Water levels were measured in selected wells in the study area in June and July 1982. These data were used to prepare a potentiometric map of the upper aquifer. Drill cuttings, driller's logs, and geophysical logs were collected from four test wells at Fort Rucker and from other wells and test wells drilled in the area during the study. Drill cuttings were described by either the Geological Survey of Alabama or the U.S. Geological Survey. An aquifer test was conducted at Fort Rucker in March 1983 to estimate the hydraulic characteristics of the aquifer, and the magnitude of mutual interference of water levels between wells.

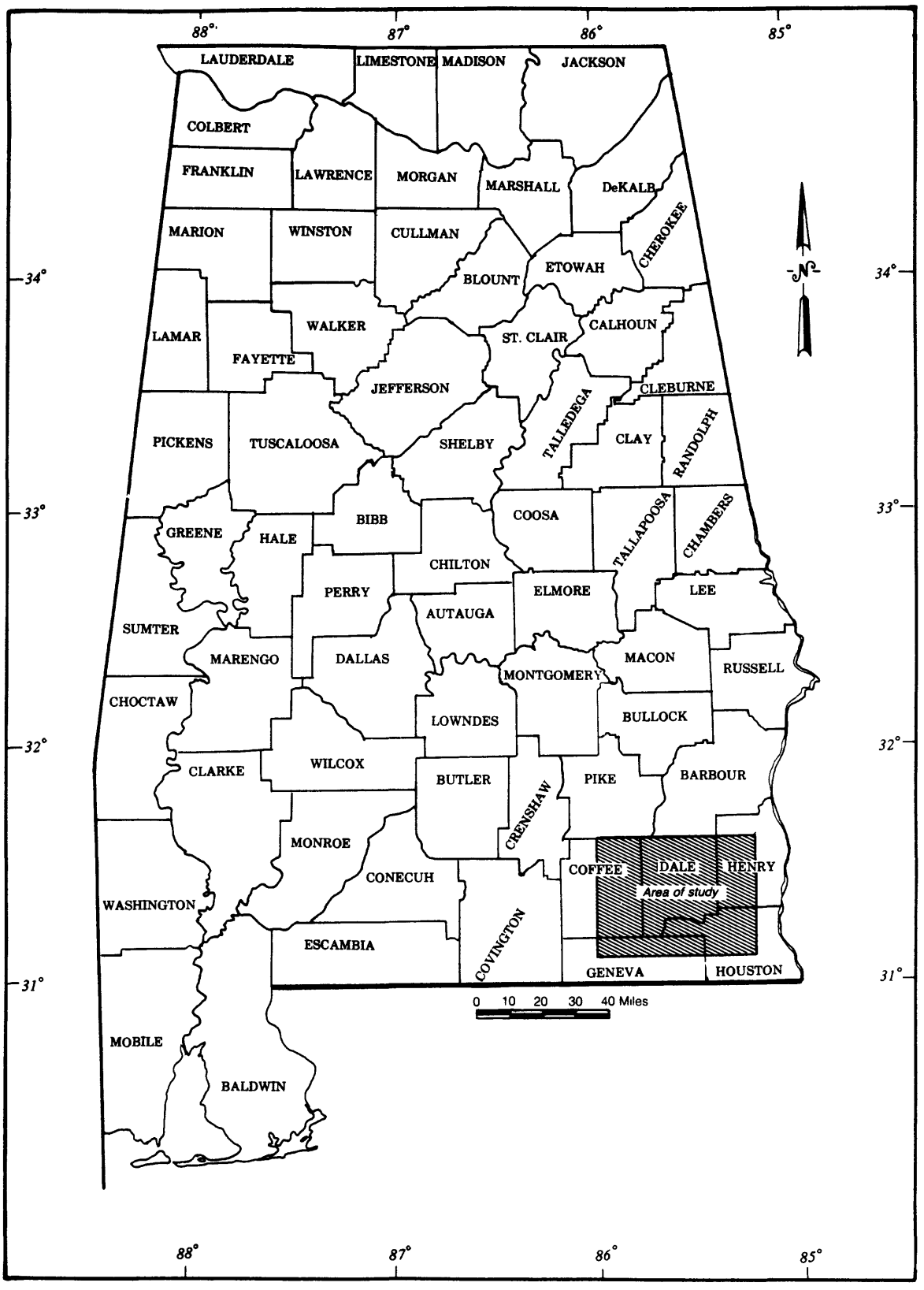


Figure 1.--Location of the area of study.

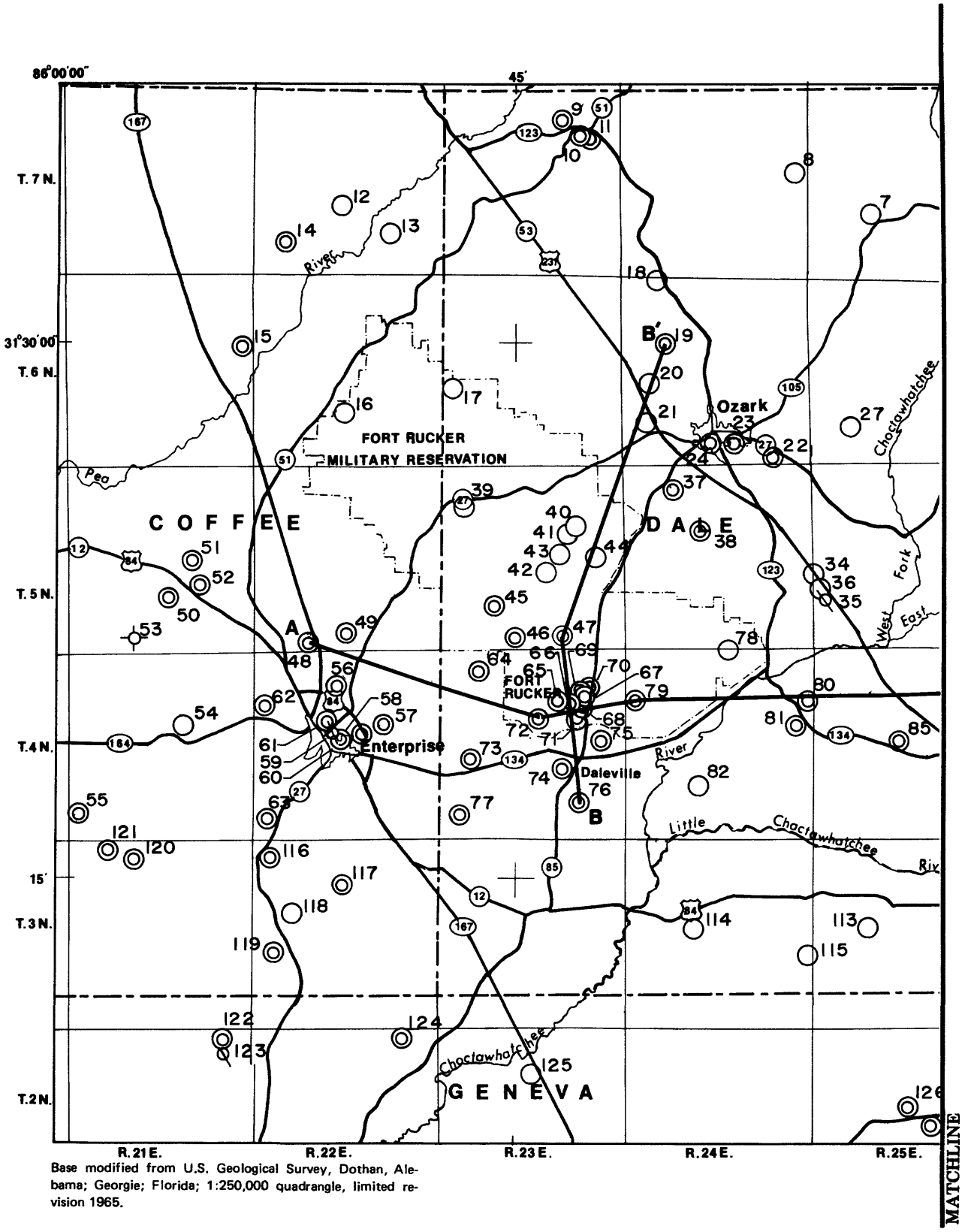
Previous Geologic and Hydrologic Studies

The first published geologic map that included the study area was probably Michael Toumey's geologic map of Alabama. The map was included in his second Biennial Report of the Alabama State Geologist in 1858. More detailed geologic maps of the State were prepared later by Smith and others (1894) and Adams and others (1926). A map of the Tertiary formations in Alabama was prepared by MacNeil (1946). Geologic maps of Coffee, Dale, Geneva, Henry, and Houston Counties were compiled in the 1960's by the U.S. Geological Survey in cooperation with the Geological Survey of Alabama. The geologic map in this report (fig. 3) is modified from the map by MacNeil (1946). MacNeil's map is not as detailed as the county geologic maps, but the detail presented is adequate for this report.

Ground-water data for the study area were published as early as 1907 in Eugene Allen Smith's "Underground Water Resources of Alabama" (Smith, 1907). More recent data are included in LaMoreaux (1948) and Carter and others (1949). Water-availability studies were made in the 1960's by the U.S. Geological Survey in cooperation with the Geological Survey of Alabama. Results of these studies were published in county water-availability reports by the Geological Survey of Alabama.

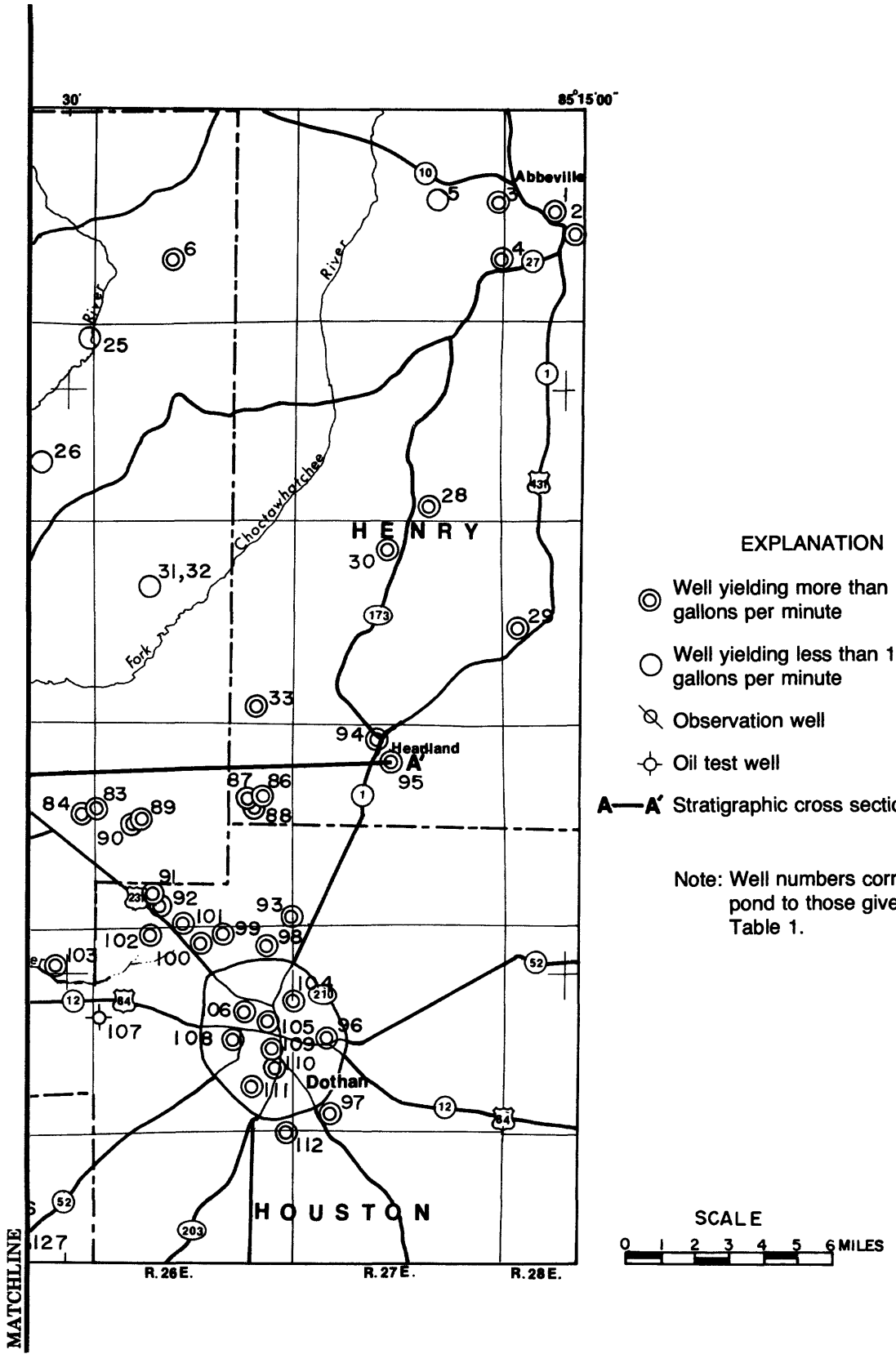
ACKNOWLEDGMENTS

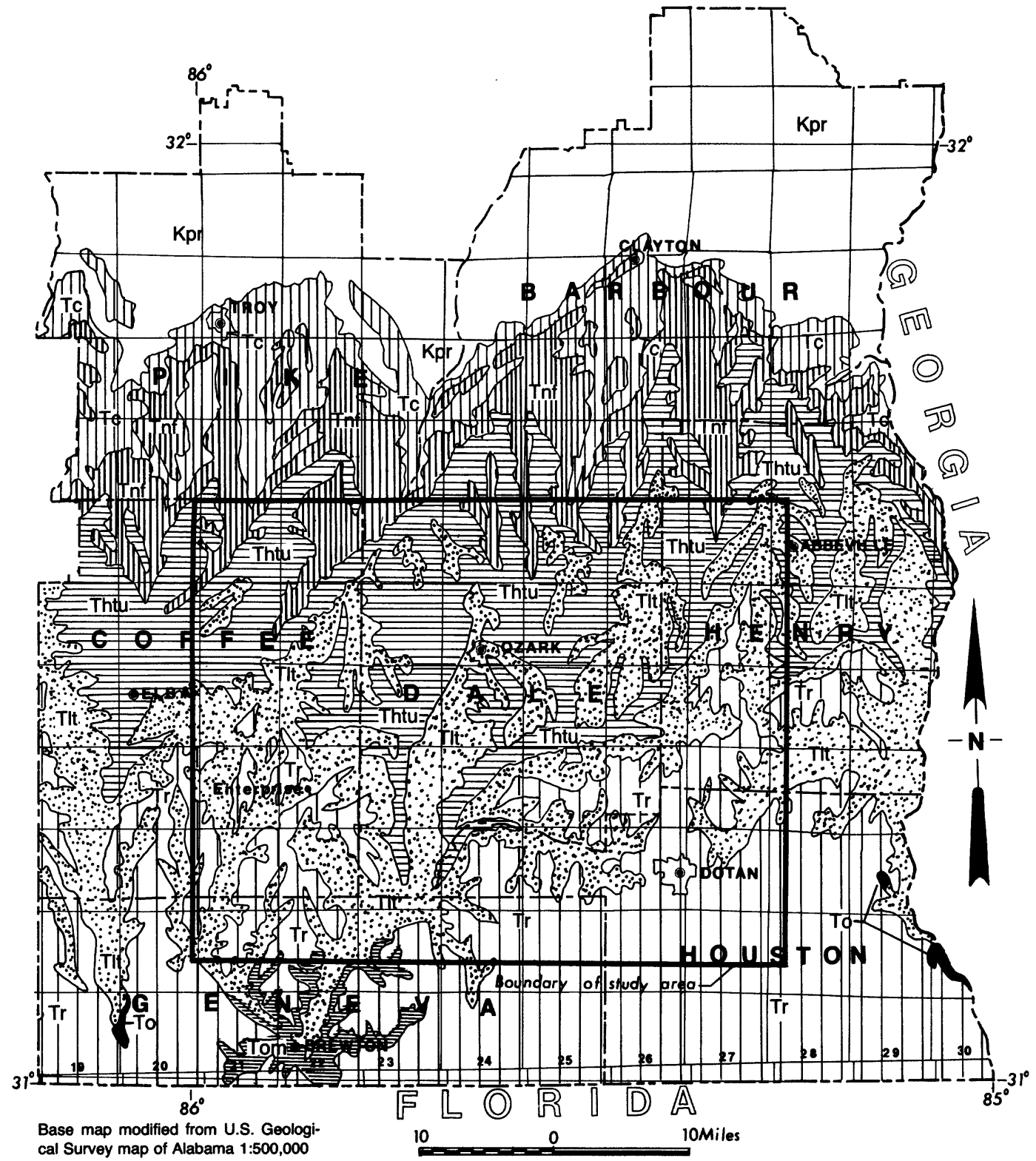
The authors thank Facilities Engineering personnel at Fort Rucker, and waterworks officials at Dothan, Ozark, Enterprise, and several other cities and towns in the study area. Particular acknowledgment is due Col. Dan Barney, Director of Facilities Engineering at Fort Rucker, Mr. Joseph Hayes, Mr. Robert Flemming, and Mr. John Ard of Fort Rucker for their assistance in the collection of hydrologic data. Acknowledgment is also made to Layne-Central Company, Pensacola, Florida and Donald Smith of Smith Well and Supply Company, Headland, Alabama for furnishing data for wells in the study area.



Base modified from U.S. Geological Survey, Dothan, Alabama; Georgie; Florida; 1:250,000 quadrangle, limited revision 1965.

Figure 2.--Locations of wells and stratigraphic cross sections.

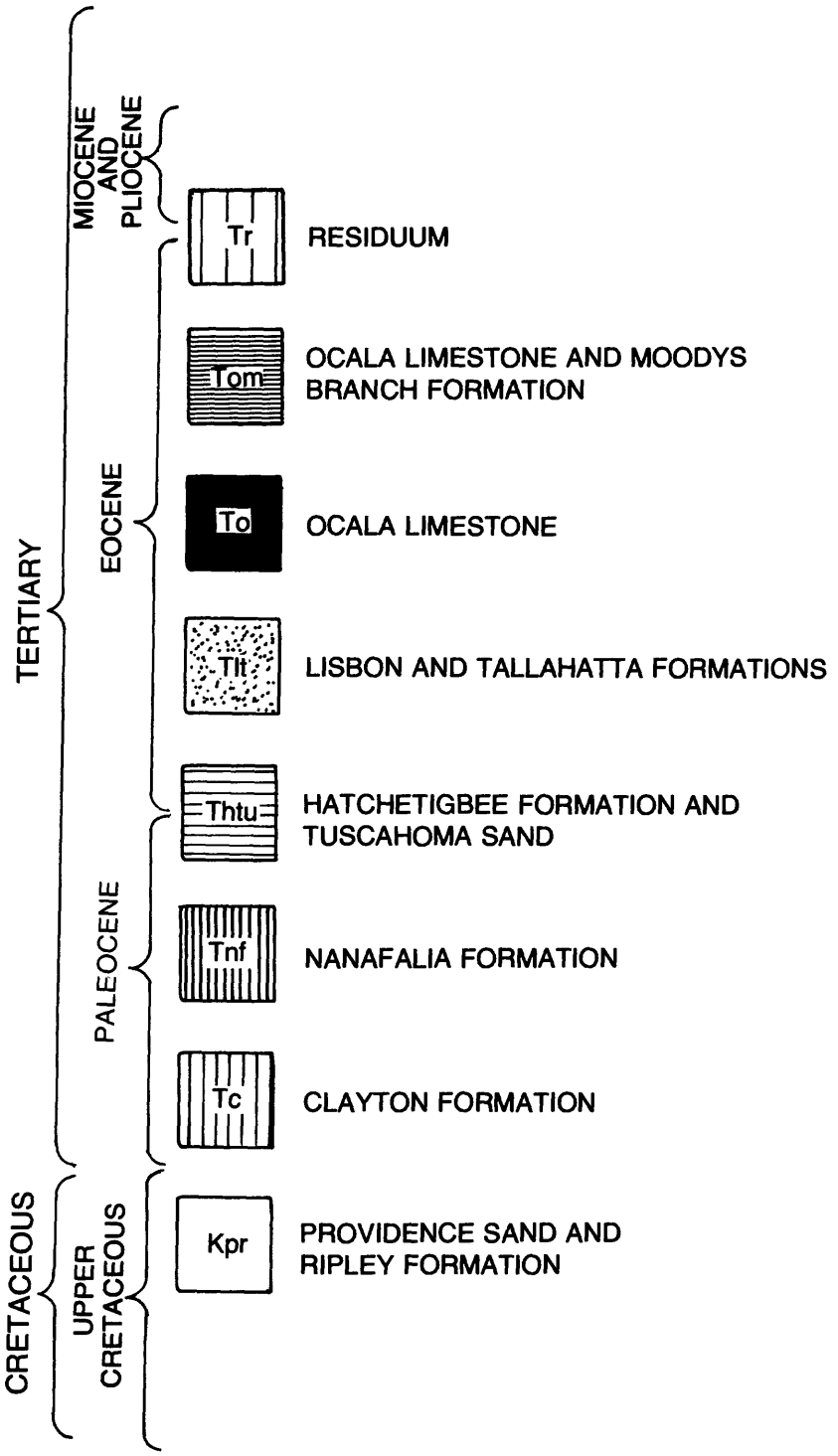

30'
85°15'00"
Abbeville
Choctawhatchee River
Pea River
HENRY
HOUSTON
Headland
Dothan
A
A'
R. 26 E.
R. 27 E.
R. 28 E.
MATCHLINE
EXPLANATION
Well yielding more than 100 gallons per minute
Well yielding less than 100 gallons per minute
Observation well
Oil test well
A—A' Stratigraphic cross section
Note: Well numbers correspond to those given in Table 1.
SCALE
0 1 2 3 4 5 6 MILES



Base map modified from U.S. Geological Survey map of Alabama 1:500,000

Figure 3.--Generalized geologic map of the Cretaceous and Tertiary formations in southeastern Alabama.

EXPLANATION



PHYSICAL FEATURES

The study area is in the Southern Red Hills and Dougherty Plain districts of the East Gulf Coastal Physiographic section (Sapp and Emplaincourt, 1975). The Southern Red Hills are characterized by sand hills dissected by southward-flowing streams. The Dougherty Plain is a relatively flat upland that slopes gently southward except where dissected by streams.

Most of the study area is drained by the Choctawhatchee River and its tributaries. The northwestern corner of the area is drained by the Pea River and its tributaries, and the eastern edge of the area is drained by tributaries to the Chattahoochee and Chipola Rivers.

The average annual rainfall in the study area is about 54 inches. The wettest months usually are March and July; the driest usually are October and November.

GEOLOGIC FORMATIONS AND THEIR WATER-BEARING CHARACTERISTICS

The study area is underlain by sedimentary deposits of Cretaceous and Tertiary age (fig. 3). These deposits strike generally eastward and dip southward 15 to 25 feet per mile. Geologic formations that comprise the Tertiary-Cretaceous aquifer system are from oldest to youngest, the Ripley Formation and Providence Sand of Cretaceous age and the Clayton and Nanafalia Formations and Tuscahoma Sand of Tertiary age (figs. 4 and 5). The Hatchetigbee, Tallahatta, and Lisbon Formations overlie the Tuscahoma Sand, but are not important aquifers in the study area.

Ripley Formation

The Ripley Formation is the deepest geologic unit tapped for water supplies in the Fort Rucker area. The Ripley crops out north of the study area in Barbour and Bullock Counties and in the northern part of Pike County. The formation is about 350 to 400 feet thick immediately south of the outcrop and may be more than 500 feet thick in the study area. The Ripley consists of sand and calcareous clay interbedded with calcareous sandstone and sandy limestone. The upper 150 feet of the unit consists mainly of sand and sandy limestone; the lower part consists mainly of calcareous clay and calcareous sandstone. In the outcrop area, the Ripley is subdivided into the Cusseta Sand Member and an upper unnamed member. Analysis of drill cuttings and geophysical logs of test wells at Fort Rucker indicates that subdivision of the formation in the study area is impractical. Sample logs of drill cuttings collected from several wells in the study area are given in table 2. Driller's logs of selected wells are given in table 3. These logs give detailed lithologic descriptions of the Ripley and overlying geologic formations.

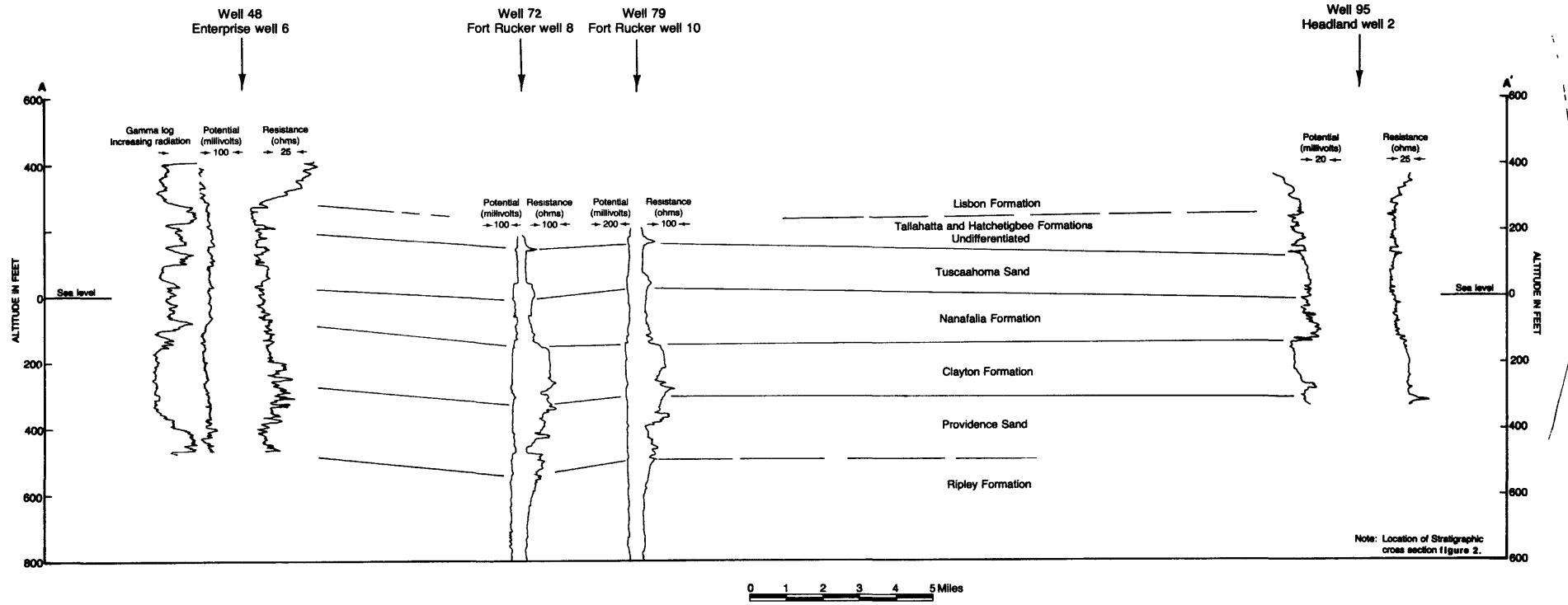


Figure 4.--Stratigraphic cross section A-A' from Enterprise to Headland.

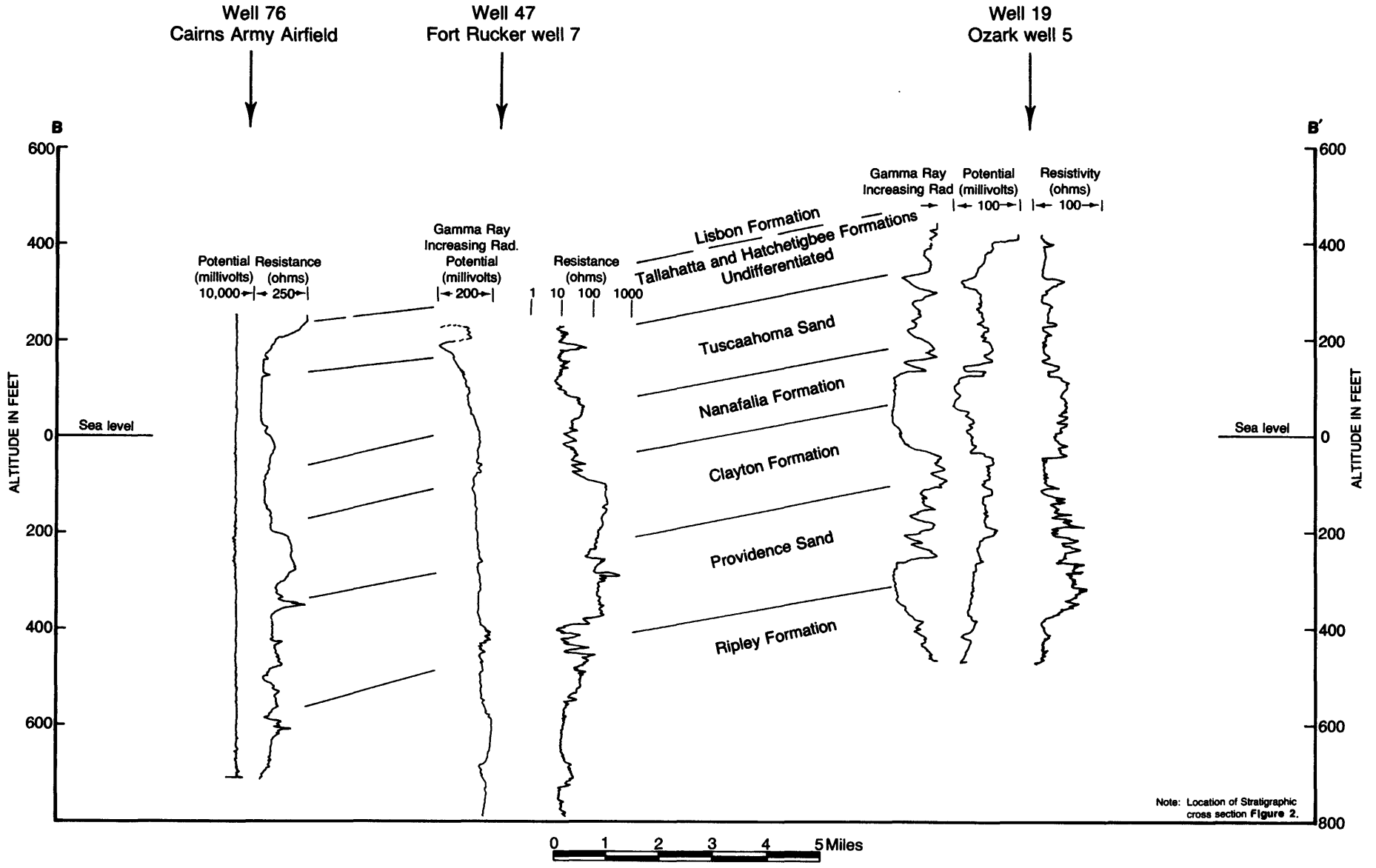


Figure 5.--Stratigraphic cross section B-B' from Cairns Airfield near Fort Rucker to about 3 miles north of Ozark.

The upper part of the Ripley formation is developed for water supplies at Fort Rucker and the cities of Ozark and Dothan. The Ripley Formation is usually developed in conjunction with the overlying Providence Sand. However, municipal wells at Ozark are apparently screened solely in the Ripley. Ozark well 4 (well 22) had a drawdown of 89 feet after pumping 750 gal/min (gallons per minute) for 24 hours in 1968.

Providence Sand

The Providence Sand, the uppermost Cretaceous formation, overlies the Ripley Formation and crops out in Barbour, Bullock, and Pike Counties. The Providence, in the area of outcrop, consists of the Perote Member at the bottom and an unnamed member at the top. The Perote Member consists mainly of clay, and the unnamed upper member consists mainly of sand. These lithologies are present in the subsurface in the Fort Rucker area. Sand in the upper member, however, is interbedded with sandy limestone and calcareous sandstone, and the lower part of the Perote Member is mainly sand. The Providence is about 150 to 220 feet thick in the outcrop area and in the subsurface in the Fort Rucker area.

The Providence is a major source of water supply at Fort Rucker, Enterprise, Dothan, and at several smaller towns and communities in the study area. The Providence is generally developed in conjunction with the underlying Ripley Formation or with the overlying Clayton and Nanfalia Formations and the Tuscahoma Sand. A municipal well at Dothan (well 91), apparently screened solely in the Providence, had a drawdown of 36 feet after pumping 876 gal/min for 48 hours in 1974.

Clayton Formation

The Clayton Formation, the lowermost Tertiary formation in the study area, overlies the Providence Sand and crops out in southern Bullock County and in Barbour and Pike Counties. At outcrops, the Clayton consists of a basal sand that is overlain by relatively pure limestone. This limestone is overlain by sandy limestone and sandy clay that comprise the upper part of the formation. The maximum thickness of the Clayton in Barbour County is about 125 feet (Newton, 1965) and in Pike County is about 180 feet (Shamberger, 1968). Analysis of drill cuttings from test wells at Fort Rucker indicates that the thickness of the Clayton in the study area is about 150 to 175 feet. The lithologic character of the formation in the subsurface is similar to that at outcrops except that most outcrops are deeply weathered and much of the limestone is absent due to solution.

The Clayton is a major aquifer in some parts of southeast Alabama, and is developed in some of the original wells at Fort Rucker. However, tests made in the Clayton during the 1981-82 test drilling program at Fort Rucker indicate that the limestone in the Clayton is not very permeable in the vicinity of Fort Rucker. The low permeability probably results from the limited extent of solution channel development compared to the more extensive channel-development in the Clayton in other parts of the study area. A capacity test for a well developed in the Clayton at Battens Crossroads indicates that the well had a drawdown of 15 feet after pumping 112 gal/min for 24 hours in 1968.

Nanafalia Formation

The Nanafalia Formation overlies the Clayton Formation in the study area, and crops out in southern Barbour and Pike Counties, and in northern Coffee, Dale, and Henry Counties. The Nanafalia consists of siltstone, calcareous clay, and sand in the area of its outcrop. In the subsurface in the Fort Rucker area, the unit consists of glauconitic fossiliferous sand, calcareous carbonaceous clay, and sandy limestone. The Nanafalia is about 100 to 160 feet thick in the study area.

Sand beds in the Nanafalia Formation are a major source of water in the study area. The Nanafalia is usually developed in conjunction with the overlying Tuscahoma Sand and the underlying Clayton Formation and Providence Sand. The original wells at Fort Rucker are screened in the Nanafalia, but are also screened in the Tuscahoma, Clayton, and Providence. A capacity test made for a well at Newville, apparently screened solely in the Nanafalia, indicates that the well had a drawdown of 86 feet after pumping 210 gal/min for 24 hours in 1974.

Tuscahoma Sand

The Tuscahoma Sand overlies the Nanafalia Formation and crops out over a large part of the study area (fig. 3). The basal part of the Tuscahoma consists primarily of glauconitic sand which is 25 to 50 feet thick in the Fort Rucker area. The upper part consists of 80 to 120 feet of calcareous carbonaceous clay. Geohydrologic data indicate that both parts of the Tuscahoma thicken toward the west.

The Tuscahoma is developed for water supplies in conjunction with underlying formations at Fort Rucker, Enterprise, Dothan, and several other towns and communities in the study area. Large capacity wells (wells producing 100 gal/min or more) are rarely developed exclusively in the Tuscahoma. Records of a few wells that are developed exclusively in the Tuscahoma indicate that wells in the Tuscahoma area generally have specific capacities ranging from 1 to 2 (gal/min)/ft (gallons per minute per foot of drawdown).

Hatchetigbee Formation

The Hatchetigbee Formation overlies the Tuscahoma Sand and crops out in Coffee, Dale, and Henry Counties. The Hatchetigbee is included with the underlying Tuscahoma Sand on MacNeil's geologic map (fig. 3). The Hatchettigbee consists of a basal glauconitic sand bed that is 4 to 10 feet thick at outcrops, and upper beds that consist mainly of carbonaceous clay. The upper part of the unit generally ranges in thickness from 20 feet in Henry County to 50 feet in Coffee County. Test well records indicate that the Hatchetigbee is about 50 feet thick at Fort Rucker.

The Hatchetigbee is not a major aquifer in the study area, and is generally not tapped by large capacity wells. Some domestic wells in the study area are developed in the basal sand bed of the Hatchetigbee.

Tallahatta Formation

The Tallahatta Formation overlies the Hatchetigbee Formation and crops out in Coffee, Dale, and Henry Counties. The Tallahatta varies in thickness and lithology throughout the study area. The unit is only about 20 feet thick in northern Coffee County, but is more than 100 feet thick in the southern part of the study area. The Tallahatta consists of silty clay, calcareous sandstone, and fossiliferous silty sand. At some outcrops in Dale and Henry Counties, the Tallahatta contains beds of massive siltstone which are typical of the formation in southwest Alabama. The Tallahatta is included with the overlying Lisbon Formation on MacNeil's geologic map.

The Tallahatta Formation is not a major aquifer in the study area, although it was a principal source of water for Dothan in the early years of Dothan's public water system. Dothan presently (1983) uses one well (well 109) developed in the Tallahatta and the overlying Lisbon Formation. A capacity test made for this well in 1955 indicated a drawdown of 53 feet after pumping 584 gal/min for 8 hours. The Tallahatta is a principal source of water for several towns and communities south of the study area.

Lisbon Formation

The Lisbon Formation overlies the Tallahatta Formation and crops out on uplands over much of the study area. The Lisbon generally ranges in thickness from 20 feet in northern Henry County to 150 feet along the southern part of the study area. The Lisbon consists of sand, sandy limestone, and calcareous sandy clay in the subsurface. At outcrops, the Lisbon is generally weathered to massive silty sand.

The Lisbon Formation is not a major aquifer in the study area, mainly because of its proximity to the land surface. The Lisbon is a principal source of water supply south of the study area, especially in southern Houston County where it is developed in conjunction with the overlying Ocala Limestone for irrigation and public water supplies. The Lisbon is developed in some parts of the study area for domestic and stock supplies.

Residuum

The uppermost Tertiary formations in the study area consist of residual clay, sand, gravel, and chert boulders that are the residual remains of the Moodys Branch Formation and the Ocala Limestone of Eocene age and Miocene and (or) Pliocene deposits. These deposits, which have been jumbled due to the solution of the limestone, are collectively named residuum. The residuum is generally less than 25 feet thick at Fort Rucker, but may be as much as 100 feet thick in the Dothan area.

Because of the jumbled heterogeneous characteristics of the residuum, it is not a significant source of water in the study area. Domestic and stock wells in some parts of the area are developed in the residuum. In southern parts of Houston and Geneva Counties, where the Ocala Limestone has not been

completely dissolved, it is a major aquifer for municipal, irrigation, and other farm-related uses. Some wells in this area are developed solely in the Ocala; others are developed in the Ocala and the underlying Lisbon Formation. The Ocala Limestone and the Moodys Branch Formation undifferentiated crop out along the southern margin of the study area.

Terrace and Alluvial Deposits

Terrace and alluvial deposits of Quaternary age are present along and adjacent to the flood plains of major streams in the study area. These deposits consist of sand, silt, clay, and small gravel, and are usually not more than 25 feet thick. These deposits, which are not shown on MacNeil's geologic map, are most extensive in the valleys of the Choctawhatchee and Pea Rivers.

The terrace and alluvial deposits are not a major source of water in the study area. A few domestic wells are developed in the deposits.

HYDROLOGY OF THE TERTIARY-CRETACEOUS AQUIFER SYSTEM

The Tertiary-Cretaceous aquifer system in the study area consists of water-bearing units in several geologic formations. Geologic formations comprising the aquifer system are the basal part of the Tuscahoma Sand and the Nanafalia and Clayton Formations of Tertiary age, and the Providence and Ripley Formation of Cretaceous age (see fig. 6). A clay zone in the upper part of the Tuscahoma Sand is the upper confining layer for the aquifer system and massive clay beds in the lower part of the Ripley Formation comprise the lower confining layer. Geologic and hydrologic data compiled during the study indicate that a clay zone in the Providence Sand is a third confining layer that divides (to some extent) the aquifer system into an upper and lower aquifer. Therefore, for this stsudy, the Tertiary-Cretaceous aquifer system is divided into an upper aquifer consisting of the Tuscahoma Sand, the Nanafalia and Clayton Formations, and the upper part of the Providence Sand, and a lower aquifer consisting of the lower part of the Providence Sand and the upper part of the Ripley Formation. Fort Rucker, Dothan, and Enterprise pump water mainly from the upper aquifer; Ozark pumps water from the lower aquifer.

Source of Ground Water

All ground water in the study area is derived from rainfall that occurs on or north of the area. Most of the rainfall leaves the area as runoff through streams or as evapotranspiration. Some of the rainfall infiltrates downward to recharge the aquifers that underlie the study area.

Recharge and Discharge

The amount of recharge received by the aquifers is difficult to estimate because it is dependent on when the rainfall occurs, the intensity and magnitude of the rainfall, and atmospheric and hydrologic conditions such as air temperature and soil-moisture conditions. For example, a 2-inch rainstorm in July will usually run off or remain in the soil zone, later to be evaporated or transpired back to the atmosphere. A 2-inch rain in December will usually result in significant recharge because the evapotranspiration rate is low and because winter rains generally are less intense and of longer duration than summer rainstorms.

The area of recharge for the Tertiary-Cretaceous aquifer system is 20 to 50 miles updip (north) of pumping centers in the study area (see fig. 6). The recharge area for the upper aquifer is 20 to 40 miles updip from the pumping centers; the recharge area for the lower aquifer is 40 to 50 miles updip.

Water moves downdip through the aquifer system to points of downdip-discharge. The principal areas of downdip-discharge are at major pumping centers in the study area. Major centers that pump from the upper aquifer are Fort Rucker, Dothan, and Enterprise. Ozark is the major center that pumps from the lower aquifer.

A large part of the recharge in the outcrop area is lost as discharge to perennial (ground-water supported) streams. A major control on the amount of recharge received by the aquifer is the transmissivity of the aquifer downdip. The downdip-transmissivity limits the amount of water that can move through the aquifer from the area of outcrop. A transmissivity of 7,800 ft^2/d and a hydraulic gradient of 10 ft/mi will permit about 0.6 Mgal/d per lineal mile of outcrop area to move through the upper aquifer. Expressed another way, this is about 1.4 inches of recharge per square mile of outcrop.

Aquifer Test

An aquifer test was conducted at Fort Rucker during the week of March 14-18, 1983. The purposes of the test were to obtain data from which estimates of hydraulic characteristics (transmissivity and storage) of the upper aquifer could be made and to determine the magnitude of pumping-level interference between wells. Well 70 (Fort Rucker well 9) was used as the pumping well during the 24-hour test, and drawdown measurements were made in wells 65, 66, 69, 71, and 79 (Fort Rucker wells 1, 2, 4, 6, and 10) which were not pumping during the test period (figs. 7 and 8). Wells 47 and 72 (Fort Rucker wells 7 and 8) were pumping at a constant rate into the Fort Rucker water system prior to and during the test period. Wells 67 and 68 (Fort Rucker wells 3 and 5) were not pumping, but were not used for the aquifer test.

Data obtained during the test indicate that the Tuscahoma Sand, the Nanafalia and Clayton Formations, and the upper part of the Providence Sand are hydraulically interconnected at Fort Rucker, and can be considered to be a single aquifer (upper aquifer) from a hydrologic viewpoint. Figure 9 is a semi-logrithmic plot of drawdown versus the radius (distance) from the pumping

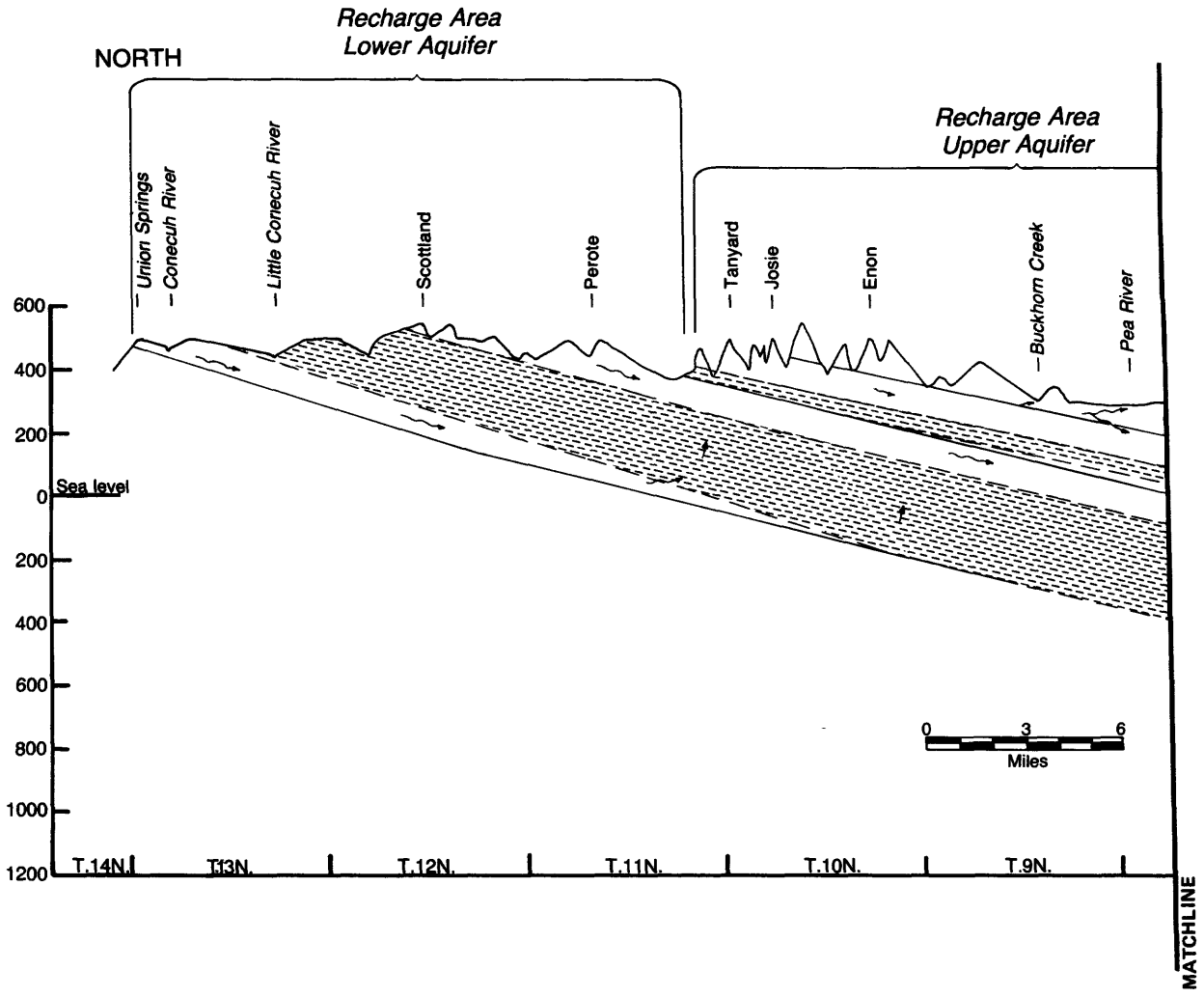
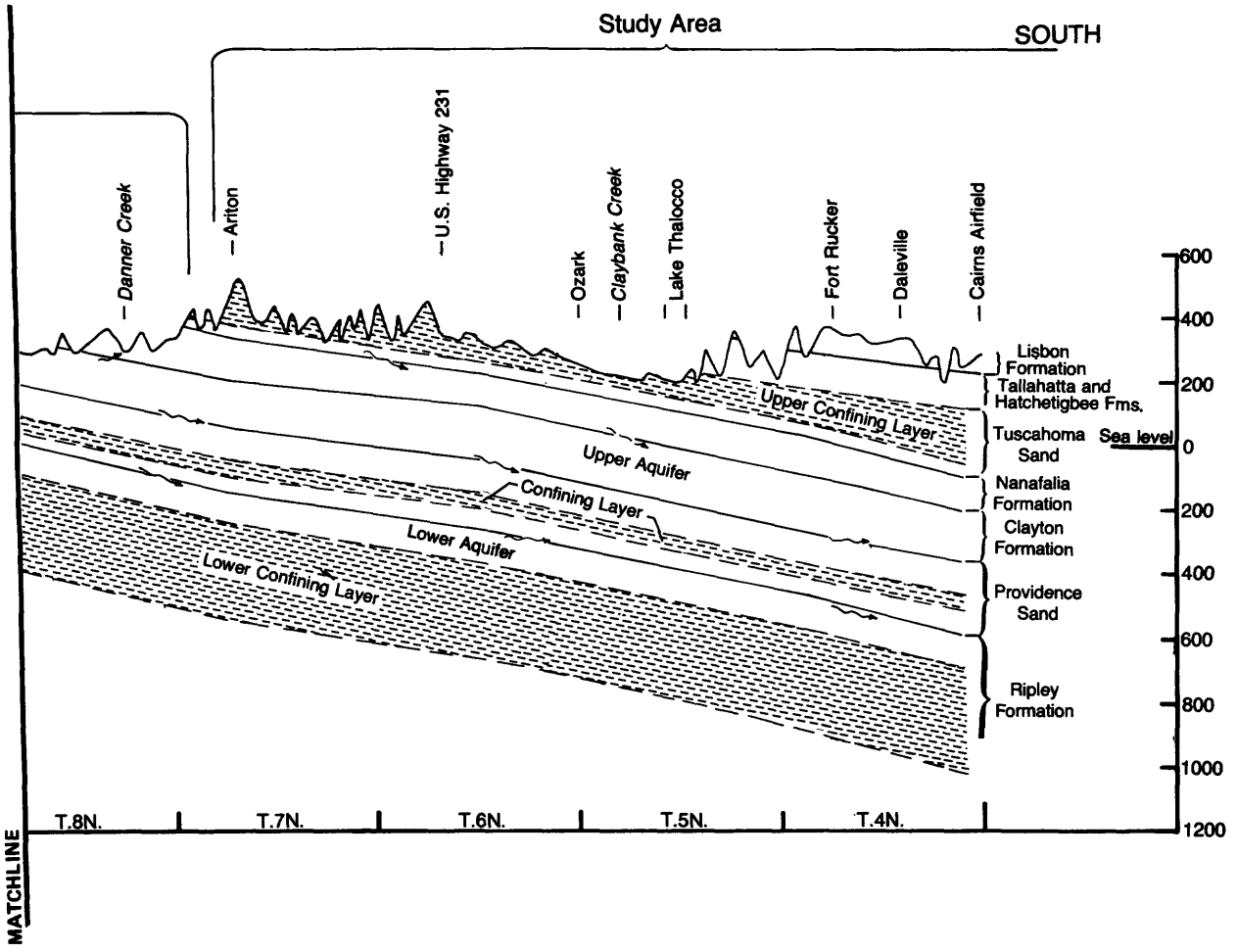


Figure 6.--Generalized cross section of the aquifer system.


Study Area
SOUTH
Danner Creek
Ariton
U.S. Highway 231
Ozark
Claybank Creek
Lake Thalocco
Fort Rucker
Daleville
Cairns Airfield
Upper Confining Layer
Upper Aquifer
Confining Layer
Lower Aquifer
Lower Confining Layer
Lisbon Formation
Tallahatta and Hatchetigbee Fms.
Tuscahoma Sand
Nanafalia Formation
Clayton Formation
Providence Sand
Ripley Formation
Sea level
600
400
200
0
200
400
600
800
1000
1200
T.8N.
T.7N.
T.6N.
T.5N.
T.4N.
MATCHLINE

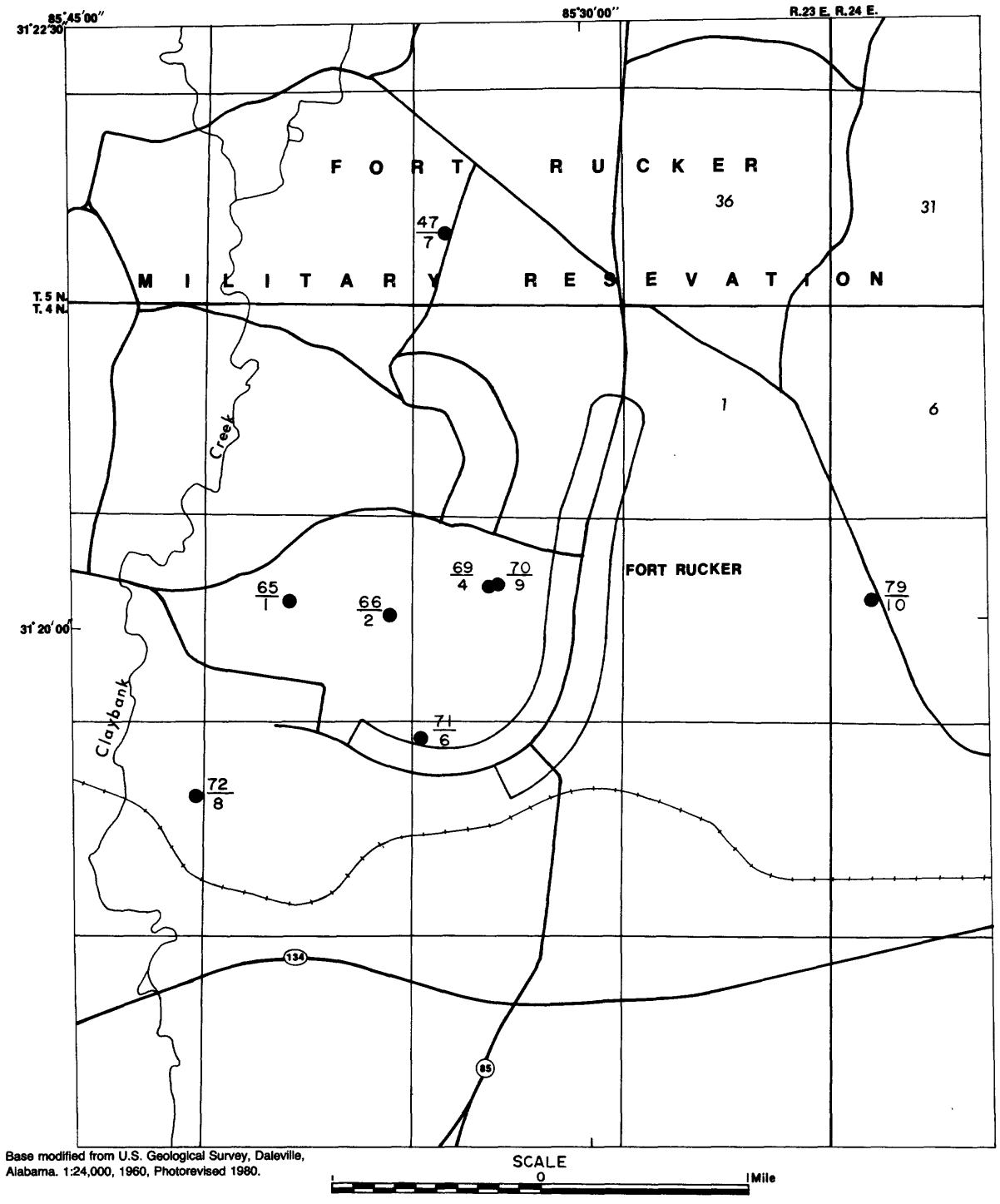


Figure 7.--Locations of wells used in aquifer test at Fort Rucker.

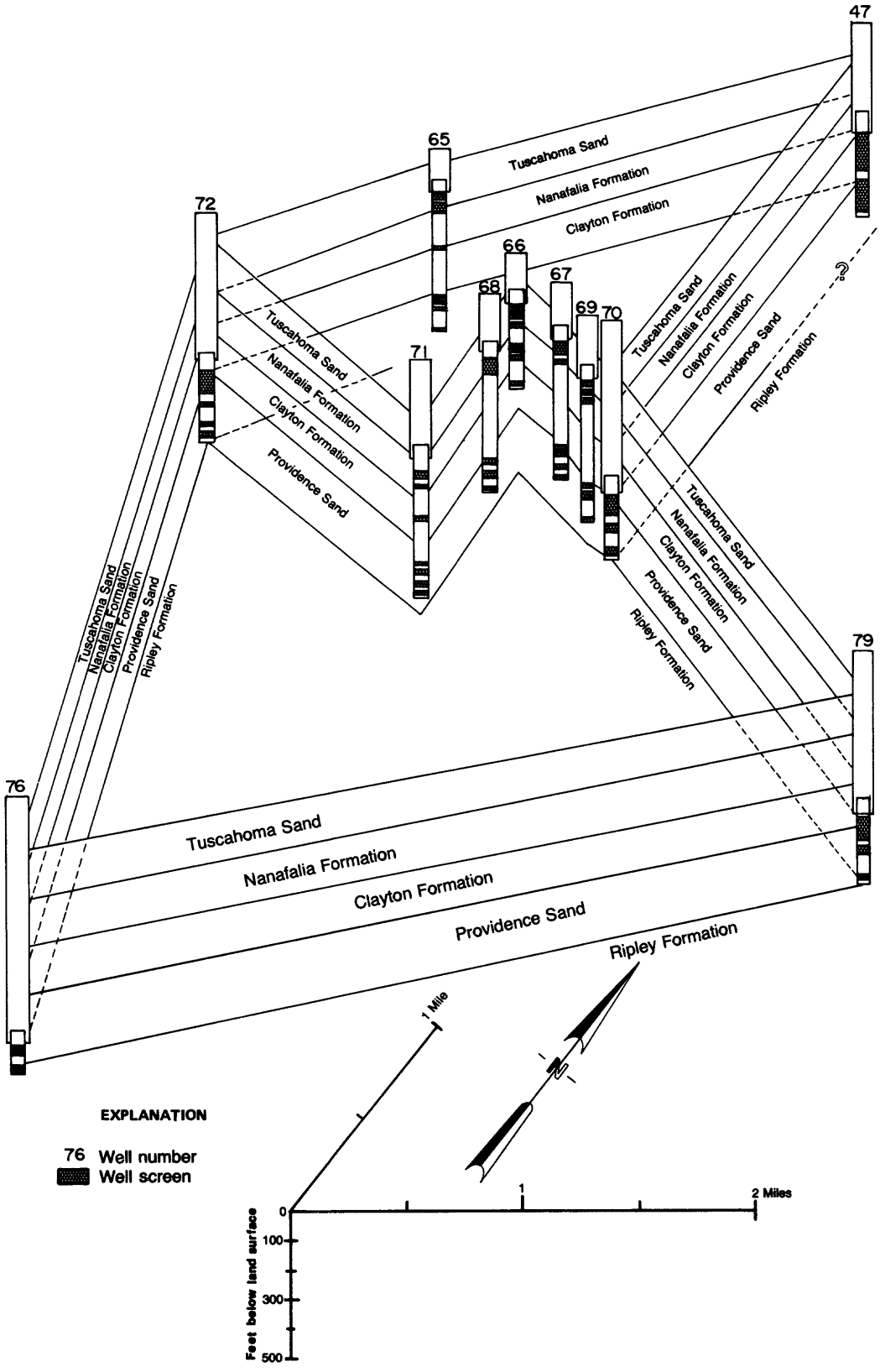


Figure 8.--Fence diagram of production wells at Fort Rucker in 1983.

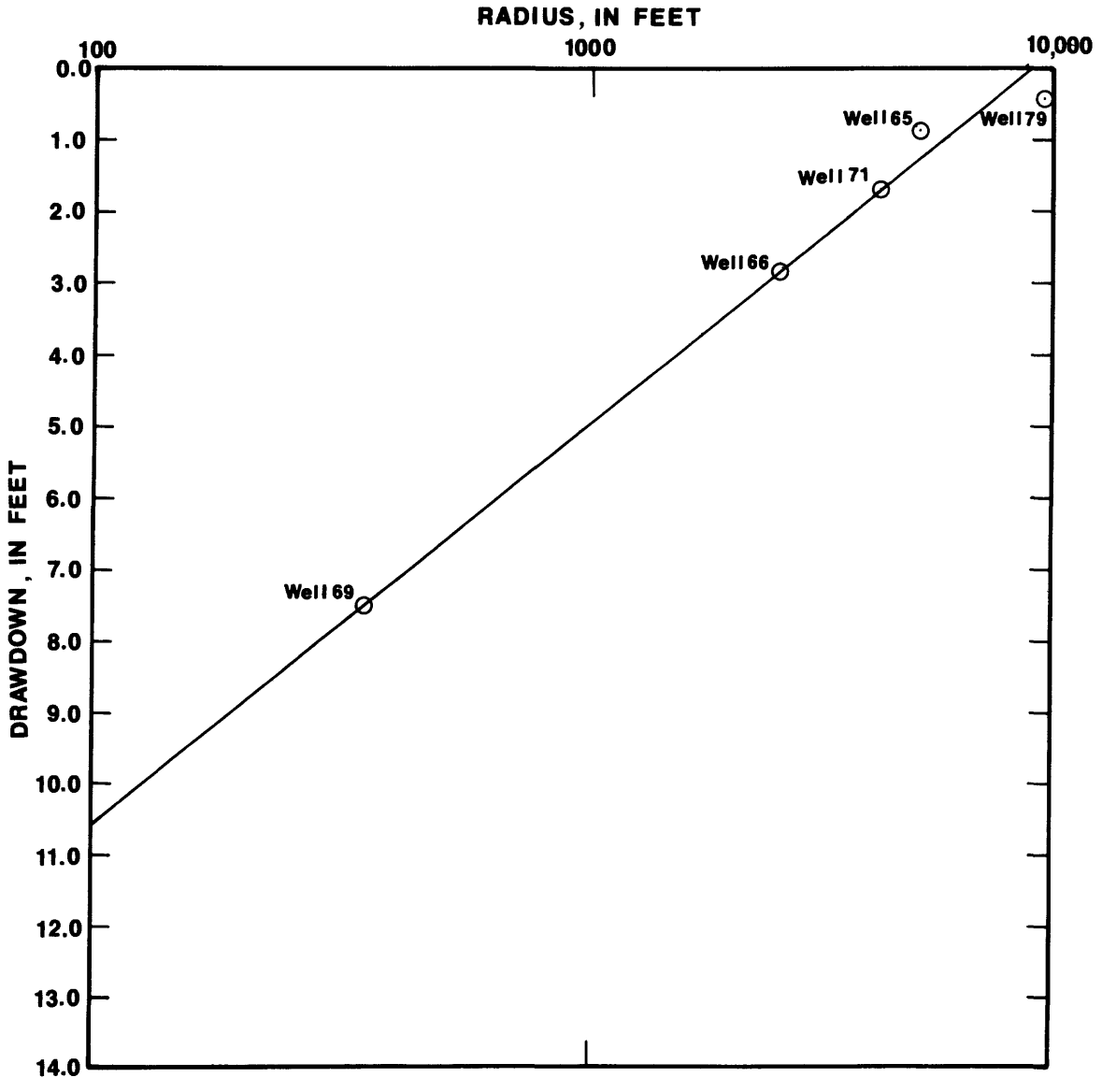


Figure 9.--Drawdown in wells at Fort Rucker during aquifer test.

well after 24 hours of pumping. The transmissivity is determined by the slope of the line drawn through the points in the following equation:

$$T = \frac{-2.30Q}{2 \quad s/ \quad \log_{10} r}$$

where T = transmissivity, in feet squared per day,
Q = discharge of the well, in cubic feet per day,
s = drawdown, in feet,
and r = radius, in feet from pumping well.

Computations of data collected during the test indicate that the upper aquifer has a transmissivity of about 7,800 ft^2/d and a coefficient of storage of about $3x10^{-4}$. These values are in the normal range for an artesian aquifer consisting of unconsolidated sediments.

The drawdown data indicate that the interference of pumping levels between the new wells is relatively small, and that interference between well 70 (Fort Rucker well 9) and the old wells is sufficiently small to allow pumping from well 70 and one or more of the old wells without serious mutual interference. Figure 10 is a suite of curves that depicts, in a general way, the theoretical drawdown at various distances from a well that is discharging constantly from the upper aquifer at a rate of 700 gal/min (Knowles and others, 1963). The curves, which show drawdowns after 1, 5, 10, and 20 years of continuous pumping, may be used to aid in estimating optimum spacing of future wells at Fort Rucker. For example, a well discharging at a rate of 700 gal/min 5,000 feet from an idle well would cause a drawdown of 14.5 feet in the idle well after 20 years of continuous pumping. The curves may also be used to estimate the mutual interference between existing wells. The data plots for the curves were computed from the aquifer characteristics obtained from the aquifer test at Fort Rucker.

Capacity tests made by Fort Rucker personnel in 1975 indicate that the well field was capable of producing from 3.0 to 3.5 Mgal/d at that time (oral commun., Mr. John Ard, Fort Rucker Waterworks Manager, 1982). Well 47 was placed in production in 1977 and wells 70, 72, and 79 were placed in production in 1982-83. Pumpage from these wells combined with selected pumpage from the original wells will produce 5 to 6 Mgal/d. An additional well, to be completed in 1984, will increase the capacity of the well field by about 0.8 Mgal/d.

Withdrawals

Pumpage from the aquifer system for public water supplies has increased by as much as a factor of 10 during the past 40 years. Reported daily water use at Dothan was about 1.4 million gallons in 1946 (Carter and others, 1949). Maximum daily use is presently (1983) about 14.8 million gallons. Pumpage at Ozark, which was about 0.25 Mgal/d in 1946, is presently 2.75 Mgal/d. Pumpage at Enterprise has increased from 0.4 Mgal/d in 1946 to 5.3 Mgal/d in 1983. Historical pumpage records for Fort Rucker are not available. However, water level records compiled for the original wells at Fort Rucker indicate an

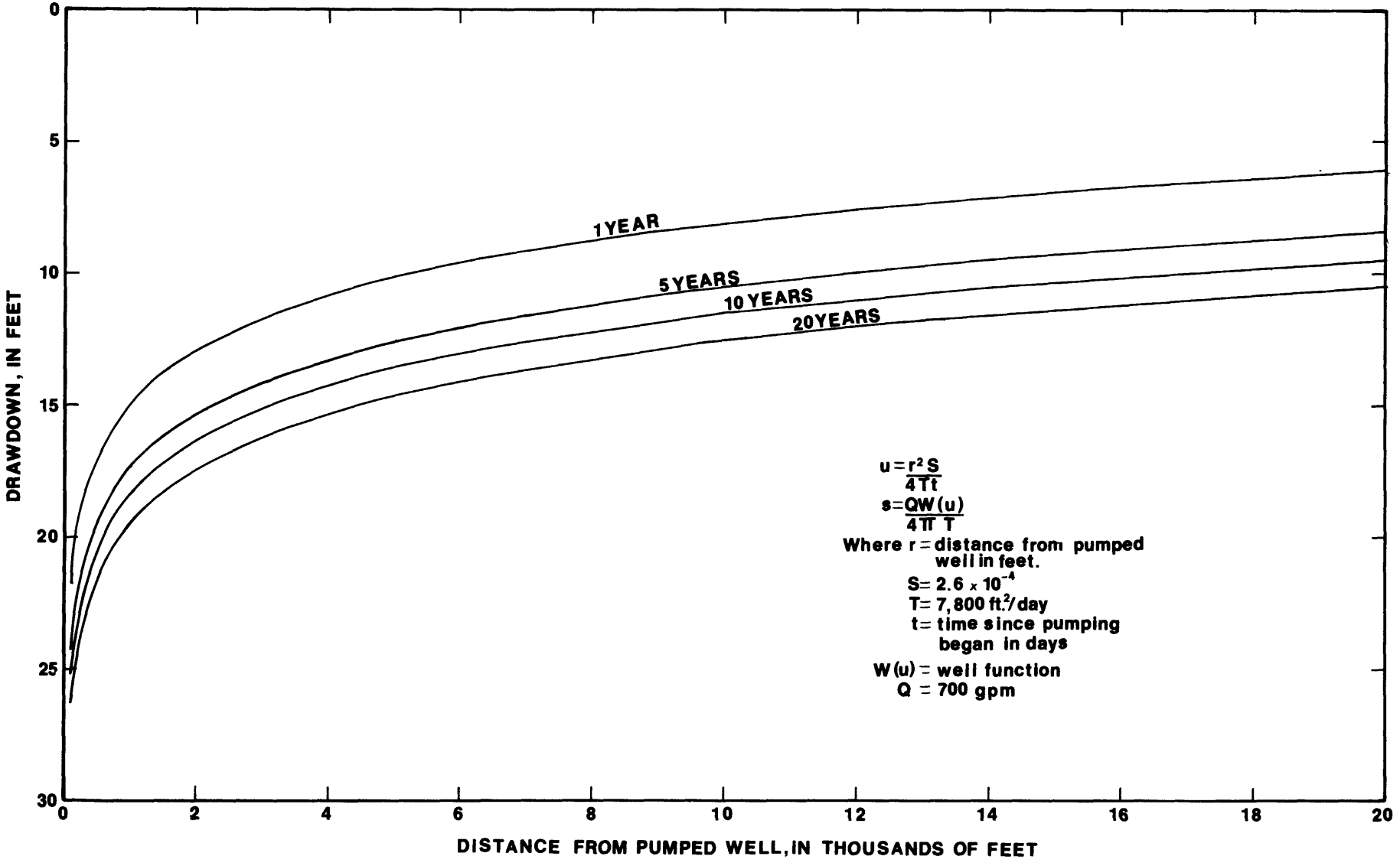


Figure 10.--Theoretical drawdown in the upper aquifer at Fort Rucker.

accelerated rate of decline from 1976 to 1982. Waterworks officials report that the demand exceeded the capacity of the wells during summer months from 1976 to 1982 (oral commun., Mr. John Ard, Fort Rucker Waterworks Manager, 1982).

Ground-water withdrawals for irrigation use increased significantly during the past 40 years. Pumping from ground-water sources for irrigation was practically nonexistent in the 1940's, but is presently common in some parts of the study area. The amount of water used for irrigation is difficult to estimate because irrigation is seasonal and sporadic due to climatic conditions and crop requirements. However, based on available data for irrigation wells in the study area, 10 Mgal/d or more of ground water is used for irrigation some of the time during the growing season. Use of ground water for irrigation will probably accelerate more in the next 40 years as farmers attempt to maximize production to compensate for increasing costs of fuel, fertilizer, and farm machinery.

The current total use of ground water for industry is estimated to be about 5 Mgal/d. Industrial use of ground water has not increased as significantly as use for irrigation and public supplies, because the economy is based on agriculture. Industrial ground-water use will probably increase during the next 40 years and may increase significantly if industry continues to expand in the area as it has during the past 15 years.

Fluctuations of the Potentiometric Surface

In a confined artesian aquifer system such as the one underlying the study area, the level to which water will rise in wells developed in the aquifer is called the potentiometric surface. The potentiometric surface fluctuates in response to seasonal variations in recharge and discharge. In areas of heavy pumpage, such as Fort Rucker, Ozark, and Dothan, fluctuations of the potentiometric surface also reflect the variations in rates of withdrawals.

A water-level recorder was installed on an unused municipal well (well 24) at Ozark in 1982 to monitor fluctuations of the potentiometric surface in the lower aquifer (Ripley Formation). Figure 11 shows fluctuations of the water surface in the well from February 1982 through March 1983. The figure also shows average daily pumpage per month by the city of Ozark and total monthly precipitation at Eufaula Wildlife Refuge (about 50 miles northeast of Fort Rucker in the outcrop area of the lower aquifer). Comparison of the three graphs in figure 11 indicates that the potentiometric surface of the lower aquifer at Ozark is affected more by pumpage from the aquifer than by recharge. However, recharge apparently had some effect on the potentiometric surface during the winter of 1982-83 because the water surface was higher in February 1983 than in February 1982. Rainfall records of the National Weather Service indicate that precipitation was generally below normal during the winter of 1981-82, and was generally above normal during the winter of 1982-83.

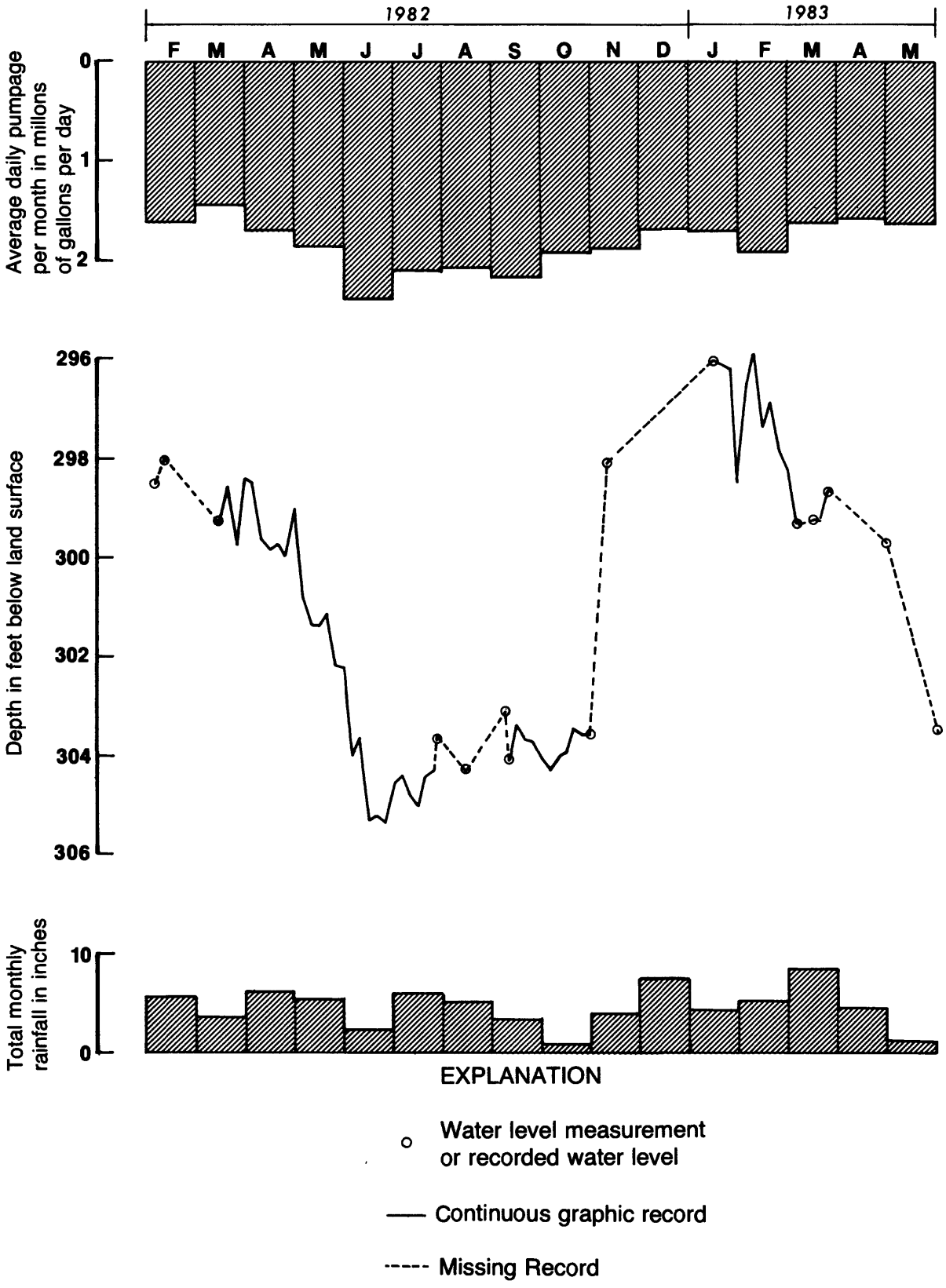


Figure 11.--Fluctuation of the water level in well 24 (lower aquifer), average daily pumpage at Ozark, and total monthly precipitation at Eufaula Wildlife Refuge during 1982-83.

Historical water-level data were recorded for the study area as early as 1895 (Smith, 1906). Smith published water-level data that were obtained between 1895 and 1905. Additional water-level data were published in the 1940's (LaMoreaux, 1948) and in the 1960's in the county water-availability reports. These data and data collected during the current study indicate that the most significant declines in the potentiometric surface occurred after 1965.

Waterworks personnel at Fort Rucker have measured water levels in the original Fort Rucker wells periodically since the wells were constructed. These data, shown graphically in figure 12, indicate that the largest water-level declines at Fort Rucker occurred between 1976 and 1982. This accelerated decline resulted from increased water use at Fort Rucker (oral commun., Mr. John Ard, Fort Rucker Waterworks Manager, 1982). Mr. Ard reported that during summer months from 1977 to 1981 the demand for water exceeded the capacity of the well field and the use of water at Fort Rucker had to be restricted.

A potentiometric map of the upper aquifer in the study area is shown in figure 13. The map is compiled mainly from water-level measurements made in June and July 1982. Depressions in the potentiometric surface have developed in the Dothan area, the Battens Crossroads area, and the Fort Rucker-Enterprise area. These depressions result from long-term withdrawals of large amounts of water. Before wells 70, 72, and 79 (Fort Rucker wells 9, 8, and 10) were installed, a depression had formed in the vicinity of Fort Rucker's well field. After these wells were placed in service in 1981-82, the original wells were idle most of the time and the water surface recovered about 20 feet. This recovery resulted from pumping the new wells which are 5,000 feet or more apart as opposed to the previous pumpage from the original wells which are about 2,000 feet apart. The recovery of the water level is temporary, and a depression will probably develop around the new wells in future years. The system can withstand a deeper cone of depression than the one that developed around the original well field because the pumps are set deeper in the new wells.

Effects of Withdrawals on the Aquifer System

Prior to development by wells, aquifers are in a steady state because, over a long period of time, recharge is equal to discharge (Lohman, 1972). Discharge from wells upsets this balance by causing a loss from storage. The imbalance remains until there is no further loss from storage. The loss from storage can be counterbalanced only by an increase in recharge, a decrease in natural discharge, or a combination of the two, as long as pumpage continues.

Available hydrologic data indicate that water levels in the pumping centers are continuing to decline. No significant decrease in streamflow or decline in water levels is apparent in the recharge area and, according to records of the National Weather Service, rainfall during the past 20 years was about normal. Based on these data the aquifer system has not reached a new state of equilibrium subsequent to withdrawals from the pumping centers.

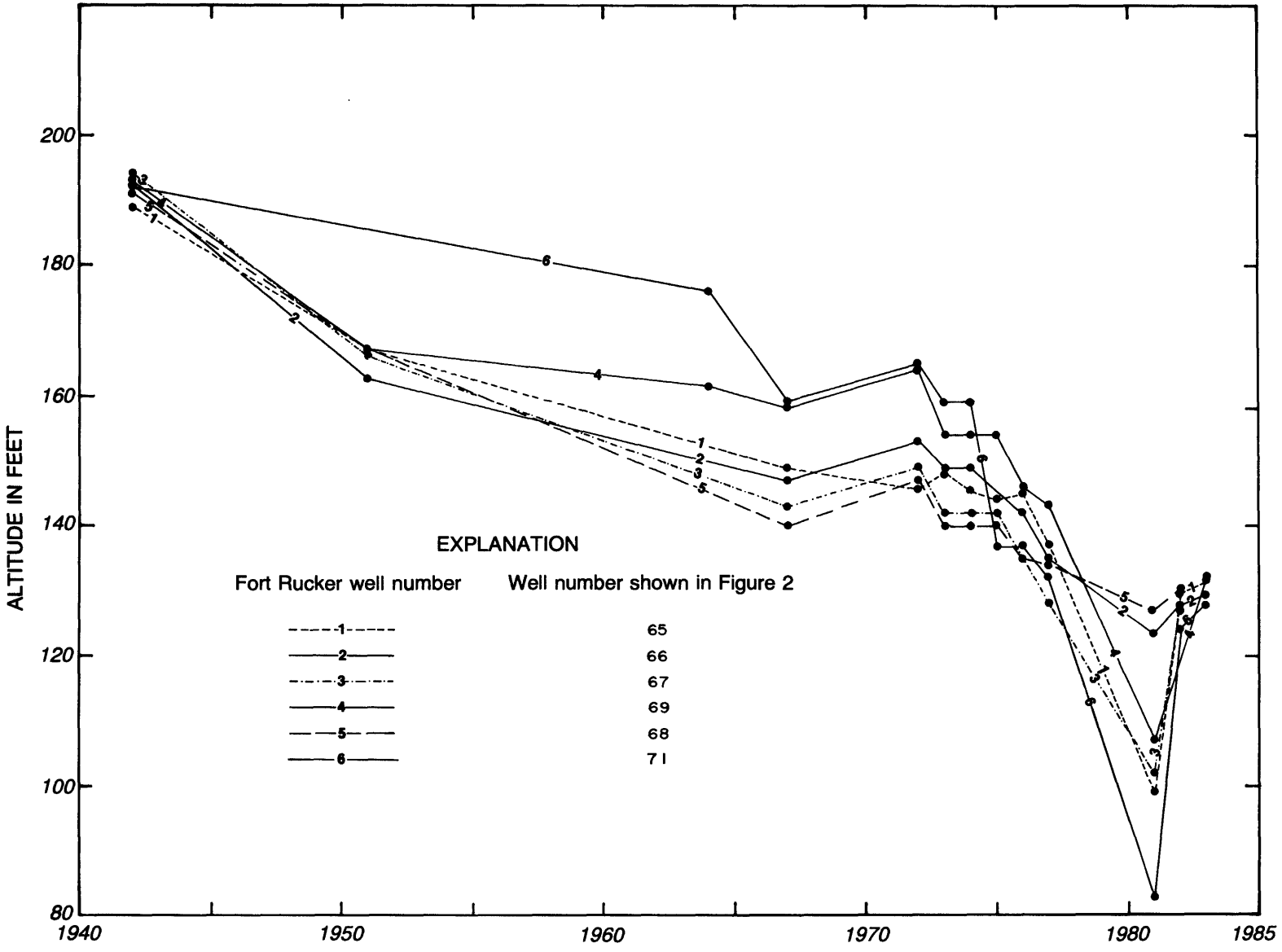


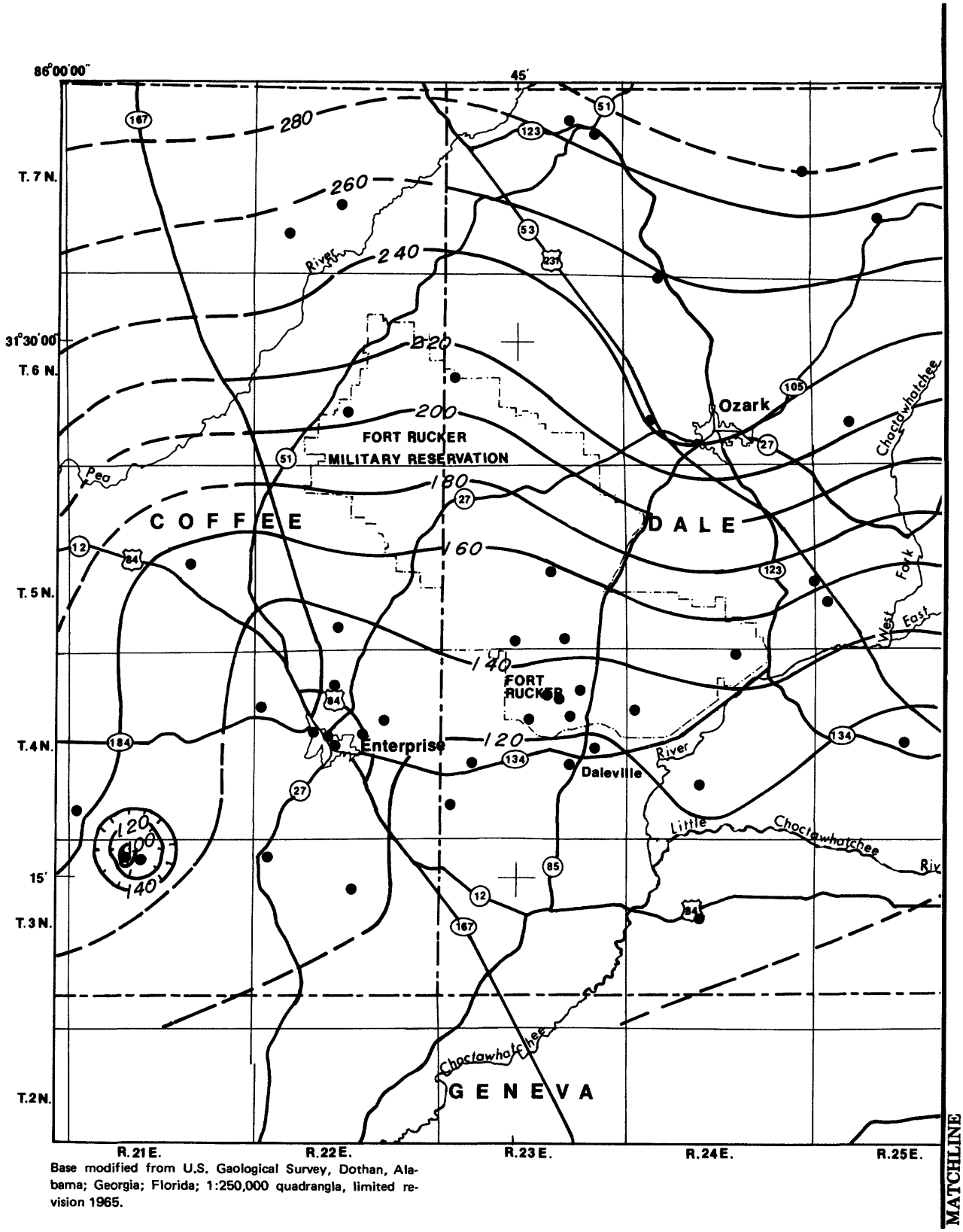
Figure 12.--Water-level trends in production wells at Fort Rucker from 1942 to 1983.

The depression around the pumping centers will continue to increase in size until drawdowns from pumpage lower water levels sufficiently to increase the amount of water entering the aquifers to offset the pumpage. Through the use of the potentiometric map, a rough estimation of the rate of increase needed to attain a new equilibrium can be made. Flow paths for ground-water movement can be drawn on the potentiometric surface to determine the area from which pumpage in the study area obtains its water (fig. 14). The intersection of the area of diversion with the outcrop-area of the aquifer determines the contributing area (recharge area) for the pumpage. An estimate of the additional recharge needed to attain equilibrium can be made by dividing the pumpage (expressed in acre-inches per year) by the area of recharge (in acres). Pumpage is 33 Mgal/d (443,577 acre-inches per year) for the area of diversion and the recharge area equals about 400 mi^2 (256,000 acres). The resultant rate is about 1.75 in/yr that must be supplied to attain a new equilibrium. This rate appears to be a reasonable value, but available data are inadequate to ascertain if the transmissivity of the aquifer is sufficiently high to support the gradient of the potentiometric surface to induce that amount of recharge. Based on the single transmissitivity value for the aquifer, natural recharge would be about 1.4 in/yr under the present ground-water gradient. A steeper gradient induced by pumpage would increase the rate of water-movement through the aquifer and enable a greater amount of water to be recharged. To reach a new state of equilibrium, the additional water would have to be captured from the sources of discharge in the recharge area, evapotranspiration and streamflow, or from a reduction in withdrawals in the pumping centers. Reduction of evapotranspiration would not cause any adverse effects but reduction of streamflow could cause problems during dry periods. Reduction in pumpage is not expected to occur in the foreseeable future.

QUALITY OF WATER

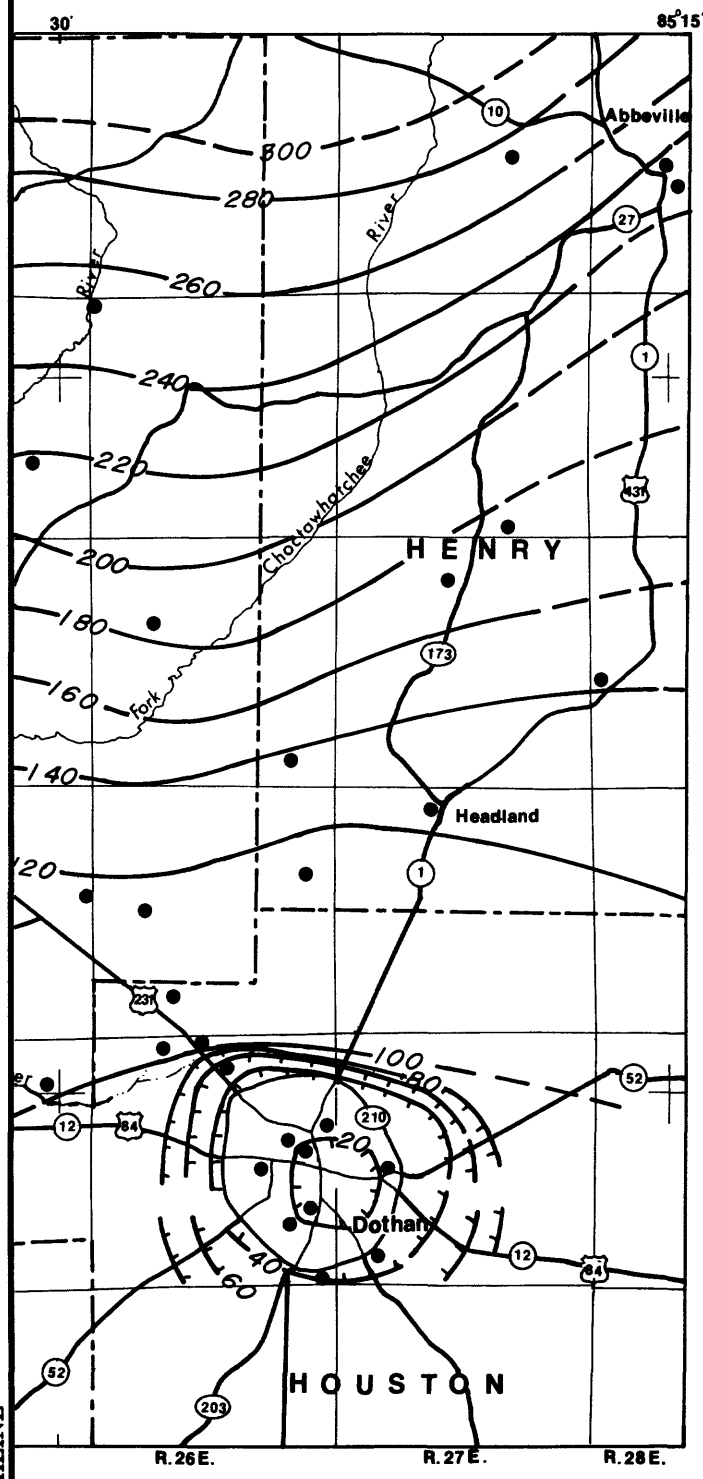
Field determinations for specific conductance, pH, and temperature were made for most wells inventoried during the current study. No laboratory chemical analyses were made.

The specific conductance of water from wells sampled ranges from 220 to 540 micromhos per centimeter at 25°Celsius. The pH ranges from 6.1 to 8.1 units and has a median of about 7.2 units. The temperature ranges from 19°C (Celsius) or 66°F (Fahrenheit) to 26.5°C or 80°F. More detailed water-quality data are published in the water-availability reports for Coffee, Dale, Geneva, Henry, and Houston Counties. Additional water-quality data are available in the files of the U.S. Geological Survey and the Alabama Department of Environmental Management, Water Division.



Base modified from U.S. Geological Survey, Dothan, Alabama; Georgia; Florida; 1:250,000 quadrangle, limited revision 1965.

Figure 13.--Potentiometric surface of the upper aquifer in the study area in 1982.



EXPLANATION

-100- Potentiometric contour shows altitude of the potentiometric surface for the upper aquifer in the Fort Rucker area. Dashed where approximately located. Contour interval 20 feet.

Hachures indicate depressions. Datum is sea level.

Well in which water level was measured in 1982.

SCALE

0 1 2 3 4 5 6 MILES

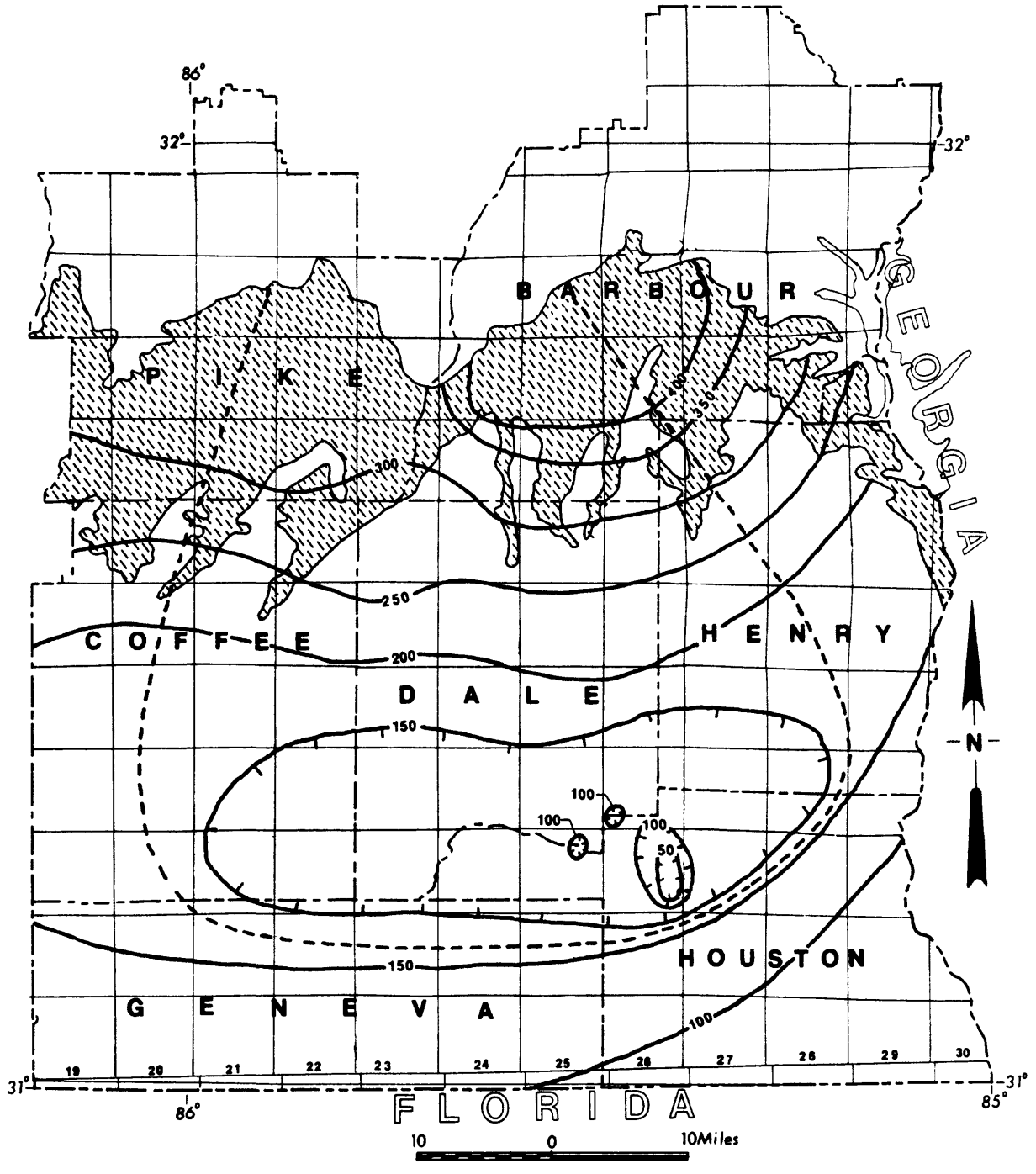


Figure 14.--Areas of diversion and recharge for the upper aquifer.

SUMMARY

The Tertiary-Cretaceous aquifer system in the study area includes the basal sand in the Tuscahoma Sand, sand beds in the Nanafalia Formation, porous limestone and sand beds in the Clayton Formation, and sand beds in the Providence Sand and the upper part of the Ripley Formation. For this report, this system is divided into an upper and lower aquifer. The upper aquifer consists of the Tuscahoma Sand, the Nanafalia Formation, the Clayton Formation, and the upper part of the Providence Sand. The lower aquifer consists of the lower part of the Providence Sand and the Ripley Formation.

The aquifer test at Fort Rucker indicates that the upper aquifer has a transmissivity of about 7,800 ft^2/d and coefficient of storage of about $3x10^{-4}$.

Wells too-closely spaced, causing excessive drawdown because of interference when pumped, appear to be the most common problem in the study area, especially at Dothan and Fort Rucker. Wider spacing for future wells and selective pumping from existing wells should alleviate the excessive drawdown problem.

Preliminary evaluation of the aquifer system indicates that the system is in a state of hydrologic imbalance as a result of heavy pumpage at Fort Rucker, Dothan, Ozark, and Enterprise during the past 40 years. A new state of equilibrium can be attained only by an increase in recharge to or by reducing discharge from the system.

Water-quality data collected during this study and data collected during previous studies indicate that water in the aquifer system is of good chemical quality and is suitable for municipal, domestic, irrigation, and some industrial uses.

Data collected during the study indicate that the aquifer system in the study area is a reliable source of water supply for current and future uses. However, sites for additional wells should be carefully selected to avoid mutual interference between wells.

SELECTED REFERENCES

Adams, G. I., Butts, Charles, Stephenson, L. W., and Cooke, C. W., 1926, Geology of Alabama: Alabama Geological Survey Special Report 14, 312 p., 97 pls., including revised geologic map of Alabama.

Carter, R. W., and others, 1949, Water resources of southeastern Alabama: Alabama Geological Survey Special Report 21, 265 p.

Causey, L. V., Scott, J. C., and Newton, J. G., 1967, Geologic map of Houston County: Alabama Geological Survey Special Map 58.

Ferris, J. G., and others, 1962, Theory of aquifer tests: U.S. Geological Survey Water Supply Paper 1536-E, 171 p.

Knowles, D. B., Reade, H. L., Jr., and Scott, J. C., 1963, Geology and ground-water resources of Montgomery County, Alabama: U.S. Geological Survey Water-Supply Paper 1606, 75 p.

LaMoreaux, P. E., 1948, Flouride in the ground water of the Tertiary area of Alabama: Alabama Geological Survey Bulletin 59, 77 p.

Lohman, S. W., 1972, Ground-water hydraulics: U.S. Geological Survey Professional Paper 708, 70 p.

MacNeil, F. S., 1940, Geologic map of the Tertiary formations of Alabama: U.S. Geological Survey Preliminary Oil and Gas Investigations Map 45.

Monroe, W. H., 1941, Notes on deposits of Selma and Ripley age in Alabama: Alabama Geological Survey Bulletin 48, 150 p.

Newton, J. G., 1965, Geologic Map of Barbour County, Alabama: Alabama Geological Survey Special Map 33.

_____ 1968a,Geologic map of Dale County, Alabama: Alabama Geological Survey Special Map 63.

_____ 1968b, Geologic map of Henry County, Alabama: Alabama Geological Survey Special Map 70.

Newton, J. G., Golden, H. G., Avrett, J. A., and Scott, J. C., 1968, Water availability, Dale County, Alabama: Alabama Geological Survey Special Map 64, 26 p.

Newton, J. G., McCain, J. F., and Avrett, J. A., 1968, Water availability, Henry County, Alabama: Alabama Geological Survey Special Map 71, 14 p.

Sapp, C. D., and Emplaincourt, J., 1975, Physiographic regions of Alabama: Alabama Geological Survey Special Map 168.

Scott, J. C., 1966, Geologic map of Geneva County, Alabama: Alabama Geological Survey Special Map 54.

Scott, J. C., Golden, H. G., and Avrett, J. A., 1967, Water availability in Geneva County, Alabama: Alabama Geological Survey Special Map 55.

Scott, J. C., McCain, J. F., and Avrett, J. A., 1967, Water availability in Houston County, Alabama: Alabama Geological Survey Special Map 59.

Shamberger, V. M., 1968, Geologic map of Pike County, Alabama: Alabama Geological Survey Special Map 72.

Smith, E. A., 1907, The underground water resources of Alabama: Alabama Geological Survey Monograph 6, 388 p.

Smith, E. A., Johnson, L. C., and Langdon, D. W., Jr., 1899, Report on the Geology of the Coastal Plain of Alabama: Alabama Geological Survey Special Report 6, 759 p.

Toulmin, L. D., LaMoreaux, P. E., 1963, Stratigraphy along the Chattahoochee River, connecting link between Atlantic and Gulf coastal plain: Alabama Geological Survey Reprint Series 4, 20 p.

Toumey, Michael, 1858, Second biennial report on the geology of Alabama: Alabama Geological Survey Biennial Report 2, 292 p.

Turner, J. D., Scott, J. C., and Newton, J. G., 1965, Geological map of Coffee County, Alabama: Alabama Geological Survey Special Map 35.

Turner, J. D., Scott, J. C., Golden, H. G., and Avrett, J. A., 1968, Water availability, Coffee County, Alabama: Alabama Geological Survey Special Map 76.

Table 1. Records of wells in the Fort Rucker area

NOTE:

Well numbers correspond to those shown in figure 2.

Depth of well and water level: Reported depths and water levels given in feet, measured depths and water levels given in feet and tenths.

Water-bearing unit: Kr, Ripley Formation; Kp, Providence Sand; TC, Clayton Formation; Tnf, Nanafalia; Ttu, Tuscahoma Sand; Th, Hatchetigbee Formation; Tt, Tallahatta Formation; Tl, Lisbon Formation.

Altitude: Determined by aneroid barometer.

Method of lift: Cf, centrifugal; C, cylinder; F, flows; J, jet; M, manual; N, none; S, submergible turbine; T, turbine.

Use of water: D, domestic; Ind, industrial; Irr, irrigation; P, public supply; S, stock; O, observation.

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
1	313421085152701	City of Abbeville	Layne-Central Co.	1965	470	18, 8	Tc, Kp	434	166 200	10-05-65 8-24-82	T	P	Abbeville No. 4 Casing: 18-in from surface to 385 ft; 8 in from 335 to 390 ft, 8 in screen from 390 to 470 ft. Reported drawdown 20 ft after pumping 350 gpm on 10-05-65.
2	313413085145501	City of Abbeville	Layne-Central Co.	1950	475	18, 8	Tc, Kp	430	176 179.5 196.2 206.5	1950 1-21-65 6-29-82 11-18-82	T	P	GSA No. J-7 Abbeville No. 2. Casing: 18 in from surface to 350 ft; 8 in from 300 to 395 ft; 8 in screen from 395 to 475 ft. Reported drawdown 27 ft after 8 hrs pumping 372 gpm in 1950.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
3	313428085170601	City of Abbeville	Layne-Central Co.	1976	680	18, 10	Kp	457	267 290	3-04-76 8-13-82	T	P	Abbeville No. 5. Casing: 18 in from surface to 600 ft; 10 in from 540 ft to 605 ft and 680 to 690 ft; 10 in screen from 605 to 680 ft. Reported drawdown 116 ft after 2.5 hrs pumping 402 gpm on 3-04-76.
4	313303085172401	City of Abbeville	Layne-Central Co.	1952	545	18, 8	TC, Kp	450	191.5 202	2-10-65 7-21-82	T	P	GSA No: K-5, Abbeville No. 3. Casing: 18 in from surface to 425 ft; 8 in from 365 to 430 ft; 8 in screen from 430 to 545 ft. Reported drawdown 30 ft after 8 hrs pumping 351 gpm in 1952.
5	313444085190101	Willie L. Weems	H. E. Smith Drilling Co.	1963	280	4, 3	Tnf, Tc	470	186.1 193.3 193.7	1-21-65 6-07-82 6-28-82	S	D	GSA No. K-3 Casing: 4 in from surface to 229 ft; 3 in from 229 to 260 ft; 3 in screen from 260 to 280 ft. Reportedly pumped at 25 gpm in 1963.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
6	313311085263201	Dale County Water Authority	Smith Well and Supply Co.	1982	725	12, 6	Kp, Kr	484	325	11-01-82	T	P	Casing: 12 in from surface to 550 ft; 6 in from 510 to 570 ft; 6 in screen from 570 to 590 ft, 650 to 670 ft and 705 to 725 ft. Reported drawdown 109 ft after 24 hrs pumping 450 gpm on 11-01-82. Electric logs available in the files of USGS.
7	313333085330401	Dale County Board of Education	Alton Powell Drilling Co.	1963	270.42	6, 4	Tnf	447	160 156.4 172.2 173.3	7-30-63 6-07-82 6-28-82 11-18-82	S	P	GSA No. B-8 Casing: 6 in from surface to 248 ft; 4 in from 241 to 250.42 ft; 4 in screen from 250.42 to 270.42 ft. Reported drawdown 60 ft after 5 hrs pumping 131 gpm on 7-30-63.
8	313434085355201	Pleasant Ridge Church	Carroll Hardware	1965	240	4	Tnf	478	176.6 178.3 178.6	6-23-65 2-09-82 6-28-82	S	D	GSA No: C-3 Casing: 4 in from surface to 178 ft; none below.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
9	313608085432101	Town of Ariton	Alton Powell Drilling Co.	1959	364	6	Tc, Kp	434	155 155.6 148.6	10-19-59 2-08-82 6-28-82	S	P	GSA No: D-5, Ariton No. 2. Casing: 6 in from surface to 223 ft; none below. Reported drawdown 19 ft after 1.5 hrs pumping 70 gpm on 10-19-59.
10	313556085430801	Town of Ariton	Gray Artesian Well Co.	1946	668	8	Tc, Kp, Kr	479	189	1946	T	P	GSA No: D-7, Ariton No. 1. Casing: 8 in from surface to 272 ft; none below. Reported drawdown 12 ft after 8 hrs pumping 90 gpm in 1946.
11	313557085423001	Town of Ariton	Layne-Central Co.	1974	440	16, 8	Tc, Kp	520	179 235 237 235.2	1-03-75 6-12-81 2-08-82 11-15-82	T	P	Ariton #3. Casing: 16 in from surface to 330 ft; 8 in from 270 to 335 ft and 385 to 410 ft; 8 in screen from 335 to 385 ft and 410 to 440 ft. Reported drawdown 53 ft after 14 hrs pumping 201 gpm on 01-03-75.
12	313338085504601	Jenny Allen	English Well and Supply Co.	1981	260	4	Tc	315	62.6 62.7	2-19-82 7-01-82	S	D	Casing: 4 in from surface to 240 ft; none below.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
13	313306085490201	Gene Smith Evangelistic Association	English Well and Supply Co.	1981	200	6	Tc	327	60 58.0 58.2	1981 2-19-82 7-01-82	S	P	Casing: 6 in from surface to 165 ft; none below. Reported drawdown 5 ft after 6 hrs pumping 60 gpm in 1981.
14	313307085521701	Town of New Hope	English Well and Supply Co.	1974	242	6, 3	Tc	350	95 93.8	3-30-74 11-15-82	S	P	New Hope #1. Casing: 6 in from surface to 202 ft; 3 in from surface to 126 ft; none below. Reported drawdown 7 ft after 48 hrs pumping 170 gpm on 3-30-74.
15	313005085541001	Southland Broilers	Layne-Central Co.	1978	430	24, 12	Tc, Kp	335	100	12-20-78	T	Ind.	Casing: 24 in from surface to 245 ft; 12 in from 190 to 250 ft and 430 to 440 ft; 12 in screen from 250 to 430 ft. Reported drawdown 73 ft after 24 hrs pumping 900 gpm on 12-20-78.
16.	312759085503401	Fort Rucker Military Reservation	J. D. Hughes and Son Well Drilling	1982	460	4	Tc	463	255 260.5 260.8	11-22-81 12-02-81 11-11-82	S	M	Old Tabernacle. Casing: 4 in from surface to 426 ft; none below. Reported drawdown 25.5 ft after 48 hrs pumping 30 gpm 11-23-81.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
17	312857085470101	Fort Rucker Military Reservation	J. D. Hughes and Son Well Drilling	1982	420	4	Tc	470	260.6 259.2 260.8	12-02-81 6-29-82 11-16-82	S	M	Longstreet Field. Casing: 4 in from surface to 366 ft; none below. Reported drawdown 13.9 ft after 49 hrs pumping 30 gpm 11-19-81.
18	313140085401201	C. H. Carroll	Carroll Hardware Ozark, Ala.	1982	485	4	Tc	530	271.2 270.4	10-03-82 11-18-82	S	D	Casing: 4 in from surface to 300+, none below.
19	312959085392501	Town of Ozark	Layne-Central Co.	1972	...	..	Kr	443	298.9	12-04-81	T	P	Ozark No. 5. Electric logs available in files of USGS.
20	312858085403701	Doyle Chism	Carroll Hardware	1965	330	4	Tc	322	92.4 108.8	6-29-65 2-10-82	S	D	GSA No: F-8. Casing: 4 in from surface to 294 ft; none below. Reported to pump 10 gpm on 6-29-65.
21	312743085402501	Woodlawn Memory Garden	Carroll Hardware	1961	345	4	Tnf, Tc	295	59.2 53.1 52.2	6-29-65 2-10-82 6-28-82	S	Irr	GSA No: F-14. Casing: 4 in from surface to 150 ft; none below. Reported to pump 20 gpm on 6-29-65.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
22	312639085361601	Town of Ozark	Layne-Central Co.	1967	815	18, 10	Kr	409	267.5	12-07-81	T	P	Ozark No. 4. Casing: 18 in from surface to 750 ft; 10 in from 670 to 755 ft; 10 in screen from 755 to 815 ft. Reported drawdown 89 ft after 24 hrs pumping 750 gpm in 1968.
23	312714085380801	Town of Ozark	Layne-Central Co.	1954	813	16, 10	Kr	403	187 237.6 284.9	1954 7-13-65 12-08-81	T	P	GSA No. F-17. Ozark No. 2. Casing: 16 in from surface to 750 ft; 10 in from 665 to 753 ft; 10 in screen from 753 to 813 ft. Reported drawdown 47 ft when pumped at 735 gpm in 1954.
24	312719085384301	Town of Ozark	Layne-Central Co.	1946	845	16, 8	Kr	442	210 247.4 298.0	1946 7-13-65 12-10-81	T	P	GSA No. F-16, Ozark No. 1. Casing: 16 in from surface to 420 ft; 8 in from surface to 805 ft; 8 in screen from 805 to 845 ft. Reported drawdown 10 ft when pumped at 197 gpm in 1946.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
25	313150085290601	Joe Snell	Carroll Hardware	....	90	4	Tnf	255	1.4 0.6	2-09-82 6-28-82	J	D	GSA No. G-1. Casing: 4 in from surface to 42 ft; none below. Measured flow 27 gpm on 6-08-65.
26	312828085304101	Bethel Church	Carroll Hardware	1961	285	4	Ttu, Tnf	367	134.1 150.9 148.5	6-17-65 2-09-82 6-28-82	S	D	GSA No. G-8. Casing: 4 in from surface to 185 ft; none below.
27	312746085341701	Jerry Grammont	Carroll Hardware	1964	153	4	Tnf	225	1.6 1.7 1.7	2-09-82 6-28-82 11-16-82	J	D	GSA No. G-9. Casing: 4 in from surface 63 ft; none below. Estimated flow 1 gpm on 6-18-65.
28	312643085191801	James Golden	Smith Well and Supply Co.	1979	560	8	Tc, Kp	380	200 206 207 212	4-06-79 2-17-82 6-29-82 11-18-82	S	Irr	Casing: 8 in from surface to 410 ft; none below. Reported drawdown 25 ft after 8 hrs pumping 400 gpm on 4-06-79.
29	31233508516101	John Solomon	Smith Well and Supply Co.	1981	680	12, 8	Kp	370	220 229 241	1981 2-16-82 11-17-82	T	Irr	Casing: 12 in from surface to 500 ft; 8 in from 490 (?) to 630 ft; 8 in screen from 630 to 680 ft. Reported drawdown 105 ft after 36 hrs pumping 700 gpm.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
30	312534085203401	Town of Newville	Tom Smith Artesian Well Co.	1974	420	8, 4	Tnf	394	165 227	1-23-74 2-17-82	T	P	Newville No. 2. Casing: 8 in from surface to 370 ft; 4 in from 310 to 378 ft; 4 in screen from 370 to 420 ft. Reported drawdown 86 ft after 24 hrs pumping 210 gpm on 1-23-74.
31	312453085274801	Fort Rucker Military Reservation	Carroll Hardware	1969	365	4, 2	Tnf	356	177.96 152.54	12-01-81 6-29-82	S	M	Goldberg Field No. 2. Casing: 4 in from surface to 214 ft. Reported to pump 14 gpm.
32	312451085275001	Fort Rucker Military Reservation	Buie Drilling Co.	1976	303	8	Ttu, Tnf	355	152 144 174 166.0	6-14-76 12-01-81 6-29-82 11-16-82	S	M	Goldberg Field No. 3. Casing: 8 in from surface to 238 ft; none below. Reported drawdown 29 ft when pumped at 39 gpm on 6-14-76.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
33	312210085240801	Faulkner Farms	Smith Well and Supply Co.	1979	720	12, 8	Tc, Kp, Kr (?)	349	204 214 212.7	..... 2-19-82 11-17-82	T	Irr	Casing: 12 in from surface to 460 ft; 8 in from 450 (?) to 515 ft, 525 to 530 ft, 550 to 555 ft, 575 to 580 ft, 600 to 620 ft, 640 to 643 ft, and 645 to 690 ft; 8 in screen from 515 to 525, 530 to 550 ft, 555 to 575 ft, 580 to 600 ft, 620 to 640 ft, 643 to 645 ft, and 690 to 720 ft. Reported drawdown 66 ft after 24 hrs pumping 1200 gpm.
34	312318085350201	Alabama Highway Department	Alabama Highway Department	1975	270	4, 3	Ttu	335	161.3 170.4	3-18-75 6-07-83	S	P	Casing: 4 in from surface to 230 ft; 3 in screen from 230 to 270 ft. Reported drawdown 12.6 ft after 18.5 hrs pumping 27 gpm 3-18-75.
35	312239085344901	U.S. Geological Survey	Smith Well and Supply Co.	1980	453	6, 4	Tc	245	90.5	10-15-80	..	O	Casing: 6 in from surface to 210 ft; 4 in from 192 to 433 ft and 453 to 474 ft; 4 in screen from 433 to 453 ft.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
36	312240085344801	Fort Rucker Military Reservation	Smith Well and Supply Co.	1978	...	...	Tc	247	80 94.9	6-14-78 12-01-81	S	M	Hunt Field. Reported drawdown 13 ft after 36 hrs pumping 50 gpm on 6-14-78. Electric logs available in the files of USGS.
37	312600085401101	Town of Ozark	Layne-Central Co.	1962	900	18, 10	Kr	430	236 248.3 309.0	3-14-62 7-13-65 12-04-81	T	P	GSA No. K-1. Ozark No. 3. Casing: 18 in from surface to 832 ft; 10 in from 752 to 840 ft; 10 in screen from 840 to 900 ft. Reported drawdown 48 ft when pumped at 681 gpm.
38	312439085383101	Town of Ozark	Layne-Central Co.	1978	880	20, 10	Kr	340	185 220.0	3-29-78 12-03-81	T	P	Ozark No. 6. Casing: 20 in from surface to 765 ft; 10 in from 700 to 770 ft; 10 in screen from 770 to 880 ft. Reported drawdown 200 ft after 24 hrs pumping 709 gpm on 3-29-78.
39	312534085470401	Fort Rucker Military Reservation	Carroll Hardware	1975	230	4, 3	Ttu	396	183 184.1 164.9 187.2	.... 11-20-81 6-28-82 11-16-82	S	M	Range Headquarters. Casing: 4 in from surface to 210 ft; 3 in screen from 210 to 230 ft. Reported to pump 25 gpm.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
40	312428085425701	Fort Rucker Military Reservation	.....	....	...	...	Ttu (?)	224	50.5	12-03-81	S	M	Engineer Beach
41	312409085431701	Fort Rucker Military Reservation	Carroll Hardware	....	...	...	Ttu (?)	247	45.0	12-03-81	S	M	Girl Scout Camp
42	312328085433401	Fort Rucker Military Reservation	Carroll Hardware	1977	257	4, 3	Tnf	215	37 59.2	3-02-77 11-19-81	S	M	Wildlife Area. Casing: 4 in from surface to 199 ft, 3 in from 195 to 237 ft; 3 in screen from 237 to 257 ft. Reported drawdown 20 ft after pumping 30 gpm 3-02-77.
43	312357085432601	Fort Rucker Military Reservation	Carroll Hardware	1975	215	4	Tnf	241	53.5 53.8	11-19-81 6-29-82	S	M	Enlisted Men's Beach. Casing: 4 in from surface to 200 ft; 3 in screen from 200 to 215 ft.
44	312351085424601	Fort Rucker Military Reservation	Carroll Hardware	1970	135	6	Ttu	226	46.1	11-19-81	S	M	Lake Lodge. Casing: 6 in from surface to 85 ft; none below.
45	312207085444901	National Guard	Smith Well and Supply Co.	1977	315	12, 6	Ttu, Tnf	293	124	2-16-77	T	M	Casing: 12 in from surface to 170 ft; 6 in from 145 to 200 ft; 6 in screen from 200 to 305 ft. Reported drawdown 37.5 ft after 4 hrs pumping 250 gpm 2-16-77.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
46	312132085450801	Fort Rucker Military Reservation	Layne-Central Co.	1956	682	16, 8	Tc, Kp	290	105 118.9 169.5 143.2	8-28-56 7-16-65 11-19-81 6-29-82	T	M	GSA No. L-4. Lowe Field. Casing: 16 in from surface to 370 ft; 8 in from 310 to 375 ft, 380 to 554 ft, 574 to 600 ft and 615 to 662 ft; 8 in screen from 375 to 380 ft, 554 to 574 ft, 600 to 615 ft and 662 to 682 ft. Reported drawdown 82 ft after pumping 402 gpm on 8-28-56.
47	312138085431001	Fort Rucker Military Reservation	Layne-Central Co.	1979	650	24, 16	Tc, Kp	281	136 140.9 137.8	4-07-79 11-19-81 6-29-82	T	M	Fort Rucker No. 7. Casing: 24 in from surface to 375 ft; 16 in from 300 to 380 ft, and 510 to 540 ft; 16 in screen from 380 to 510 ft and 540 to 650 ft. Electric logs available in the files of USGS.
48	31213308552001	City of Enterprise	Carloss Well Drilling Co.	1970	748	24, 10	Tc, Kp	418	255	1970	T	P	Enterprise No. 6. Casing: 24 in from surface to 520 ft; 10 in from 448 to 620 ft, 664 to 680 ft, 700 to 705 ft, 725 to 732 ft; 10 in screen from 620 to 664 ft, 680 to 700 ft, 705 to 725 ft and 732 to 748 ft. Electric logs available in the files of USGS.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
49	312203085510301	Fort Rucker Military Reservation	Acme Drilling Co.	1961	640	8	Tc, Kp	395	200 243 257 255	3-28-61 12-02-81 6-30-82 11-16-82	T	M	GSA No. I-3. Shell Field Aux. Field No. 3. Casing: 8 in from surface to 540 ft; none below. Reported drawdown 27.3 ft after 8 hrs pumping 465 gpm 3-28-61. Electric logs available in files of USGS.
50	312302085555901	Town of New Brocton	Layne-Central Co.	1962	534	12, 6	Tc	445	241	6-15-62	T	P	GSA No. J-5, New Brocton No. 2. Casing: 12 in from surface to 483 ft; 6 in from 423 to 488 ft, 498 to 506 ft, and 516 to 524 ft; 6 in screen from 488 to 498 ft, 506 to 516 ft and 524 to 534 ft. Reported drawdown 15 ft after 8 hrs pumping 104 gpm 6-15-62.
51	312331085553401	Town of New Brocton	Layne-Central Co.	1977	645	16	Tc	447	266 271 296.9	6-16-78 1-07-82 11-11-82	T	P	New Brocton No. 3. Casing: 16 in from surface to 527 ft; none below. Reported drawdown 60 ft after 24 hrs pumping 293 gpm 6-16-78.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
52	312309085554501	Town of New Brocton	Layne-Central Co.	1941	358	12, 8	Ttu, Tnf	455	242	5-15-41	T	P	GSA No. J-4; New Brocton No. 1. Casing: 12 in from surface to 299 ft; screen 8 in 299 to 358 ft. Reportedly pumped 100 gpm 5-15-41.
53	312129085573201	R. S. Strickland	Seaboard Oil Co. of Delaware	....	3691	...	...	388	...	....	..	..	Oil Test Well 542. Data used for geologic and hydrologic control. Electric log in files of USGS.
54	311900085560601	Shelly Walls	J.D. Hughes and Son Well Drilling Co.	1963	510	4	Ttu, Tnf	376	161.9	2-19-82	S	D	GSA No. O-3. Casing: 4 in from surface to 212 ft; none below.
55	311644085592501	Town of Goodman	Acme Drilling Co.	1977	783	8, 6	Tc	360	202 224 190.1	8-29-77 7-28-82 11-12-82	T	P	Goodman No. 1. Casing: 8 in from surface to 682 ft; 6 in from 654 to 740 ft and 6 in screen from 740 to 783 ft. Reported drawdown 59 ft after 12 hrs pumping 240 gpm on 8-29-77.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
56	312005085510401	City of Enterprise	Layne-Central Co.	1961	750	24, 10	Tnf, Tc, Kp	380	200 246.7 250.5	6-01-61 12-14-81 11-11-82	T	P	GSA No. P-1, Enterprise No. 4. Casing: 24 in from surface to 460 ft; 10 in from surface to 465 ft, 475 to 495 ft, 515 to 535 ft, 545 to 567 ft, 577 to 598 ft, 608 to 630 ft, 640 to 670 ft, 680 to 700 ft and 710 to 740 ft; 10 in screen from 465 to 475 ft, 495 to 515 ft, 535 to 545 ft, 567 to 577 ft, 598 to 608 ft, 630 to 640 ft, 670 to 680 ft, 700 to 710 ft and 740 to 750 ft. Drawdown 66 ft after 8 hrs pumping 650 gpm on 6-01-61.
57	311923085493901	City of Enterprise	Layne-Central Co.	1979	753	24, 10	Tc, Kp	352	220 224.1 229.1	1-09-79 12-15-81 7-01-82	T	P	Enterprise No. 7. Casing: 24 in from surface to 560 ft; 10 in from 485 to 565 ft, 585 to 595 ft, 610 to 620 ft, 630 to 640 ft, 665 to 675 ft, and 695 to 713 ft; 10 in screen from 565 to 585 ft, 595 to 610 ft, 620 to 630 ft, 640 to 665 ft, 675 to 695 ft and 713 to 753 ft. Reported drawdown 141 ft after 5 hrs pumping 824 gpm on 1-09-79.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
58	311900085500001	City of Enterprise	Layne-Central Co.	1967	772	24, 10	Tnf, Tc, Kp	382	233 249.6	11-03-67 12-14-81	T	P	Enterprise No. 5. Casing: 24 in from surface to 480 ft; 10 in from 428 to 485 ft, 495 to 505 ft, 515 to 625 ft, 645 to 682 ft, 692 to 702 ft, and 712 to 732 ft; 10 in screen from 485 to 495 ft, 505 to 515 ft, 625 to 645 ft, 682 to 692 ft, 702 to 712 ft, and 732 to 772 ft. Reported drawdown 60 ft after 12 hrs pumping 752 gpm on 11-03-67.
59	311844085511201	City of Enterprise	Layne-Central Co.	1943	770	18, 10	Ttu, Tnf, Tc, Kp	362	163 217.7 226.4	1944 1-04-82 6-11-82	..	O	GSA No. P-4, Enterprise No. 1, COF 1. Casing: 18 in from surface to 310 ft; 10 in from 280 to 343 ft, 398 to 412 ft, 432 to 485 ft, 505 to 519 ft, 544 to 690 ft and 710 to 745 ft; 10 in screen from 343 to 398 ft, 412 to 432 ft, 485 to 505 ft, 519 to 544 ft and 690 to 710 ft. Reported drawdown 13 ft after 8 hrs pumping 280 gpm in 1944.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
60	311843085511101	City of Enterprise	Layne-Central Co.	1959	765	24, 10	Tnf, Tc, Kp	360	180 239.2 228.0	1959 12-14-81 6-11-82	T	P	GSA No. P-5, Enterprise No. 3. Casing: 24 in from surface to 405 ft; 10 in from 347 to 410 ft, 430 to 482 ft, 502 to 515 ft, 535 to 680 ft, and 700 to 745 ft; 10 in screen from 410 to 430 ft, 482 to 502 ft, 515 to 535 ft, 680 to 700 ft, and 745 to 765 ft. Reported drawdown 94 ft after 8 hrs pumping 752 gpm in 1959.
61	311908085513001	City of Enterprise	Gray Artesian Well Co.	1934	606	12	Tnf, Tc	364	243.6	12-14-81	T	P	GSA No. P-3, Enterprise No. 2. Casing: 12 in from surface to 425 ft; none below. Reported drawdown 75 ft after 8 hrs pumping 600 gpm in 1934.
62	311930085533401	City of Enterprise	Layne-Central Co.	1981	860	24, 16, 10	Tc, Kp	406	272 269.4 274.5 273.2	10-01-81 4-22-82 7-01-82 11-11-82	T	P	Enterprise No. 8. Casing: 24 in from surface to 630 ft; 16 in from 570 to 635 ft; 10 in from 765 to 795 ft; 10 in screen from 635 to 765 ft and 795 to 860 ft. Reported drawdown 97 ft after 4 hrs pumping 754 gpm on 10-01-81.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
63	311635085525001	Meadowlawn Cemetery	Burrell Drilling Co.	1956	774	6	...	355	...	....	T	I	GSA No. P-6. Electric logs available in files of USGS.
64	312033085461601	Macedonia Community Water System	Layne-Central Co.	1981	710	12, 6	Tc, Kp	363	216 218	11-24-81 2-03-82	T	P	Macedonia No. 1. Casing: 12 in from surface to 495 ft; 6 in from 435 to 500 ft, 515 to 535 ft and 620 to 636 ft; 6 in screen from 500 to 515 ft, 535 to 620 ft, 636 to 641 ft and 665 to 710 ft. Reported drawdown 109 ft after pumping 457 gpm on 11-24-81.
65	312005085435601	Fort Rucker Military Reservation	Layne-Central Co.	1942	620	18, 10	Ttu, Tnf, Tc, Kp	202.64	69 104.1 73.2	9-01-81 11-20-81 6-28-82	T	M	GSA No. M-2, Fort Rucker No. 1. Casing: 18 in from surface to 148 ft; 10 in from 105 to 153 ft, 173 to 179 ft, 219 to 335 ft, 340 to 498 ft, 508 to 513 ft, 528 to 536 ft, and 551 to 610 ft; 10 in screen from 153 to 173 ft, 179 to 219 ft, 335 to 340 ft, 498 to 508 ft, 513 to 528 ft, 536 to 551 ft and 610 to 620 ft. Reported drawdown 58 ft after 21 hrs pumping 335.24 gpm on 9-01-81.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
66	312003085432401	Fort Rucker Military Reservation	Layne-Central Co.	1942	649	18, 10	Ttu, Tnf, Kp	226.4	35 69 98 103.7 99.1	4-07-42 7-04-52 9-01-81 11-20-81 6-28-82	T	M	GSA No. M-3, Fort Rucker No. 2. Casing: 18 in from surface to 168 ft; 10 in from 120 to 173 ft, 193 to 203 ft, 223 to 233 ft, 253 to 309 ft, 324 to 528 ft, 543 to 549 ft and 564 to 639 ft; 10 in screen from 173 to 193 ft, 203 to 223 ft, 233 to 253 ft, 309 to 324 ft, 528 to 543 ft, 549 to 564 ft and 634 to 649 ft. Reported drawdown 80.5 ft after 36 hrs pumping 810 gpm 4-07-42. Reported drawdown 50.8 ft after 8 hrs pumping 750 gpm 4-07-52. Reported drawdown 26 ft after 16 hrs pumping 324.13 gpm 9-01-81.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
67	312008085431001	Fort Rucker Military Reservation	Layne-Central Co.	1942	673	18, 10	Ttu, Tnf, Kp	252.4	58 129 150.1 124.9	5-01-42 9-01-81 12-01-81 6-28-82	T	M	GSA No. M-5, Fort Rucker No. 3. CAsing: 18 in from surface to 202 ft; 10 in from 151 to 207 ft, 257 to 273 ft, 283 to 552 ft, 567 to 571 ft, 586 to 615 ft, and 630 to 663 ft; 10 in screen from 207 to 257 ft, 273 to 283 ft, 552 to 567 ft, 571 to 586 ft, 615 to 630 ft, and 663 to 673 ft. Reported drawdown 47 ft after 37.5 hrs pumping 805 gpm 5-01-42. Reported drawdown 19 ft after 13 hrs pumping 271.71 gpm 9-01-81.
68	311956085431901	Fort Rucker Military Reservation	Layne-Central Co.	1942	670	18, 10	Ttu, Tnf, Kp	250.7	60 101.7 117 123.2	1942 7-16-65 7-16-77 12-04-81	T	O	GSA No. M-4, Fort Rucker No. 5. Casing: 18 in from surface to 201 ft; 10 in from 162 to 216 ft, 276 to 552 ft, 567 to 588 ft, and 618 to 660 ft; 10 in screen from 216 to 276 ft, 552 to 567 ft, 588 to 618 ft, and 660 to 670 ft. Reported drawdown 33 ft after 48 hrs pumping 459 gpm 7-16-77.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
69	312009085425801	Fort Rucker Military Reservation	Layne-Central Co.	1942	689	18, 10	Ttu, Tnf, Kp	265.83	74 104 160.0	4-07-42 7-04-52 12-01-81	T	M	GSA No. 6, Fort Rucker No. 4. Casing: 18 in from surface to 218 ft; 10 in from 164 to 219 ft, 239 to 247 ft, 267 to 275 ft, 295 to 566 ft, 581 to 586 ft, and 616 to 679 ft; 10 in screen from 219 to 239 ft, 247 to 267 ft, 275 to 295 ft, 566 to 581 ft, 586 to 616 ft and 679 to 689 ft. Reported drawdown 18 ft after 7 hrs pumping 379.52 gpm 9-01-81.
70	312019085425501	Fort Rucker Military Reservation	Layne-Central Co.	1982	807	18, 10	Kp	302	177 174.4 175.3	3-10-82 3-15-82 6-28-82	T	M	Fort Rucker No. 9. Casing: 18 in from surface to 585 ft; 10 in from 525 to 590 ft, 670 to 690 ft, and 720 to 772 ft; 10 in screen 590 to 670 ft, 690 to 720 ft, and 772 to 807 ft. Reported drawdown 44 ft after pumping 503 gpm in 1982. Electric logs available in the files of USGS.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
71	311932085431801	Fort Rucker Military Reservation	Layne-Central Co.	1942	751	18, 10	Ttu, Tnf, Tc, Kp	355	163 230 272.3 231.0	1942 9-01-81 11-19-81 6-28-82	T	M	GSA No. M-8, Fort Rucker No. 6. Casing: 18 in from surface to 330 ft; 10 in from 281 to 257 ft, 387 to 406 ft, 416 to 511 ft, 531 to 673 ft, 683 to 695 ft, 715 to 731 ft and 751 to 765 ft; 10 in screen from 357 to 387, 406 to 416 ft, 511 to 531 ft, 673 to 683 ft, 695 to 715 ft, and 731 to 751 ft. Reported drawdown 10 ft after pumping 200 gpm in 1942. Reported drawdown 41 ft after 7 hrs pumping 78 gpm 9-01-81.
72	311918085442401	Fort Rucker Military Reservation	Layne-Central Co.	1982	760	18, 10	Tc, Kp	235	108 108.6 106.9	12-18-81 7-02-82 11-15-82	T	M	Fort Rucker No. 8. Casing: 18 in from surface to 535 ft; 10 in from 475 to 540 ft, 620 to 650 ft, 660 to 710 ft, and 720 to 730 ft; 10 in screen from 540 to 620 ft, 650 to 660 ft, 710 to 720 ft and 730 to 760 ft. Reported drawdown 45 ft after pumping 503 gpm 12-18-81. Electric logs available in the files of USGS.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
73	311804085463001	Town of Level Plains	Artesian Well Co.	1969	...	...	Tc	318	174.9 243.0 202.9	10-07-69 12-15-81 11-17-82	S	P	Level Plains No. 1 Reported drawdown 78.79 ft after 24 hrs pumping 82 gpm on 10-07-69.
74	311804085432201	Town of Daleville	Layne-Central Co.	1966	707	16, 8	Tnf, Tc, Kp	325	178 203.9 206.0	7-15-66 12-15-81 6-30-82	T	P	Daleville No. 2. Casing: 16 in from surface to 350 ft; 8 in from 300 to 355 ft, 395 to 470 ft, 480 to 550 ft, and 590 to 657 ft; 8 in screen from 355 to 395 ft, 470 to 480 ft, 550 to 590 ft, and 657 to 707 ft. Reported drawdown 39 ft after 6 hrs pumping 503 gpm 7-15-66.
75	311838085423901	Town of Daleville	Layne-Central Co.	1961	700	18, 8	Ttu, Tnf, Tc, Kp	333	176.7 217.3	7-17-65 12-14-81	T	P	GSA No. M-11, Daleville No. 1. Casing: 18 in from surface to 350 ft; 8 in from 300 to 355 ft, 375 to 464 ft, 474 to 580 ft, 590 to 620 ft, 630 to 640 ft, and 680 to 690 ft; 8 in screen from 355 to 375, 464 to 474 ft, 580 to 590 ft, 620 to 630 ft, 640 to 680 ft and 690 to 700 ft. Reported drawdown 37.4 ft after 15 mins pumping 460 gpm 7-17-65.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
76	311720085425901	Fort Rucker Military Reservation	Layne-Central Co.	1981	940	18, 10	Kp, Kr	309	188 179.2 181.9	11-01-81 6-29-82 11-15-82	T	M	Cairns Airfield. Casing: 18 in from surface to 840 ft; 10 in from 800 to 845 ft, and 880 to 910 ft; 10 in screen from 845 to 880 ft and 910 to 940 ft. Reported drawdown 90 ft after 25 hrs pumping 754 gpm 11-01-81. Electric logs available in the files of USGS.
77	311703085470201	Town of Level Plains	Weldon Drilling Co.	1980	440	...	Ttu, Tnf	341	204 224	6-03-81 12-15-81	S	P	Level Plains No. 2. Reported drawdown 30 ft after 29 hrs pumping 150 gpm 6-03-81.
78	312117085373701	Fort Rucker Military Reservation	Smith Well and Supply Co.	1975	296	8, 4	Tnf	231	65 86 81 85.4	4-26-75 12-01-81 6-29-82 11-16-82	S	M	Hatch Field. Casing: 8 in from surface to 270 ft; 4 in from 255 to 276 ft; 4 in screen from 276 to 296 ft. Reported drawdown 29 ft after 36 hrs pumping 50 gpm 4-26-75.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
79	312006085410601	Fort Rucker Military Reservation	Layne-Central Co.	1982	780	18, 10	Tc, Kp	300	167 167.9 170.0	4-30-82 7-02-82 11-15-82	T	M	Fort Rucker No. 10. Casing: 18 in from surface to 555 ft; 10 in from 495 to 560 ft, 640 to 654 ft, and 684 to 750 ft; 10 in screen from 560 to 640 ft, 654 to 684 ft and 750 to 780 ft. Reported drawdown 51 ft after pumping 503 gpm 4-03-82. Electric logs available in the files of USGS.
80	311949085354801	Town of Newton	Layne-Central Co.	1959	695	12, 6	Kp	325	147 156.9	1959 7-20-65	T	P	GSA No. N-3, Newton No. 1. Casing: 12 in from surface to 608 ft; 6 in from 558 to 623 ft, 633 to 648 ft and 658 to 685 ft; 6 in screen from 623 to 633 ft, 648 to 658 ft and 685 to 695 ft. Reported drawdown 45 ft when pumped at 254 gpm in 1959.
81	311917085353501	Town of Newton	Layne-Central Co.	1978	720	18, 8	Tc, Kp	351	226 269.1	6-19-78 12-09-81	T	P	Newton No. 2. Casing: 18 in from surface to 530 ft; 8 in from 480 to 535 ft, 555 to 580 ft, 620 to 656 ft and 686 to 710 ft; 8 in screen from 535 to 555 ft, 580 to 620 ft, 656 to 686 ft and 710 to 720 ft. Reported drawdown 116 ft after 24 hrs pumping 530 gpm 6-19-78.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
82	311724085385301	W. A. Dossett	Carroll Hardware Ozark, Ala.	1963	355	4	Ttu	310	183.5 184.9	10-04-82 11-17-82	S	D	Casing: 4 in from surface to 180 ft; none below.
83	311914085291501	Midland City	Layne-Central Co.	1960	752	12, 6	Tc, Kp	390	203 263.6 275.9	1960 12-01-81 11-17-82	T	P	GSA No. 0-4, Midland City No. 2. Casing: 12 in from surface to 650 ft; 6 in from 570 to 655 ft, 665 to 671 ft, 681 to 690 ft, and 705 to 737 ft; 6 in screen from 655 to 665 ft, 671 to 681 ft, 690 to 705 ft and 737 to 752 ft. Reported drawdown 2.2 ft when pumped at 49 gpm in 1960.
84	311908085293701	Midland City	Layne-Central Co.	1945	547.67	12, 6	Tnf, Tc	375.5	188	1945	T	P	GSA No. 0-7, Midland City No. 1. Casing: 12 in from surface to 336 ft; 6 in from 289 to 506 ft; 6 in screen from 506 to 547 ft. Reported drawdown 44 ft after 8 hrs pumping 80 gpm in 1945.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
85	311838085322301	Town of Pinckard	Layne-Central Co.	1965	755	12, 6	Kp	374	210 262.6 266.0 262.6	7-27-65 12-09-81 6-29-82 11-17-82	T	P	GSA No. O-12, Pinckard City No. 2. Casing: 12 in from surface to 700 ft; 6 in from 645 to 705 ft; 6 in screen from 705 to 755 ft. Reported drawdown 28 ft after 3.2 hrs pumping 100 gpm 7-27-65.
86	311945085240501	American Brass Inc.	.....	....	...	...	...	347	223.2 239.2	2-04-82 11-17-82	..	Irr	American Brass No. 2.
87	311934085241701	American Brass Inc.	Layne-Central Co.	1965	183	6, 4	Tt	353	15.3	4-19-65	T	Ind	GSA No. W-3, American Brass No. 1. Casing: 6 in from surface to 163 ft; 4 in screen from 163 to 183 ft. Reportedly pumped 30 gpm in 1965.
88	311920085241801	American Brass Inc.	.....	....	...	...	...	355	....	....	..	Ind	American Brass No. 3.
89	311851085273001	City of Dothan	Layne-Central Co.	1942	678	18	Tc, Kp	375	170 254	1942 2-01-82	T	P	GSA No. P-6, Dothan No. 2. Reported drawdown 31 ft after pumping 550 gpm in 1942.
90	311850085274301	City of Dothan	Layne-Central Co.	1943	672	18, 8	Tc	367	172 250 247.2 254.3	1943 1-26-82 6-30-82 11-19-82	T	P	GSA No. P-7, Dothan No. 4. Casing: 18 in from surface to 492 ft; 8 in from 425 to 570 ft; 8 in screen from 570 to 670 ft. Reported drawdown 41.5 ft after 24 hrs pumping 550 gpm in 1943.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
91	311658085271001	City of Dothan	Layne-Central Co.	1974	860	18, 10	Kp	327.2	184 233.5 219.2	4-21-76 1-27-82 6-30-82	T	P	Dothan No. 23. Casing: 18 in from surface to 710 ft; 10 in from 610 to 715 ft, and 760 to 790 ft; 10 in screen 715 to 760 ft and 790 to 860 ft. Reported drawdown 15 ft after 8 hrs pumping 1001 gpm 4-21-76. Electric logs available in the files of USGS.
92	311647085265501	City of Dothan	Layne-Central Co.	1973	838	18, 10	Kp	339.29	190 228	 1-27-82	T	P	Dothan No. 22. Casing: 18 in from surface to 734 ft; 10 in from 654 to 739 ft and 779 to 793 ft; 10 in screen from 739 to 779 ft and 793 to 838 ft. Reported drawdown 16 ft after pumping 744 gpm.
93	311623085232401	City of Dothan	Layne-Central Co.	1982	1105	18, 10	Kp, Kr	302	192 194 195	9-10-81 2-09-82 4-14-82	T	P	Dothan No. 26. Casing: 18 in from surface to 735 ft; 10 in from 655 to 740 ft, 760 to 820 ft, 840 to 860 ft, and 960 to 1050 ft; 10 in screen from 740 to 760 ft, 820 to 840 ft, 860 to 960 ft and 1050 to 1080 ft. Reported drawdown 67 ft after pumping 851 gpm 9-10-81. Reported drawdown 65 ft after 25.5 hrs pumping 802 gpm 2-09-82.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
94	312108085204301	City of Headland	Layne-Central Co.	1946	659	16, 8	Tc, Kp	381	191 255.8	5-21-64 2-04-82	T	P	GSA No. X-1, Headland No. 1. Casing: 16 in from surface to 360 ft; 8 in from 320 to 590 ft and 610 to 644 ft; 8 in screen from 590 to 610 ft and 644 to 659 ft. Reported drawdown 24 ft after 1 hr pumping 336 gpm 5-21-64.
95	312037085202001	City of Headland	Layne-Central Co.	1964	697	16, 8	Tc, Kp	373	185 219 224	6-27-64 2-04-82 6-29-82	T	P	GSA No. X-2, Headland No. 2. Casing: 16 in from surface to 540 ft; 8 in from 480 to 600 ft, 620 to 657 ft, and 677 to 687 ft; 8 in screen from 600 to 620 ft, 657 to 677 ft and 687 to 697 ft. Reported drawdown 28 ft after 8 hrs pumping 508 gpm 6-27-64. Electric logs available in the files of USGS.
96	311325085215701	City of Dothan	Layne-Central Co.	1956	720	18, 8	Ttu, Tnf	304.7	150 277 281.7	12-18-56 1-27-82 6-30-82	T	P	GSA No. J-3, Dothan No. 13. Casing: 18 in from surface to 575 ft; 8 in from 495 to 580 ft; 8 in screen from 580 to 720 ft. Reported drawdown 73 ft after 8 hrs pumping 530 gpm 12-18-56.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
97	311129085222901	City of Dothan	Layne-Central Co.	1961	804	18, 8	Ttu, Tnf	342.33	205 313	1961 2-03-82	T	P	GSA No. J-6, Dothan No. 15. Casing: 18 in from surface to 700 ft; 8 in from 620 to 704 ft; 8 in screen from 704 to 804 ft. Reported drawdown 136 ft after 8 hrs pumping 699 gpm in 1961.
98	311523085235601	City of Dothan	Layne-Central Co.	1961	714	18, 8	Ttu, Tnf, Tc	327.82	193 295	4-19-61 1-26-82	T	P	GSA No. I-1, Dothan No. 15. Casing: 18 in from surface to 534 ft; 8 in from 454 to 539 ft and 589 to 664 ft; 8 in screen from 539 to 589 ft and 664 to 714 ft. Reported drawdown 162 ft after 8 hrs pumping 708 gpm 9-19-61.
99	311616085251001	City of Dothan	Layne-Central Co.	1979	975	24, 10	Kp, Kr	349	234 240	1980 1-28-82	T	P	Dothan No. 24. Casing: 24 in from surface to 830 ft; 10 in from 750 to 835 ft; 10 in screen from 835 to 975 ft. Reported drawdown 13 ft after 12 hrs pumping 805 gpm in 1980.
100	311530085260001	City of Dothan	Layne-Central Co.	1971	715	18, 10	Tnf, Tc	280.19	171 222.5	2-15-73 1-26-82	T	P	Dothan No. 19. Casing: 18 in from surface to 555 ft; 10 in from 493 to 560 ft and 620 to 675 ft; 10 in screen from 560 to 620 ft and 675 to 715 ft. Reported drawdown 167 ft after pumping 602 gpm 2-15-73.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
101	311609085263801	City of Dothan	Layne-Central Co.	1971	800	18, 10	Tnf, Tc, Kp	330	174 227	2-15-72 1-28-82	T	P	Dothan No. 20. Casing: 18 in from surface to 540 ft; 10 in from 480 to 545 ft, 605 to 630 ft, and 670 to 770 ft; 8 in screen from 545 to 605 ft, 630 to 670 ft and 770 to 800 ft. Reported drawdown 35 ft after pumping 805 gpm 2-15-72.
102	311555085272401	City of Dothan	Layne-Central Co.	1979	835	18, 10	Kp	319	200 213	1980 2-01-82	T	P	Dothan No. 25. Casing: 18 in from surface to 730 ft; 10 in from 655 to 735 ft; 10 in screen from 735 to 835 ft. Reported drawdown 38 ft after 12 hrs pumping 850 gpm in 1980.
103	311513085303301	City of Dothan	Smith Well and Supply Co.	1981	455	12, 6	Ttu, Tnf	210	117 109	10-29-81 11-04-82	T	P	Little Choctawhatchee Waste Treatment Facility Casing: 12 in from surface to 290 ft; 6 in from 240 to 295 ft and 315 to 405 ft; 6 in screen from 295 to 315 ft and 405 to 455 ft. Reported drawdown 33 ft after 24 hrs pumping 226 gpm 10-29-81.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
104	311420085230401	City of Dothan	Smith Well and Supply Co.	1966	725	18, 8	Ttu, Tnf, Tc	310.79	206 278	8-01-66 2-01-82	T	P	Dothan No. 17. Casing: 18 in from surface to 555 ft; 8 in from 500 ft to 560 ft and 620 to 725 ft; 8 in screen from 560 to 620 ft and 725 to 765 ft. Reported drawdown 110 ft after pumping 640 gpm 8-01-66.
105	311349085235901	City of Dothan	Smith Well and Supply Co.	1946	786	18, 8	Ttu, Tnf,	320.25	157 302	6-08-46 1-27-82	T	P	GSA No. 1-2, Dothan No. 9. Casing: 18 in from surface to 556 ft; 8 in from 476 to 571 ft, 581 to 601 ft and 651 to 751 ft; 8 in screen from 571 to 581 ft, 601 to 651 ft and 751 to 786 ft. Reported drawdown 20 ft after 8 hrs pumping 258 gpm 6-08-46.
106	311355085241601	City of Dothan	Smith Well and Supply Co.	1953	820	18, 8	Ttu, Tnf, Tc	355.54	223 330	3-04-54 1-28-82	T	P	GSA No. 1-3, Dothan No. 12. Casing: 18 in from surface to 605 ft; 8 in from 525 to 610 ft and 670 to 780 ft; 8 in screen from 610 to 670 ft and 780 to 820 ft. Reported drawdown 56 ft after 8 hrs pumping 510 gpm 3-04-54.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
107	311404085290101	T. H. Whitfield	R. W. Williams	....	6007	...	...	270	...	....	..	..	GSA No. I-4. Oil Test Well 426. Data used for geologic and hydrologic control. Electric log in files of USGS.
108	311330085245901	City of Dothan	Layne-Central Co.	1951	754	18, 8	Ttu, Tnf, Tc	295.6	150 264 267	12-18-56 1-26-82 7-01-82	T	P	GSA No. I-6, Dothan No. 10. Casing: 18 in from surface to 558 ft; 8 in from 478 to 563 ft, 568 to 580 ft, 600 to 635 ft, and 660 to 714 ft; 8 in screen from 563 to 568 ft, 580 to 600 ft, 635 to 660 ft and 714 to 754 ft. Reported drawdown 73 ft after 8 hrs pumping 530 gpm 12-18-56.
109	311314085235601	City of Dothan	Layne-Central Co.	1955	325	16, 10	Tl, Tth	322.03	52 36.6	4-01-55 1-26-82	T	P	GSA No. I-8, Dothan No. 7. Casing: 16 in from surface to 132 ft; 8 in from 162 to 235 ft, 250 to 260 ft, and 275 to 285 ft; 10 in screen from 132 to 162 ft, 235 to 250 ft, 260 to 275 ft, and 285 to 325 ft. Reported drawdown 53 ft after pumping 584 ft 4-01-55.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
110	311231085235101	City of Dothan	Layne-Central Co.	1953	835	24, 18, 8	Ttu, Tnf, Tc	291.36	158 275	3-04-54 1-28-82	T	P	GSA No. I-11, Dothan No. 11. Casing: 24 in from surface to 95 ft; 18 in from 95 to 630 ft; 8 in from 550 to 635 ft and 725 to 805 ft; 8 in screen from 635 to 725 ft, and 805 to 835 ft. Reported drawdown 181 ft after 8 hrs pumping 520 gpm 3-04-54.
111	311218085242301	City of Dothan	Layne-Central Co.	1963	805	18, 8	Ttu, Tnf, Tc	282.65	163 252	2-20-64 2-01-82	T	P	GSA No. I-12, Dothan No. 16. Casing: 18 in from surface to 590 ft; 8 in from 510 to 595 ft, 675 to 685 ft; 8 in screen from 595 to 675 ft and 785 to 805 ft. Reported drawdown 78 ft after 1.5 hrs pumping 560 gpm 2-20-64. Electric logs available in the files of USGS.
112	311115085235001	City of Dothan	Layne-Central Co.	1973	751	18, 10	Ttu, Tnf	311.10	216 271 278	2-19-73 2-02-82 7-01-82	T	P	Dothan No. 21. Casing: 18 in from surface to 646 ft; 10 in from 576 to 651 ft; 10 in screen from 651 to 751 ft. Reported drawdown 94 ft after pumping 556 gpm 2-19-73. Electric logs available in the files of USGS.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
113	311338085334401	Fort Rucker Military Reservation	Emmett Hughes Drilling Co.	....	468	6	Tt, Ttu	319	69.9 70.4	12-02-81 11-04-82	S	M	GSA No. H-4, Toth Field. Casing: 6 in from surface to 200 ft; none below. Electric logs available in the files of USGS.
114	311348085390801	Fort Rucker Military Reservation	Smith Well and Supply Co.	1975	423	8, 4	Ttu	349	212 240 238.3	5-28-75 12-02-81 11-10-82	S	M	Allen Field. Casing: 8 in from surface to 350 ft; 4 in from 350 to 393 ft; 4 in screen from 393 to 423 ft. Reported drawdown 20 ft after 36 hrs pumping 50 gpm 5-28-75.
115	311258085352301	Wallace Grace	I. D. Griffin	1980	540	4	Ttu, Tnf	278	67.2 62.6	6-11-82 11-04-82	S	D	Casing: 4 in from surface to 300 ft; none below.
116	311538085532301	Battens Crossroads	Foy English	1968	812	6	Tc	350	183 220.0 222.0 223.0	4-29-68 1-06-82 6-29-82 11-15-82	S	P	Battens Crossroads No. 1. Casing: 6 in from surface to 714 ft; none below. Reported drawdown 15 ft after 24 hrs pumping 112 gpm 4-29-68.
117	311445085502401	Carson Brunson	John D. Hughes and Son	1977	650	6	Tc	286	168.4 164.6	2-18-82 11-16-82	S	Irr	Reportedly pumped 153 gpm in 1977.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
118	311404085524901	Jack Sherrer	.....	1977	...	4	...	302	58.0	2-18-82	S	S	
119	311247085522301	Frank Britt	J. M. Presley	1977	520	6	Tt, Th	280	60 58.4 63.4	7-13-77 2-18-82 11-15-82	S	Irr	Casing: 6 in from surface to 242 ft; none below. Reported drawdown 100 ft after 2 hrs pumping 125 gpm 7-13-77.
120	311515085572301	Conagra Inc.	Layne-Central Co.	1978	880	18	Tc, Kp	250	100 147	7-14-78 1-28-82	T	Ind	Conagra No. 2. Casing: 18 in from surface to 700 ft; none below. Reported drawdown 95 ft after 48 hrs pumping 750 gpm 7-14-78.
121	311516085574201	Conagra Inc.	Layne-Central Co.	1971	725	...	...	296	195 197.9	1-05-82 11-11-82	T	Ind	Conagra No. 1. Reportedly pumped 750 gpm 2-25-71.
122	321015085545001	Town of Coffee Springs	Layne-Central Co.	....	288	10, 6	Tl	260	92	1946	T	P	GSA No. J-2, Coffee Springs No. 1. Casing: 10 in from surface to 185 ft; 6 in from 86 to 192 ft and 222 to 268 ft; 6 in screen from 192 to 222 ft and 268 to 288 ft. Reportedly pumped 50 gpm in 1946.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
123	311000085543801	Town of Coffee Springs	Emmett Hughes Drilling Co.	1964	790	6, 4	Tnf	238	71.0 70.3	2-18-82 6-29-82	...	O	GSA No. J-4; abandoned well. Casing: 6 in from surface to 200 ft; 4 in from 200 to 750 ft; none below. Electric logs available in the files of USGS.
124	311030085491101	Town of Bellwood	Smith Well and Supply Co.	1979	560	8, 4	Ttu	259	121	5-29-79	T	P	Bellwood No. 1. Casing: 8 in from surface to 490 ft; 4 in from 477 to 507 ft and 527 to 540 ft; 4 in screen from 507 to 527 ft and 540 to 560 ft. Reported drawdown 134 ft after 1.12 hrs pumping 150 gpm 5-29-71.
125	310908085435601	Fort Rucker Military Reservation	Smith Well and Supply Co.	1975	351	8, 4	Tt	267	112 110	6-28-75 6-08-82	S	M	High Bluff No. 1. Casing: 8 in from surface to 295 ft; 4 in from 258 to 321 ft; 4 in screen from 321 to 351 ft. Reported drawdown 74 ft after pumping 50 gpm 6-28-75.

Table 1. Records of wells in the Fort Rucker area--Continued

Well No.	Well location (WATSTORE No.)	Owner	Driller	Year completed	Depth of well (ft)	Diameter of well (inches)	Water-bearing unit	Altitude of land surface (ft)	Water level: Above (+) or below land surface (ft)	Water level: Date of measurement	Method of lift	Use of water	Remarks
126	310821085320901	Town of Malvern	Powell Drilling Co.	1981	313	12, 8, 6, 4	Tl	320	85 77.4	3-20-81 10-14-82	T	P	Malvern No. 2. Casing: 12 in from surface to 211 ft; 8 in from 171 to 214 ft; 6 in from 214 to 215 ft, and 250 to 267 ft; 6 in screen from 215 to 250 ft, 267 to 293 ft and 4 in from 293 to 313 ft. Reported drawdown 108.5 ft after 24 hrs pumping 108 gpm 3-20-81.
127	310810085311101	Town of Malvern	Hughes Brothers Drilling Co.	1968	267	12, 6	Tl	290	46 48	5-04-68 10-14-82	J	P	Malvern No. 1. Casing: 12 in from surface to 179 ft, 6 in from 137 to 181 ft, 188 to 213 ft and 225 to 245 ft; 6 in screen from 181 to 188 ft, 213 to 225 ft and 245 to 267 ft.

Table 2.--Sample logs of wells in the Fort Rucker area

Well 10

Owner: Town of Ariton - Well 1 Driller: Gray Artesian Well Co.
Samples described by Randall Fleming, Geological Survey of Alabama

	Thickness (ft)	Depth (ft)
Tuscahoma Sand		
Sand, clear to grayish-orange, very fine to medium, subangular to subrounded, quartzose, glauconitic.	10	10
Sand, clear to grayish-orange, very fine to medium, with the finer fractions in abundance, subangular to subrounded, quartzose, glauconitic.	10	20
Sample missing.	10	30
Sand, grayish-orange, very fine to fine, subangular, quartzose, slightly glauconitic; clay, light gray, silty, micaceous, carbonaceous.	10	40
Sand, yellowish-gray, very fine to fine, subangular, quartzose, trace mica.	10	50
Sample missing.	10	60
Sand, clear to moderate pink, fine to medium, subangular to subrounded, quartzose, trace mica.	10	70
Sand, clear to moderate pink, fine to medium, subangular to subrounded, quartzose, trace mica.	10	80
Sand, clear to moderate pink, fine to coarse, subangular to subrounded, quartzose, trace mica.	10	90
Sand, light gray, coarse to very coarse, subrounded, quartzose; clay, light gray, silty micaceous, carbonaceous; limonitic ironstone, moderate red, sandy, clayey.	10	100
Sand, yellowish-gray, fine to coarse, subangular to subrounded, quartzose; clay, same; limonitic ironstone, pale orange, sandy.	10	110
Sand, light gray to grayish-yellow-green, fine to very coarse, angular to subrounded, glauconitic, grains with clay coating in part.	10	120
Sand, light gray to grayish-yellow-green, fine to very coarse, subangular to subrounded, quartzose, glauconitic, clay coatings on some grains.	10	130
Nanafalia Formation		
Sand, light gray, very fine to coarse, subangular to subrounded, quartzose; clay, light gray, silty, micaceous, carbonaceous; trace sandstone, white, calcareous; shell fragments present.	10	140
Sand, light gray, very fine to medium, subangular to subrounded, quartzose, trace glauconitic; clay same; shell fragments and few micro fossils.	10	150
Sand, same; clay, light gray to medium light gray, silty, micaceous, calcareous; claystone, light gray, sandy glauconitic, calcareous; shell fragments and micro fossils present.	10	160

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 10

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sample missing.	10	170
Sand, light gray, very fine to medium, subangular to subrounded, quartzose, slightly glauconitic; clay, same; shell fragments present.	20	190
Sand, light gray, very fine to medium, subangular to subrounded, quartzose, glauconitic, clay, same; shell fragments and micro fossils (Ostracods) present.	10	200
Sand light gray, very fine to medium, subangular to subrounded, quartzose; clay, medium gray, silty, micaceous, calcareous; clay, light gray, sandy, micaceous, calcareous; shell fragments present.	10	210
Sand, same; clay, light gray, sandy, micaceous, calcareous; clay, medium gray, same.	10	220
Sand, light gray, very fine to coarse, subangular to subrounded, quartzose, glauconitic, fossiliferous; clay, medium gray, silty, micaceous, calcareous; shell fragments and micro fossils.	10	230
Sand, same; marl, light gray, sandy, glauconitic, porous; clay, same; micro fossils and shell fragments present; Ostrea thirsae.	10	240
Sand, light gray, very fine to medium, angular to subrounded, quartzose, glauconitic; clay, medium gray, silty, micaceous, calcareous.	10	250
Sample missing.	20	270
Clayton Formation - Contact between 250-270		
Sand, yellowish-gray, very fine to coarse, subangular to subrounded, quartzose, glauconitic, fossiliferous; limestone, light gray, crystalline, fossiliferous, glauconitic in part; shell fragments and micro fossils.	10	280
Limestone, light gray, glauconitic, sandy, fossiliferous; sand, same.	10	290
Sample missing.	10	300
Sand, yellowish-gray, very fine to fine, subangular, quartzose, glauconitic; limestone, same.	10	310
Sand, yellowish-gray, very fine to fine, subangular, quartzose, glauconitic, fossiliferous; limestone, same in slightly increasing amounts; micro fossils and shell fragments present.	10	320
Sand, light gray, fine to coarse, subangular to subrounded, quartz, glauconitic, fossiliferous; limestone, same.	10	330
Sand, same; limestone, light gray, fossiliferous, sandy, glauconitic in part; shell fragments and micro fossils present.	10	340

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 10

	Thickness (ft)	Depth (ft)
Clayton Formation -(continued)		
Sand, very pale orange, very fine to medium, subangular to subrounded, quartzose, glauconitic; minor amounts of limestone, same.	20	360
Sand, very light gray, very fine to medium, subangular to subrounded, quartzose, trace glauconite and mica; limestone, light gray, sandy, glauconitic and micaceous in part, fossiliferous; micro fossils and shell fragments.	10	370
Sand, very light gray, very fine to medium, subangular to subrounded, quartzose; limestone, same.	10	380
Sand, very light gray, very fine to medium, angular to subrounded, quartzose, trace glauconitic and mica; small amount of limestone, same.	10	390
Sample with trace clay, medium gray, silty, micaceous.	20	410
Sand, very light gray, fine to coarse, subangular to subrounded, quartzose; limestone, same.	10	420
Sample missing.	10	430
Sand, light gray, very fine to coarse, angular to subrounded, quartzose, trace mica; limestone, light gray, sandy, fossiliferous.	10	440
Providence Sand		
Sample missing	10	450
Sand, same as above; clay, medium gray, silty, calcareous, micaceous; limestone, same.	10	460
Sand, light gray, fine to very coarse, subangular to subrounded, quartzose; clay, same; limestone, same.	10	470
Sand, yellowish-gray, very fine to medium, angular to subrounded, quartzose, micaceous; clay, same; limestone.	10	480
Sand, yellowish-gray, very fine to medium, angular to subrounded, quartzose, micaceous; limestone, same; clay, same.	10	490
Sample missing.	10	500
Sand, pale yellowish-orange, very fine to fine, angular to subangular, quartzose, micaceous.	10	510
Sample missing	10	520
Sand, light gray, very fine to medium, angular to subrounded, quartzose, feldspar fragments present; clay, medium gray to medium light gray, silty, micaceous, calcareous; limestone, same as above.	10	530
Sand, yellowish-gray, very fine to medium, angular to subrounded, quartzose, trace feldspar fragments; clay, same.	30	560
Sand, same; marl, light gray, sandy, micaceous, glauconitic, fossiliferous.	10	570

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 24

Owner: Town of Ozark - Well 1 Driller: Layne-Central Company

Samples described by Randall Fleming, Geological Survey of Alabama

	Thickness (ft)	Depth (ft)
Lisbon Formation		
Sand, moderate reddish-brown, very fine to coarse, angular to subrounded, quartzose, some grains with red clay coatings, fine grains in excess.	10	10
Sand, moderate reddish-orange, very fine to coarse, angular to subrounded, quartzose, grains with red clay coating, fine grains in excess.	10	20
Sand, moderate reddish-orange very fine to coarse, angular to rounded, quartzose, grains with red clay coating, fine grains in excess.	10	30
Sand, grayish-pink, very fine to coarse, angular to subrounded, quartzose, slight frosting, fine grains in excess; clay varicolored (orange to pink), silty to sandy.	10	40
Tallahatta Formation		
Sand, very pale orange, fine to coarse, subangular to rounded, quartzose, slight frosting in part, medium grains in excess.	10	50
Sand, very pale orange, fine to coarse, subangular to subrounded, quartzose, slight frosting in part, medium grains in excess.	10	60
Sand, very light gray, medium to very coarse, subangular to subrounded, quartzose, slight frosting, medium grains in excess.	10	70
Sand, very light gray, medium to very coarse, subangular to rounded, quartzose, slightly frosted, few grains in fine pebble size.	10	80
Sand, very light gray, medium to very coarse, subangular to rounded, quartzose, slightly frosted, few grains in pebble size.	2	82
Hatchetigbee Formation		
Clay, medium gray, silty, micaceous, carbonaceous; sand, very light gray, very fine to coarse, angular to subrounded, quartzose, trace glauconite; shell fragments present.	8	90
Clay, medium gray, silty, micaceous, carbonaceous; sand, same.	10	100
Clay, medium gray, silty, micaceous, carbonaceous.	10	110
Bashi Marl Member (of some authors)		
Marl, light olive-gray, glauconitic, sandy, fossiliferous; clay, light gray, silty, micaceous, glauconitic, fossiliferous; clay, light gray, silty, micaceous, glauconitic, fossiliferous; clay, light gray, silty, micaceous, glauconitic, fossiliferous, calcareous; sand, light gray, very fine to medium, angular to subangular, quartzose, extremely glauconitic; abundant shell fragments present.	10	120

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 24

	Thickness (ft)	Depth (ft)
Tuscahoma Sand		
Sand, yellowish-gray, very fine to coarse, subangular to subrounded, quartzose; marl, same; abundant shell fragments, badly weathered.	8	128
Sand, yellowish-gray, very fine to coarse, subangular to subrounded, quartzose; marl, same; abundant shell fragments, badly weathered.	12	140
Sand, light gray, very fine grained to coarse, angular to subrounded, quartzose, glauconitic, very fine grains in excess; clay, light olive-gray, silty, micaceous, carbonaceous.	20	160
Sand, very light gray, very fine to fine, angular, quartzose, glauconitic, micaceous; clay, light gray, silty, micaceous, carbonaceous; trace marl, same.	9	169
Sand, yellowish-gray, very fine to medium, angular to subrounded, slightly glauconitic, some grains frosted; clay, medium light gray, silty, micaceous, carbonaceous.	18	187
Clay, medium light gray, sandy to silty, micaceous, carbonaceous; sand, same.	13	200
Clay, medium light gray, sandy, micaceous, carbonaceous.	10	210
Sand, light gray, very fine to medium, angular to subrounded, quartzose, glauconitic (large-grained and a pale yellow-green color); clay, same.	4	214
Sand, light gray to moderate greenish-yellow, fine to coarse, subangular to rounded, quartzose, glauconitic; clay, same.	11	225
Sand, light gray to light greenish-gray, medium to coarse, subangular to subrounded, quartzose, glauconitic.	10	235
Nanafalia Formation		
Sand, same; marl, light gray, sandy, glauconitic; clay, medium light gray, silty, micaceous, carbonaceous.	10	245
Sand, pale yellowish-orange, fine to very coarse, subangular to rounded, quartzose, glauconitic; shell fragments present.	10	255
Sand, light gray to light greenish-gray, fine to medium, subangular to subrounded, quartzose, glauconitic, frosted in part.	20	275
No samples taken.	5	280
Sand, yellowish-gray, very fine to medium, subangular to subrounded, quartzose, glauconitic, micaceous, fossiliferous; Robulus sp.?	10	290
Sand, light gray to light greenish-gray, fine to coarse, subangular to subrounded, quartzose, glauconitic, fossiliferous, shell fragments and micro fossils.	10	300
Sand, light gray, very fine to medium, subangular, quartzose, glauconitic; marl, light gray, sandy, micaceous, fossiliferous.	10	310
Clay, medium light gray, silty, micaceous, calcareous; marl, same; sand, same.	10	320

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 24

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sand, yellowish-gray, very fine to medium, subangular, quartzose, fossiliferous; clay, same; shell fragments and micro fossils (ostracods).	10	330
Sand, same; clay, medium light gray, silty to sandy, micaceous, calcareous.	10	340
Sand, yellowish-gray, fine to coarse, subangular to subrounded, quartzose, frosted in part; clay, same.	10	350
Clayton Formation		
Limestone, very light gray, silty, fossiliferous; sand, light gray, coarse to very coarse, subrounded, quartzose, frosted; clay, same.	10	360
Limestone, same; light gray, fine to coarse, subangular to subrounded, quartzose, frosted.	10	370
Limestone, very light gray, silty, fossiliferous; sand, yellowish gray, very fine to coarse, subangular to subrounded, quartzose, frosted in part.	19	389
Limestone, very light gray, porous, fossiliferous, silty.	79	468
Limestone, very light gray, silty, fossiliferous; trace sand.	10	478
Limestone, same; sand, light gray, medium to coarse, subrounded, quartzose, micaceous, frosted in part.	14	492
Limestone, same; sand, light gray, medium to coarse, subangular to subrounded, quartzose, frosted in part.	8	500
Providence Sand		
Sand, light gray, fine to coarse, subangular to subrounded, quartzose, micaceous, frosted; limestone, same.	8	508
Sand, yellowish-gray, fine to coarse, subangular to subrounded, quartzose, frosted; limestone, same.	12	520
Sand, light gray, very fine to medium, angular to subrounded, quartzose, slight frosting; trace limestone, same.	10	530
No sample.	9	539
Sand, very pale orange, very fine to fine, subangular, quartzose, trace feldspar fragments.	1	540
Sand, very pale orange, very fine to fine, subangular, quartzose, micaceous, feldspar fragments; trace limestone.	10	550
Sand, light gray, very fine to medium, subangular to subrounded, quartzose, micaceous, frosted; limestone, very light gray, micaceous, fossiliferous.	10	560
Limestone, very light gray, micaceous, sandy, fossiliferous; sand, same.	21	581
Sand, light gray, very fine to medium, angular to subrounded, quartzose, slightly fossiliferous; limestone, same.	9	590

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 24

	Thickness (ft)	Depth (ft)
Providence Sand (continued)		
Clay, medium gray, silty, micaceous, calcareous; sand, same.	20	610
Sand, light gray, very fine to coarse, subangular to rounded, quartzose, micaceous; clay, same; trace limestone.	20	630
Clay, light gray, silty, micaceous, carbonaceous, calcareous; sand, same.	30	660
Clay, same; sand, light gray, very fine to coarse, angular to subrounded, quartzose, micaceous.	20	680
Limestone, very light gray, sandy, fossiliferous; sand, yellowish-gray, medium to very coarse, subangular to rounded, quartzose, feldspar fragments.	20	700
Ripley Formation		
Sand, light gray to grayish-orange, fine to coarse, subangular to subrounded, quartzose, feldspar fragments present, micaceous; limestone, same.	20	720
No sample.	10	730
Sand, same; limestone, yellowish-gray, sandy, micaceous.	20	750
Sand, light gray to pale yellowish-orange, fine to very coarse, subangular to rounded, quartzose, feldspar fragments; trace limestone, same.	26	776
Sand, light gray to grayish-orange, fine to coarse, subangular to rounded, quartzose, feldspar fragments present, slight micaceous; trace limestone, same.	25	801
Sand, very pale orange, very fine to fine, angular to subangular, quartzose, micaceous.	22	823
Sand, very pale orange, very fine to fine, angular to subangular, quartzose, micaceous, few ostracods.	57	880

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 34

Owner: Alabama Highway Department
U.S. Highway 231 Rest Area
Driller: Alabama Highway Department
Samples described by John C. Scott

	Thickness (ft)	Depth (ft)
Lisbon Formation		
Sand, yellowish-orange to pale red-purple, medium to very coarse, silty, clayey; pale red-purple, sandy clay.	10	10
Sand, moderate orange-pink, medium to very coarse, silty; pale red-purple, sandy clay.	10	20
Sand, very pale orange, medium to very coarse with granules and pebbles.	10	30
Tallahatta and Hatchetigbee Formations, undifferentiated		
Clay, pale red-purple, sandy, silty; very pale orange, medium to very coarse, silty sand; sparse fossil fragments.	10	40
Clay, pale red-purple to reddish-brown, silty, sandy, sparsely micaceous; yellowish-orange, medium to very coarse, silty sand.	10	50
Sandy, yellowish-orange, medium to very coarse, silty; pale red-purple, sandy clay.	10	60
Sand, grayish-orange, medium to very coarse, sparsely glauconitic, silty, moderate red to grayish-orange-pink, sandy clay.	10	70
Sand, yellowish-gray, medium to very coarse, sparsely glauconitic; moderate red and dark olive-gray, sandy clay; sparse fossil fragments.	10	80
Limestone, yellowish-gray, very sandy, sparsely glauconitic; yellowish gray, fine to coarse, silty, clayey sand.	10	90
Clay, olive-gray, finely sandy, silty, sparsely micaceous.	20	110
Sand, greenish-gray, fine to coarse, very glauconitic, clayey, silty; light gray calcareous glauconitic sandstone.	10	120
Sandstone, yellowish-gray, calcareous, glauconitic, sparsely fossiliferous; olive-gray, silty clay.	10	130
Tuscahoma Sand		
Clay, olive-gray, sandy, glauconitic; yellowish gray calcareous, glauconitic, sandstone.	10	140
Sand, olive-gray, medium to coarse, silty, fossiliferous, glauconitic; olive-gray, silty, sandy clay; yellowish-gray calcareous, glauconitic sandstone. Fossil fragments common.	10	150
Clay, olive-gray, sandy, silty, sparsely glauconitic; yellowish-gray sparsely glauconitic, calcareous, sandstone.	20	170
Clay, medium light-gray, finely sandy, silty, micaceous, carbonaceous.	40	210

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 34	Thickness (ft)	Depth (ft)
Tuscahoma Sand (continued)		
Clay, light olive-gray, sandy, silty, micaceous, carbonaceous, sparsely glauconitic.	10	220
Sand, light gray, medium to very coarse, silty, sparsely glauconitic; light olive-gray, micaceous, carbonaceous, sandy clay.	20	240
Sand, light gray, medium to very coarse, sparsely glauconitic, silty; light gray calcareous fossiliferous, sandstone; fossil fragments common to abundant.	30	270

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 35

Owner: U.S. Geological Survey Driller: Smith Well and Supply Company
Dale County Observation Well
Samples described by Jack T. Kidd, Geological Survey of Alabama

	Thickness (ft)	Depth (ft)
Quaternary terrace deposits		
Sand, grayish-orange, fine to very coarse, subangular to subrounded, consists of predominantly clear quartz coated with grayish-orange clay.	10	10
Sand, same, increase in coarse to very coarse, some granules; several fragments of parent material present which consist of clayey sand, composed of light gray and light brown clay matrix with fine to very coarse sand.	10	20
Sand and gravel, very pale orange, medium sand to very fine gravel, quartzose, subangular to subrounded, some grayish-orange clay staining; heavy minerals common, including kyanite, and unidentified black and amber minerals.	10	30
Hatchetigbee Formation		
Clayey sand or sandy clay, very glauconitic, consists of moderate reddish-brown clay, same very pale orange and grayish-orange-pink clay streaks, and sand, fine to medium, some coarse, subangular.	10	40
Clayey sand, sandy clay, and clay, predominantly grayish-orange glauconitic clayey sand, fine to medium, with lesser amounts of very pale orange clay, and grayish-red sandy clay.	10	50
Tuscahoma Sand		
Sand, grayish-orange, fine to very coarse, subangular to subrounded, glauconitic, quartzose, some pebbles; sandy clay and clayey sand, grayish-orange fine to very coarse, glauconite; small amount of clay, grayish-orange and very light gray.	10	60
Sand, same; clay, very light gray, very finely micaceous; clay, dark yellowish-orange, fine sandy, glauconitic.	10	70
Clay, light gray, some orange laminae, very finely micaceous, some fragments sandy due to apparent mixing and coating during drilling; sand, grayish-orange, fine to very coarse, some pebbles, subangular to subrounded, quartzose, glauconitic.	10	80
Clay, light gray, very finely micaceous; clayey silty sand, grayish-orange, very fine to fine, glauconitic, micaceous; sand, light gray to grayish-orange, fine to very coarse, some pebbles, subangular to subrounded.	10	90
Silty clay and siltstone, medium light gray, very micaceous, glauconitic, carbonaceous.	10	100
Same, predominately silty clay.	10	110

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 35

	Thickness (ft)	Depth (ft)
Tuscahoma Sand (continued)		
Silty clay and siltstone, same.	20	130
Silty shale and siltstone, same; sand, light gray to greenish-gray, coarse to very coarse, subangular to subrounded, quartzose, large glauconite grains, trace of pyrite.	10	140
Sand, greenish-gray to light gray, coarse to very coarse, subangular to subrounded, quartzose, very glauconitic, contains shell fragments (oysters?), grades into sandy limestone; few large fragments of claystone, light gray; small Pecten noted.	10	150
Sandy limestone, very light gray to yellowish-gray composed of sand, clear to greenish-gray, medium to very coarse, subangular to subrounded, quartzose, with glauconite, shell fragments and matrix of indurated white lime and lesser amounts of light olive-gray less indurated marly matrix; large amounts of loose sand, assumed to be derived from sandy limestone.	10	160
Sandy limestone and sand, same, predominantly sandy limestone with light olive-gray marly matrix; shell fragments.	10	170
Sandy limestone with white matrix, same; sand, same; shell fragments.	10	180
Sandy limestone, same; sand, same; shell fragments, trace of pyrite.	10	190
Sand, clear to greenish-gray, medium to very coarse, subangular to subrounded, quartzose, very glauconitic, small percentage of sand cemented by marly matrix and parent rock for sand appears to be marly sand; small amount of white sandy limestone; trace of moderate reddish-brown sandy clay; shell fragments, forams.	10	200
Sandy, silty marl, glauconitic, very calcareous, grades into sandstone, light gray, very fine to medium, some coarse; small amount of white sandy marl; shell fragments.	10	210
Sand, light gray, to greenish-gray, very fine to very coarse, subangular to subrounded, quartzose, silty calcareous matrix in part; shell fragments, fish teeth, phosphate, glauconite.	10	220
Silty sand, light gray, very fine to medium, some coarse, glauconitic, micaceous, calcareous in part, grades into silty sandy marl in part; shell fragments, fish teeth, phosphate glauconite.	10	230
Silty sand, medium light gray, very fine to fine, some medium to coarse, subangular to subrounded, quartzose, micaceous, glauconitic, very silty, some fragments slightly calcareous due to scattered shell fragments.	20	250

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 35

	Thickness (ft)	Depth (ft)
Tuscahoma Sand (continued)		
Calcareous siltstone and/or silty sandstone, light gray, composed of silt and very fine clear quartz sand, calcareous matrix, some scattered fine to coarse sand, shell fragments.	10	260
Nanafalia Formation		
Sandy lime-sandy marl-calcareous sand, light gray, composed of clear very fine to very coarse quartz in indurated lime matrix and less indurated marly matrix; numerous shell fragments and one shark tooth noted.	10	270
Calcareous sand, sandy lime, sandy marl, light gray, composed of clear to light gray to greenish-gray, very fine to very coarse quartz sand, in lime or marl matrix; numerous shell fragments; Nummulites.	10	280
Sandy lime, calcareous sand, medium light gray, glauconitic, micaceous, fossiliferous, sand is colorless to light greenish gray, very fine to very coarse, subangular to subrounded, quartzose; shell fragments.	10	290
Sand, colorless to light gray, coarse to very coarse; subangular to subrounded, quartzose; trace of light greenish-gray sand; trace of pyrite.	10	300
Sand and gravel, light gray, coarse sand to very fine pebbles, predominantly subrounded, quartzose, most grains have small amount of dark gray clay coating, some grains coated or cemented with pyrite; shell fragments; small amounts of various lithologies probably from cavings.	10	310
Lignitic sand, brownish-black to brownish-gray, very fine to very coarse, subangular to subrounded, pyritic, sand present as coarse dark coated loose grains and as very fine to fine grains in a lignitic matrix.	10	320
Same, some fragments grade into silty and very fine sandy lignite; large flakes of muscovite.	10	330
Same.	10	340
Sandy and clayey silt, medium gray, fine to very coarse sandy, very micaceous with large flakes of muscovite, glauconitic.	10	350
Silt, medium dark gray, clayey, very micaceous with large muscovite flakes, very fine to fine sandy, some scattered coarser grains, carbonaceous in part.	20	370
Lignitic sandy siltstone, dark gray to brownish-black, consists of siltstone in a lignite or carbonaceous matrix with abundant very fine to very coarse subangular to subrounded quartz sand, abundant muscovite, few shell fragments.	10	380

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 35

	Thickness (ft)	Depth (ft)
Clayton Formation		
Chalky limestone, very light gray to yellowish-gray, bioclastic.	10	390
Carbonaceous silty sand, medium gray, very fine to fine, some medium to very coarse, subangular to subrounded, various amounts of pyrite, muscovite, glauconite, carbonized wood; small amount of shale, brownish-gray.	10	400
Chalky limestone, very light gray to yellowish-gray, fine to coarse sandy, fossiliferous; sand, light gray, very fine to medium, some coarse to very coarse, subangular to subrounded, quartzose, glauconitic, micaceous; trace of silty sandstone.	10	410
Chalky limestone, very light gray, bioclastic.	10	420
Chalky limestone, same and sandy in part.	10	430
Sand, colorless to light gray, coarse to very coarse, subangular to subrounded, quartzose; chalky limestone, same; silty carbonaceous shale, probably cavings.	10	440
Sand, same.	10	450
Sandy, limestone, pinkish gray to very light gray, contains fine to coarse colorless quartz sand, fossiliferous.	10	460
Same.	10	470
Sand, colorless to light gray, medium to very coarse, subangular to subrounded, quartzose, some grains coated with white chalky material indicating the sand was derived from a calcareous sandstone or a rotten sandy chalk; sandy limestone same as above; trace of glauconite; fossils - gastropod, echinoid spine, forams.	10	480
Sandy, limestone, very light gray (fresh), most fragments coated with light olive-gray clay, probably during drilling, otherwise same as sandy limestone above.	10	490
Providence Sand		
Silty sandy chalk, light olive-gray, sand is fine to coarse, subangular to subrounded quartz; sandy limestone, same as above; glauconite, gastropod, forams; abundant sand, probably derived from chalk and limestone, colorless with trace of grayish orange, fine to very coarse.	10	500
Sandy limestone, very light gray, glauconitic in part, fossiliferous, sand is colorless to light gray, fine to coarse, subangular to subrounded; abundant sand, probably derived from sandy limestone, same; silty chalk, same; fossils - bryozoans, shell fragments.	10	510
Sandy limestone, same, grades into calcareous sandstone, and sandy silty chalk, very micaceous, glauconitic; abundant sand, colorless to light gray, trace of grayish-orange, fine to very coarse, subangular to subrounded, quartzose.	10	520

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 35	Thickness (ft)	Depth (ft)
Providence Sand (continued)		
Sandy limestone, same; abundant sand, same; trace of clay, moderate red.	10	530
Sandy limestone, same; sand, same, slight increase in yellowish-gray grains, but still only a very small percentage of total sand; trace of sandy clay - clayey sand, dark yellowish-orange, very fine to fine.	10	540
Sandy limestone, same; sand, same; trace of clay, moderate red, fine sandy (only 2 or 3 fragments present).	17	557

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 63

Owner: Meadow Lawn Cemetery Driller: Burrell Drilling Company

Samples described by Eleanor T. Caldwell

	Thickness (ft)	Depth (ft)
Iron stained sand.	90	90
Same; red and pale green clay.	45	135
Fine to coarse, gray, glauconitic sand.	44	179
Fine to very coarse, gray, glauconitic, argillaceous sand.	24	203
Fine to coarse, green, glauconitic sand.	23	226
Same; white, hard, fossiliferous, sandy limestone; gray, soft, micaceous, glauconitic, silty marl; trace of dark gray, soft, micaceous, carbonaceous, noncalcareous shale.	23	249
Same.	47	296
Fine to coarse, gray, glauconitic, shelly sand; dark gray shale as above; fragments of gray, hard, fossiliferous, glauconitic, very sandy limestone.	46	342
Dark gray, soft, sticky, micaceous, carbonaceous, non-calcareous shale; sand as above.	15	457
Mostly shale as above; trace of green, coarse, glauconitic sand.	23	480
Fine to coarse, green, glauconitic sand; rare shell fragments.	23	503
Same; fragments of white, hard, slightly glauconitic, very sandy limestone.	68	571
Mostly sand as above; some coarse orange sand; abundant shell fragments.	23	594
Fine to coarse, clayey and limey, fossiliferous sand; common shell fragments; corded Camerina common.	46	640
White, porous, coquinoid limestone; calcareous algae; shell fragments.	163	803

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 70

Owner: U.S. Army - Fort Rucker Well 9 Driller: Layne-Central Company
Samples described by John C. Scott

	Thickness (ft)	Depth (ft)
Tallahatta and Hatchetigbee Formations		
Sand, dark yellowish-orange, medium to very coarse, angular to subangular, silty.	10	36
Sand, dark yellowish-orange, medium to very coarse, angular to subangular, silty, sparsely glauconitic. (Glauconite is weathered to pale green).	28	64
Sand, yellowish-gray, fine to coarse, angular to subangular, glauconitic, slightly silty. Light olive-gray finely micaceous clay.	31	95
Sand, yellowish-brown to grayish-brown, medium to very coarse, glauconitic, silty. Fossil fragments and microfossils common. Medium gray sandy, silty glauconitic, micaceous clay. Most sand grains are coated with iron oxide.	22	117
Clay, light olive-gray, sandy, silty, glauconitic, micaceous. Fossils and fossil fragments scarce.	23	140
Sand and calcareous sandstone, light olive-gray, medium to coarse, very glauconitic, fossiliferous, fossils and fragments common. Light olive-gray calcareous sandy clay. Calcareous sandstone is cemented with soft limestone.	22	162
Tuscahoma Sand (160 feet from E-log)		
Clay, light olive-gray, sandy, calcareous, glauconitic, very fossiliferous, lignitic, light gray calcareous sandstone.	22	184
Clay, light olive-gray, slightly sandy, micaceous, sparsely lignitic. A few fragments of white limestone.	46	230
Clay, olive-gray, silty, micaceous, sparsely lignitic.	22	252
Sand, greenish-gray, medium to coarse, very glauconitic. Olive-gray, silty micaceous clay; a few fragments of calcareous sandstone.	22	274
Sand, greenish-gray, medium to coarse, glauconitic, micaceous, sparsely fossiliferous. Yellowish-gray to white calcareous sandstone. Olive-gray silty clay. Fossil fragments common.	23	297
Nanafalia Formation (300 feet from E-log)		
Sand, greenish-gray, medium to coarse, glauconitic, sparsely pyritic; some grains stained and coated with iron. Pale orange to white glauconitic mudstone (siltstone). Olive-gray silty clay. Top Tnf (?).	23	320
Sand, greenish-gray, fine to medium, glauconitic, sparsely micaceous. Light olive-gray silty clay.	23	343

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 70

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sandstone, light greenish-gray, calcareous, fossiliferous; microfossils and fossil fragments common to abundant. Olive gray sandy clay. Greenish-gray coarse to very coarse silty sand. Large sand grains are mostly subrounded.	45	388
Calcareous sandstone and sand same as above except fossils and fragments more abundant. Odontogryphaea thirsae, corals and microfossils (O. thirsae zone [?]).	23	411
Sand, greenish-gray, mostly medium to coarse, silty glauconitic, fossiliferous, lignitic. Light gray to white calcareous sandstone.	22	433
Clayton Formation (432 feet from E-log)		
Limestone, very pale orange to white, slightly sandy, very fossiliferous (fossils comprise more than half of limestone). Light greenish gray calcareous sandstone. Olive-gray silty lignitic clay.	23	456
Limestone, yellowish-gray, very fossiliferous.	23	479
Limestone, same as above except composed almost entirely of fossils and fossil fragments.	23	502
Limestone, yellowish-gray to white, very fossiliferous.	23	525
Limestone, same as above except slightly darker yellowish-gray.	46	571
Limestone, yellowish-gray to light olive-gray, very fossiliferous, coarsely sandy. Light greenish-gray to white calcareous sandstone.	22	593
Providence Sand (595 feet from E-log)		
Sand, light greenish-gray to yellowish-gray, medium to very coarse, sparsely glauconitic, fossiliferous. Yellowish-gray to white calcareous sandstone.	23	616
Sand, yellowish-gray, medium to very coarse, sparsely glauconitic and fossiliferous (glauconite and fossils may be from above). A few fragments of pyrite.	23	639
Sand, yellowish-gray, mostly medium to coarse, sparsely glauconitic and fossiliferous. Light gray to white calcareous sandstone.	22	661
Limestone, yellowish-gray to light olive-gray, sandy, fossiliferous. Very light gray to white calcareous sandstone.	22	683
Sand, yellowish-gray to white, coarse to very coarse, calcareous, fossiliferous. Light gray to white calcareous sandstone.	23	706
Sand, yellowish-gray, medium to very coarse, fossiliferous (corals abundant). Light gray to white calcareous sandstone. Yellowish-gray to yellowish-orange silty sand mottled and stained with iron.	22	728

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 70

	Thickness (ft)	Depth (ft)
Providence Sand (continued)		
Clay, olive-gray, sandy, silty, fossiliferous, carbonaceous calcareous. Light gray to white calcareous sandstone.	23	751
Clay, light olive-gray, sandy, fossiliferous, calcareous, silty.	22	773
Sand, yellowish-gray, mostly medium to coarse, silty, calcareous, sparsely fossiliferous. Light gray to white calcareous sandstone.	23	796
Ripley Formation (810 feet from E-log)		
Clay, yellowish-gray to light olive-gray, sandy, silty, calcareous. Light greenish-gray, medium to coarse silty sand.	23	819
Sandstone, light gray to white, calcareous, pyritic, fossiliferous. Light gray to white, medium to very coarse silty sand. Greenish-gray calcareous sandstone.	45	864
Sand, light greenish-gray, fine to medium, silty, micaceous, carbonaceous (calcareous matrix). Light gray to white calcareous sandstone. A few fossil fragments.	23	887
Sandstone, light gray to white, calcareous, fossiliferous. Light greenish gray, fine to medium micaceous, silty sand. Fossil fragments common.	22	909
Sand, greenish-gray, fine to medium, silty, micaceous. Greenish gray sandy, micaceous clay. Light gray to white calcareous sandstone.	23	932
Sample missing	23	955
Clay, greenish-gray to olive-gray, finely sandy, silty, micaceous, carbonaceous, calcareous.	67	1022
Clay, greenish-gray to olive-gray, finely sandy, silty, micaceous, carbonaceous, calcareous. A few microfossils and fossil fragments.	46	1068
Sand, greenish-gray, fine to medium, finely glauconitic, silty. Greenish-gray, silty carbonaceous clay. Light gray to white calcareous sandstone.	23	1091
Clay, light olive-gray, silty, finely sandy, micaceous, calcareous. Greenish-gray, fine, silty sand.	45	1136
Clay, light olive-gray, silty, calcareous, carbonaceous, micaceous.	23	1159

Table 2.--Sample logs of wells in the Fort Rucker Area--Continued

Well 72

Owner: U.S. Army - Fort Rucker Well 8 Driller: Layne-Central Company
Samples described by Charles W. Copeland, Geological Survey of Alabama;
formation boundaries determined by John C. Scott, U.S. Geological Survey

	Thickness (ft)	Depth (ft)
Tallahatta and Hatchetigbee Formations		
Sand, very pale orange, fine to coarse, subangular to subrounded, quartzose with weathered glauconite and traces of kyanite.	40	40
Sand, very pale orange, fine to very coarse, subangular to subrounded, quartzose, glauconitic with minor amounts of medium light gray, carbonaceous clay and yellowish-gray to grayish-green, calcareous, glauconitic, marl or claystone.	22	62
Limestone, very light gray to light greenish-gray, sandy, glauconitic, fossiliferous; sand, very light gray, fine to medium, subangular to subrounded, quartzose, glauconitic; fossils, mainly fragments of pelecypod shells and bryozoans.	29	91
Tuscahoma Sand		
Clay, medium light gray, silty, slightly micaceous and carbonaceous; sand, very light gray, fine to medium, subangular to subrounded, quartzose, glauconitic.	30	121
Clay and sand, same.	48	169
Clay, medium light gray, silty, micaceous, carbonaceous with limestone from above; few pieces of indurated, gray, fine grained, calcareous, sandstone.	23	192
Sand, very light gray to light greenish-gray, medium to coarse, subangular to subrounded, quartzose, glauconitic; trace of medium light gray, carbonaceous clay.	23	215
Sand, some with coating of yellowish to gray clay on grains.	23	238
Sand, same, grains now mostly clean without clay coating.	44	282
Nanafalia Formation (Top at 260 feet from E-log)		
Sand, some with minor amounts of medium gray clay and white, finely sandy, glauconitic, limestone.	23	305
Sand, very light gray, fine to medium with some coarse, subangular to subrounded, quartzose, glauconitic, fossiliferous; trace gray clay; fossils, mainly fragments of oyster shells.	23	328
Sand, same, abundantly fossiliferous with white, finely sandy, argillaceous limestone; few forams, ostracods, abundant oyster shell fragments.	23	351
Sand, very light gray, medium to coarse, subangular to subrounded, quartzose, fossiliferous with glauconite trace; abundant oyster shell fragments, echinoid fragments and large forams, Nummulities.	22	373

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 72

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sand, very light gray and yellowish-gray, medium to coarse, subangular to subrounded, quartzose, fossiliferous; limestone, white, sandy, fossiliferous; shell debris and microfossils.	23	396
Clayton Formation		
Limestone, white, sandy in part, coquinoidal in part, abundantly fossiliferous; mainly molds and casts.	23	419
Limestone, white, mainly coquinoidal.	45	464
Limestone, same; bryozoans abundant.	23	487
Limestone, same and limestone, light olive-gray, porous with saccharoidal texture and appearance.	23	510
Limestone, white, mainly coquinoidal.	22	532
Sand, very light gray to white, fine to coarse, subangular to subrounded, quartzose, fossiliferous, slightly glauconitic; limestone, white, coquinoidal; few ostracods and benthonic foraminifers.	23	555
Sand, same, calcite cemented in part; limestone, coquinoidal, same and some white, medium to coarse, sandy limestone.	23	578
Providence Sand (Top at 570 feet from E-log)		
Sand, white, medium to coarse, quartzose; limestone, sandy and coquinoidal, same.	23	601
Limestone, white, medium to coarsely sandy, fossiliferous; limestone, coquinoidal, same, in lesser amounts; sand, same.	22	623
Limestone, white, coquinoidal in part, fossiliferous, and limestone, very light gray to white, medium to coarse sandy, porous, leached in part, with saccharoidal appearance; sand, medium to coarse, subangular to subrounded, quartzose; pyrite trace; few leached benthonic foraminifers and ostracods.	23	646
Limestone, coquinoidal and sandy, same; sand, same.	23	669
Limestone, same, slightly glauconitic; sand, same, some grains yellowish-gray; limestone, light gray, very finely sandy and silty; trace medium gray, finely sandy, slightly calcareous clay.	23	692
Limestone, same with clay, medium gray, finely sandy, slightly calcareous; few benthonic foraminifers.	22	714
Sand, very light gray to yellowish-gray, medium to very coarse, subangular to subrounded, poorly sorted, quartzose; clay, medium gray to yellowish-gray, finely sandy, limestones from above.	23	737

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 72

	Thickness (ft)	Depth (ft)
Providence Sand (continued)		
Limestone, white to yellowish-gray, medium to coarsely sandy, fossiliferous; sand, medium to very coarse, same; shell fragments.	23	760
Sand, very light gray to yellowish-gray, subangular to subrounded, quartzose, clayey; limestone, very light gray, silty, very finely sandy with trace of glauconite; clay is medium light gray, very finely sandy, calcareous.	23	783
Ripley Formation (Top at 775 feet from E-log)		
Sand, very light gray to white, medium, subangular to subrounded, quartzose with glauconite trace.	23	806
Sand, very light gray to white, fine to medium, subangular to subrounded, quartzose with glauconite and mica trace; limestone, white, finely sand; trace medium gray clay.	22	828
Sand, same; limestone, same in minor amounts; clay trace, same.	23	851
Sand, very light gray to white, fine to medium, subangular to subrounded, quartzose, slightly glauconitic and micaceous; micas are muscovite and chlorite.	22	873
Sand, same with muscovite, chlorite, and possible biotite micas; limestone, white, finely sandy; clay, medium gray, silty, in trace amounts.	23	896
Sand, very light gray to white, subangular to subrounded, quartzose, micaceous, slightly glauconitic, fossiliferous; few benthonic foraminifers; clay, medium light gray to yellowish-gray, finely sandy.	23	919
Sand, very light gray to white, subangular to subrounded, quartzose, micaceous (mainly muscovite), slightly glauconitic.	22	941
Sand, same with light gray, finely sandy limestone and pyrite.	23	964
Sand, same with light gray, finely sandy limestone, pyrite and abundant fragments of oyster shells.	22	986
Sand, same with light gray, finely sandy limestone and pyrite.	23	1009
Sand, same and sandy limestone, same; limestone and sand percentage in the chips is about equal.	23	1032
Sand, same and sandy limestone or limey sandstone, same; benthonic foraminifers and ostracods.	23	1055
Sand, same and light gray, finely sandy, micaceous, calcareous clay; ostracods.	22	1077
Sand, same and light gray, finely sandy, micaceous, calcareous, fossiliferous, chalky clay or calcareous clay; calcareous and arenaceous benthonic foraminifers and ostracods.	23	1100

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 76

Owner: U.S. Army - Ft Rucker Cairns Airfield Driller: Layne-Central Company
Samples described by Neil E. Moss, Geological Survey of Alabama; formation boundaries determined by John C. Scott, U.S. Geological Survey.

	Thickness (ft)	Depth (ft)
Lisbon Formation		
Sand, very light gray to very pale orange, fine to coarse, subangular to subrounded, quartzose, micaceous with abundant clay, grayish-orange and light red.	10	10
Sand, white to pale yellowish-orange, coarse to very coarse, some granules, subangular to subrounded, quartzose.	10	20
Sand, white to moderate reddish-orange, fine to very coarse, subangular to subrounded, quartzose, with some clay, moderate reddish orange.	14	34
Clay, moderate reddish-orange, finely micaceous, with sand, very light gray, fine to coarse, subangular to subrounded, quartzose.	10	44
Sand, same, with clay, same.	10	54
Sand, white to very light gray, some moderate reddish orange, medium to very coarse, subangular to rounded, quartzose, with traces of clay, same and glauconite.	9	63
Sand, same, fine to very coarse, with clay, moderate reddish-orange and light red.	29	92
Tallahatta and Hatchetigbee Formations		
Sand, white to very light gray to grayish-yellow to pale yellowish-green, fine to very coarse, subangular to subrounded, quartzose, glauconitic, with limestone, very light to yellowish-gray, very finely crystalline, clay, yellowish to light olive-gray, and fragments of pelecypods, gastropods, and echinoderms.	32	124
Sand, same, except with limestone, pale yellowish-orange to very light gray.	20	144
Shell fragments, pelecypod, gastropod, bryozoan, and echinoderm, with glauconite, and trace of sand.	11	155
Clay, medium to light olive-gray, finely micaceous, glauconitic, carbonaceous.	10	165
Tuscahoma Sand (top at 186 feet from E-log)		
Clay, same, except light olive to olive-gray	41	206
Clay, same, light olive-gray	11	217
Sand, white to yellowish-gray, fine to very coarse, subangular to subrounded, quartzose, glauconitic, with limestone, yellowish-gray, very finely crystalline, clay, same, and fragments of gastropods, pelecypods, and echinoderms.	10	227

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 76

	Thickness (ft)	Depth (ft)
Tuscahoma Sand (continued)		
Sand, very light to yellowish-gray, fine, subangular to subrounded, quartzose, glauconitic, micaceous, with clay, same.	21	248
Clay, light olive-gray, some moderate reddish-orange, micaceous, carbonaceous, glauconitic, sandy, fossiliferous, foraminifera, trace shell fragments.	20	268
Clay, light olive-gray, micaceous, glauconitic, slightly sandy, with foraminifera.	21	289
Sand, very light gray to pale olive, medium to very coarse, subangular to subrounded, quartzose, glauconitic with trace clay and shell fragments.	22	311
Sand, same, with clay light greenish-gray and moderate reddish-orange.	10	321
Sand, same.	10	331
Sand, same, medium.	11	342
Sand, same.	42	384
Nanafalia Formation (Top at 378 feet from E-log)		
Sand, same, with limestone, very light to yellowish-gray, very finely crystalline, fossiliferous, foraminifera, fragments of pelecypods, gastropods, and echinoderms.	20	404
Sand, very light gray to yellowish-gray, fine to coarse, subangular to subrounded, quartzose, glauconitic, micaceous, with abundant clay, light olive gray, and foraminifera.	10	414
Sand, very light gray, mostly fine, some medium to coarse grained, subangular to subrounded, quartzose, glauconitic, micaceous, with abundant clay, same, and foraminifera.	10	424
Sand, same, trace clay, with fragments of pelecypods, gastropods, and echinoderms, and trace limestone, very light gray, very finely crystalline.	10	434
Sand, same as 424-434, except very light to yellowish gray, fine to very coarse.	31	465
Sand, very light to yellowish-gray, fine to very coarse, subangular to subrounded, quartzose, glauconitic, with clay, light olive-gray, carbonaceous, some moderate reddish orange and shell fragments and foraminifera.	10	475
Sand, white to yellowish-gray, medium to very coarse, subangular to subrounded, quartzose, slightly glauconitic, with limestone, very light gray, very finely crystalline, trace shell fragments, and trace foraminifera.	19	496

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 76

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sand, same, with abundant clay, light olive to light brownish-gray, carbonaceous, micaceous.	10	506
Sand, white to yellowish-gray, some pale yellowish-orange, medium to very coarse, subangular to subrounded, quartzose, slightly glauconitic, with fragments of gastropods, bryozoans, pelecypods, and echinoderms.	10	516
Clayton Formation (By E-log at 512 ft; by samples at 516 ft)		
Limestone, yellowish-gray to pale orange, very finely crystalline, sandy, slightly glauconitic, with bryozoan, pelecypod, gastropod, and echinoderm fragments, foraminifera.	12	528
Clay, light olive-gray and moderate reddish-orange, micaceous, silty.	10	538
Limestone, same as 516-528.	22	560
Clay, same as 528-538, with sand and limestone, same.	10	570
Limestone, same.	21	591
Limestone, same, with clay, moderate reddish-orange.	9	600
Limestone, same.	23	623
Limestone, same, with clay, light olive-gray.	10	633
Limestone, same.	22	655
Sand, very light gray to white, medium to very coarse, subangular to subrounded, quartzose, slightly glauconitic, with limestone, same, and clay, light olive-gray trace.	41	696
Providence Sand (Top at 670 ft from E-log)		
Limestone, yellowish-gray to very pale orange, very finely crystalline, fossiliferous, foraminifera, ostracods, bryozoan, pelecypod, echinoderm fragments, with sand, same.	21	717
Limestone, same, except with trace fine sand, trace clay, brownish-gray, carbonaceous and fossils, trace.	20	737
Limestone, same as 696-717.	12	749
Sand, yellowish-gray to white, medium to very coarse, subangular to subrounded, quartzose, slightly glauconitic, with limestone, same.	61	810
Sand, same, some pale yellowish-gray, with some clay, light olive-gray, trace.	31	841
Sand, same, some pale yellowish-gray, some fine.	42	883
Limestone, very light gray to very pale orange, very finely crystalline, slightly fossiliferous, shell fragments, microfossils, with sand, same; (limestone is caved material from Clayton Formation).	10	893
Limestone, same, except light to light olive-gray.	11	904

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 76		
	Thickness (ft)	Depth (ft)
Ripley Formation		
Sand, very light gray to pale yellowish-orange, medium to very coarse, subangular to subrounded, quartzose, slightly glauconitic with foraminifera, ostracods, shell fragments, with limestone, very light gray, very finely crystalline.	83	987
Sand, same, with more limestone.	43	1030

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 79

Owner: U.S. Army - Fort Rucker Well 10 Driller: Layne-Central Company
Samples described by John C. Scott

	Thickness (ft)	Depth (ft)
Lisbon Formation		
Sand, moderate reddish-brown, fine to medium, glauconitic, silty, iron stained, sparsely micaceous, loosely cemented, pale red-purple sparsely glauconitic clay. Glauconite occurs mainly as coating on clay pieces.	42	42
Sand, moderate orange-pink, medium to coarse, sparsely glauconitic. Glauconite is deeply weathered (light olive-green).	24	66
Tallahatta and Hatchetigbee Formations		
Clay, medium light gray, sandy, glauconitic (black glauconite), light gray slightly calcareous sandy siltstone. Moderate reddish-brown silty clay. Yellowish-orange to yellowish-gray medium to coarse glauconitic sand.	29	95
Clay, medium gray, very fossiliferous (micro and macro fossils), calcareous, very glauconitic, slightly sandy. Most of the sample is composed of fossils and glauconite.	32	127
Siltstone and calcareous sandstone, medium gray to medium light gray, very fossiliferous, glauconitic. Fossil fragments abundant.	32	159
Tuscahoma Sand (135 ft from E-log)		
Clay, medium gray, silty, glauconitic fossiliferous, slightly sandy.	63	222
Sand, medium light gray, medium to very coarse, glauconitic. Some medium gray clay and light gray calcareous sandstone in sample.	32	254
Nanafalia Formation (270 ft from E-log)		
Clay, medium light gray, silty, carbonaceous. Light gray, fine to medium glauconitic sand. Very light gray to white calcareous glauconitic fossiliferous sandstone. Fossil fragments common.	31	285
Sand, greenish-gray, coarse to very coarse, glauconitic. Very light gray to white calcareous glauconitic sparsely fossiliferous sandstone.	31	316
Sand, greenish gray, glauconitic, fossiliferous, medium gray carbonaceous clay. Light gray to white calcareous fossiliferous sandstone.	32	348
Sand, greenish-gray, fine to medium, silty, glauconitic, sparsely fossiliferous.	30	378

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 79

	Thickness (ft)	Depth (ft)
Nanafalia Formation (continued)		
Sand, greenish-gray, medium to very coarse, glauconitic, very fossiliferous. Light greenish-gray to white calcareous, glauconitic fossiliferous sandstone.	32	410
Sand, greenish-gray, coarse to very coarse, very fossiliferous, carbonaceous; micro fossils and fossil fragments abundant. Very light gray to white calcareous sandstone.	31	441
Clayton Formation		
Limestone, yellowish-gray, very fossiliferous. Sample composed mainly of fossils and fossil fragments.	62	503
Same as above except fossil content less.	32	535
Limestone, yellowish-gray, very fossiliferous, slightly sandy; some carbonaceous material present.	30	565
Sand and calcareous sandstone, very light gray to white, coarse to very coarse, fossiliferous, sparsely glauconitic. Yellowish-gray fossiliferous sandy limestone.	30	595
Providence Sand (590 ft from E-log)		
Sand, very pale orange to white, medium to very coarse, sparsely fossiliferous (fossils may be from limestone and calcareous sandstone above). Small amounts of limestone and calcareous sandstone in sample.	32	627
Same as above except sand is mostly medium to coarse.	62	689
Sand, medium gray, moderate reddish-brown, pale red-purple, and moderate yellow, fine to very coarse, very clayey; a few fossil fragments present. Appear to be a "mish-mash" of reworked sediments.	31	721
Sand, medium light gray, medium to very coarse, very silty, calcareous, carbonaceous. Some calcareous sandstone and fossil fragments in sample.	62	783
Ripley Formation (790 ft from E-log)		
Same as above except sand is mostly fine to medium. Some hard calcareous sandstone in sample.	31	813
Sand, light olive-gray, fine to medium, silty, calcareous, micaceous, sparsely glauconitic. Some olive-gray clay and calcareous sandstone in sample.	33	846
Sand as above except sand is mostly fine and sample contains a few fossil fragments.	32	878
Sand, light olive-gray, very fine to fine silty, clayey, micaceous, calcareous, sparsely glauconitic, finely micaceous.	31	909

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 79

	Thickness (ft)	Depth (ft)
Ripley Formation (continued)		
Clay, medium gray, very finely sandy calcareous, finely micaceous.	93	1002
Clay, medium gray, sandy, sparsely micaceous, light gray, medium to very coarse, silty sand.	31	1033
Sand, light gray, medium to very coarse, very silty, clayey, calcareous, carbonaceous, sparsely micaceous.	22	1055
Sand, light gray, medium to coarse (some very coarse), very silty, clayey, calcareous.	23	1078
Clay, medium gray to light gray, very finely sandy, calcareous, sparsely micaceous.	68	1146

Table 2.--Sample logs of wells in the Fort Rucker Area--Continued

Well 90

Owner: City of Dothan - Napier Field Well 4 Driller: Layne-Central Co.

	Thickness (ft)	Depth (ft)
Brown sandy clay.	2	2
Red sandy clay.	26	28
Pink, yellow, white and tan mottled sandy clay. Mica noted.	19	47
Red, yellow, and gray clay with coarse grains and granules of quartz.	18	65
Yellow-tan clay and medium to coarse quartz grains.	21	86
Reddish-brown clayey sand. Fine to coarse subangular sand.	21	107
Reddish-yellow clay and white coarse subangular sand and granules of quartz.	25	132
White to milky fine to coarse subangular sand. Trace of glauconite.	21	153
White, fine and medium subangular sand.	23	176
White and milky fine to coarse subangular glauconitic sand.	21	197
White and milky fine to coarse subangular glauconitic sand.	22	219
Greenish-white coarse subangular glauconitic sand.	24	243
Gray, hard arnaceous limestone, Glauconitic.	10	253
Gray, glauconitic sandy clay.	12	265
Gray, very fine micaceous sandy clay which contains glauconite granules.	24	289
Gray, very fine micaceous sandy clay. Trace of glauconite.	22	311
Gray, very fine micaceous sandy clay. Trace of glauconite.	21	332
Gray, very fine micaceous sandy clay. Trace of glauconite.	21	353
Gray, very fine micaceous sandy clay. Trace of glauconite.	13	366
Greenish-white medium grained glauconitic subangular quartz grains.	20	386
Greenish-white medium-grained glauconitic subangular quartz.	15	401
Greenish-white medium-grained glauconitic subangular quartz.	32	433
Milky and buff white fine, medium, and coarse subangular quartz. Trace of gray clay.	7	440
Yellow, gray, and orange mottled clay with buff white fine to coarse subangular quartz.	23	463
Yellow, gray, and orange mottled clay with buff white fine to coarse subangular quartz.	21	484
Greenish-white fine to coarse subangular quartz. Scattered particles of limey material.	19	503
Light tan-gray limey material and yellow fine and medium subangular slightly glauconitic sand.	26	529
Yellow fine, medium and coarse subangular, slightly glauconitic sand. Trace of tan limey material.	23	552
Buff white limestone. Trace of fine sand.	22	574
Buff white limestone. Trace of fine sand.	21	595
Buff white limestone. Trace of fine sand.	20	615
Buff white sandy limestone.	23	638
Milky and white medium grained subangular quartz.	21	659
Milky and white medium grained subangular quartz.	13	672

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 123

Owner: Town of Coffee Springs - Well 2 Driller: Emmett Hughes Drilling Co.
Samples described by John C. Scott (NOTE: Samples unwashed when described)

	Thickness (ft)	Depth (ft)
No samples	130	130
Sand, yellowish-gray, fine to very coarse, loosely calcareous cemented fossiliferous, shell fragments common.	10	140
Sand, yellowish-gray, fine to medium, calcareous, fossiliferous.	10	150
No samples.	60	210
Sand, light gray, fine, sparsely glauconitic.	20	230
Sand, light gray, medium, glauconitic; shell fragments rare.	20	250
Sand, light gray, fine to medium, sparsely glauconitic.	10	260
Sand, light gray, fine to coarse, glauconitic, shell fragments rare.	20	280
Sand, very light gray, fine to coarse, glauconitic.	10	290
Sand, light gray, fine to coarse, glauconitic, fossiliferous; shell fragments common; medium gray silty clay, rare.	20	310
Sand, medium gray, fine to medium, calcareous, finely glauconitic, fossiliferous.	20	330
Sand, light gray, fine to medium, calcareous, finely glauconitic, fossiliferous.	20	350
Sand, light gray, fine to medium, calcareous, sparsely glauconitic.	10	360
Tallahatta (?) Formation		
Sand, medium gray, fine calcareous, clayey, glauconitic, sparsely micaceous, fossiliferous.	20	380
Sand, medium light gray, fine to medium, calcareous, glauconitic, sparsely fossiliferous.	20	400
Sand, medium gray, fine, very glauconitic (fine grained glauconite).	10	410
Clay, medium gray, finely sandy, calcareous, very glauconitic, fossiliferous.	20	430
Bashi Marl Member (of some authors)		
Sand, medium gray, medium to coarse, calcareous, very glauconitic, fossiliferous.	10	440
Tuscahoma (?) Sand		
Clay, medium dark gray, very finely sandy, calcareous, finely glauconitic, fossiliferous.	30	470
Sand, medium gray, fine to medium, glauconitic, sparsely, fossiliferous.	10	480
Clay, medium gray, silty, sparsely, glauconitic.	110	590

Table 2.--Sample logs of wells in the Fort Rucker area--Continued

Well 123

	Thickness (ft)	Depth (ft)
Tuscahoma Sand		
Sand, medium gray, medium to coarse silty, glauconitic, slightly ferruginous.	10	600
Clay, medium gray, silty, sparsely glauconitic, sparsely micaceous.	30	630
Clay, medium gray, silty, finely sandy, sparsely glauconitic and micaceous.	40	670
Sand, medium light gray, medium to coarse, very glauconitic.	50	720
Nanafalia (?) Formation		
Sand, light gray, fine to medium, finely glauconitic.	10	730
Sand, medium light gray, medium to coarse, glauconitic.	10	740
Sand, medium gray, medium to coarse, glauconitic, fossiliferous.	10	750
Sand, medium gray, fine, silty, glauconitic, slightly ferruginous.	20	770
Sand, light gray, fine to medium, finely glauconitic, slightly ferruginous.	10	780
Sand, medium light gray, medium to coarse, very calcareous, sparsely glauconitic; very pale orange limestone.	10	790

Table 3.--Driller's logs of wells in the Fort Rucker area

Well 1

Owner: Town of Abbeville - Well 4 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	15	15
Sand and clay streaks	11	26
Rock	1	27
Clay	4	31
Sand and clay streaks	7	38
Sand and clay balls	15	53
Clay	5	58
Sandy clay	27	85
Rock	5	90
Soft lime	3	93
Rock	14	107
Clay and lime	20	127
Rock	1	128
Clay	64	192
Rock	2	194
Clay	3	197
Rock	2	199
Sand	4	203
Rock	2	205
Sand and clay	41	246
Clay	12	258
Clay	8	266
Sand	5	271
Sand	3	274
Lime	50	324
Lime	1	325
Lime	57	382
Limerock	36	418
Sand	4	422
Limerock	8	430
Limerock	12	442
Lime	38	480
Lime	6	486

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 2

Owner: Town of Abbeville - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	23	23
Sand	8	31
Hard clay	16	47
Sand	21	68
Clay and sand streaks	15	83
Clay	15	98
Rock	1	99
Clay	1	100
Rock	4	104
Limestone	61	165
Hard shale	42	207
Rock	1	208
Shale	2	210
Rock	1	211
Hard shale	10	221
Sand	5	226
Shale	12	238
Red sandy, draggy	10	248
Gray clay streaks lime rock	85	333
Soft gray lime rock	56	389
Hard lime rock	33	422
Hard lime rock	73	495

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 3

Owner: Town of Abbeville - Well 5 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	10	10
Red clay and sand streaks	9	19
Red sand with clay streaks	35	54
Yellow sandy clay	18	72
Clay	12	84
Rock	1	85
Clay and lime rock streaks	24	109
Sandy clay	13	122
Soft black shale	29	151
Blue clay	67	218
Sand	18	236
Blue sand and soft shale	21	257
Blue clay and lime rock streaks	33	290
Packed sand	27	317
Clay and blue shale	2	319
Packed sand with rock breaks	30	349
Clay and shale	3	352
Hard white lime rock	168	520
Clay	1	521
Hard and soft lime with sand and clay	11	532
Lime rock with blue clay	48	580
Packed fine sand with lime streaks	166	746

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 4

Owner: Town of Abbeville - Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sandy clay	22	22
Fine sand	13	35
Clay	9	44
Rock	2	46
Clay	14	60
Clay	6	66
Fine sand	5	71
Clay	10	81
Sand	2	83
Clay	7	90
Rock	1	91
Clay	5	96
Rock	1	97
Clay	1	98
Rock	1	99
Sandy shale	10	109
Rock	2	111
Shale	22	133
Sandy shale	22	155
Shale	66	221
Rock and soft streaks	7	228
Coarse green sand	14	242
Coarse green sand	6	248
Shale	4	252
Rock	4	256
Sandy shale	16	272
Rock	2	274
Sandy shale	12	286
Rock	1	287
Hard shale	13	300
Coarse sand	8	308
Coarse sand	23	331
Shale	11	342
Sand, fine	12	354
Sand	23	377
Sand and clay streaks	22	399
Sand and clay streaks	12	411
Limerock	134	545

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 6

Owner: Dale Co. Water & Fire Protection Authority (Bertha Well)

Driller: South Well and Supply Co.

	Thickness (ft)	Depth (ft)
Clay	20	20
Clay	10	30
Sand	10	40
Sand	15	55
Sand	20	75
Sand	20	95
Clay	20	115
Marl	20	135
Marl	25	160
Marl	20	180
Marl	20	200
Marl	5	205
Rock and sand	8	213
Rock	1	214
Marl	13	227
Marl	8	235
Marl	5	240
Rock	1	241
Marl	19	260
Marl	17	277
Sand	4	281
Rock	1	282
Marl	13	295
Sand	15	310
Gumbo	21	331
Sand	4	335
Sand	17	352
Marl	1	353
Sand	2	355
Marl	10	365
Lime	10	375
Marl	5	380
Limestone	20	400
Limestone	17	417
Limestone	13	430
Limestone	6	436
Sand	5	441
Rock	1	442
Sand	2	444
Rock	1	445
Rock	6	451
Rock	7	458
Rock	1	459
Rock	3	462
Marl and rock	3	465

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 6

	Thickness (ft)	Depth (ft)
Rock and marl	2	467
Marl	1	468
Rock	2	470
Marl and rock	5	475
Rock	2	477
Rock and marl	13	490
Rock	6	496
Rock	2	498
Marl	2	500
Rock	9	509
Marl	2	511
Rock	3	514
Marl	11	525
Rock	1	526
Marl	5	531
Rock	1	532
Rock	3	535
Rock	1	536
Marl	5	541
Rock	1	542
Marl	5	547
Rock	1	548
Marl	3	551
Marl	9	560
Marl	5	565
Rock	15	580
Sand	21	601
Marl	14	615
Rock	2	617
Rock	1	618
Marl	7	625
Marl	1	626
Rock	1	627
Rock and sand	15	642
Sand	3	645
Rock and sandstone	4	649
Sand	2	651
Rock and sand	6	657
Sand	5	662
Rock and sand	8	670
Sand	5	675
Rock and sand	9	684
Sand	3	687
Rock	2	689
Sand	2	691
Rock	1	692

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 6		
	Thickness (ft)	Depth (ft)
Sand	3	695
Rock and sand	6	701
Sand	4	705
Rock	1	706
Sandstone	9	715
Sandstone	10	725
Rock	1	726
Sand	5	731
Rock and sand	14	745
Sand	10	755
Rock and sand	10	765
Rock	1	766
Marl	1	767

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 7

Owner: Dale Co. Board of Education, George W. Long High School Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand	11	11
Clay, sandy	15	26
Clay	17	43
Clay, sandy	33	76
Clay	7	83
Clay, light blue	2	85
Marl	30	115
Sand, red and clay balls	19	134
Rock	0.5	134.5
Clay, white	1	135
Rock, white to greenish lime	3	138
Marl, soft, sandy	15	153
Rock	0.5	153.5
Marl, soft, sandy	70	223
Rock	0.5	223.5
Marl, soft, sandy	3	226
Sand, coarse, with lignite breaks	46	272

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 11

Owner: Town of Ariton - Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	10	10
Sandy clay	15	25
Blue sandy clay	16	41
Hard lime rock	2	43
Shale	24	67
Red sandy clay	42	109
Black clay	27	136
Black clay	5	141
Sand	11	152
Sand and clay	22	174
Clay	8	182
Clay	5	187
Clay with rock streaks	6	193
Clay shells	12	205
Clay shells	11	216
Clay, rock and sand streaks	12	228
Clay	17	245
Clay and shell	6	251
Sandy clay and shells	8	259
Sand	14	273
Shale	11	284
Rock	1	285
Shale	10	295
Shale	6	301
Lime rock	9	310
Lime and clay	8	318
Lime rock - small clay streaks	22	340
Lime rock	22	362
Lime rock	17	379
Sand	6	385
Sand	2	387
Lime and sand	21	408
Sand and lime	23	431
Sand and lime	13	444
Hard lime rock	9	453
Hard lime rock	1	454
Sand and clay lime breaks	21	475
Sand and clay lime breaks	23	498
Rock	1	499
Sand and clay lime breaks	21	520
Sand and clay lime breaks	10	530
Rock	1	531
Sand and clay lime breaks	11	542
Sand and clay lime breaks	22	564
Sand and shale, rock breaks hard	23	587
Sand and shale, rock breaks hard	23	610

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 16

Owner: U.S. Army Fort Rucker Old Tabernacle Field

Driller: Hughes and Son Well Drilling

	Thickness (ft)	Depth (ft)
Red clay	23	23
Sand	14	37
Clay	8	45
Sand	31	76
Yellow clay	9	85
Sand	5	90
Sandy marl	6	96
Sand	6	102
Marl	32	134
Gray rock	4	138
Fine gray sand	12	150
Marl	5	155
Gray rock	1	156
Marl	9	165
Sand	7	172
Marl	11	183
Rock	2	185
Marl	4	189
Sand	9	198
Marl	4	202
Sand	16	218
Marl	22	240
Sand	38	278
Marl	12	290
Sand	10	300
Marl	6	306
Sand	18	324
Rock	1	325
Marl	7	332
Sand	11	343
Gray rock	2	345
Marl	15	360
Sand	10	370
Marl	8	378
Sand	12	390
Rock	1	391
Marl	7	398
Rock	2	400
Marl	10	410
Coarse white sand	15	425
Limestone	35	460

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 19

Owner: Town of Ozark - Well 5 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	12	12
Yellow sand	2	14
Clay and rock breaks	28	42
Sandy clay	30	72
Sandy shale	10	82
Clay and shale	22	104
Sand and clay breaks	29	133
Clay and sand breaks	32	165
Lime rock	3	168
Sand and clay breaks	28	196
Rock	2	198
Clay	2	200
Rock	1	201
Clay and rock breaks	4	205
Rock hard	4	209
Sand clay and rock breaks	43	252
Clay	10	262
Sandy clay	12	274
Clay	10	284
Lime clay and sand	14	298
Lime and clay breaks	50	348
Lime	20	368
Hard and soft lime	60	428
Sandy hard lime	20	448
Hard lime	34	482
Clay and lime breaks	29	511
Rock	3	514
Clay	6	520
Rock	2	522
Clay and rock	8	530
Clay and sand breaks	14	544
Clay hard	16	560
Clay and lime rock	42	602
Hard lime	20	622
Clay	9	631
Hard lime	3	634
Clay	8	642
Lime and clay	10	652
Brown lime and sand	16	668
Sand and lime	20	688
Clay sand and lime	20	708
Brown sand and lime	20	728
Brown sand and lime breaks	20	748
Brown sand and lime breaks	20	768
Brown sand and lime breaks	15	783

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 19

	Thickness (ft)	Depth (ft)
Lime clay and sand breaks	5	788
Lime clay and sand breaks	12	800
Sand	8	808
Clay and sand breaks	14	822
Hard clay	29	851
Sandy clay	7	858
Hard blue clay	50	908

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 22

Owner: Town of Ozark - Well 4 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Red sandy clay	28	29
Clay	4	33
Sand	42	75
Sandy shale	53	128
Rock	1	129
Clay	5	134
Rock	1	135
Sandy shale	85	220
Sand	7	227
Sand	21	248
Rock	4	252
Sand and lime breaks	20	272
Sand and rock	40	312
Rock	1	313
Sand	7	320
Rock	1	321
Clay	22	343
Sand and rock	15	358
Rock	2	360
Clay and rock	5	365
Packed sand	19	384
Lime	18	402
Lime	23	425
Lime	22	447
Lime	23	470
Lime	24	494
Lime and sand	87	581
Rock	9	590
Clay	35	625
Rock	1	626
Clay and lime	44	670
Lime and clay	57	727
Sand and lime	14	741
Sand and lime	23	764
Sand and lime	13	777
Sand	10	787
Sand	22	809
Sand	15	824
Clay	8	832

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 23

Owner: Town of Ozark - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand, red	40	40
Clay, soft	10	50
Clay, hard	37	87
Rock	2	89
Clay	91	180
Sand, green	40	220
Clay, sand breaks	16	236
Clay, sandy; rock breaks	74	310
Sand, rock breaks	10	320
Sand, packed	20	340
Limestone, sandy	12	352
Limestone	15	367
Sand, packed	40	407
Sand, packed; limestone breaks	13	420
Limestone; sandy	30	450
Limestone, hard	10	460
Limestone, sandy	5	465
Limestone, hard	12	477
Limestone	11	488
Rock	1	489
Limestone, sandy	21	510
Limestone, hard	90	600
Clay, hard; limestone breaks	20	620
Clay	77	697
Limestone, hard	11	708
Sand; limestone breaks	13	721
Sand	8	729
Rock and sand breaks	21	750
Sand, brown	51	801
Sand; small breaks limestone	5	806
Limestone	1	807
Limestone; sand breaks	15	822
No record	1	823

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 24

Owner: Town of Ozark - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand, orange	21	21
Sandy clay, brown	15	36
White sand, coarse	11	47
White sand, coarse	35	82
Shale, dark gray, fossiliferous	43	125
Rock, shell fragments	3	128
Sandy shale, glauconitic, gray	26	154
Rock	3	157
Shale	12	169
Shale and sandy streaks	16	185
Rock	2	187
Hard shale	20	207
Rock	1	208
Shale	5	213
Rock	1	214
Green sand, rock breaks	10	224
Green sand, rock breaks	11	235
Green sand, rock breaks	20	255
Rock and sand breaks	8	263
Sand and rock breaks	17	280
Rock and sand breaks	6	286
Sandy shale and rock breaks	28	314
Shale and rock breaks	46	360
Hard lime	31	391
Soft lime	10	401
Lime, gray	91	492
Lime and sand	16	508
Sandy lime	6	514
Lime	7	521
Sand and lime breaks	18	539
Lime	12	551
Hard lime	30	581
Hard lime and sandy shale breaks	11	592
Lime with hard shale breaks	15	607
Lime	12	619
Hard lime	8	627
Shale and lime breaks	53	680
Hard lime, sandy shale breaks	20	700
Hard lime	23	723
Sand	2	725
Clay	15	740
Hard lime	10	750
Lime marl and sand breaks	51	801
Sand	24	925
Sand and small breaks	35	860
Rock	1	861
Sand, rock breaks	19	880
Clay	4	884

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 28

Owner: James Golden Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Chalk	15	15
Sand	10	25
Sand, clay	10	35
Clay	13	48
Sand	2	50
Red clay	10	60
Sand, chalk	10	70
Marl	8	78
Rock	1	79
Marl	3	82
Rock	1	83
Marl	11	94
Rock	1	95
Sand	13	108
Rock	1	109
Sand	21	130
Marl	20	150
Rock	1	151
Marl	111	262
Sand	4	266
Rock	5	271
Sand	1	272
Rock	6	278
Sand and rock	22	300
Rock	10	310
Rock and marl	39	349
Sand	3	352
Sand and marl	8	360
Rock	4	364
Sandy marl	6	370
Sand	10	380
Marl	2	382
Limestone	8	390
Sand	10	400
Limestone	100	500
Rock	10	510
Sand	10	520
Rock	8	528
Sand	2	530
Rock	10	540
Rock and clay	20	560

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 29

Owner: John Solomon Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Clay	18	18
Coarse sand, dry	22	40
Unconsolidated chalk and gravel	10	50
Fine sand, yellow, water	20	70
Coarse sand	15	85
Marl, little rocky	12	97
Sand	3	100
Clay	15	115
Sand, yellow, very clean in places, few streaks and green marl in this area	45	160
Sand, marl	2	162
Rock and marl	3	165
Blue marl with few rocks, tough	13	178
Gray rock	12	190
Gray rocky marl	10	200
Hard rock and tough marl	10	210
Gray rock	8	218
Hard rock	2	220
Softer rock	5	225
Hard rock	2	227
Marl, few streaks rock	33	260
Tough marl and rock	40	300
Marl	45	345
Green sand	20	365
Rock	1	366
Sandstone with rock streaks	34	400
Marl, few rocks	30	430
Marl, more rock	5	435
Sand, gray	8	443
Rock	1	444
Sand, marl white	1	445
Rock	1	446
White sandy marl	4	450
Rocky white sand	15	465
Rock	2	467
Coarse sand	13	480
Clayton limestone	70	550
Harder limestone	2	552
Soft streaks	8	560
Hard limestone	20	580
Mostly hard - some sand showed here	20	600
Very hard limestone with sand grains embedded	10	610
Rocky sand	10	620
Clean sand, coarse	3	623
Hard rock	3	626

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 29		
	Thickness (ft)	Depth (ft)
Clean sand and rock	12	638
Hard rock	1	639
Sand, clean	9	648
Hard rock	1	649
Clean sand, medium coarse	31	680
Sand, not so clean	10	690
Little marl		

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 30

Owner: Town of Newville - Well 2 Driller: Tom Smith Artesian Well Co.

	Thickness (ft)	Depth (ft)
Clay	10	10
Sandy clay	15	25
Sand	25	50
Rock	50	100
Shale	81	181
Rock and sand	24	205
Shale	67	272
Sandy shale	28	300
Rocky shale with sand	47	347
Rock	3	350
Rock and shale with sand	34	384
Sand	31	415
Limey sand	35	450
Rock	6	456
Sandy lime	116	572

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 32

Owner: U.S. Army - Fort Rucker Driller: Buie Drilling Company

	Thickness (ft)	Depth (ft)
Clay	20	20
Sandy clay	20	40
Coarse sand	60	100
Sand with rock	10	110
Soft sandy rock	10	120
Light blue marl	30	150
Blue marl	140	290

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 33

Owner: Faulkner Farms, Inc. Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Clay	18	18
Coarse sand	14	32
Gravel	6	38
Coarse sand and chalk	20	58
Yellow sand	22	80
Pink sand	15	95
Marl (green)	5	100
Sandy blue marl	15	115
Sand	17	132
Soft rock and sand	15	147
Blue marl	10	157
Black pepper sand	3	160
Gray rock (soft)	23	185
Hard rock	2	187
Gray rock and sand	10	197
Blue marl	37	234
Sandy marl	11	245
Rock	1	246
Sandy marl	11	257
Marl	15	272
Sandy marl	16	288
Coarse green sand	16	304
Coarse green sand, some rock scattered	21	325
Green sand and gray rock	14	339
Hard rock	1	340
Gray rock and green sand	8	348
Hard rock	1	349
Sandy marl	10	359
Hard rock	1	360
Sandy marl	10	370
Soft marl	10	380
Rock marl	12	392
Coarse green sand	8	400
Rock	8	408
Gray sand (coarse)	17	425
White lime rock	20	445
Pretty solid rock	7	452
Softer rock	28	480
More solid	47	527
Harder	9	536
Hard rock	5	541
Drilled as sandstone, sampled as medium sand	17	558
Hard rock	2	560
Soft sand, getting coarser here	3	563

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 33

	Thickness (ft)	Depth (ft)
Rock, hard, little softer bottom few feet	7	570
Sand, softer, washed out, not very clean or coarse, had a soft feel, maybe a little clay	7	577
Hard rock	1	578
Softer rock, sampled as clean rock possibly porous, not very much sand	6	584
Hard rock	2	586
Softer, sampled as clean rock and sand	14	600
Sand, mushy, some marl here, providence started here	20	620
Rocky sand, sampled as clean sand medium	10	630
Hard rock, sampled as clean sand medium	2	632
Soft, sampled as clean sand medium	1	633
Hard rock	1	634
Softer as sandstone, sampled as clean coarse sand	6	640
Medium hard, sampled as good clean coarse providence sand	6	646
Hard, sampled as good clean coarse providence sand	1	647
Medium sand, sampled as good clean coarse providence sand	13	660
Harder, sampled as clean coarse sand, streaks of rock	20	680
Same as above except last 2 ft very hard, possible gumbo marl and rock	20	700
Sand and rock	25	725
Marl	11	736

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 34

Owner: Alabama Highway Department (U.S. Highway 231 Rest Area) Driller: Alabama Highway Department

	Thickness (ft)	Depth (ft)
Brown sand clay	1	1
Fine brown moist sand	5	6
Red and gray clay	2	8
Brown sand, medium to fine	1	9
Tan coarse sand	23	32
Red coarse sand	1	33
Red and gray clay	1	34
Brown coarse sand	11	45
Red and gray clay	1	46
Brown coarse sand	7	53
REd and gray clay	1	54
Brown coarse sand with thin layers of red and gray clay	12	66
Brown coarse sand with thin layers of gray sand clay and thin layers of red and gray clay	7	73
Brown coarse sand	3	76
Brown coarse sand with thin hard layers of dark gray sand clay	5	81
Hard gray sandrock	1	82
Dark gray sand clay with very thin layers of gray sand clay	4	86
Hard gray sandrock	1	87
Hard dark gray sand clay with very thin layers dark gray fine sand	8	95
Hard dark gray sand clay	22	117
Hard wet dark gray sand clay with thin layers dark gray fine sand	4	121
Hard gray sandrock	1	122
Hard wet gray sand clay with thin layers gray sandrock	24	146
Medium wet dark gray sand clay with hard layers	22	168
Hard wet dark gray sand clay with hard layers of gray sandstone	1	169
Medium wet dark gray sand clay with very thin layers of gray sandrock	14	183
Hard wet dark gray sand clay with thin layers of gray sandstone	8	191
Hard wet dark gray sand clay	35	226
Dense wet gray sand, with very thin layers of gray sandrock	17	243
Hard gray calcareous sandrock with very thin layers of sand	5	248
Dense wet gray sand	3	251
Hard wet gray calcareous sandrock with very thin layers of sand	3	254
Dense wet gray sand	1	255
Hard gray calcareous sandrock with very thin layers of sand	3	258
Dense gray sand with very think layers of calcareous sandrock	12	270
Hard gray rock		

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 35

Owner: U.S. Geological Survey, Dale County Observation Well 1 — Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Sand	30	30
Chalk	10	40
Sand and chalk in streaks	20	60
Chalk	20	80
Hard marl	30	110
Hard marl with soft streaks	10	120
Hard marl	10	130
Rock	0.5	130.5
Marl and streaks of blue sand	9.5	140
Blue sand	5	145
Hard rock	1	146
Sand	4	150
Rock	2	152
Choppy rock and sand	18	170
Hard rock	1	171
Choppy sand	8	179
Rock	2	181
Sand	7	188
Hard rock	1	189
Sand	1	190
Hard rock	1	191
Sand	12	203
Marl	5	208
Hard rock	2	210
Sandy marl	10	220
Rock and sand	2	222
Rock and sand	3	225
Soft marl	5	230
Soft marl	10	240
Rock, choppy and not too hard	1	241
Soft marl	9	250
Soft marl, drilled like sand	7	257
Rock and marl in streaks	3	260
Sand, rock and marl streaks	10	270
Hard, choppy, gray rock	3	273
Hard gray rock and streaks of sand	7	280
Gray rock	7	287
Coarse sand	23	310
Sand and something that resembled black coal	20	330
Soft marl	51	381
Rock, white lime	9	390
Fine sand, dirty	10	400
Same	10	410
White chalk	6	416
Limestone with some clay	10	426

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 35

	Thickness (ft)	Depth (ft)
Limestone, harder	7	433
Medium sand, clean	18	451
Hard rock	5	456
Hard rock	3	459
Sand	11	470
Hard rock	1	471
Rock	2	473
Sand	9	482
Rock	8	490
Rock	6	496
Sand	4	500
Hard rock	10	510
Marl	6	516
Marl with streaks of rock	6	522
Rock and sand	14	536
Rock	5	541
Sand	9	550
Marl	1	551
Rock and sand	5	556

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 37

Owner: Town of Ozark - Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand	30	30
Sandy clay	10	40
Clay	16	56
Lime	7	63
Sandy clay	30	93
Clay	51	144
Clay and lime	8	152
Rock	1	153
Sandy clay	76	229
Sand	38	267
Sand and limerock	29	296
Lime	24	320
Sandy clay and lime	17	337
Sandy clay	36	373
Lime and sand	12	385
Lime	4	389
Sandy clay	14	403
Sand	23	426
Limestone	70	496
Lime	90	586
Limerock	3	589
Limestone	45	634
Clay	6	640
Limestone	4	644
Clay and lime	56	700
Lime	8	708
Limestone and clay	69	777
Sand	5	782
Limestone	3	785
Sand	2	787
Limestone	4	791
Sand	4	795
Sandy lime	69	864
Sand	13	877
Sand and lime	33	910
Sand and lime	10	920
Limestone	13	933

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 38

Owner: Town of Ozark - Well 6 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Yellow sand	7	8
Red clay	12	20
Sandy clay	35	55
Blue clay	48	103
Rock	3	106
Clay	96	202
Rock	1	203
Sand	16	219
Lime breaks	3	222
Sand, lime and clay streaks	31	253
Clay and lime streaks	27	280
Clay and sand streaks	80	360
Lime coarse	20	380
Lime and sand	31	411
Lime and sand	31	442
Lime and sand	31	473
Lime and sand, hard	27	500
Lime and sand	5	505
Lime and sand	5	510
Lime and sand, hard	26	536
Lime and sand, hard	32	568
Lime and sand, hard	12	580
Lime and sand	19	599
Sand clay and lime	32	631
Brown sand lime and clay streaks	31	662
Lime sand and clay streaks	32	694
Clay lime and sand streaks	29	723
Lime rock	2	725
Clay and lime breaks	25	750
Lime rock	3	753
Clay and lime breaks	17	770
Lime rock	3	773
Sand and lime, hard	15	788
Sand and lime, hard	31	819
Sand and lime, hard	31	850
Sand and lime, hard	7	857
Lime breaks and sand	25	882
Lime breaks and sand	6	888
Rock	5	893
Clay and rock breaks	21	914

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 42

Owner: U.S. Army - Fort Rucker Wildlife Area Driller: Carroll Hardware, Inc.

	Thickness (ft)	Depth (ft)
Sand and clay	10	10
Sand and clay	10	20
Soapstone	10	30
Soapstone and clay	10	40
Soapstone and rock	10	50
Soapstone and sand	10	60
Soapstone	10	70
Dark coarse sand	10	80
Soapstone	10	90
Soapstone and rock	10	100
Soapstone and rock	10	110
Soapstone and rock	10	120
Soapstone and rock	10	130
Soapstone and rock	10	140
Soapstone and rock	10	150
Soapstone and rock	10	160
Soapstone and rock	10	170
Soapstone and rock	10	180
Rock	10	190
Rock and sand	10	200
Coarse sand	10	210
Coarse sand	10	220
Green sand	10	230
Green sand	10	240
Green sand	10	250
Green sand and shell	10	260

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 45

Owner: Alabama National Guard Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Sandy clay	30	30
Fine sand	7	37
Yellow clay	15	52
Blue marl	34	86
Rock soft	4	90
Rock	1.5	91.5
Marl	1.5	93
Rock	2	95
Marl	33	128
Marl	43	171
Sand	29	200
Sand, rock streaks	5	205
Sand	5	210
Rock with sand breaks	7	217
Sand	8	225
Sand	10	235
Rock	1	236
Sand	3	239
Rock	1	240
Sand	25	265
Rock	1	266
Sand	3	269
Rock	4	273
Sand	17	290
Marl	3	293
Sand	12	305
Sandy marl	10	315

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 46

Owner: U.S. Army - Fort Rucker
Lowe Field

Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand	7	7
Clay	8	15
Clay, red, sandy	41	56
Sandstone, hard	6	62
Sandstone, soft	15	77
Clay, sandy	21	98
Rock, soft	6	104
Rock, hard	8	112
Sand	2	114
Rock	3	117
Clay, sandy	28	145
Rock	2	147
Clay	74	221
Rock	1	222
Sand, green	4	226
Rock, soft	3	229
Sand, green	5	234
Rock and sand streaks	3	237
Sand, green	32	269
Sand	2	271
Rock	1	272
Clay	4	276
Rock	2	278
Sand	2	280
Rock	3	283
Clay, sandy	12	295
Rock and clay streaks	3	298
Clay, sandy; rock breaks	43	341
Limestone	11	352
Clay, sandy	7	359
Limestone	112	471
Limestone, soft	69	540
Limestone, hard	25	565
Limestone, soft	10	575
Rock, hard	7	582
Limestone, sandy	6	588
Rock	2	590
Limestone, soft	12	602
Rock, hard and soft streaks	25	627
Limestone, hard	33	660
Sand, rock breaks	12	672
Rock	3	675
Sand	4	679
Rock	1	680
Sand	4	684
Rock	1	685
Clay, blue, tough	10	695

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 47

Owner: U.S. Army - Fort Rucker Well 7 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sand	51	51
Blue clay	36	87
Hard rock and lime streaks	10	97
Blue clay	110	207
Hard sand	29	236
Rock	1	237
Hard sand	16	253
Rock	1	254
Hard sand	11	265
Rock	2	267
Hard sand	14	281
Rock	2	283
Sand and rock breaks	51	334
Rock	4	338
Clay	14	352
Rock	2	354
Sand and lime	24	378
Soft lime	31	409
Soft lime	32	441
Soft lime	31	472
Soft lime	31	503
Soft lime	26	529
Hard lime	6	535
Hard lime	5	540
Sandy soft lime	25	565
Lime and sand hard breaks	32	597
Lime and sand hard breaks	32	629
Lime and sand hard breaks	31	660
Lime and sand	10	670
Clay	26	696
Sand and lime rock	27	723
Sand and lime rock	32	755
Sand and lime rock	31	786
Sand and lime rock	32	818
Sand and lime rock	31	849
Sandy clay	32	881
Clay	74	955
Sandy clay rock breaks	25	980
Hard clay rock breaks	20	1000
Hard clay	100	1100

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 49

Owner: U.S. Army - Fort Rucker Shell Field
Driller: Acme Drilling Company

	Thickness (ft)	Depth (ft)
Sand, streaks clay	86	86
Clay, sandy with streaks sand	21	107
Marl, blue	14	121
Rock break	-	-
Shale	21	142
Marl, blue	18	160
Sand	5	165
Rock	7	172
Shale	37	209
Rock	1	210
Shale, sandy	102	312
Rock	3	315
Limestone, soft and sand	7	322
Rock	5	327
Shale, sandy	20	347
Shale	6	353
Shale, sandy	4	357
Sand	12	369
Rock	1	370
Shale and rocks	8	378
Shale	11	389
Rock	1	390
Shale	2	392
Rock	1	393
Shale and limestone	17	410
Rock	4	414
Shale and limestone	3	417
Rock	1	418
Limestone and sand	9	427
Rock	2	429
Sand and limestone	17	446
Rock	2	448
Sand and shellrock	27	475
Limestone, hard	2	477
Sand, limey, with black streaks	9	486
Limestone, hard	2	488
Sand, limey	2	490
Sand, packed; colors mud black	15	505
Rock	2	507
Sand, packed; colors mud black	18	525
Clay and limestone	3	528
Limestone, soft	4	532
Limestone, sandy	6	538
Rock	2	540
Limestone, soft	44	584
Rock, hard	3	587
Limestone	6	593
Limestone, hard	37	630
Limestone, sandy	10	640

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 50

Owner: Town of New Brockton - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	2	2
Clay	17	19
Sand	7	26
Clay	100	126
Rock	3	129
Clay	69	198
Sand	6	204
Limerock	5	209
Limerock and sand	3	212
Clay	112	324
Rock	1	325
Clay	10	335
Clay	15	350
Limerock	5	355
Clay	25	380
Clay	22	402
Clay and limerock	12	414
Clay	11	425
Clay	23	448
Clay, limerock	22	470
Clay, limerock	15	485
Limestone	7	492
Limestone	23	515
Limestone	22	537

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 51

Owner: Town of New Brockton - Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	25	25
Red clay	72	97
Blue clay	4	101
Red clay	15	116
Limerock	2	118
Sand and shells	8	126
Soapstone	63	189
Lime	3	192
Soapstone	90	282
Sand	5	287
Green sand	16	303
Sand and pepper sand	33	336
Rock	2	338
Sandy clay	21	359
Sand	7	366
Clay	3	369
Sand	5	374
Cemented sand	22	396
Sandy clay	12	408
Sand	17	425
Sandy clay	4	429
Sand and clay	20	449
Rock and sandy clay	8	457
Sand and clay	16	473
Clay, sand and lime	10	483
Sand	4	487
Sand and lime	19	506
Sand and lime	13	519
Rock	2	521
Lime	6	527
Rock	2	529
Lime	95	624
Lime	2	626
Lime	18	644
Rock	2	646

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 52

Owner: Town of New Brockton - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	26	26
White clay	54	80
CLay	3	83
Red clay	39	122
Clay	4	126
Sandstone	2	128
Sand clay	9	137
Hard rock	1	138
Soapstone	60	198
Sand	6	204
Clay	6	210
Rock	2	212
Hard sand	6	218
Soapstone	29	247
Rock	1	248
Soapstone	13	261
Rock	1	262
Clay	50	312
Sandstone	2	314
Soapstone	11	325
Water-bearing sand	33	358

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 55

Owner: Town of Goodman Driller: Acme Drilling Company

	Thickness (ft)	Depth (ft)
Top soil	4	4
Sandy clay	12	16
Clay	2	18
Sand	82	100
Sand	33	133
Sand	7	140
Sand	20	160
Gray clay	20	180
Sand	8	188
Rock	2	190
Sand with streaks of clay	20	210
Sand	4	214
Clay	2	216
Sand and streaks of clay	11	227
Rock	1	228
Lime with streaks of sand	12	240
Rock	2	242
Soft shale	8	250
Clay	10	260
Sand shale	10	270
Clay	115	385
Rock	1	386
Clay	23	409
Rock	1	410
Clay	110	520
Marl and rock streaks	13	533
Rock	4	537
Sand, draggy	13	550
Sand	4	554
Marl, sandy	5	559
Rock	1	560
Shale	3	563
Rock	1	564
Shale, sandy	6	570
Gumbo	14	584
Rock	2	586
Shale, sandy	10	596
Rock	2	598
Sand	12	610
Sand	3	613
Rock	2	615
Clay, sandy	4	619
Lime	4	623
Lime, soft	3	626
Lime, hard	2	628

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 55

	Thickness (ft)	Depth (ft)
Sand	4	632
Rock	2	634
Shale, sandy	7	641
Rock	2	643
Marl	14	657
Sand	3	660
Rock	3	663
Sand	4	667
Rock	2	669
Rock	3	672
Lime, soft	3	675
Lime	85	760
Lime	85	845
Lime, hard	60	905
Clay	5	910

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 56

Owner: City of Enterprise - Well 4 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	15	15
Sand	10	25
Sandy clay	50	75
Clay	25	100
Sandy clay	10	110
Sand and clay	7	117
Sand and rock	15	132
Clay	10	142
Sand clay	3	145
Rock	8	153
Clay	45	198
Sand	4	202
Rock	1	203
Clay	4	207
Rock	4	211
Sand	8	219
Sandy clay	12	231
Clay	32	263
Rock	1	264
Clay	16	280
Sand	7	287
Clay	16	303
Sand	10	313
Sand	15	328
Clay and rock	6	334
Sand	21	355
Sand rock	5	360
Sandy clay	13	373
Clay	7	380
Sandy clay	5	385
Rock	2	387
Sand	10	397
Clay and rock	7	404
Clay	4	408
Rock	6	414
Sandy clay	7	421
Sand and rock	6	427
Sandy clay	11	438
Rock	4	442
Sandy clay	15	457
Rock	2	459
Sand	5	464
Rock and sand	8	472
Sandy limestone	18	490
Sand	7	497

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 56

	Thickness (ft)	Depth (ft)
Sand	7	504
Rock	2	506
Sand and limestone	13	519
Limestone	23	542
Limestone	46	588
Limestone	78	666
Sand	14	680
Sand	3	683
Limestone and sand	16	699
Sand	6	705
Limestone	17	722
Sand	4	726
Limestone	3	729
Sand	3	732
Limestone	3	735
Sand	9	744
Limestone	1	745
Sand	7	752
Limestone and sand	20	772

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 57

Owner: City of Enterprise - Well 7 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Red clay	8	9
Sandy red clay	96	105
Tough clay	2	107
Sandy clay, gray	11	118
Soft sand	10	128
Hard clay, sand and lime	11	139
Sand, gray, salt and pepper	5	144
Lime rock	2	146
Sand	2	148
Sandy lime	13	161
Clay	35	196
Sand, black	4	200
Rock	1	201
Sandy clay	3	204
Lime	4	208
Clay	3	211
Rock	1	212
Clay and lime, sandy	17	229
Hard clay	37	266
Hard rock	2	268
Clay	32	300
Sandy clay	12	312
Lime rock	1	313
Hard clay, sandy	10	323
Lime	2	325
Hard rock, green sand with lime and clay	23	348
Hard rock sand, green	17	365
Hard rock	1	366
Lime and clay	7	373
Hard pack sand with lime and little clay	14	387
Lime rock	2	389
Sand, clay and rock breaks	4	393
Clay, sand and lime	20	413
Hard clay	2	415
Lime	1	416
Sand with lime and clay	9	425
Clay	3	428
Lime and clay	6	434
Lime rock	2	436
Lime and clay	5	441
Hard lime	1	442
Lime and clay	11	453
Rock	1	454
Clay with lime	10	464

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 57

	Thickness (ft)	Depth (ft)
Hard rock	1	465
Clay and lime	9	474
Lime	2	476
Sandy lime, with clay	13	489
Hard rock	1	490
Sandy lime	4	494
Hard rock	1	495
Sandy lime	11	506
Sandy lime	23	529
Sandy lime	6	535
Lime and clay	17	552
Lime and clay	14	566
White lime, little white clay	9	575
White lime, little white clay	22	597
White lime, little white clay	22	619
White lime, little white clay, harder	23	642
White lime with white clay, hard	9	651
Hard lime	11	662
White lime with clay	3	665
White lime with clay	6	671
Hard lime	1	672
White lime, hard streaks	11	683
Sand	4	687
Sand	3	690
Hard lime, soft streaks, little clay	18	708
Hard lime, soft breaks, sandy and clay	18	726
Sand	4	730
Sand	5	735
Lime and sand, little clay	11	746
Hard lime	1	747
Sand and lime breaks	6	753
Hard lime	5	758
Sand	3	761
Hard lime with clay	15	776
Hard lime with clay	19	795
Lime and clay breaks	17	812
Lime with clay	9	821
Lime and clay, harder	23	844
Lime and clay, hard	23	867

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 58

Owner: City of Enterprise - Well 5 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Sandy clay	3	4
Hard clay	21	25
Sand	59	84
Sandy clay	4	88
Sand	10	98
Clay	14	112
Hard clay	8	120
Sandy clay	7	127
Hard clay and rock	54	181
Rock	3	184
Hard clay and rock	46	230
Rock	2	232
Hard clay and sandy streaks	20	252
Hard shale and lime	76	328
Green sand and clay streaks	19	347
Green sand and clay streaks	23	370
Green sand and clay streaks	20	390
Hard shale	8	398
Green sand and clay streaks	14	412
Rock	3	415
Gray sand and lime	28	443
Lime rock	8	451
Fine sand and lime	9	460
Rock	1	461
Sandy shale	7	468
Rock	1	469
Sandy shale	8	477
Lime rock and sand streaks	7	484
Sand and lime	6	490
Lime rock and sand streaks	15	505
Sand and lime	11	516
Hard rock	2	518
Sand and lime	13	531
Sand and lime lignite	28	559
Lime	18	577
Lime	23	600
Lime cut better	23	623
Lime	23	646
Lime	26	672
Rock	9	681
Sand	14	695
Rock	6	701
Sand	2	703
Rock	1	704

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 58

	Thickness (ft)	Depth (ft)
Sand	8	712
Rock	1	713
Sand	1	714
Rock	17	731
Sand	9	740
Rock	3	743
Sand and rock	7	750
Sand	11	761
Sand	4	765
Rock	1	766
Sand and rock	11	777
Hard lime	23	800

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 59

Owner: City of Enterprise - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	15	15
Sandy clay	39	54
Coarse sand	20	74
Soft clay, Rock 6 in.	14	88
Fine blue sand	5	93
Rock	1	94
Shale	2	96
Rock	1	97
Shale	1	98
Rock	1	99
Shale	4	103
Rock and breaks	4	107
Shale	2	109
Rock	3	112
Hard cemented sand	11	123
Rock	13	136
Hard sand and lime	2	138
Rock	32	170
Shale and lime	22	192
Shale and lime	25	217
Rock	2	219
Clay	10	229
Lime, shale and boulders	60	289
Rock	1	290
Shale and boulders	15	305
Green sand	3	308
Boulders	30	338
Green sand	14	352
Rock	2	354
Green sand	23	377
Hard rock	1	378
Green sand	15	393
Rock	1	394
Green sand	7	401
Rock	4	405
Green sand	11	416
Rock	1	417
Streaks coarse sand and boulders	8	425
Fine hard sand	9	434
Rock	1	435
Sand and shale	15	450
Rock	1	451
Sand and shale	11	462
Rock	8	470
Coarse sand	2	472

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 59

	Thickness (ft)	Depth (ft)
Rock	1	473
Sand and lime	18	491
Sand and lime	18	509
Hard rock	2	511
Pack sand	23	534
Pack sand, fine	12	546
Lime, soft	81	627
Soft lime	44	671
Hard lime	9	680
Hard fine sand	26	706
Hard fine sand	7	713
Shale and lime	21	734
Fine pack sand	6	740
Rock	1	741
Sand and rock breaks	29	770
Lime rock	12	782

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 60

Owner: City of Enterprise - Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	12	12
Sand and clay streaks	28	40
Sand and gravel	6	46
Clay	4	50
Sand	27	77
Clay	9	86
Rock	4	90
Clay	2	92
Clay	5	97
Rock	2	99
Hard clay	4	103
Sand	4	107
Rock	2	109
Sandy clay	7	116
Clay	5	121
Rock	1	122
Clay	11	133
Rock	1	134
Shale	6	140
Lime rock	20	160
Sand	4	164
Rock	1	165
Shale	3	168
Rock	1	169
Shale	45	214
Rock	1	215
Shale and lime	37	252
Rock	2	254
Shale	54	308
Sand	7	315
Shale	19	334
Sand	12	346
Rock	1	347
Sand	4	351
Rock	1	352
Sand	22	374
Rock	2	376
Sand	6	382
Shale	3	385
Sand	6	391
Rock	-	-
Sand	7	398
Rock	3	401
Shale and rock	2	403
Shale and rock	10	413

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 60

	Thickness (ft)	Depth (ft)
Rock	2	415
Sand and rock	5	420
Rock	1	421
Sand	2	423
Rock	1	424
Sand	9	433
Rock	1	434
Shale	6	440
Rock	1	441
Sand	7	448
Rock	1	449
Shale	4	453
Shale and rock	5	458
Shale	3	461
Rock	2	463
Sand	2	465
Rock	1	466
Sand and lime	3	469
Rock (lime)	13	482
Sand and lime	6	488
Rock	2	490
Sand and rock	9	499
Rock	1	500
Shale and lime	4	504
Rock	2	506
Sand, lime and lignite	40	546
Lime	123	669
Rock	5	674
Sand and lime	16	690
Rock	3	693
Sand and lime	12	705
Lime	18	723
Rock	2	725
Lime and rock	3	728
Sand and lime	9	737
Rock	1	738
Lime and rock	3	741
Sand	6	747
Rock	2	749
Sand	2	751
Rock	1	752
Sand	2	754
Rock	1	755
Sand	4	759
Rock	1	760
Sand	4	764
Rock	-	-
Sand	2	766
Lime hard	16	782

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 62

Owner: City of Enterprise - Well 8 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	10	10
Multi colored clay	14	24
Sand with clay	102	126
Rock	1	127
Gray sandy clay	19	146
Sand lime shells-clay	25	171
Hard clay	8	179
Sandy clay	6	185
Rock	7	192
Black clay	33	225
Sand	11	236
Sand rock-clay streaks	10	246
Clay	3	249
Rock	8	257
Fine sand with clay	35	292
Clay and shale	23	315
Sand with clay	8	323
Rock	1	324
Hard clay-sandy	57	381
Hard sand some clay	22	403
Rock	2	405
Hard sand	5	410
Rock	1	411
Hard packed sand	18	429
Soft rock	2	431
Hard sand	12	443
Lime rock	8	451
Hard packed sand	13	464
Rock	1	465
Hard packed sand	5	470
Lime rock	3	473
Hard packed sand	8	481
Hard clay	2	483
Sand with clay	5	488
Rock	1	489
Sand with clay	8	497
Rock	1	498
Sand	1	499
Sand with clay	4	503
Rock	1	504
Sandy clay	3	507
Lime rock	3	510
Sand	2	512
Lime rock	3	515
Sand	3	518

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 62

	Thickness (ft)	Depth (ft)
Lime rock	5	523
Sand with clay	2	525
Rock	1	526
Sandy lime and clay	5	531
Hard lime-shells	9	540
Sand	6	546
Lime, clay, shells	8	554
Hard lime	1	555
Sand	5	560
Sandy clay	4	564
Sand	2	566
Sand lime shells clay black muck	23	589
Sand, shale black muck	19	608
Hard clay	12	620
Light gray lime	14	634
Light gray lime	22	656
Light gray lime	23	679
Light gray lime	12	691
Soft gray lime with clay	10	701
Soft gray lime with clay	21	722
Hard lime	2	724
Hard lime with clay	14	738
Hard packed sand	8	746
Hard packed sand	5	751
Hard lime	4	755
Soft lime with clay	4	759
Hard lime, sandy	10	769
Clay with lime and sand	23	792
Clay with lime and sand	4	796
Hard lime, sandy clay	16	812
Hard lime, clay	20	832
Hard lime with clay	20	852
Hard lime with clay	8	860

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 64

Owner: Macedonia Water System Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sandy clay	12	12
Pink sand	14	26
Red sand	10	36
Sand	110	146
Blue clay	41	187
Hard rock	11	198
Sand with clay breaks	7	205
Blue clay	6	211
Sand and clay	4	215
Hard rock	2	217
Clay	23	240
Rock	2	242
Clay	47	289
Clay with sand breaks	20	309
Sand with lime breaks	20	329
Sand	1	330
Hard rock	31	361
Rock with sand breaks	17	378
Clay with sand breaks	31	409
Rock	1	410
Clay and sand	8	418
Sand lime and clay	22	440
Sand and lime	8	448
Rock	2	450
Sand and lime	32	482
Sand and lime	26	508
Lime and clay breaks	31	539
Soft white lime	30	569
Lime	29	598
Lime	31	629
Lime	19	648
Lime	10	658
Sand with lime breaks	11	669
Rock	1	670
Lime with sand breaks	23	693
Lime with sand breaks	10	703
Rock	2	705
Lime	19	724
Sand with lime breaks	32	756
Sand clay lime	32	788
Sand lime clay	31	819
Sand lime clay	32	851

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 65

Owner: U.S. Army - Fort Rucker Driller: Layne-Central Company
Well 1

	Thickness (ft)	Depth (ft)
Sandy clay	11	11
Shale	34	45
Rock	8	53
Shale	9	62
Sandy shale	12	74
Shale	74	148
Sand	27	175
Rock	5	180
Sand	21	201
Rock	1	202
Sand	17	219
Rock	1	220
Sand	7	227
Hard lime rock	8	235
Sand	9	244
Fine sand and lime	21	265
Sandy shale	39	304
Rock	2	306
Fine sand	3	309
Rock	6	315
Sand	10	325
Rock	1	326
Sand	14	340
Lime	82	422
Lime and hard rock	63	485
Hard rock	14	498
Sand	20	518
Hard rock	3	521
Sand	10	531
Rock	1	532
Sand	6	538
Sand and lime	39	577
Hard rock	17	594
Sand	11	605
Rock and sand breaks	15	620
Hard rock	4	624

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 66

Owner: U.S. Army - Fort Rucker Driller: Layne-Central Company
Well 2

	Thickness (ft)	Depth (ft)
Clay	20	20
Sandy shale	7	27
Soft rock	8	35
Shale	25	60
Sandy shale	10	70
Rock	11	81
Shale	6	87
Sand and shale	34	121
Rock	2	123
Shale	30	153
Rock	1	154
Shale	12	166
Clay	2	168
Sand, rock	13	181
Sand (draggy)	37	218
Sand (packed, but better)	39	257
Sand, cut good	18	275
Rock	1	276
Sand and shale	18	294
Rock	1	295
Sandy shale	11	306
Sand	14	320
Sand	4	324
Rock	2	326
Sand	4	330
Sand	4	334
Rock	2	336
Sand	10	346
Soft rock	2	348
Sand (draggy)	18	366
Sandy shale and limestone	96	462
Lime rock	35	497
Soft limestone	4	501
Hard lime rock	23	524
Sand	19	543
Rock	3	546
Sand	7	553
Limestone	2	555
Sand	2	557
Sand, streaks of limestone	9	566
Sand	2	568
Rock	1	569
Limestone	56	625
Clay	5	630
Sand	2	632

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 66		
	Thickness (ft)	Depth (ft)
Rock	2	634
Sand	15	649
Rock	1	650
Clay	21	671
Rock	3	674
Sand	5	679
Rock	1	680

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 67

Owner: U.S. Army - Fort Rucker Well 3 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sand	18	18
Shale	10	28
Sand	19	47
Lime	4	51
Soft rock	6	57
Shale	17	74
Lime	10	84
Sandy shale	10	94
Rock	11	105
Shale	10	115
Sandy shale	33	148
Lime rock	2	150
Shale	46	196
Shady shale	6	202
Green sand	40	242
Rock	2	244
Green sand	20	264
Hard shale	5	269
Sand	14	283
Rock	2	285
Sand	1	286
Rock	2	288
Sand and shale	10	298
Shale	20	318
Rock	1	319
Shale	5	324
Rock	1	325
Sand and shale	4	329
Rock	1	330
Sand	8	338
Rock	1	339
Sand, rock	3	342
Sand	5	347
Lime rock	3	350
Sand, rock	6	356
Sand	2	358
Rock	2	360
Sand	8	368
Rock	2	370
Sand, rock	2	372
Sand, streaks shale and limestone	66	438
Sand, shale and lime	43	481
Lime rock	15	496
Soft lime	28	524
Lime	10	534

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 67

	Thickness (ft)	Depth (ft)
Lime rock	15	549
Sand	18	567
Rock	3	570
Sand	5	575
Lime rock	10	585
Lime rock	5	590
Sand and lime rock	18	608
Sand streaked with lime rock	22	630
Rock	3	633
Limestone	17	650
Shale	5	655
Rock	1	656
Lime, rock	4	660
Sand, rock	11	671
Sand, rock	3	674

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 68

Owner: U.S. Army - Fort Rucker Well 5 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	10	10
Brown sand	3	13
Clay	4	17
Brown sand	9	26
Sandy clay	26	52
Sandy shale	45	97
Rock	10	107
Sandy shale	18	125
Rock	1	126
Shale	65	191
Shale, sand breaks	11	202
Green sand	9	211
Sandy shale	70	281
Lime rock	3	284
Sandy shale	10	294
Rock	2	296
Sandy shale	5	301
Rock	2	303
Shale rock breaks	17	320
Rock and lime	2	322
Shale	4	326
Rock	1	327
Shale	6	333
Rock	1	334
Sandy shale	14	348
Rock	1	349
Shale	2	351
Rock	13	364
Sand	15	379
Lime rock	111	490
Rock	2	492
Lime rock	43	535
Hard rock	13	548
Sand	20	568
Hard rock	4	572
Sand, rock breaks	47	619
Sand, shale, and rock breaks	27	646
Sand and lime	26	672

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 69

Owner: U.S. Army - Fort Rucker Well 4 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy shale	9	9
Soft clay	15	24
Soapstone	4	28
Streaks of sand and clay	18	46
Sand	8	54
Sandy clay	6	60
Muddy sand	10	70
Rock	2	72
Sandy shale	17	89
Sandy shale	20	109
Lime rock	12	121
Sand and shale	34	155
Shale	38	193
Rock	1	194
Sand and shale	20	214
Sand	39	253
Rock	1	254
Sand	29	283
Rock	3	286
Sand	9	295
Rock with breaks	6	301
Sand	4	305
Rock	1	306
Sand	7	313
Rock with breaks	5	318
Sand (draggy)	10	328
Rock	5	333
Sand	6	339
Rock	2	341
Sand and shale	18	359
Rock	2	361
Sand (draggy)	4	365
Rock	1	366
Sand and shale	4	370
Rock	5	375
Shale	9	384
Rock	1	385
Coarse sand	4	389
Lime rock	15	404
Lime rocks, sand breaks, good	16	420
Limestone, soft	102	522
Lime rock, sand breaks	25	547
Hard rock	15	562
Sand	19	581
Hard rock	3	584

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 69

	Thickness (ft)	Depth (ft)
Soft lime	13	597
Sand	4	601
Rock	1	602
Lime rock, sand breaks	6	608
Lime rock	5	613
Sand	5	618
Lime rock, sand breaks	37	655
Hard rock	7	662
Lime rock	8	670
Sand	19	689
Rock	1	690
Gummy shale	14	704
Lime rock	1	705
Shale	6	711
Rock	2	713
Sand	3	716
Rock and sand breaks	10	726
Sand	5	731
Rock and sand breaks	27	758
Lime rock	2	760
Rock	2	762
Lime rock, streaks of shale	32	794
Sand and rock breaks	27	821
Hard rock	8	829
Sand and rock	17	846
Hard rock	2	848
Rock and breaks	18	866
Shale and lime	9	875
Sand	2	877
Rock	2	879
Shale and sand breaks	12	891
Sandy shale	21	912
Tough shale	88	1000

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 70

Owner: U.S. Army - Fort Rucker Well 9 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Red clay	12	13
Sand with some clay	67	80
Loose sand with clay	17	97
Clay and shale, sandy streaks	20	117
Clay and shale	28	145
Lime, sandy	7	152
Hard lime rock	6	158
Clay	4	162
Clay with sandy streaks	31	193
Lime rock	1	194
Soft sandy clay	13	207
Sandy lime	15	222
Hard lime	1	223
Clay with lime	7	230
Clay	26	256
Soft sand with clay	18	274
Sand with lime	8	282
Sand	7	289
Lime rock	1	290
Sand	25	315
Sand with lime	5	320
Sand with rocks streaks, shells	23	343
Sand with rock streaks, shells	22	365
Sand with rock streaks, shells	23	388
Sand with rock streaks, shells	23	411
Sand with rock streaks, shells	22	433
Sand with rock streaks, shells	2	435
Medium white lime	21	456
Medium white lime	13	469
Hard white lime	10	479
Hard white lime	23	502
Hard white lime	23	525
Hard white lime	9	534
Extra hard white-gray lime	14	548
Medium white lime	23	571
Medium white lime	12	583
Extra hard white lime	7	590
Soft white lime	2	592
Extra hard white lime	1	593
Extra hard white lime	2	595
Loose sand and lime streaks	20	615
Extra hard lime, white	1	616
Sand with lime	23	639
Hard lime	3	642

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 70

	Thickness (ft)	Depth (ft)
Sand	7	649
Extra hard lime	1	650
Sand	3	653
Extra hard lime	1	654
Sand and lime streaks	7	661
Extra hard sandy lime	22	683
Extra hard sandy lime	9	692
Soft sandy lime	5	697
Extra hard sandy lime	9	706
Soft sandy lime	12	718
Extra hard lime	2	720
Soft sandy lime	6	726
Extra hard lime	2	728
Clay with hard lime streaks	23	751
Extra hard lime with clay and sand	22	773
Extra hard lime with clay	9	782
Sand	4	786
Extra hard lime with clay	24	810
Lime and sand streaks, cut rough	9	819
Extra hard lime with clay	4	823
Lime and sand streaks, cut rough	18	841
Lime and sand streaks, lime smooth	23	864
Lime and sand streaks, lime hard and smooth	23	887
Lime and sand streaks, lime hard and smooth	22	909
Lime and sand streaks, lime hard and smooth	2	911
Clay with hard lime streaks	21	932
Clay, hard on bottom	23	955
Hard clay	113	1068
Hard clay, sandy streaks	23	1091
Hard clay	68	1159

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 71

Owner: U.S. Army - Fort Rucker Well 6 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sandy clay	15	15
Yellow sand	55	70
Fine sand	22	92
Fine white sand	28	120
Sand with clay streaks	42	162
Sandy clay	9	171
Shale	41	212
Rock	4	216
Lime	7	223
Rock	2	225
Shale	14	239
Rock	2	241
Shale	88	329
Rock	1	330
Green sand	10	340
Lime rock	5	345
Green sand	42	387
Rock	2	389
Green sand	6	395
Rock	7	402
Sand	14	416
Lime rock and sand breaks	25	441
Lime rock and shale	36	477
Lime rock	2	479
Shale	8	487
Lime rock	5	492
Hard rock	2	494
Lime rock and sand breaks	8	502
Sand	29	531
Shale	4	535
Soft lime rock	71	606
Hard lime rock	31	637
Sand and lime	16	653
Hard lime rock	13	666
Fine sand	17	683
Hard rock	4	687
Sand	13	700
Lime rock and breaks sand	51	751
Lime rock	13	764
Sand	11	775
Lime rock	4	779

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 73

Owner: Town of Level Plains - Well 1 Driller: Tom Smith Artesian Well Co.

	Thickness (ft)	Depth (ft)
Clay	15	15
Yellow sand	25	40
Yellow sand	5	45
Clay	5	50
Yellow sand	50	100
Yellow marl	10	110
Blue marl	15	125
Rock breaks and shell	5	130
Marl	10	140
Shell and sand (blue-gray)	20	160
Marl	55	215
Rock (blue-hard)	1	216
Marl	22	238
Rock	2	240
Sandy marl	20	260
Marl	17	277
Sandy	3	280
Marl	37	317
Sandy marl	23	340
Sand	10	350
Sand	10	360
Sand	20	380
Sandy marl	35	415
Rock	2	417
Marl	33	450
Sand rock breaks	10	460
Sandy marl and shell	20	480
Shell rocks and sand	5	485
Limestone with sand	15	500
Gray rock some sand	20	520
Gray rock and black marl or charcoal sand	20	540
Gray rock and black marl or charcoal sand	15	555
Limestone	5	560
Limestone	20	580
Limestone	20	600
Limestone	40	640
Limestone	40	680

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 74

Owner: Town of Daleville - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	11	11
Sand and gravel	38	49
Clay	9	58
Sand and gravel	12	70
Clay	40	110
Clay and rock	10	120
Rock	8	128
Clay and rock	12	140
Sand	9	149
Clay	43	192
Rock	3	195
Clay	29	224
Rock	2	226
Clay	43	269
Rock	2	271
Clay	30	301
Sand	20	321
Sand	12	333
Limerock	3	336
Sand	8	344
Sand and lime	17	361
Sand, clay, lime	25	386
Rock	3	389
Sand	12	401
Rock	2	403
Clay and rock	15	418
Clay and shells	5	423
Rock	1	424
Clay and shells	2	426
Rock	1	427
Clay and lime	11	438
Pack	2	440
Clay shells and lime	21	461
Sand	4	465
Limerock	5	470
Sand	10	480
Limerock	1	481
Sand	2	483
Limerock	2	485
Sand	4	489
Lime and rock	1	490
Sand and lime	15	505
Clay	36	541
Lime	10	551
Lime	23	574

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 74

	Thickness (ft)	Depth (ft)
Lime	12	586
Lime	25	611
Lime	32	643
Lime	12	655
Sand	16	671
Lime	5	676
Sand	6	682
Lime	6	688
Sand	5	693
Lime	4	697
Sand	4	701
Lime	10	711

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 75

Owner: Town of Daleville - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	2	2
Red clay	14	16
Sand	4	20
Sand and gravel	25	45
Sand and clay	16	61
Clay	16	77
Sand	11	88
Clay and rock	22	110
Rock	10	120
Clay	3	123
Rock	7	130
Clay and rock	6	136
Rock	3	139
Clay	58	197
Rock	2	199
Clay	30	229
Rock	1	230
Clay	70	300
Sand	21	321
Sand	10	331
Rock	4	335
Sand	9	344
Sand	22	366
Sand	18	384
Rock	5	389
Sand	7	396
Rock	2	398
Sand	2	400
Rock	2	402
Sandy clay	4	406
Rock	1	407
Clay	49	456
Clay and rock	9	465
Sand	5	470
Clay and rock	3	473
Sand and shells	13	486
Sand and shells	7	493
Rock	5	498
Sand	12	510
Sandy clay	18	528
Sandy clay	27	555
Sandy clay	20	575
Limerock	25	600
Limerock	22	622
Limerock	17	639

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 75		
	Thickness (ft)	Depth (ft)
Limerock	5	644
Limerock	3	647
Sand	18	665
Limerock	2	667
Limerock	3	670
Limerock	8	678
Sand	11	689
Sand	3	692
Limerock and sand	19	711
Limerock	22	733
Limerock	45	778

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 76

Owner: U.S. Army - Fort Rucker Airfield Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay, red and gray	10	10
Fine sand, some rock, gray clay	27	37
Clay, red and gray, fine sand	30	67
Clay, red and gray, fine sand, some rock	20	87
Red and gray clay	18	105
Gray clay, shells	10	115
Gray white limestone	13	128
Sand, gray and white limestone	19	147
Gray clay, shell, some limestone	12	159
Gray clay, some limestone	93	252
Red and gray clay	40	292
Gray sand, some gray clay and limestone	10	302
Mostly sand; some red and gray clay	44	346
Very fine sand	9	355
Fine sand, red clay, some limestone	10	365
Sand, red clay, limestone	12	377
Sand, red clay, limestone	10	387
Limestone, some sand	10	397
Sand, limestone, some red clay	10	407
Mostly gray clay	10	417
Mostly gray clay, some red clay	10	427
Gray clay, shells, specks of red clay	11	438
Gray clay, some red clay, limestone	9	447
Gray clay, some red clay	10	457
Sand and shells, some gray clay	12	469
Gray clay, some shells	9	478
Sand and shells, gray clay	10	488
Sand, gray clay, shells	11	499
Red and gray clay	10	509
Sand, shells, red clay	10	519
Limestone, some red clay	12	531
Red and gray clay	10	541
Limestone, fossils	10	551
Limestone, fossils	12	563
Red clay, gray clay, limestone	10	573
Limestone, some chalky	10	583
Limestone, real chalky	12	595
Fine chalky limestone, some clay	9	604
Fine to medium coarse chalky limestone	10	614
Chalky limestone	13	627
Red and gray clay, some limestone	10	637
Chalky limestone	10	647
Fine sand, chalky limestone	12	659
Fine sand, chalky limestone	10	669
Sand, chalky limestone, some clay	10	679

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 76

	Thickness (ft)	Depth (ft)
Mostly sand, some limestone	11	690
Very fine silty sand	10	700
White chalky clay and limestone	10	710
White chalky clay, coarse limestone	11	721
Chalky clay, some limestone	10	731
Gray clay, chalky limestone	10	741
Gray clay, chalky limestone, some fine sand	12	753
Sand, chalky limestone	10	763
Sand, chalky limestone	10	773
Sand, chalky limestone	11	784
Fine sand, chalky limestone	10	794
Fine sand, chalky limestone	10	804
Sand, chalky limestone	10	814
Fine to medium coarse sand, chalky limestone	10	824
Fine to medium coarse sand, chalky limestone	10	834
Mostly fine sand, some chalky limestone	12	846
Fine silty sand, some limestone	9	855
Fine silty sand, some limestone	10	865
Fine silty sand, chalky limestone	12	877
Fine sand, some limestone	10	887
Sand, limestone	10	897
Gray clay, limestone	12	909
Gray clay, limestone	9	918
Gray clay, limestone, some sand	10	928
Medium coarse tan sand, some gray clay	12	940
Fine silty sand, some gray clay	10	950
Sand, gray clay, limestone	10	960
Sand, gray clay, limestone	11	971
Fine sand	9	980
Fine sand, some gray clay	10	990
Sand, gray clay, limestone	12	1002
Sand, limestone, gray clay	10	1012
Limestone, gray clay, some sand	10	1022
Mostly gray clay, some limestone	12	1034

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 78

Owner: U.S. Army - Fort Rucker Hatch Field Driller: Smith Well and Supply Company

	Thickness (ft)	Depth (ft)
Sand	40	40
Rock	4	44
Rocky marl	8	52
Blue marl	84	136
Blue sand fine, packed	20	156
Rock	2	158
Sandy marl	38	196
Rock	2	198
Sandy marl	6	204
Marl	6	210
Rock	1	211
Marl	9	220
Rock	1	221
Marl	11	232
Rock	1	233
Sandy marl	23	256
Rock, marl streaks	8	264
Rock	14	278
Hard rock	2	280
Coarse sand	20	300
Limestone	1	301

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 79

Owner: U.S. Army - Fort Rucker Driller: Layne-Central Company
Well 10

	Thickness (ft)	Depth (ft)
Sand	4	4
Red clay	8	12
Red sandy clay	68	80
Blue clay	25	105
Lime clay and rock	117	222
Green sand	32	254
Green sand	31	285
Green sand	31	316
Green sand	32	348
Sand and lime rock	30	378
Sand and lime rock	32	410
Coarse brown sand and lime	31	441
Soft white lime	31	472
Soft lime	31	503
Soft lime	32	535
Soft lime	22	557
Hard lime	8	565
Hard sand and lime	31	596
Sand and lime breaks	31	627
Sand and hard lime	31	658
Sand and hard lime	31	689
Clay sand and lime	32	721
Brown sand and lime	31	752
Brown sand and lime	31	783
Sand and clay, hard lime	31	814
Sand and clay, hard lime	32	846
Clay and sand	32	878
Blue clay	268	1146

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 80

Owner: Town of Newton - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay, red, sandy	12	12
Sand, clay balls	8	20
Sand, white, coarse and gravel	52	72
Clay	1	73
Sand, red, fine	8	81
Limestone	12	93
Rock	4	97
Clay, hard	19	116
Rock	2	118
Clay	14	132
Rock	2	134
Shale, hard	36	170
Rock	3	173
Shale, blue, hard	29	202
Rock	1	203
Clay	12	215
Sand, gray, fine	13	228
Rock	2	230
Shale	55	285
Sand, fine, hard streaks	4	289
Sand, gray, coarse	9	298
Rock	1	299
Shale, sand, streaks	29	328
Shale, hard	17	345
Limestone, hard	11	356
Shale	5	361
Limestone, soft	12	373
Rock	1	374
Limestone, soft	46	420
Rock	3	423
Limestone	26	449
Sand, limestone breaks	24	473
Limestone, white, soft	58	531
Limestone, hard	68	599
Sand, hard	12	611
Rock, hard	2	613
Sand, hard	1	614
Rock, hard	7	621
Sand, hard	13	634
Rock, sand breaks	12	646
Sand, hard	13	659
Rock	1	660
Limestone, hard; soft streaks	8	668
Sand	4	672
Rock	2	674

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 80

	Thickness (ft)	Depth (ft)
Sand	1	675
Limestone, hard; soft streaks	5	680
Sand	20	700
Limestone, hard	25	725
Rock	2	727
Limestone, hard; soft streaks	27	754
Rock	2	756
Limestone	5	761

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 81

Owner: Town of Newton - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	15	15
Sand	13	28
Sand and gravel	5	33
Sand	50	83
Clay	6	89
Rock	2	91
Sandy clay	1	92
Rock	2	94
Sandy clay and rock	55	149
Rock	4	153
Sandy clay	34	187
Clay	41	228
Rock	1	229
Clay	2	231
Rock	3	234
Sandy clay	67	301
Rock	2	303
Sandy clay	31	334
Sand and clay streaks	11	345
Clay	20	365
Sand and clay	13	378
Rock	1	379
Sand with clay	21	400
Clay with rocks	23	423
Clay	4	427
Sand with clay	10	437
Shale and rocks	43	480
Sand with lime	23	503
Gravel with lime	22	525
Lime with sand	24	549
Lime with gravel	23	572
Soft lime with clay	22	594
Lime and clay	23	617
Clay with lime	23	640
Clay with lime	5	645
Lime	9	654
Sand	6	660
Rock	5	665
Sand with lime breaks	19	684
Rock	2	686
Sand and rock	2	688
Rock	1	689
Sand	1	690
Rock	15	705
Sand and rock	2	707

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 81

	Thickness (ft)	Depth (ft)
Lime and sand	11	718
Lime	12	730
Lime and sand	3	733
Lime	7	740
Lime with sand	18	758
Lime	1	759
Lime and sand	3	762
Lime	35	797

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 83

Owner: Town of Midland City - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay, red	28	28
Clay and gravel	9	37
Rock	6	43
Sand, yellow, loose, muddy	31	74
Mud, sandy, loose	31	105
Clay	3	108
Sand	4	112
Clay	14	126
Sand and limestone	16	142
Sand and clay	16	158
Clay, blue	7	165
Rock	1	166
Clay, sandy	10	176
Sand	12	188
Sand	3	191
Sand and limestone	23	214
Clay; limestone streaks	50	264
Rock	2	266
Clay	34	300
Rock, hard	1	301
Clay	72	373
Clay, sand streaks	17	390
Limestone, hard	7	397
Limestone, hard; and sand	41	438
Limestone; streaks shale	68	506
Shale, sandy; limestone breaks	18	524
Limestone	128	652
Sand, packed	14	666
Limestone	3	669
Sand, packed	13	682
Limestone	2	684
Limestone; streaks sand	48	732
Sand	3	735
Rock	2	737
Sand	6	743
Rock	2	745
Sand	9	754
Limestone; sand breaks	-	-

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 84

Owner: Town of Midland City - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	8	8
Clay	42	50
Sand	14	64
Sand	21	85
Sand	22	107
Sand	9	116
Sand, streaks clay	12	128
Sand, breaks small clay	20	148
Clay	16	164
Sand, fine	5	169
Rock, hard	1	170
Sand, fine	4	174
Sandy clay	17	191
Soft lime rock	7	198
Soft breaks lime rock	19	217
Shale	11	228
Lime rock	9	237
Sand and shale	15	252
Rock	13	265
Shale	110	375
Green sand, lime rock breaks	20	395
Sand and rock	22	417
Rock	15	432
Sand, no good	7	439
Rock and clay	53	492
Rock	15	507
Sand	3	510
Rock	4	514
Sand	5	519
Rock	3	522
Sand	1	523
Rock	1	524
Sand	9	533
Rock	1	534
Soft sandy lime rock	18	552
Soft sandy lime rock	22	574
Soft sandy lime rock	21	595

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 85

Owner: Town of Pinckard - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	2	2
Red clay	25	27
Soft pipe clay	30	57
Muddy sand	47	104
Sandy clay	16	120
Sand	18	138
Sandy clay	54	192
Soft rock	8	200
Sandy clay and rock breaks	22	222
Sandy clay and rock breaks	16	238
Lime rock and clay breaks	10	248
Hard clay and lime streaks	11	259
Hard lime rock	5	264
Hard clay and lime rock streaks	12	276
Sandy clay and lime breaks	17	293
Sandy clay	22	315
Sandy clay	15	330
Hard clay	57	387
Lime rock and sand breaks	19	406
Green sand and lime breaks	22	428
Sand and lime streaks	23	451
Sand and lime streaks	22	473
Clay and lime streaks	23	496
Clay and lime streaks	16	512
Lime rock	8	520
Lime rock	21	541
Lime rock	12	553
Sand and lime rock	10	563
Lime and clay breaks	15	578
Lime rock	9	587
Lime rock	22	609
Lime rock	23	632
Lime rock	23	655
Hard lime rock	23	678
Lime rock	9	687
Sand and rock breaks	11	698
Lime and lime breaks	14	712
Lime rock	4	716
Sand and lime breaks	4	720
Hard sand and lime breaks	22	742
Hard sand and lime breaks	23	765

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 87

Owner: American Brass Inc. - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	25	25
Flint rock hard	9	34
Red clay hard	11	45
Rock	1	46
Muddy sand	20	66
Muddy sand	14	80
Clay	2	82
Rock hard	13	95
Sand lime streak	2	97
Packed sand	10	107
Clay rock breaks	7	114
Rock hard	1	115
Clay	3	118
Sand	10	128
Clay	30	158
Packed sand	22	180
Sand fine	15	195
Rock	2	197
Clay lime breaks	18	215

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 90

Owner: City of Dothan - Well 4, Napier Field Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy, clay	28	28
Clay	19	47
Muddy sand	56	103
Rock	5	108
Sand and shale	48	156
Rock	1	157
Sand and shale	70	227
Hard shale	17	244
Rock	8	252
Hard shale	114	366
Hard shale	35	401
Rock	32	433
Sandy shale	53	486
Rock	17	503
Lime	6	509
Rock	2	511
Sandy shale	12	523
Lime	110	633
Rock	3	636
Sand	18	654
Rock	2	656
Sand	16	672
Rock	32	704

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 91

Owner: City of Dothan - Well 23 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	30	30
Sand	60	90
Clay	16	106
Sand	4	110
Lime and clay	45	155
Sand	9	164
Clay and lime	46	210
Clay	22	232
Rock	3	235
Lime	19	254
Clay	34	288
Rock	5	293
Shale	90	383
Sand and lime rock	30	413
Clay and lime	100	513
Sand	25	538
Clay	6	544
Sand, lime and clay breaks	26	570
Lime and clay breaks	31	601
Soft lime	32	633
Lime hard breaks	31	664
Lime	32	696
Hard lime	14	710
Sand and lime	17	727
Sand with lime breaks	31	758
Sand with lime breaks	8	766
Clay and hard lime	16	782
Sand and lime	8	790
Sand and lime	33	823
Rock	2	825
Sand and lime	8	833
Rock	1	834
Sand and lime	5	839
Rock	1	840
Sand and lime	13	853
Sand and lime	9	862
Rock	1	863
Clay	16	879
Rock	1	880
Clay	4	884
Clay	6	890
Rock	1	891
Clay	13	904
Rock	1	905
Clay	10	915

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 92

Owner: City of Dothan - Well 22 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	20	20
Sand, red	80	100
Rock	1	101
Clay, rock and sand	27	128
Hard rock	2	130
Clay, rock and sand	10	140
Rock	1	141
Clay	9	150
Rock	1	151
Sandy clay	6	157
Rock	1	158
Clay, sand and rock streaks	87	245
Sandy clay and lime	7	252
Rock	3	255
Lime	4	259
Rock	2	261
Black clay	29	290
Clay and rock streaks	6	296
Clay	65	361
Rock	1	362
Clay	46	408
Soft rock and sand streaks	20	428
Hard rock	2	430
Sand	19	449
Sand, clay and rock streaks	8	457
Lime, sand and rock	40	497
Soft rock	2	499
Clay sand and rock breaks	21	520
Sand and lime	4	524
Sand and lime	23	547
Lime soft	15	562
Hard lime	8	570
Soft lime hard streaks	23	593
Soft lime hard streaks	22	615
Soft lime hard streaks	23	638
Soft lime clay streaks	22	660
Soft lime	5	665
Soft lime and rock	18	683
Soft lime and shale streaks	22	705
Hard lime clay and sand streaks	23	728
Hard lime and sand streaks	6	734
Sand	16	750
Sand rock breaks	22	772
Sand	5	777
Rock	1	778

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 92		
	Thickness (ft)	Depth (ft)
Sand	6	784
Rock	6	790
Sand	4	794
Sand streaks of lime	22	816
Sand streaks of lime	15	831
Rock sand and clay streaks	7	838
Rock sand and clay streaks	22	860

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 94

Owner: City of Headland - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	10	10
Sand	13	23
Sand	45	68
Packed sand	26	94
Red sand	8	102
Limerock	8	110
Shale	6	116
Limerock	18	134
Sand	3	137
Rock	1	138
Fine sand	16	154
Sand	21	175
Sand and shale	20	195
Rock	3	198
Sand shale and breaks limerock	16	214
Limerock	29	243
Shale	101	344
Sand	9	353
Sandrock and shale	26	379
Limerock	36	415
Sand	3	418
Shale and sand breaks	33	451
Limerock and sand breaks	33	484
Shale	31	515
Limerock	69	584
Sand	13	597
Sand	13	610
Lignite	11	621
Limerock and sand breaks	14	635
Rock	7	642
Sand	16	658

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 95

Owner: City of Headland - Well 2 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	19	19
Sand	19	38
Clay	6	44
Sand and gravel	38	82
Rock	2	84
Sand	13	97
Rock	3	100
Lime	31	131
Clay	56	187
Clay	14	201
Clay and sand	24	225
Clay	19	244
Rock	2	246
Lime	7	253
Rock	2	255
Sand and clay	54	309
Shale	51	360
Shale and sand	25	385
Lime and sand	10	395
Lime rock	6	401
Lime and sand	8	409
Lime rock	11	420
Sand	5	425
Sand	6	431
Clay	8	439
Lime, hard	4	443
Clay	12	455
Lime and clay	34	489
Sandy clay	11	500
Clay	4	504
Sandy clay	8	512
Lime	29	541
Lime	23	564
Lime	22	586
Lime	22	608
Lime	12	620
Lime	11	631
Lime	22	653
Lime	4	657
Sand	10	667
Lime	1	668
Sand	5	673
Lime	3	676
Lime	9	685
Lime	3	688
Lime	3	691
Lime	3	694
Sand and lime	5	699
Lime	11	710

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 96

Owner: City of Dothan - Well 13 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sandy clay	15	15
Loose sandy clay	5	20
Clay	2	22
Sand	5	27
Sandy clay	6	33
Clay	25	58
Rock	2	60
Soft limerock	8	68
Hard limerock	12	80
Clay	5	85
Loose sand	25	110
Loose sand and red clay	23	133
Loose sand and clay	10	143
Hard rock	5	148
Clay	16	164
Rock	1	165
Clay and rock breaks	20	185
Rock	1	186
Sand and rock breaks	7	193
Lime rock	5	198
Rock and sand breaks	14	212
Blue sand clay and rock breaks	6	218
Rock	1	219
Sand and rock breaks	5	224
Hard rock	1	225
Clay	2	227
Loose sand	14	241
Rock	2	243
Clay	4	247
Blue sandy clay	12	259
Rock	2	261
Sand	11	272
Clay	5	277
Sand draggy	16	293
Sand and clay breaks	26	319
Clay	13	332
Rock	14	346
Hard sand	8	354
Hard limerock	7	361
Blue sandy shale and rock	24	385
Blue clay	17	402
Rock	2	405
Shale	122	527
Rock	1	528
Sandy shale	45	573

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 96

	Thickness (ft)	Depth (ft)
Sand and streaks shale	12	585
Hard blue sand	10	595
Hard blue sand and rock breaks	19	614
Hard gray sand and rock breaks	23	637
Sand and sand rock breaks, bottom limestone cut better	28	665
Gray packed sand	8	673
Lime rock	2	675
Packed sand, limerock breaks	7	682
Packed sand fine	10	692
Limerock	3	695
Packed sand fine	9	704
Sand and rock breaks, rock 3 to 5 ft apart	19	723
Clay	5	728
Sand, clay, limerock	22	750
Limerock, hard and soft streaks	100	850
Hard rock	20	870
Hard shale	18	888
Rock and clay breaks	23	911

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 97

Owner: City of Dothan - Well 14 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	9	9
Soft sand	15	24
Clay	31	55
Limestone	7	62
Sand	3	65
Sand	23	88
Clay	2	90
Sand	8	98
Clay	12	110
Sand and clay	32	142
Clay, sand and gravel	30	172
Clay and sand	15	187
Sand	90	277
Limerock	3	280
Sand	11	291
Limerock	6	297
Sand	17	314
Limerock and clay	23	337
Sand, clay and limestone	24	361
Limestone and sand	6	367
Sand and limestone	27	394
Limestone	22	416
Limestone	13	429
Limestone	13	442
Limestone	63	505
Clay	195	700
Sand	12	712
Limerock	5	717
Sand	13	730
Limerock	1	731
Sand	17	748
Limerock	1	749
Limerock and sand	23	772
Limerock and sand	23	795
Limerock and sand	23	818
Limestone and sand and clay	23	841
Shale and lime	69	910

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 98

Owner: City of Dothan - Well 15 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	27	27
Sand	3	30
Clay	20	50
Sand and clay	24	74
Clay	21	95
Sand	49	144
Limerock	10	154
Limerock and sand	43	197
Sandy clay	51	248
Clay	10	258
Sand and clay	31	289
Limerock and clay	64	353
Rock	4	357
Limerock and clay	53	410
Clay	118	528
Rock	6	534
Sand	8	542
Sand	5	547
Rock	3	550
Sand and limerock	15	565
Sand	13	578
Sand and limestone	10	588
Sand	16	604
Limerock	2	606
Sand	4	610
Sand	10	620
Limestone	42	662
Sand	17	679
Sand	20	699
Rock	1	700
Sand	22	722
Lignite	2	724
Sandy clay	9	733

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 99

Owner: City of Dothan - Well 24 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Orange clay	15	15
Red sand, gravel	16	31
Red sandy clay	7	38
Red sandy clay, gravel	12	50
Lime rock	1	51
Soft yellow sand	9	60
Soft yellow sand	9	69
Red clay	4	73
Hard rock	1	74
SAnd, gravel clay	17	91
Sand	23	114
Sand	23	137
Sand	4	141
Yellow clay	5	146
Rock	3	149
Hard sand and lime	18	167
Medium pack sand, lime	5	172
Soft sand, shale	11	183
Soft sand, shale, clay	23	206
Soft sand, shale, clay	23	229
Soft sand, clay	23	252
Soft sand	15	267
Packed sand and clay	8	275
Sand and shale	11	286
Soft rock	1	287
Shale, sand streaks	11	298
Shale, sand, lime	13	311
Clay with sand streaks	13	324
Rock	3	327
Rock with sand streaks	2	329
Sand lime, clay	7	336
Sand, shale, lime, clay	8	344
Clay with sand	54	398
Clay with sand	10	408
Rock	2	410
Sand and clay streaks	3	413
Clay	46	459
Clay	11	470
Sand with clay streaks	9	479
Rock with sand streaks	3	482
Lime with sand and shale streaks	9	491
Sand with hard rock streaks	6	497
Sand, lime clay shale	23	520
Sand, clay shale	23	543
Sandy clay	9	552

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 99

	Thickness (ft)	Depth (ft)
Rock	1	553
Clay	12	565
Clay	6	571
Sandy lime	17	588
Sandy lime	9	597
Lime	7	604
Lime	7	611
Soft lime	10	621
Hard lime	12	633
White lime	23	656
Soft sand, gravel clay	9	665
Sand with hard streaks clay	14	679
Hard sand, lime, clay	22	701
Hard lime	23	724
Hard lime	13	737
Hard lime	9	746
Hard lime, soft streaks	23	769
Medium lime, hard streaks	17	786
Hard lime	6	792
Hard lime	7	799
Medium lime, hard streaks	11	810
Soft lime, hard streaks	5	815
Hard lime	6	821
Sand with lime	16	837
Sand with lime	6	843
Sand with hard lime	3	846
Sand with lime	14	860
Sand with lime	7	867
Hard lime	5	872
Sand, lime	6	878
Hard lime-sand	5	883
Sand with hard lime	22	905
Sand with hard lime	14	919
Hard rock	5	924
Sandy lime	4	928
Sand with rock	22	950
Sand with rock	16	966
Sand and lime	6	972
Hard sand, lime	23	995
Hard sand, lime	22	1017
Hard sand, lime	10	1027

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 100

Owner: City of Dothan - Well 19 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	15	15
Coarse red sand and clay	23	38
White sand and clay	42	80
Blue clay	6	86
Hard shale	6	92
Rock	1	93
Hard shale	15	108
Rock	1	109
Shale and rock streaks	21	130
Shale and sand	36	166
Hard shale and shells	28	194
Sand and chalk streaks	24	218
Rock	2	220
Sand and shale coarse gravel	48	268
Hard clay	27	295
Rock	2	297
Clay	5	302
Rock	1	303
Clay	157	460
Rock	1	461
Hard clay	16	477
Rock shale streaks	4	481
Shale	15	496
Sand with lime streaks	8	504
Clay and sand streaks	22	526
Sandy clay	5	531
Rock	1	532
Sandy clay	6	538
Rock clay streaks	3	541
Sand and rock streaks	4	545
Rock	1	546
Sand, clay and lime	6	552
Rock	2	554
Sand, clay and lime	14	568
Sandy lime	20	588
Sandy lime	22	610
Sandy lime	12	622
Sand	8	630
Lime and small clay	23	653
Lime	20	673
Soft lime, clay	23	696
Soft lime, clay	20	716
Hard clay and lime	31	747
Sandy lime	14	761
Hard lime and clay	21	782
Hard lime and clay	22	804
Hard clay and lime	22	826
Hard lime and clay	46	872

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 101

Owner: City of Dothan - Well 20 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	10	10
Sandy clay	22	32
Sand	48	80
Sandy clay	11	91
Clay	5	96
Sand	4	100
Clay	11	111
Lime, clay and gravel	8	119
Lime and rock	20	139
Sand	12	151
Rock	1	152
Sand clay	50	202
Rock	1	203
Clay, sand and rock breaks	17	220
Clay and shale	37	257
Rock	6	263
Lime, clay and shale	53	316
Rock	1	317
Shale	47	364
Rock	1	365
Shale	64	429
Soft rock	2	431
Sandy shale	4	435
Rock	2	437
Sand	21	458
Rock and sand breaks	6	464
Sand, shale and lime	24	488
Rock soft	3	491
Sand, shale and lime	13	504
Clay and lime, rock breaks	19	523
Sand and lime	23	546
Sand and lime	22	568
Sand and lignite	23	591
Sand and lignite	17	608
Clay	5	613
Clay and lime	17	630
Lime and clay breaks	6	636
Lime and clay breaks	37	673
Hard lime and clay	8	681
Clay and lime	22	703
Clay and lime	22	725
Sand, clay and lime	23	748
Sand and lime	22	770
Sand and lime	22	792
Sand and lime	10	802
Sand	16	818
Rock	6	824
Clay	12	836

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 102

Owner: City of Dothan - Well 25 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Red clay	16	17
Firm sand, small clay streaks	9	26
Clay	3	29
Loose sand	57	86
Lime rock, hard	1	87
Hard sand with lime	8	95
Hard lime	1	96
Coarse sand and lime	7	103
Sand	7	110
Hard rock	1	111
Clay	2	113
Soft sandy clay	8	121
Rock	1	122
Hard clay	9	131
Hard packed coarse sand, fine gravel	28	159
Sand, fine gravel, lime and green clay	32	191
Rock, lime	4	195
Coarse sand, lime and clay	35	230
Gummy clay	6	236
Sand and lime	4	240
Gummy clay	7	247
Hard rock	11	258
Sand lime and shale	15	273
Sand lime and shale (hard)	49	322
Hard sand, some clay and rock	41	363
Hard clay and rock	45	408
Hard clay, rock and sand	23	431
Sand, rock and clay, hard	45	476
Sand with clay	12	488
Sand lime and clay streaks, hard	68	556
Soft lime	4	560
Hard lime, soft streaks	75	635
Soft lime	11	646
Hard lime	12	658
Hard lime, soft streaks (clay)	22	680
Hard lime, brittle	22	702
Hard lime, soft streaks (clay)	22	724
Hard lime	7	731
Packed sand, with lime, little clay	16	747
Packed sand with lime, little clay	22	769
Packed sand with lime, small clay streaks	18	787
Hard rock (4 in.)	1	788
Sand	2	790
Packed sand and clay streaks	8	798

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 102

	Thickness (ft)	Depth (ft)
Rock (2 in.)	1	799
Packed sand and clay streaks	7	806
Rock (2 in.)	1	807
Packed sand and clay streaks	5	812
Packed sand	3	815
(Hard) rock	2	817
Sand and clay	6	823
Lime rock, hard	3	826
Soft lime, some clay	7	833
Lime rock, hard	1	834
Soft lime, some clay	1	835
Soft lime	2	837
Lime rock, hard	1	838
Lime, sandy, some clay	20	858
Lime, sandy, some clay	9	867
Lime rock (extra hard)	4	871
Medium lime	10	881
Hard sandy lime	23	904
Hard sandy lime	23	927
Hard sandy lime	23	950

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 103

Owner: City of Dothan Waste Treatment Facility
Driller: Smith Well and Supply Co.

	Thickness (ft)	Depth (ft)
Chalk	8	8
Gravel	2	10
Clay	42	52
Sand	24	76
Clay	9	85
Sand	31	116
Chalk	4	120
Limestone	5	125
Chalk	5	130
Marl	6	136
Marl	12	148
Rock	8	156
Rock	4	160
Marl	11	171
Marl	25	196
Marl	7	203
Marl	11	214
Marl	5	219
Marl	37	256
Marl	1	257
Rock	1	258
Marl	18	276
Marl	6	282
Marl	10	292
Sand	20	312
Rock	6	318
Sand	4	322
Rock	1	323
Sand	5	328
Rock and sand	8	336
Sandstone	20	356
Sandstone	19	375
Sandstone	5	380
Rock	19	399
Rock	6	405
Sand	11	416
Sand	20	436
Sand	20	456

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 104

Owner: City of Dothan - Well 17 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	1	1
Soft clay	3	4
Hard clay	12	16
Sandy clay	11	27
Rock	13	40
Clay	11	51
Green sandy lime-lost returns	35	86
Rock	2	88
Limerock	19	107
Sand	4	111
Rock	1	112
Sand and rock streaks	20	132
Hard rock	16	148
Lime rock softer	22	170
Rock	2	172
Lime	8	180
Rock	1	181
Lime rock and soft streaks	29	210
Soft lime and sand	93	303
Rock	3	306
Sand and clay	20	326
Soft rock	2	328
Lime and sand	19	347
Clay	17	364
Rock	3	367
Clay and rock breaks	5	372
Clay	100	472
Rock	2	474
Clay and rock streaks	20	494
Rock	1	495
Clay and rock streaks	46	541
Sand Nanafalia or Neheola	8	549
Sand	6	555
Limerock	4	559
Sand, lime and shells	8	567
Limerock	7	574
Sand, lime and shells	21	595
SAnd, lime and shells	5	600
Rock	3	603
Sand and lime	12	615
Rock	2	617
Finer sand and lime	24	641
Finer sand and lime	27	668
Lime, hard and soft streaks	54	722
Brown sand and lime Providence	10	732
Brown sand and lime	23	755
Brown sand and lime	15	770
Clay and rock streaks	8	778

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 105

Owner: City of Dothan - Well 9 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	75	75
Sandy clay	5	80
Clay	10	90
Sand	10	100
Rock	12	112
Sand and rock breaks	13	125
Sand	11	136
Sandrock	15	151
Rock	2	153
Hard sandy lime	36	189
Rock	8	197
Fine sand	18	215
Clay	1	216
Sand	7	223
Sand	13	236
Clay	4	240
Sand	15	255
Rock	1	256
Clay	7	263
Sand	17	280
Sand	5	285
Clay	6	291
Sand	18	309
Clay	4	313
Rock	17	330
Sand	10	340
Hard lime	8	348
Sandy lime	19	367
Limestone	13	380
Limerock hard	10	390
Shale	180	570
Sand	7	577
Rock, soft	1	578
Sand	4	582
Rock, small breaks, sand	10	592
Rock	8	600
Sand	18	618
Rock sand breaks	4	622
Sand	6	628
Rock	4	632
Sand	10	642
Rock	3	645
Sand	8	653
Rock	3	656
Hard sand	6	662

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 105

	Thickness (ft)	Depth (ft)
Rock	2	664
Hard sand	4	668
Rock	2	670
Sand, three small boulders	21	691
Sand	5	696
Limerock	54	750
Pack sand	40	790
Clay	35	825
Hard rock	10	835
Rock	-	-

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 106

Owner: City of Dothan - Well 12 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Top soil	2	2
Hard clay	50	52
Sandy clay	22	74
Coarse white sand	10	84
White clay and sand	10	94
Rock (flint)	41	135
Pack sand with soft streaks	21	156
Sand and limestone streaks	8	164
Sand and streaks red clay	14	178
Sand and streaks red clay	9	187
Hard limestone	7	194
Limestone and sand breaks	21	215
Fine muddy sand	8	223
Limestone and sand breaks	10	233
Clay	3	236
Limerock	1	237
Clay and limerock	11	248
Sand	3	251
Clay	8	259
Fine sand and rock breaks	29	288
Draggy sand	12	300
Sand (cut good)	11	311
Sand (draggy)	21	332
Sandy clay	20	352
Rock	3	355
Sand and limerock breaks	5	360
Limestone, sand rock and clay	240	600
Sand and limestone	27	627
Limerock	7	634
Sand	10	644
Sand and limestone breaks	11	655
Limerock and sand breaks	29	684
Limerock	5	689
Limestone and white sandy clay	31	720
Limerock	51	771
Limerock and sand breaks	7	778
Red sand	24	802
Red sand	18	820
Sand and clay	30	850

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 108

Owner: City of Dothan - Well 10 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red sandy clay	21	21
Coarse red sand	12	33
Clay	16	49
Coarse sand streaks, clay	37	86
Coarse yellow sand	51	137
Rock	16	153
Sand	2	155
Rock and sand breaks	4	159
Sand	2	161
Lime rock	22	183
Sand	16	199
Sand	14	213
Clay	6	219
Sand	56	275
Sandy shale	15	290
Limestone	3	293
Sand	3	296
Rock	33	329
Soft lime sand streaks	14	343
Rock	2	345
Fine sand	2	347
Rock	1	348
Limerock sand streaks	4	352
Hard rock	17	369
Shale	46	415
Rock, hard	3	418
Shale	139	557
Sand	11	568
Rock	11	579
Sand	7	586
Rock	1	587
Sand	2	589
Rock	1	590
Sand	4	594
Rock	4	598
Sand	8	606
Rock	1	607
Rock and sand breaks	7	614
Sand	3	617
Rock	2	619
Sand	2	621
Rock	1	622
Fine sand	11	633
Rock and sand breaks	8	641
Sand coarser than above with breaks limerock	10	651

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 108

	Thickness (ft)	Depth (ft)
Rock	2	653
Sand	4	657
Rock	1	658
Sand	2	660
Limerock	43	703
Limerock breaks red sand	9	712
Pack sand	13	725
Rock	3	728
Pack sand	44	772
Hard sandy lime and shale	18	790

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 109

Owner: City of Dothan - Well 7 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	8	8
Sand	40	48
Clay	10	58
Clay and boulders	3	61
Sand, soft, muddy	39	100
Boulder	-	-
Sand, white, packed	6	106
Sand, yellow, soft	21	127
Sand, red, soft, with shell and gravel	23	150
Sand, red, soft	15	165
Clay, sand	5	170
Rock; soft and hard streaks	27	197
Rock	2	199
Sand	3	202
Rock	1	203
Limestone; sand breaks	19	222
Sand	30	252
Clay	3	255
Sand	24	279
Clay	4	283
Sand	20	303
Rock	1	304
Sand	25	329
Rock	-	-

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 110

Owner: City of Dothan - Well 11 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	52	52
Limestone, lost returns pumped cement in it, and finally set 24 in. surface casing	38	90
Packed sand with soft streaks	53	143
Packed sand	20	163
Rock	1	164
Clay	4	168
Limerock	27	195
Sand and lime breaks	34	229
Clay and lime breaks	51	280
Sandy clay	12	292
Sand	6	298
Sandy clay	25	323
Limestone	95	418
Clay	125	543
Blue and white clay	63	606
Hard shale	19	625
Limerock	5	630
Dark gray sand	2	632
Limerock	3	635
Dark gray sand	11	646
Dark gray sand	12	658
Limerock	3	661
Sand	2	663
Limerock	1	664
3 to 4 ft streaks sand with 6 to 8 in. breaks limerock	70	734
Sand and limerock	70	804
Brown sand and small rock breaks	31	835
Blue shale	15	850

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 111

Owner: City of Dothan - Well 16 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Clay	7	7
Sandy clay	5	12
Clay	13	25
Sand	4	29
Clay	4	33
Sandy clay	9	42
Clay	16	58
Lime	9	67
Cavity	-	-
Open hole	5	72
Soft sand	18	90
Sand	58	148
Rock	7	155
Hard lime streak	35	190
Sand lime streak	5	195
Sand lime streak	9	204
Soft rock	2	206
Clay	15	221
Rock	2	223
Sandy clay	7	230
Rock	1	231
Sandy clay	8	239
Rock	3	242
Draggy sand	10	252
Clay	12	264
Sand (sample No. 1)	15	279
Clay	2	281
Sand (sample No. 2)	24	305
Sand lime streak	5	310
Rock soft	6	316
Hard sand	18	334
Pack sand (sample No. 3)	16	350
Pack sand	5	355
Rock	1	356
Sand lime (sample No. 4 cut fair)	29	385
Hard sand lime	16	401
Rock	8	409
Sandy clay	44	453
Clay	8	461
Sandy clay	21	482
Clay	19	501
Hard rock	1	502
Sandy clay	23	525
Clay	3	528
Rock	1	529

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 111

	Thickness (ft)	Depth (ft)
Sandy clay	12	541
Rock	-	-
Sandy clay	10	551
Rock	-	-
Clay	5	556
Rock	1	557
Sandy clay	35	592
Green sand (sample No. 5 1/8 in.)	24	616
Rock	1	617
Draggy green sand	5	622
Hard lime rock	6	628
Packed sand	10	638
Sandy lime (sample No. 6 1/2 in. mud)	5	643
Hard lime sand	17	660
Pack sand gray (sample No. 7 1/4 in. mud)	4	664
Pack sand lime (sample No. 8 1/8 in. mud)	16	680
Clay lime	20	700
Fine sand (sample No. 9)	11	711
Hard lime sandy clay (sample No. 10)	22	733
Hard lime sandy clay	23	756
Same	28	784
Pack sand 3 small lime breaks (sample No. 11 1/3 in. mud)	20	804
Lime clay	63	867

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 112

Owner: City of Dothan - Well 21 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	12	12
Sand	14	26
Pink clay	20	46
Sand	6	52
Clay	33	85
Lime, hard	16	101
Lime, hard and soft	28	129
Sand and soft lime	42	171
Rock	2	173
Hard lime, blue clay	13	186
Sand and blue clay streaks	14	200
Soft lime with hard streaks	69	269
Hard lime	2	271
Lime rock	20	291
Sand, gray	27	318
Sand, gray	16	334
Rock	1	335
Sand, gray	6	341
Sand, gray	13	354
Sand lime and clay streaks	47	401
Sand and gray	10	411
Sand and limes streaks	45	456
Lime rock	2	458
Hard and soft lime	38	496
Rock	2	498
Clay	39	537
Rock, hard lime	8	545
Clay and shale	100	645
Sand, green	15	660
Sand, green	8	668
Hard lime, clay and sand streaks	14	682
Lime and sand streaks	8	690
Sand, green	14	704
Sand with lime breaks, gray sand	6	710
Rock, hard	1	711
Sand with lime breaks, gray sand	16	727
Sand lime breaks with clay streaks	22	749
Sand and lime streaks	3	752
Hard clay and lime	19	771
Hard clay and sandy lime	43	814
Clay	45	859

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 114

Owner: U.S. Army - Fort Rucker, Allen Field
Driller: Smith Well and Supply Co.

	Thickness (ft)	Depth (ft)
Sandy clay	15	15
Gravel	30	45
Soft chalk	25	70
Stiff clay	30	100
Clay rock	10	110
Clay marl	40	150
Rock	2	152
Marl	3	155
Rock	1	156
Sandy marl	12	168
Rock	2	170
Mucky sand	10	180
Soft marl	15	195
Marl rock	22	217
Hard rock	5	222
Sandy marl	23	245
Marl	25	270
Rock	5	275
Marl	100	375
Sandy marl	10	385
Sand	10	395
Rock	2	397
Sand	28	425

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 116

Owner: Mount Pleasant - Battens Crossroads Water Authority Driller: Foy English Drilling Co.

	Thickness (ft)	Depth (ft)
Clay	20	20
Sand and clay	120	140
Clay and rock	20	160
Sand and clay	30	190
Sand, marl, and rock	40	230
Sand and marl	60	290
Marl and rock	20	310
Marl	320	630
Limestone and sand	40	670
Limestone	142	812

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 117

Owner: Carson Brunson Driller: John D. Hughes and Son

	Thickness (ft)	Depth (ft)
Red sandy clay	12	12
Sand	38	50
Yellow clay	15	65
Sand	30	95
White rock	2	97
Sand	9	106
Yellow clay	4	110
Sand and marl	20	130
Gray sand	32	162
Gray shell rock	8	170
Gray sand and marl	48	218
Fine sand and white shell	6	224
Marl	57	281
Gray rock	2	283
Marl with layers of B.P. sand	7	290
Marl, gray rock and sand	205	495
Gray rock	1	496
Gray sand with layers of sandstone	32	528
White rock	2	530
Gray sand and marl	10	540
Fine gray sand and shell rock	15	555
White rock	5	560
Gray sand and shell rock	75	635
Coarse sand	10	645
Limestone	115	760

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 120

Owner: Conagra, Inc. Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Red clay	20	20
Sand	26	46
Sandy clay	15	61
Sand	32	93
Sand, clay, lime	46	139
Limerock	4	143
Sand and lime	20	163
Clay	13	176
Sand	9	185
Rock	1	186
Sand and shale	51	237
Rock	1	238
Sand and shale	35	273
Lime and shale	25	298
Rock	1	299
Sand, shale, lime	45	344
Rock	1	345
Clay and sand	64	409
Clay and sand	51	460
Sand and shale	19	479
Rock	1	480
Sand and shale	16	496
Rock	2	498
Sand and clay	5	503
Sand, clay, lime	31	534
Sand, clay	8	542
Lime and sand	24	566
Sand, lime and clay	63	629
Sand and clay	58	687
Lime	198	885
Sand and lime	57	942
Sand	8	950
Lime and sand	23	973

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 122

Owner: Town of Coffee Springs - Well 1 Driller: Layne-Central Company

	Thickness (ft)	Depth (ft)
Sandy clay	84	84
Rock	1	85
Clay	12	97
Clay and boulders	6	103
Clay	5	108
Rock	1	109
Clay	4	113
Rock	1	114
Clay	10	124
Rock	1	125
Lime rock	43	168
Sand and limerock	21	189
Sand	33	222
Muck and shale	32	254
Sand	37	291

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 124

Owner: Town of Bellwood Driller: Smith Well and Supply Co.

	Thickness (ft)	Depth (ft)
Top soil	1	1
Clay	4	5
Chalk	13	18
Sand	7	25
Clay	23	48
Sand	12	60
Chalk	6	66
Rock	1	67
Clay	1	68
Rock	1	69
Marl	30	99
Rock	1	100
Sand	2	102
Rock	1	103
Marl	27	130
Sand	9	139
Marl	17	156
Rock	2	158
Sand	18	176
Sand	20	196
Marl	9	205
Sand	2	207
Sand	9	216
Sand	10	226
Marl	10	236
Sand and marl	20	256
Sand	16	272
Marl	4	276
Marl	5	281
Rock	6	287
Rock	3	290
Sand	14	304
Rock	2	306
Marl	5	311
Sand	10	321
Rock	11	332
Sand	6	338
Rock	2	340
Sand	9	349
Marl	30	379
Rock	1	380
Rock and marl	2	382
Marl	30	412
Sand	13	425
Rock	1	426

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 124

	Thickness (ft)	Depth (ft)
Sand	1	427
Marl	1	436
Marl	30	466
Rock	2	468
Marl	8	476
Marl	30	506
Sand	6	512
Rock	1	513
Sand	23	536
Sand	20	556

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 125

Owner: U.S. Army

Driller: Smith Well and Supply Co.

	Thickness (ft)	Depth (ft)
Clay	10	10
Sandy clay	20	30
Sandy gravel	15	45
Sand	20	65
Sandy clay	50	115
Soft marl	10	125
Soft rock	5	130
Marl rock	11	141
Marl	14	155
Rock	1	156
Sandy shells	25	181
Sandy clay	19	200
Rock	2	202
Pepper sand	43	245
Mucky sand	39	284
Marl	24	308
Clay, sand	17	325
Rock	7	332
Sand	8	340
Rock	1	341
Sand	14	355

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 126

Owner: Town of Malvern - Well 2 Driller: Powell Drilling Company

	Thickness (ft)	Depth (ft)
Clay	14	14
Sandy clay	7	21
Clay	2	23
Sandy clay	8	31
Sandy clay white	14	45
Sand and clay	24	69
Sand	5	74
Sand	19	93
Sand loose	8	101
Clay and coarse sand	8	109
Clay	9	118
Sand loose	8	126
Sand packed	10	136
Sand coarse packed	5	141
Sand packed to loose	20	161
Sand packed	8	169
Sand loose	16	185
Clay soft sandy	17	202
Sand rock with lime and shells	3	205
Sand rock and sand	6	211
Gray rock	1	212
Lime rock with soft streaks	12	224
Sand rock and sand	18	242
Rock	1	243
Sand loose with lime	4	247
Lime with sandy streaks	18	265
Rock lime	1	266
Lime rock and lime 4 in. rock	8	274
Lime rock broken with lime clay streaks	7	281
Sand loose	4	285
Rock	1	286
Sand with rock 1 in.	4	290
Rock sandy	3	293
Sand soft	1	294
Rock	1	295
Sand with rock soft	1	296
Rock	3	299
Sand soft with rock streaks	4	303
Sand blue	16	319
Sand packed	1	320
Clay	5	325

Table 3.--Driller's logs of wells in the Fort Rucker area--Continued

Well 127

Owner: Town of Malvern - Well 1 Driller: Powell Drilling Company

	Thickness (ft)	Depth (ft)
Clay	5	5
Sandy clay	3	8
Sand	16	24
Clay with 4 in. rock	25	49
Sand clay with gravel	15	64
Sand and gravel	19	83
Sand packed	25	108
Sandy clay 4 in. rock	3	111
Sandy clay	4	115
Clay with rock breaks	4	119
Sand	40	159
Rock lime	2	161
Sand clay	1	162
Rock lime	6	168
Lime and lime rock breaks	9	177
Rock	1	178
Marl with sand streaks	15	193
Sand	2	195
Marl sandy with rock breaks	25	220
Rock lime with sand streaks	9	229
Lime	10	239
Rock	1	240
Lime with 6 in. rock	6	246
Sand loose	12	258
Rock lime	3	261
Sand loose	12	273
Shale and marl	10	283
Marl	15	298
Rock	2	300
Sand with lignite packed	20	320
Sand with lignite packed	5	325
Rock	1	326
Sand with lignite packed	9	335
Rock	1	336
Sand	2	338
Sand and rock breaks	14	352
Marl sandy	4	356
Sand packed	10	366
Sand	5	371

U.S. GOVERNMENT PRINTING OFFICE: 1984-544-130/10010 Region 4.