TEXAS
WATER
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BOARD

Report 155

GROUND-WATER RESOURCES OF FORT BEND COUNTY, TEXAS

August 1972

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GROUND-WATER RESOURCES OF FORT BEND COUNTY, TEXAS

By

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United States Geological Survey

This report was prepared by the U.S. Geological Survey
under cooperative agreement with the
Texas Water Development Board.

August 1972

Published and distributed
by the
Texas Water Development Board
Post Office Box 13087
Austin, Texas 78711

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GROUND-WATER RESOURCES OF FORT BEND COUNTY, TEXAS

By J. B. Wesselman
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ABSTRACT

Fresh water is available in Fort Bend County only from the Chicot and Evangeline aquifers of Tertiary and Quaternary age. The Jasper aquifer, of Tertiary age, which is the deepest hydrologic unit, contains some slightly saline water in the northwestern part of the county.

The Evangeline aquifer contains fresh water at depths of more than 2,200 feet below mean sea level. The thickness of the water-bearing sands ranges from 100 to 600 feet and averages about 300 feet. The average coefficient of permeability is probably about 250 gpd (gallons per day) per square foot.

The thickness of sands containing fresh water in the Chicot aquifer ranges from 200 to 400 feet and averages about 350 feet. The average coefficient of permeability is estimated to be about 645 gpd per square foot. Most of the ground water pumped in the county comes from the Chicot aquifer.

The total thickness of sands containing fresh water in Fort Bend County averages about 650 feet. Assuming a porosity of 30 percent, about 120 million acre-feet of fresh water is in storage in the aquifers, and about 45 million acre-feet is in storage in the upper 500 feet of sediments.

The aquifers are pierced or displaced by eight salt domes and associated faults. At some locations over the domes, there is very little or no fresh ground water. In areas not affected by the domes, wells that are capable of yielding from 500 to 4,000 gpm (gallons per minute) of fresh water can be constructed in the Chicot aquifer. Wells of similar capacity can be constructed in the Evangeline aquifer, except in the southern part of the county and near the salt domes.

The quality of the fresh water contained in the aquifers is generally suitable for irrigation, public supply, and most industrial uses. However, in the vicinity of salt domes, the concentrations of dissolved solids and chlorides may exceed the standards for drinking water recommended by the U.S. Public Health Service. The ground water is generally very hard.

About 59 mgd (million gallons per day) of ground water was used for all purposes in 1968. About 39 mgd was used for irrigation, 14 mgd was used for industry, 5 mgd was used for public supply, and about 1 mgd was used for rural-domestic supply and livestock needs. The use of ground water for irrigation probably has stabilized, but because population growth is continuing the use of ground water for industry and municipal supply will increase. The perennial supply of ground water is estimated to be about 150 mgd, or 2 to 3 times the present withdrawal rate.

Since about 1900, water levels in the Evangeline aquifer have declined by amounts that range from less than 60 feet in the northwestern part of the county to more than 190 feet in the eastern part. Since 1947, water levels in the lower unit of the Chicot aquifer have declined less than 10 feet in the western part of the county and about 130 feet in the eastern part. Since 1947, water levels in the upper unit of the Chicot have declined less than 10 feet in the southwestern half of the county and more than 40 feet along the northeast edge.

The decline in water levels has been accompanied by compaction of subsurface material and subsidence of the land surface. The maximum subsidence during the period 1943-64 was more than 1 foot.

GROUND-WATER RESOURCES OF FORT BEND COUNTY, TEXAS

INTRODUCTION

Location and Extent of the Area

Fort Bend County is on the Gulf Coastal Plain of southeast Texas, south and west of the city of Houston (Figure 1). The county has an area of 862 square miles and a population (1970) of 51,410. Fort Bend County, which is adjacent to the Houston metropolitan area, is bordered by Harris, Brazoria, Wharton, Austin, and Waller Counties. The area is about 50 miles northwest of the Gulf of Mexico.

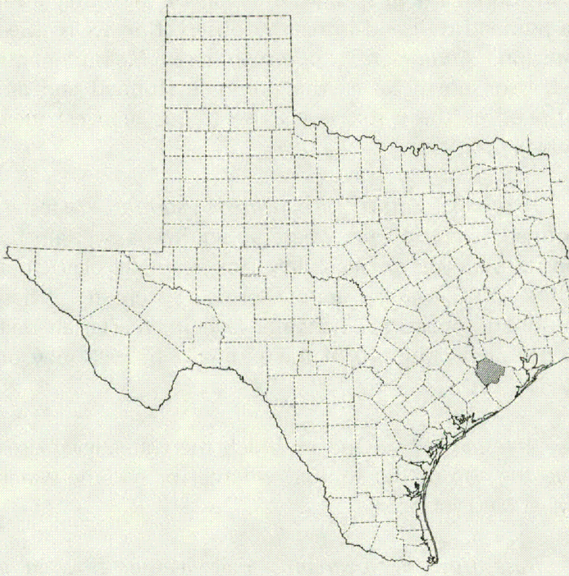


Figure 1.—Location of Fort Bend County

Purpose and Scope of the Investigation

The investigation of the ground-water resources of Fort Bend County began in September 1967 as a cooperative project of the U.S. Geological Survey and the Texas Water Development Board. The purpose of the investigation was to determine and evaluate the ground-water resources of the county. The results of the investigation are presented in this report, which include an analytical discussion of the occurrence and availability of ground water and a tabulation of basic data obtained during the investigation.

The scope of the investigation encompassed the collection, compilation, and analysis of data related to ground water, including: Determination of the location and extent of the water-bearing formations; the chemical quality of the water they contain; the quantity of water being withdrawn, and the effects of these withdrawals on the water levels; the hydraulic characteristics of the principal water-bearing formations; estimates of the quantities of ground water available for development; and the effects of ground-water withdrawals on land-surface subsidence. The following items were included in the study:

1. An inventory of all industrial, public supply, and irrigation wells, and a representative number of domestic and livestock wells (Table 4). Locations of the wells are shown on Figure 29.

2. Analysis of electrical logs and drillers' logs of water wells and oil tests to determine the hydrologic correlations (Figures 30-33), to determine the thickness of water-bearing sands (Figures 27-28), to determine the altitude of the base of fresh water and the base of slightly saline water (Figures 3, 7, and 8), and to determine the altitude of the base of the Evangeline and Chicot aquifers (Figures 4-5).

3. An inventory of the withdrawal of ground water for public supply, industrial use, and irrigation (Figure 13).

4. Aquifer tests to determine the hydraulic characteristics of the water-bearing sands (Table 2).

5. Determination of altitudes of water wells from topographic maps.

6. Measurements of water levels in wells and tabulation of water-level records (Table 6).

7. Collection and compilation of climatological records (Figures 11-12).

8. Analyses of water samples to determine the chemical quality of the water (Table 7).

9. Compilation of data on land-surface subsidence.

Economic Development

The economy of Fort Bend County is sustained by agriculture, including the production of cattle, cotton, rice, and feed grains; petroleum production; and sulfur mining. In addition, a major sugar refinery, a large power plant that supplies electricity to the Houston-Galveston area, and many small petrochemical plants contribute to the economy. Salt is produced from the Blue Ridge Salt Dome, and gravel and sand are produced at various locations in the county. A lightweight aggregate plant is located near Clodine.

Well-Numbering System

The well-numbering system used in this report is the system adopted by the Texas Water Development Board for use throughout the State. In this system, each 1-degree quadrangle in the State is given a number consisting of two digits from 01 to 89. These are the first two digits in the well number. Each 1-degree quadrangle is divided into 7½-minute quadrangles which are given a 2-digit number from 01 to 64. These are the third and fourth digits of the well number. Each 7½-minute quadrangle is divided into 2½-minute quadrangles given single digit numbers from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2½-minute quadrangle is given a 2-digit number in the order in which it was inventoried, starting with 01. These are the last two digits of the well number.

In addition to the 7-digit well number, a 2-letter prefix is used to identify the county. The prefixes for Fort Bend and adjacent counties are as follows: Austin, AP; Brazoria, BH; Fort Bend, JY; Harris, LJ; Waller, YW; and Wharton, ZA.

As an example, well JY-65-26-501, one of the public-supply wells at Richmond, is in the 1-degree quadrangle 65, in the 7½-minute quadrangle 26, in the 2½-minute quadrangle 5, and was the first well inventoried, 01.

Definitions of Terms

Most definitions of the terms used in this report are adapted from Meinzer (1923), the American Geological Institute (1960), Langbein and Iseri (1960), or Ferris and others (1962).

Acre-foot.—The volume of water required to cover 1 acre to a depth of 1 foot (43,560 cu. ft. or 325,851 gal.). The term is commonly used in measuring the volume of water in storage in an aquifer or a surface reservoir or volume of water used for various purposes.

Alluvium.—Sediments deposited by streams including flood-plain deposits and terrace deposits. Also called alluvial deposits.

Aquiclude.—A formation, group of formations, or part of a formation, which although porous and capable of absorbing water slowly, will not transmit it fast enough to yield an appreciable supply to a well or spring.

Aquifer.—A formation, group of formations, or part of a formation that is water bearing.

Aquifer test, pumping test.—The test consists of the measurement at specific intervals of the discharge and water level of the well being pumped and the water levels in nearby observation wells. Formulas have been developed to show the relationship of the yield of a well, the shape and extent of the cone of depression, and the properties of the aquifer (such as the specific yield, porosity, and coefficients of permeability, transmissibility, and storage).

Aquifer test, recovery test.—The test consists of the measurement at specific intervals of the water level in a pumped well and in nearby observation wells. (See definition: *Aquifer test, pumping test.*) Measurements are begun shortly after the pump is stopped and are continued as the water levels rise to (or recover) their previous positions.

Artesian aquifer, confined aquifer.—Artesian (confined) water occurs where an aquifer is overlain by deposits of lower permeability (for example, clay) that confine the water under pressure greater than atmospheric pressure. The water level in an artesian well will rise above the top of the aquifer. The well may or may not flow.

Artesian well.—One in which the water level rises above the top of the aquifer, whether or not the water flows at land surface.

Base flow of a stream.—Fair-weather flow in a stream supplied by ground-water discharge.

Brine.—Water containing more than 35,000 mg/l (milligrams per liter) of dissolved solids.

Cone of depression.—A conical depression in the water table or piezometric surface surrounding a discharging well.

Drawdown.—The lowering of the water table or piezometric surface caused by pumping (or artesian flow). In most instances, drawdown is the difference, in feet, between the static level and the pumping level.

Electrical log.—A graph showing the variation in the electrical properties of the rocks and their fluid contents when penetrated in a well. The electrical properties are natural potentials and resistivities to induced electrical currents, some of which are modified by the presence of the drilling mud.

Evapotranspiration.—Water withdrawn by evaporation from a land area, a water surface, moist soil, or the water table, and the water consumed by transpiration.

Fault.—A fracture in the earth's crust, along which the rocks on one side have been displaced relative to those on the other.

Flood plain.—The lowland that borders a stream. A flood plain is usually dry, but is subject to flooding.

Formation.—A body of rock that is sufficiently homogeneous or distinctive and extensive enough to be regarded as a mappable unit; usually named for a locality where a typical section of the formation is exposed.

Fresh water.—Water containing less than 1,000 mg/l of dissolved solids.

Gaining stream.—A stream or reach of a stream that receives water from the zone of saturation.

Hydraulic gradient.—The slope of the water table or piezometric surface, usually given in feet per mile.

Hydrologic cycle.—The complete cycle of phenomena through which water passes, commencing as atmospheric water vapor, passing into liquid or solid form as precipitation, thence along or into the ground, and returning to the form of atmospheric water vapor by means of evaporation and transpiration.

Lithology.—The character of a rock, expressed in terms of its mineral composition, its structure, the grain size, and arrangement of its component parts.

Milligrams per liter (mg/l).—As commonly measured and used, milligrams per liter are numerically equivalent to the milligrams of a substance in a liter of water.

Moderately saline water.—Water containing 3,000 to 10,000 mg/l of dissolved solids.

Permeability, coefficient of.—The rate of flow of water in gallons per day through a cross section of 1 square foot under a unit hydraulic gradient.

Piezometric surface.—An imaginary surface that everywhere coincides with the static level of the water in the aquifer. The surface to which the water from a given aquifer will rise under its full head.

Porosity.—The ratio of the aggregate volume of interstices (openings) in a rock or soil to its total volume, usually stated as a percentage.

Recharge of ground water.—The process by which water is absorbed and is added to the zone of saturation. Also used to designate the quantity of water that is added to the zone of saturation, usually given in acre-feet per year or in million gallons per day.

Recharge, rejected.—The natural discharge of ground water in the recharge area of an aquifer by springs, seeps, and evapotranspiration, which occurs when the rate of recharge exceeds the rate of transmission in the aquifer.

Saline water.—Water containing 1,000 mg/l or more of dissolved solids.

Specific capacity.—The rate of yield of a well per unit of drawdown, usually expressed as gallons per minute per foot of drawdown. If the yield is 250 gpm and the drawdown is 10 feet, the specific capacity is 25 gpm per foot.

Specific yield.—The quantity of water that an aquifer will yield by gravity if it is first saturated and then allowed to drain; the ratio expressed in percentage of the volume of water drained to the volume of the aquifer that is drained.

Storage.—The volume of water in an aquifer, generally given in acre-feet.

Storage coefficient.—The volume of water that an aquifer releases from or takes into storage per unit surface area of the aquifer per unit change in the component of head normal to that surface. Storage coefficients of artesian aquifers may range from about 0.00001 to 0.001; those of water table aquifers may range from about 0.05 to 0.30.

Transmissibility, coefficient of. —The rate of flow of water in gallons per day through a vertical strip of the aquifer 1 foot wide extending through a vertical thickness of the aquifer at a hydraulic gradient of 1 foot per foot and at the prevailing temperature of the water.

Transpiration.—The process by which water vapor escapes from a living plant, principally from the leaves, and enters the atmosphere.

Very saline water.—Water containing 10,000 to 35,000 mg/l of dissolved solids.

Water-table aquifer (unconfined aquifer).—An aquifer in which the water is unconfined; the upper surface of the zone of saturation is under atmospheric pressure only, and the water is free to rise or fall in response to the changes in the volume of water in storage. A well penetrating an aquifer under water-table conditions becomes filled with water to the level of the water table.

Previous Investigations

The first reports on ground water that included information on Fort Bend County were prepared by Singley (1893), Darton (1905), Fuller and Sanford (1906), Taylor (1907), and Deussen (1914). Elledge and Turner (1937) inventoried 165 wells west of the Brazos River, and Livingston and Turner (1939) inventoried 51 wells east of the Brazos River in Fort Bend County.

Several reports of ground water in the Houston district included a part of Fort Bend County. Wood (1956) and Wood, Gabrysch and Marvin (1963) discussed the availability of ground water in the gulf coast region of Texas which includes Fort Bend County. Cronin and others (1963) included part of Fort Bend County in their reconnaissance study of the Brazos River Basin. Cronin and Wilson (1967), in a report on the water-bearing characteristics of the flood-plain alluvium along the Brazos River, included a part of the flood plain in Fort Bend County. Wilson (1967) included data from wells in Fort Bend County.

Acknowledgments

The author is indebted to the property owners in Fort Bend County for supplying information about their water wells and for permitting access to their properties; to the well drillers who supplied information on the wells; and to the officials representing the municipalities, industries, and water districts for supplying data and cooperating in aquifer tests in their wells.

The cooperation received from Dr. H. A. Bernard and R. J. LeBlanc, Shell Oil Company and Shell Development Company; Dr. M. A. Hanna, Gulf Oil Company, retired; Dr. Saul Aronow, Lamar State College of Technology; and personnel of the Soil Conservation Service office at Rosenberg, Texas, is gratefully acknowledged.

HYDROLOGIC AND GEOLOGIC UNITS AND THEIR WATER-BEARING CHARACTERISTICS

The geologic units composing the aquifers in Fort Bend County range in age from Miocene to Holocene. They are, from oldest to youngest, the Fleming Formation, Goliad Sand, Willis Sand, Bently Formation, Montgomery Formation, Beaumont Clay, and the Quaternary alluvium (Table 1).

The outcrops of the Beaumont Clay, the Montgomery Formation, and Quaternary alluvium are shown on the geologic map (Figure 2). The older formations crop out in the counties north of Fort Bend County. One or more of the formations may be absent at any specific location due to nondeposition or erosion, and the sand-clay ratio of the formations varies considerably from location to location. Sand occurs in bands which may be either parallel or perpendicular to the coastline. The bands paralleling the coast probably represent long-shore deposits. The perpendicular bands contain both fluvial and deltaic deposits and represent the filling of river valleys, bays, and parts of the gulf during sea-level fluctuations.

Regionally, all of the formations dip toward the gulf at an angle greater than the slope of the land surface; they generally thicken and occur at progressively greater depths in the gulfward direction.

Bernard, LeBlanc, and Major (1962, p. 219) give the following rates of dip for the tops of the formations in the vicinity of the Brazos River: Willis Sand, 10 feet per mile; Bentley Formation, 3 feet per mile; Montgomery Formation, 2.5 feet per mile; and the Beaumont Clay, 1.8 feet per mile. Wilson (1967, p. 8) estimates the dip of the Fleming Formation to be 40 to 60 feet per mile and the dip of the bottom of the Goliad Sand to be 40 feet per mile.

The regional dip of the Tertiary beds has been altered by the intrusion of salt domes and by faulting. The overlying Quaternary beds are relatively unaffected by these faults except in the immediate vicinity of some of the salt domes.

Eight salt domes have been located in Fort Bend County (Figure 4), and all except the Thompson and Sugar Land Domes penetrate the Pleistocene beds. The caprock over the salt domes contains anhydrite, gypsum, limestone, and sulfur. Commercial oil and gas deposits occur in traps in the caprock material and in the sands over and around the domes.

Earlier investigators in the gulf coast region of Texas attempted to delineate aquifer units on the basis of geologic formations, but in the younger sediments, the aquifers generally consist of parts of one or more geologic formations.

White, Rose, and Guyton (1940), and Lang, Winslow, and White (1950), subdivided the fresh water-bearing sediments in the Houston district into zones that were either predominantly sand or clay. They tentatively correlated these zones with the geologic formations at the outcrop (Table 1). Zones 1, 3, 5, and 7 of Lang, Winslow, and White (1950) contain more sand than clay; zones 2, 4, and 6 contain more clay than sand. They also recognized that most of the individual beds of sand or clay are rarely continuous over long distances and that they often lense, grade into, and interfinger with each other. In Galveston County, Pettit and Winslow (1957) divided the beds and mapped a separate massive unit, the Alta Loma sand of Rose (1943).

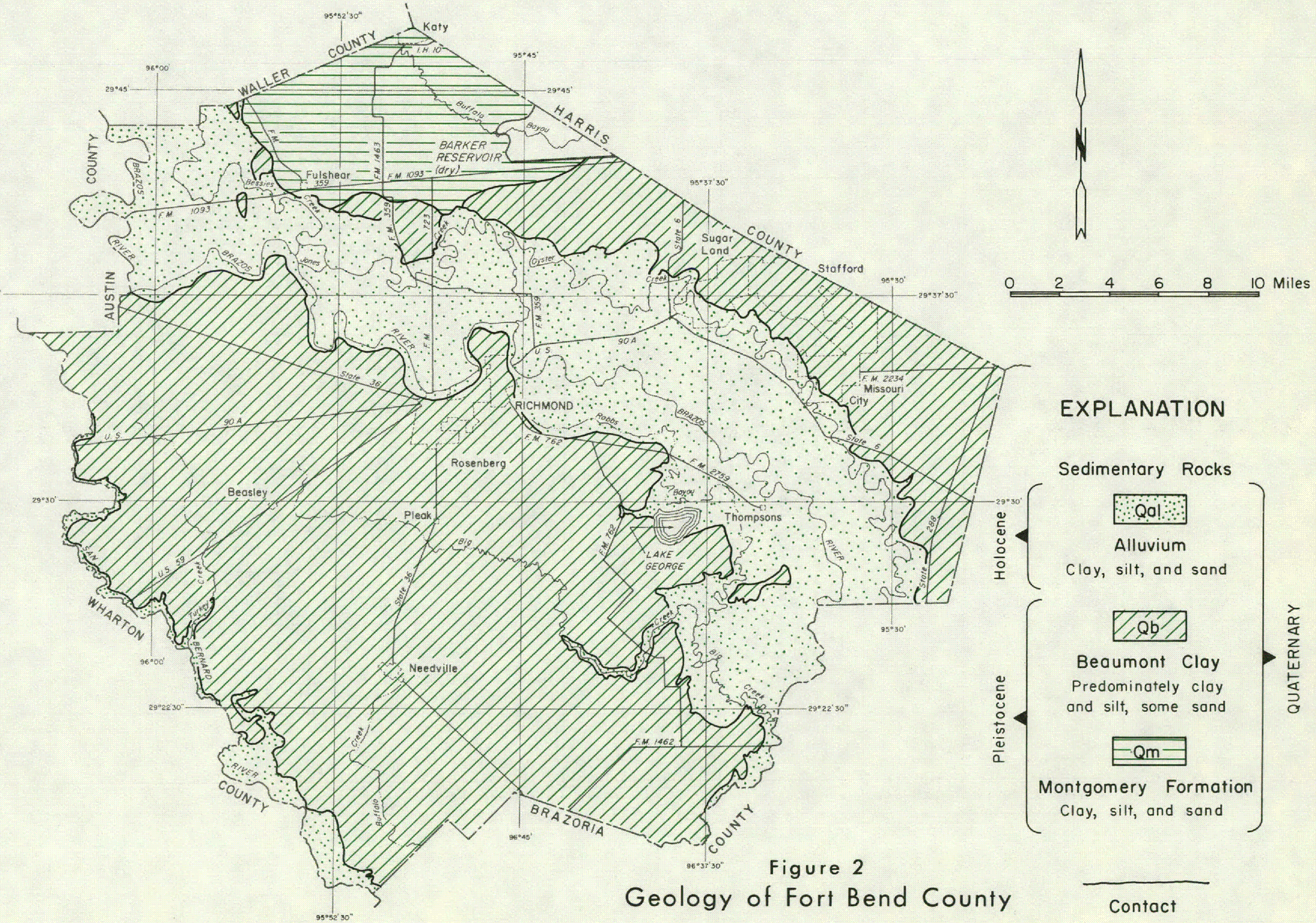


Figure 2
Geology of Fort Bend County

Base from U.S. Geological Survey topographic quadrangles

Geology from the University of Texas Bureau of Economic Geology, Atlas of Texas, 1968, Houston quadrangle

Table 1.--Correlation of Geologic and Hydrologic Units

THIS REPORT: System	Series	Stratigraphic Unit	Aquifer		WOOD AND GABRYSCH (1965): Houston district	SANDEEN AND WESSELMAN (1972): Brazoria County		WILSON (1967): Austin and Waller Counties	HAMMOND (1969): Matagorda County	LANG, WINSLOW, AND WHITE (1950): Houston district		PETITT AND WINSLOW (1957): Galveston County	
QUATERNARY	Holocene	Quaternary alluvium	Chicot aquifer	Upper unit	Confining layer and Alta Loma Sand of Rose (1943)	Chicot aquifer		Alluvium of the Brazos River	Gulf Coast aquifer	Recent		Recent	
	Pleistocene	Beaumont Clay					Upper unit	Evangeline aquifer (May contain unidentifiable parts of basal Chicot aquifer along the edges of Brazos River flood plain or along southern part of both counties)		Beaumont Clay		Beaumont Clay	
		Montgomery Formation		Lower unit							"Alta Loma Sand"		"Alta Loma Sand"
		Bentley Formation											
		Willis Sand											
TERTIARY	Pliocene	Goliad Sand	Evangeline aquifer		Heavily pumped layer	Evangeline aquifer				Zone 7		Lissie Formation	
										Zone 6			
										Zone 5			
										Zone 4			
	Miocene	Fleming Formation								Zone 3			
			Burkeville aquiclude		Zone 2			Burkeville aquiclude		Zone 2			
			Jasper aquifer					Jasper aquifer		Zone 1			

Wood and Gabrysch (1965) grouped zones 3 through part of zone 7 of Lang, Winslow, and White (1950) into one hydrologic unit which they called the "heavily pumped layer." Most large wells in the Houston area pump water from all or part of this layer. In southern Harris and Galveston Counties, the "heavily pumped layer" underlies the Alta Loma sand of Rose (1943). In Fort Bend County, where the Alta Loma sand is not recognized, Wood and Gabrysch (1965) projected their "heavily pumped layer" to the surface .

Baker and others (1963) in the Sabine River Basin and Baker (1965) in Jackson County grouped several geologic formations of the gulf coast into one unit called the Gulf Coast aquifer, which is composed of all sediments that contain fresh to slightly saline water. Hammond (1969) also used this concept, but separated a "heavily pumped zone" in Matagorda County.

Wesselman (1967) subdivided the formations above the Catahoula Sandstone in Jasper and Newton Counties into four hydrologic units: The Jasper aquifer, Burkeville aquiclude, Evangeline aquifer, and Chicot aquifer. These subdivisions were based on differences in lithology, water levels in wells, and permeabilities of the individual units.

In this report, the Burkeville aquiclude is correlated with zone 2 of Lang, Winslow, and White (1950); the Evangeline aquifer is correlated with the "heavily pumped layer" in southern Harris County; and the Chicot aquifer is correlated with the Alta Loma sand and overlying beds. These correlations are illustrated in Figures 30, 31, 32, and 33.

Jasper Aquifer

The Jasper aquifer does not contain fresh water in Fort Bend County, but electrical logs indicate that the formation contains slightly saline water in the northwest part of the county. The maximum thickness of the sands containing slightly saline water is about 100 feet (Figure 3).

The top of the Jasper aquifer correlates with Zone 1 of Lang, Winslow, and White (1950). According to Wilson (1967), the dip of the top of the Jasper aquifer in Austin and Waller Counties is 40 to 60 feet per mile. In Fort Bend County, the top of the aquifer dips at about 50 feet per mile.

Because no water wells have been completed in the Jasper aquifer in Fort Bend County, no aquifer tests were conducted. Wilson (1967, Table 2, p. 15) presented data from the analysis of the drawdown and recovery of water levels in a well screening 51 feet of sand in this aquifer in Austin County. The coefficients of transmissibility and permeability based on drawdowns were 10,800 gpd (gallons per day) per foot and 212 gpd per square foot, respectively. Based on recovery, the coefficients were 13,900 gpd per foot and 272 gpd per square foot, respectively.

The coefficient of permeability from nine tests in six wells completed in the upper part of the Jasper aquifer in Montgomery and Liberty Counties ranged from 150 to 300 gpd per square foot and averaged 240 gpd per square foot (Popkin, 1971). The range in the coefficients of permeability in the Jasper aquifer in Montgomery County probably encompasses the average coefficient of permeability in Fort Bend County.

Burkeville Aquiclude

The Burkeville aquiclude, which is composed of clay of the Fleming Formation, separates the Jasper aquifer from the Evangeline aquifer. The Burkeville is not mapped on Figure 4, but the base of the Evangeline aquifer is the top of the aquiclude. In the area where the Evangeline contains fresh water, the Burkeville is equivalent to zone 2 of Lang, Winslow, and White (1950) in the Houston district.

Evangeline Aquifer

The Evangeline aquifer, which overlies the Burkeville aquiclude and underlies the Chicot aquifer (except over some salt domes) ranges in thickness from 1,200 to 2,200 feet. The base of the aquifer is shown on Figure 4, and its relation to the other aquifers is shown on Figures 30-33.

In most of Fort Bend County, the Evangeline aquifer is composed of 400 to 700 feet of sand. The percentage of sand in the section ranges from about 33 to about 40 percent. The thickest sand beds and thickest fresh-water sections occur in the eastern half of the county.

The hydraulic properties of the aquifer are summarized in Table 2. The coefficients of transmissibility and permeability at the only well tested that was completed exclusively in the Evangeline aquifer (JY-65-26-812) were 65,700 gpd per foot and 350 gpd per square foot respectively. Only part of the aquifer was screened; therefore, the coefficient of transmissibility of the total thickness of the aquifer is greater than indicated by the test. The coefficient of permeability is higher than the average of about 250 gpd per square foot reported for the Houston district (Wood and Gabrysch, 1965, p. 65), or the average of 215 gpd per square foot in Austin and Waller Counties (Wilson, 1967).

The sands composing the Evangeline aquifer in Fort Bend County are similar to those in the Houston district; therefore, the average permeability is probably about 250 gpd per square foot. Based on an average coefficient of permeability of 250 gpd per square foot and a maximum sand thickness of 690 feet, the

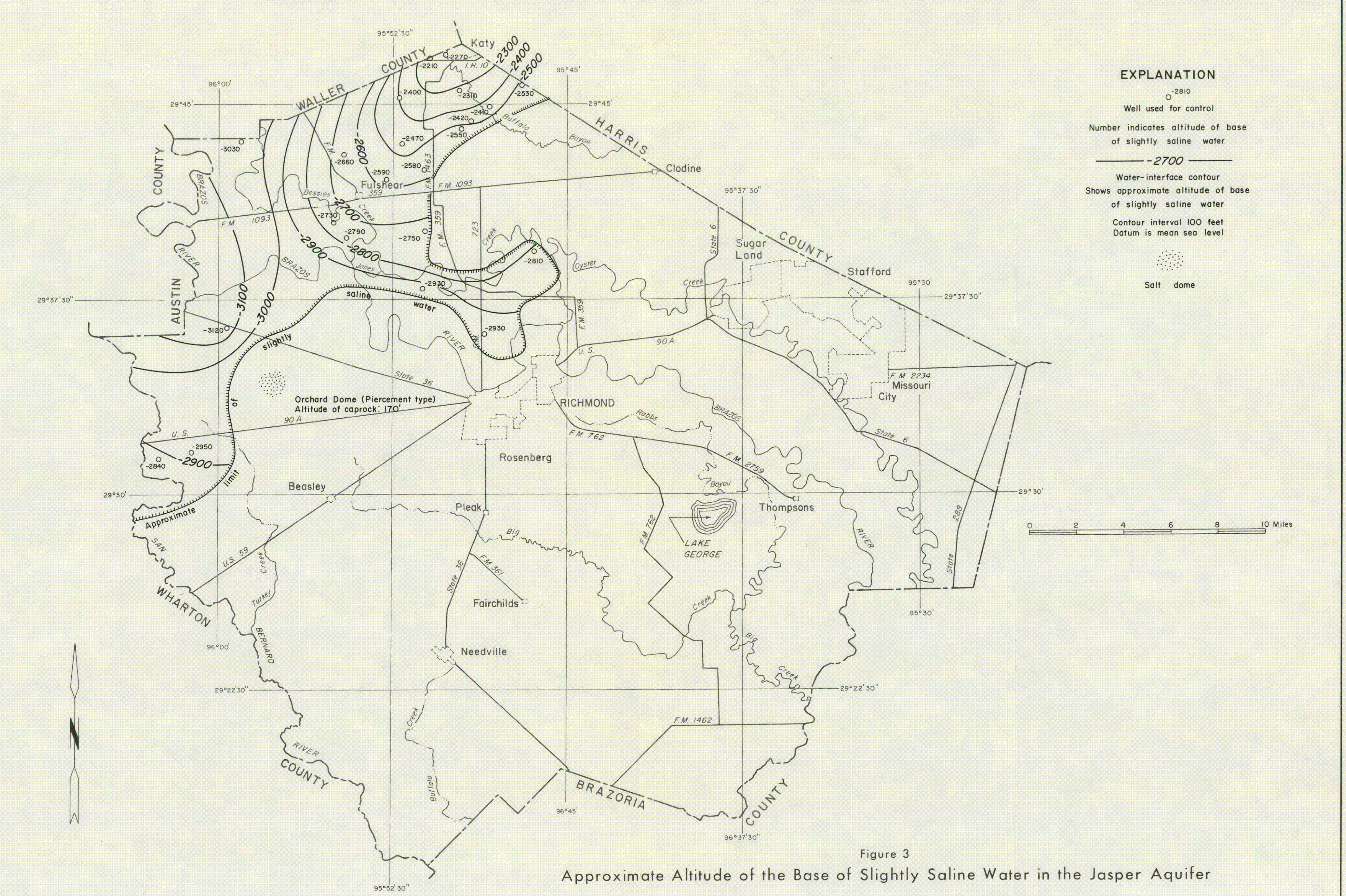
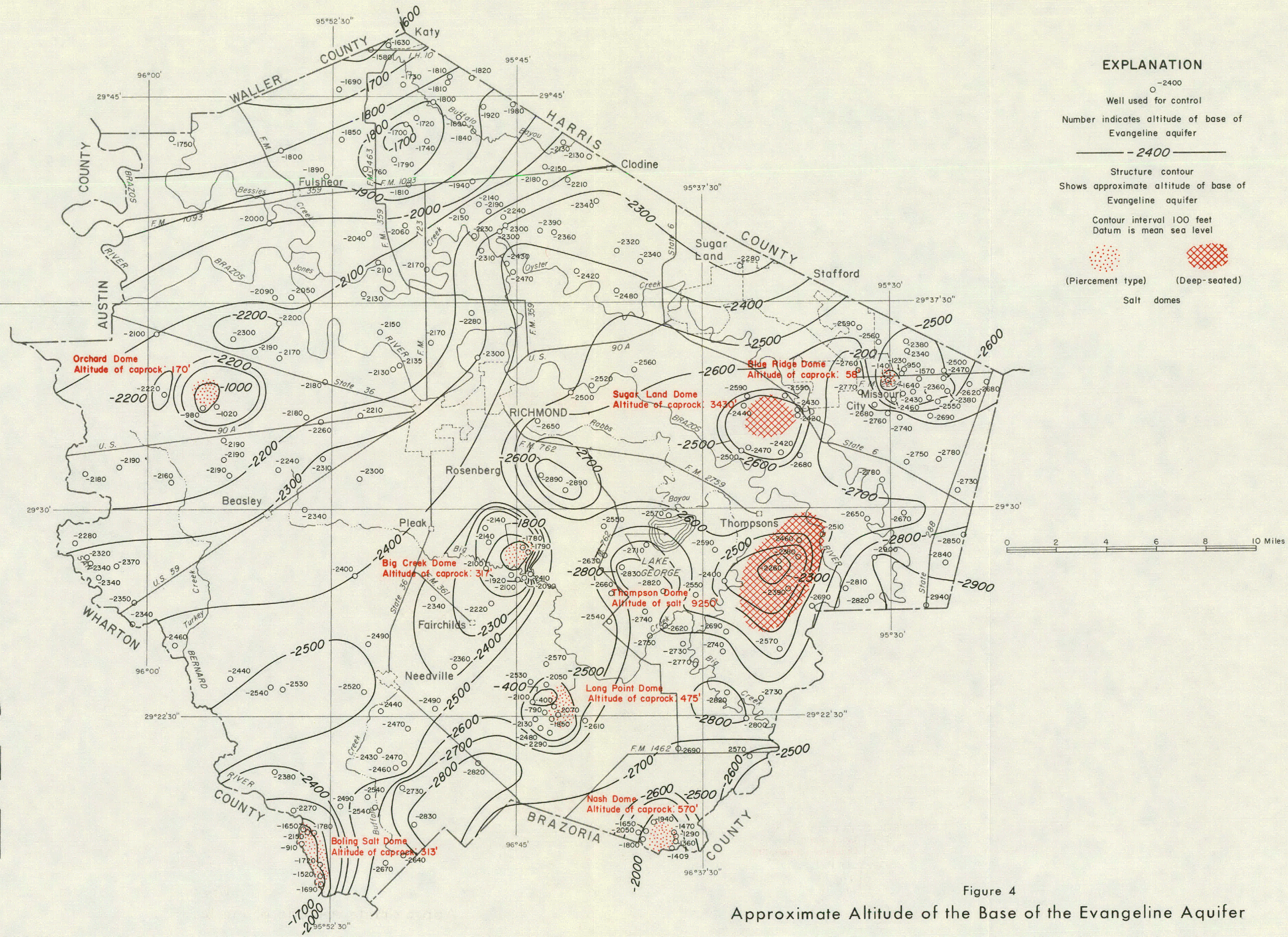


Figure 3

Approximate Altitude of the Base of Slightly Saline Water in the Jasper Aquifer

Base from U.S. Geological Survey topographic quadrangles

Altitude of salt domes modified from Hawkins and Jirik, 1966



Base from U.S. Geological Survey topographic quadrangles

Altitude of salt domes modified from Hawkins and Jirik, 1966

Figure 4

Approximate Altitude of the Base of the Evangeline Aquifer

Table 2.--Hydraulic Properties of the Aquifers and Wells

Water-bearing unit: C, Chicot; Cu, upper Chicot; Cl, lower Chicot; E, Evangeline.
D - Drawdown; R - Recovery.

WELL	DEPTH OF WELL (FT)	WATER-BEARING UNIT	DATE OF TEST	TOTAL SAND THICKNESS INCLUDED IN SCREENED INTERVAL (FT)	COEFFICIENT OF TRANSMISSIBILITY (GPD PER FT)	FIELD COEFFICIENT OF PERMEABILITY (GPD PER FT^2)	REMARKS
JY-65-19-801	256	C	July 2, 1969	60±	84,000	1,400±	Recovery test. 1-hr. specific capacity 37 gpm per ft.
25-202	292	C	June 24, 1969	116±	110,000	950±	Recovery test. 1-hr. specific capacity 11.6 gpm per ft.
203	280	C	June 24, 1969	110±	78,000	710	Recovery test. 1-hr. specific capacity 8.3 gpm per ft.
26-602	400	Cu,Cl	July 28, 1955	250	104,000	410	Recovery test. 1-hr. specific capacity 51 gpm per ft.
603	518	Cl	June 25, 1969	130±	84,500	650	Recovery test. 1-hr. specific capacity 8.8 gpm per ft.
812	1,313	E	Aug. 9, 1967	185±	65,700	350	Recovery test. 20 min. specific capacity 25 gpm per ft.
33-502	590	C	July 28, 1955	--	126,000	--	Recovery test. 1-hr. specific capacity 69 gpm per ft.
802	365	Cl	Oct. 25, 1967	--	13,200 D 15,400 R	--	Interference test. Well JY-65-33-803 pumping. Storage coefficient $1x10^{-4}$.
803	363	Cl	Oct. 25, 1967	38	14,000	370	Recovery test. 1-hr. specific capacity 5.5 gpm per ft.
34-301	314	Cl,Cu	June 26, 1969	--	47,000	--	Recovery Test.
901	636	Cl,Cu	July 27, 1955	320	120,000	375	Recovery Test. 1-hr specific capacity 49 gpm per ft.
35-303	803	Cl,E	1956	--	110,000 1/	--	Interference test. Well JY-65-35-304 pumping Storage coefficient $1x10^{-3}$
304	853	Cl,E	1967	193±	114,000 1/	590	Drawdown test.
304	853	Cl,E	1967	193±	122,000 1/	630	Recovery test.
710	508	Cl	June 30, 1969	165±	55,000	330	Recovery test. 1-hr. specific capacity 19 gpm per ft.
42-303	1,090	Cl,E	July 28, 1955	420	125,000	300	Recovery test. 1-hr. specific capacity 79 gpm per ft.
43-201	1,158	Cl,E	July 27, 1955	555	156,000	280	Recovery test. 1-hr. specific capacity 79 gpm per ft.
44-101	874	Cl,E	June 16, 1967	--	88,700	--	Recovery test. 1-hr. specific capacity 49 gpm per ft.

1/ - Reported

maximum coefficient of transmissibility is about 170,000 gpd per foot. The average fresh-water sand thickness in the county is about 300 feet; therefore, the average transmissibility of the fresh-water part of the Evangeline is probably about 75,000 gpd per foot.

Storage coefficients of the Evangeline aquifer were not determined in Fort Bend County, but on the basis of a large number of tests in the Houston district (Wood and Gabrysch, 1965, p. 16), the coefficients for the aquifer in the area are probably about 0.001 to 0.002.

The yields of 11 wells tapping the Evangeline aquifer ranged from 180 to 2,232 gpm (gallons per minute), Table 4. The specific capacity measured in well JY-65-26-812 was 25 gpm per foot of drawdown.

Chicot Aquifer

The Chicot aquifer is a sequence of sand and clay beds which overlie the Evangeline aquifer. The basis for differentiation of the units is differences in stratigraphic position, lithology, and permeability. The altitude of the base of the aquifer is shown in Figure 5. The subsurface relationships are shown in Figures 30-33.

The percentage of sand thickness in the Chicot aquifer ranges from about 40 percent in the eastern part of the county to about 75 percent in the north and northwestern parts of the county. The aquifer contains fresh water only, except in some areas over and adjacent to the salt domes.

The Chicot aquifer is subdivided into upper and lower units (Figures 30-33). In most of the southeastern part of the county, the two units are separated by a layer of clay, which is 200 to 300 feet below the land surface. The two units merge and generally function as a single aquifer in the northwestern part of Fort Bend County.

At most locations in Fort Bend County, water in the Chicot aquifer occurs under artesian conditions. However, in the major stream valleys, the upper unit of the aquifer is in hydraulic continuity with the surficial sand deposits, and therefore under water-table conditions. In the Katy area of the extreme northern part of the county, water levels have been lowered as much as 90 feet below the surface. This depressurizing has resulted in converting the aquifer in this area from artesian to water-table conditions.

The Chicot aquifer is the most permeable unit in Fort Bend County. The coefficients of transmissibility for the aquifer ranged from 13,200 to 126,000 gpd per foot in 11 tests (Table 2). The coefficient of permeability from eight tests ranged from 330 to about 1,400 gpd per square foot; the average is about 645 gpd per square foot. Based on an average sand thickness of 350 feet and an average coefficient of permeability of 645 gpm per square foot, the average transmissibility is about 225,000 gpd per foot.

The yields of wells completed in the Chicot aquifer are as much as 4,200 gpm. Specific capacities of the wells ranged from 5.5 to 69 gpm per foot of drawdown. The storage coefficient determined from one test was 0.0001.

CHEMICAL QUALITY OF GROUND WATER

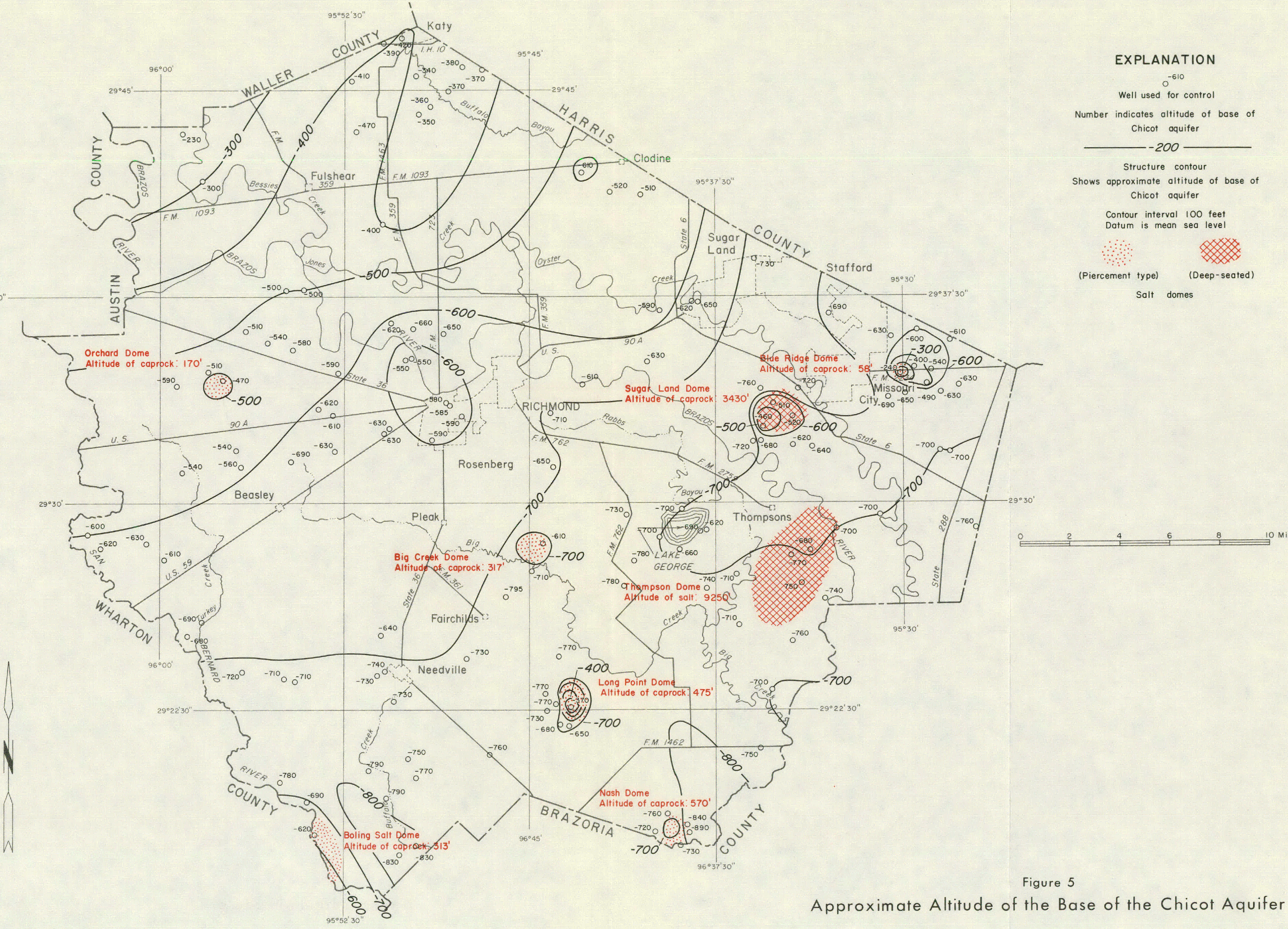
Chemical analyses of water from wells in Fort Bend County are given in Table 7. The locations of the wells sampled are identified on Figure 29 by a bar over the well number. The source and significance of the dissolved-mineral constituents and properties of water, which are reported in the analyses, are given in Table 3.

The various criteria used in determining water-quality standards are bacterial content, temperature, color, taste, odor, and the concentrations of chemical constituents. No bacterial analyses were made in this study. The results of analyses for insecticides and herbicides, made on samples from four wells, were negative.

The U.S. Public Health Service (1962, p. 7) has established standards for the chemical quality of water to be used by common carriers engaged in interstate commerce. These standards are useful in evaluating domestic and public water supplies. According to these standards, chemical substances should not be present in a water supply in excess of the listed concentrations if more suitable supplies are available or can be made available at reasonable cost. The following are the limits of concentration in mg/l (milligrams per liter) for some of the constituents:

SUBSTANCE	CONCENTRATION (mg/l)
Chloride (Cl)	250
Fluoride (F)	0.7[1]
Iron (Fe)	.3
Manganese (Mn)	.05
Nitrate (NO_3)	45
Sulfate (SO_4)	250
Dissolved solids	500

[1] According to the U.S. Public Health Service (1962, p. 41), the optimum fluoride level depends on the climatic conditions, because the amount of water drunk is influenced primarily by air temperature. The optimum value of 0.7 mg/l in Fort Bend County is based on the annual average of daily maximum air temperatures of 80.0° F at Sugar Land.



Base from U.S. Geological Survey topographic quadrangles

Altitude of salt domes modified from Hawkins and Jirik, 1966

Figure 5

Approximate Altitude of the Base of the Chicot Aquifer

Table 3.—Source and Significance of Dissolved-Mineral Constituents and Properties of Water

CONSTITUENT OR PROPERTY	SOURCE OR CAUSE	SIGNIFICANCE
Silica (SiO_2)	Dissolved from practically all rocks and soils, commonly less than 30 mg/l. High concentrations, as much as 100 mg/l, generally occur in highly alkaline waters.	Forms hard scale in pipes and boilers. Carried over in steam of high pressure boilers to form deposits on blades of turbines. Inhibits deterioration of zeolite-type water softeners.
Iron (Fe)	Dissolved from practically all rocks and soils. May also be derived from iron pipes, pumps, and other equipment. More than 1 or 2 mg/l of iron in surface waters generally indicates acid wastes from mine drainage or other sources.	On exposure to air, iron in ground water oxidizes to reddish-brown precipitate. More than about 0.3 mg/l stains laundry and utensils reddish-brown. Objectionable for food processing, textile processing, beverages, ice manufacture, brewing, and other processes. U.S. Public Health Service (1962) drinking-water standards state that iron should not exceed 0.3 mg/l. Larger quantities cause unpleasant taste and favor growth of iron bacteria.
Calcium (Ca) and magnesium (Mg)	Dissolved from practically all soils and rocks, but especially from limestone, dolomite, and gypsum. Calcium and magnesium are found in large quantities in some brines. Magnesium is present in large quantities in sea water.	Cause most of the hardness and scale-forming properties of water; soap consuming (see hardness). Waters low in calcium and magnesium desired in electroplating, tanning, dyeing, and in textile manufacturing.
Sodium (Na) and potassium (K)	Dissolved from practically all rocks and soils. Found also in ancient brines, sea water, industrial brines, and sewage.	Large amounts, in combination with chloride, give a salty taste. Moderate quantities have little effect on the usefulness of water for most purposes. Sodium salts may cause foaming in steam boilers and a high sodium content may limit the use of water for irrigation.
Bicarbonate (HCO_3) and carbonate (CO_3)	Action of carbon dioxide in water on carbonate rocks such as limestone and dolomite.	Bicarbonate and carbonate produce alkalinity. Bicarbonates of calcium and magnesium decompose in steam boilers and hot water facilities to form scale and release corrosive carbon dioxide gas. In combination with calcium and magnesium, cause carbonate hardness.
Sulfate (SO_4)	Dissolved from rocks and soils containing gypsum, iron sulfides, and other sulfur compounds. Commonly present in mine waters and in some industrial wastes.	Sulfate in water containing calcium forms hard scale in steam boilers. In large amounts, sulfate in combination with other ions gives bitter taste to water. Some calcium sulfate is considered beneficial in the brewing process. U.S. Public Health Service (1962) drinking-water standards recommend that the sulfate content should not exceed 250 mg/l.
Chloride (Cl)	Dissolved from rocks and soils. Present in sewage and found in large amounts in ancient brines, sea water, and industrial brines.	In large amounts in combination with sodium, gives salty taste to drinking water. In large quantities, increases the corrosiveness of water. U.S. Public Health Service (1962) drinking-water standards recommend that the chloride content should not exceed 250 mg/l.
Fluoride (F)	Dissolved in small to minute quantities from most rocks and soils. Added to many waters by fluoridation of municipal supplies.	Fluoride in drinking water reduces the incidence of tooth decay when the water is consumed during the period of enamel calcification. However, it may cause mottling of the teeth, depending on the concentration of fluoride, the age of the child, amount of drinking water consumed, and susceptbility of the individual. (Maier, 1950)
Nitrate (NO_3)	Decaying organic matter, sewage, fertilizers, and nitrates in soil.	Concentration much greater than the local average may suggest pollution. U.S. Public Health Service (1962) drinking-water standards suggest a limit of 45 mg/l. Waters of high nitrate content have been reported to be the cause of methemoglobinemia (an often fatal disease in infants) and therefore should not be used in infant feeding. Nitrate has been shown to be helpful in reducing inter-crystalline cracking of boiler steel. It encourages growth of algae and other organisms which produce undesirable tastes and odors.
Dissolved solids	Chiefly mineral constituents dissolved from rocks and soils. Includes some water of crystallization.	U.S. Public Health Service (1962) drinking-water standards recommend that waters containing more than 500 mg/l dissolved solids not be used if other less mineralized supplies are available. Waters containing more than 1000 mg/l dissolved solids are unsuitable for many purposes.
Hardness as $CaCO_3$	In most waters nearly all the hardness is due to calcium and magnesium. All the metallic cations other than the alkali metals also cause hardness.	Consumes soap before a lather will form. Deposits soap curd on bathtubs. Hard water forms scale in boilers, water heaters, and pipes. Hardness equivalent to the bicarbonate and carbonate is called carbonate hardness. Any hardness in excess of this is called non-carbonate hardness. Waters of hardness as much as 60 ppm are considered soft; 61 to 120 mg/l, moderately hard; 121 to 180 mg/l, hard; more than 180 mg/l, very hard.
Specific conductance (micromhos at 25°C)	Mineral content of the water.	Indicates degree of mineralization. Specific conductance is a measure of the capacity of the water to conduct an electric current. Varies with concentration and degree of ionization of the constituents.
Hydrogen ion concentration (pH)	Acids, acid-generating salts, and free carbon dioxide lower the pH. Carbonates, bicarbonates, hydroxides, and phosphates, silicates, and borates raise the pH.	A pH of 7.0 indicates neutrality of a solution. Values higher than 7.0 denote increasing alkalinity; values lower than 7.0 indicate increasing acidity. pH is a measure of the activity of the hydrogen ions. Corrosiveness of water generally increases with decreasing pH. However, excessively alkaline waters may also attack metals.

In addition to meeting the desired standards of the U.S. Public Health Service, the water should be free of odor and turbidity; and it should not contain color to the extent that it is objectionable to the user. The water should not be excessively corrosive to the water-supply system.

Water containing concentrations of chloride that exceed 250 mg/l and an equivalent amount of sodium may have a salty taste, and excessive concentrations of manganese and iron in a water supply tend to stain utensils and to discolor laundry.

Consumption of water with a high nitrate content has been related to infant cyanosis or "blue baby" disease. Water having a nitrate content of more than 45 mg/l is potentially dangerous for infant feeding. High nitrate concentrations may also indicate pollution of the water supply by sewage or organic material.

The hardness of water, caused mainly by calcium and magnesium, is important in a water supply although no limits have been established by the U.S. Public Health Service. Excessive hardness causes an increase in the comsumption of soap and induces the formation of scale in hot water heaters and water pipes.

The chemical quality necessary for the industrial use of water depends on the intended use, such as cooling, boiler-feed, or product processing. Each of these categories has different water-quality requirements. Hem (1959, p. 253) and Todd (1959, p. 186-187) summarize the water-quality tolerances for a number of industries.

The suitability of water for irrigation depends upon the chemical quality of the water, the types of crops, the soil structure and composition, irrigation and drainage methods, and climate. Some of the more important chemical characteristics that are considered in the evaluation of water for irrigation are: (1) the sodium concentration, an index of the sodium or alkali hazard, SAR (sodium-adsorption ratio); (2) the concentration of soluble salts, an index of the salinity hazard; (3) the amount of RSC (residual sodium carbonate); and (4) the concentration of boron.

A classification frequently used for judging the quality of water for irrigation was proposed by the U.S. Salinity Laboratory Staff (1954, p. 69-82). This classification is based primarily on the salinity hazard as measured by the electrical conductivity of the water and the sodium hazard as measured by the SAR. A high percentage of sodium in the soil or in the irrigation water tends to make the soil impermeable.

A diagram of this classification, with results of chemical analyses plotted according to the aquifer from which the water was pumped, is shown in Figure 6. The salinity hazard ranges from medium to high. The sodium hazard is low in all but five samples, which have a medium sodium hazard.

Wilcox (1955, p. 15-16) stated that this classification is not directly applicable to supplemental irrigation water used in areas of high rainfall. The analyses as plotted on Figure 6 indicate that all of the water would be suitable for supplemental irrigation in Fort Bend County.

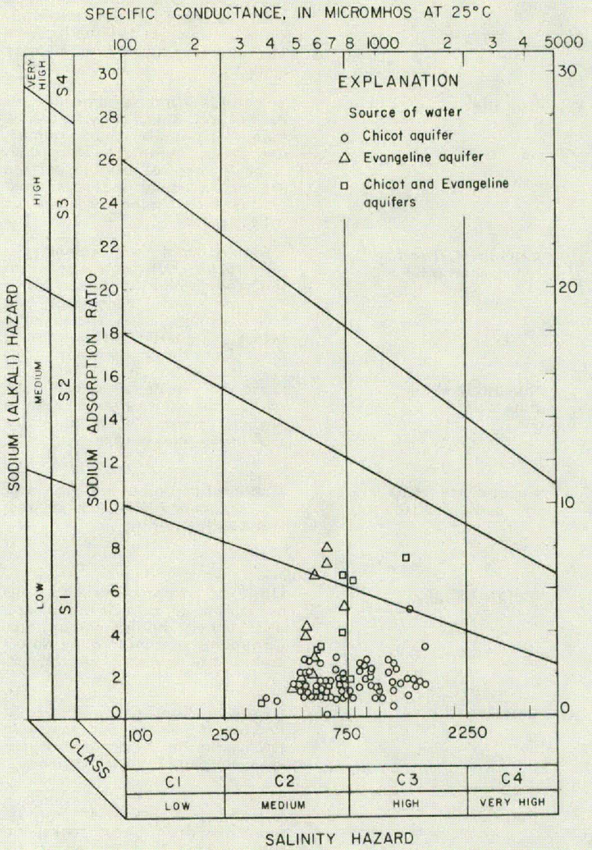


Figure 6.—Classification of Irrigation Waters

The RSC is another factor used in judging the suitability of water for irrigation. Excessive RSC may cause the water to be alkaline, causing the organic material in the soil to dissolve. Wilcox (1955, p. 11) suggests the following limits for the RSC content of irrigation waters: More than 2.5 epm (equivalents per million), not suitable; 1.25 to 2.5 epm, marginal; and less than 1.25 epm, safe. The maximum RSC for the 95 analyses listed in Table 7 was 5.54 epm. Of the 95 analyses, 57 were in the safe range, 22 were in the marginal range, and 16 exceeded the 2.5 epm limit.

Boron is essential to plant growth, but it is toxic at concentrations only slightly more than the optimum value. Scofield (1936, p. 286) indicated that a boron concentration of 1 mg/l is permissible for irrigating most boron-sensitive crops; a concentration of 3 mg/l is permissible for the more boron-tolerant crops. Most small grains and cotton are considered semi-tolerant to boron. Of 52 determinations for boron, none exceeded 1 mg/l concentration.

Rice is moderately tolerant to salinity. According to Shutts (1953, p. 871-884), the commonly accepted tolerances of rice to sodium chloride are as follows:

CONCENTRATION OF SALTS AS SODIUM CHLORIDE (mg/l)	TOLERANCE
600	Tolerant at all stages.
1,300	Rarely harmful and only to seedlings in dry, hard soil.
1,700	Harmful before tillering; tolerable for jointing to heading.
3,400	Harmful before booting; tolerable from booting to heading.
5,100	Harmful at all stages.

Chloride concentrations of more than 250 mg/l were exceeded in water from 14 wells in the county; 10 of these wells were near salt domes. Well JY-65-26-403 is not near a salt dome, but the water from this well has probably been affected by ground-water circulation near the Orchard Dome. The other three wells not near salt domes are shallow (90, 60, and 38 feet deep) and are located in the southwest part of the county. The cause of the high chloride concentrations in the water from these wells is not known. The U.S. Public Health Service standard for dissolved solids (500 mg/l) was exceeded in samples from 73 of 226 wells, but many of the wells yielding water containing chlorides in excess of 500 mg/l dissolved solids were in the vicinity of salt domes.

Ground water in the county is generally very hard. Soft water (less than 60 mg/l hardness) was obtained from only four production wells, two in the Evangeline aquifer at Sugar Land and two in the lower unit of the Chicot aquifer in the Blue Ridge Dome area. The data show that the softer water is contained in the deeper sands.

Iron exceeded 0.3 mg/l in samples from 24 wells. Many of the wells yielding high iron concentrations were completed, at least in part, in the upper unit of the Chicot aquifer. However, samples with high iron content were obtained from wells completed in each aquifer.

Fluoride determinations were made in 97 of the analyses. Nine of these exceeded the optimum value of 0.7 mg/l, five of which were in the vicinity of the Blue Ridge Dome. The highest concentration of fluoride was 1.8 mg/l. The average fluoride concentration was 0.4 mg/l, considerably lower than the optimum amount.

The concentration of nitrate was less than 15 mg/l in all samples except from well JY-66-32-907, which contained 157 mg/l of nitrate. This shallow well (30 ft. deep), which furnishes water to stock, is probably contaminated by organic material.

The concentration of sulfate did not exceed the 250 mg/l recommended by the Public Health Service in any of the water samples. Only four analyses showed concentrations greater than 100 mg/l; the highest was 242 mg/l.

To provide information on the presence and extent of pesticides in ground water, pesticide analyses were made on four samples of ground water. The water was analyzed for nine insecticides (aldrin; DDD; DDE; DDT; dieldrin; endrin; heptachlor; heptachlor epoxide; and lindane) and three herbicides (2,4-D; silvex; and 2,4-5-T) recommended for monitoring by the Federal Committee on Pest Control (Green and Love, 1967, p. 13-16). Samples of water were taken Jan. 28, 1969, from wells JY-65-26-501, JY-65-27-312, and JY-65-34-701, which are 840, 1,606, and 435 feet deep, respectively. A sample was taken on June 10, 1969, from well JY-65-18-111, 1,000 feet deep. The analyses indicated that no pesticides were present in the water sampled.

Relationship of Fresh Water to Saline Water

The geologic formations composing the fresh-water aquifers in Fort Bend County consist of sediments that were deposited in or near the Gulf of Mexico. These sediments either contained salt water at the time of deposition or were deposited in fresh water and filled with salt water at a time of higher sea level.

At some time after deposition, the sea receded and the process of recharge and discharge began. Fresh water furnished to the recharge area began to force the saline water to the discharge areas until the pressure exerted by the fresh water equaled the pressure of the salt water. Winslow and others (1957) presented a complete discussion of this process in relation to adjoining Harris County.

Several hundred electrical logs of test holes in Fort Bend and adjoining counties were used to construct the maps showing the base of fresh water and the base of slightly saline water in the aquifers in Fort Bend County.

The approximate altitude of the base of fresh water is shown on Figure 7. The approximate altitude of the base of slightly saline water in the Jasper aquifer is shown on Figure 3; the approximate base of slightly saline water in the Evangeline and Chicot aquifers is shown on Figure 8.

The contours shown on Figure 7 are very irregular, which indicates that there is no smooth or constant-trending interface between fresh and saline water. The irregularities in the base of fresh water in the northern part of the county are probably related to the interconnection of the Chicot and Evangeline aquifers.

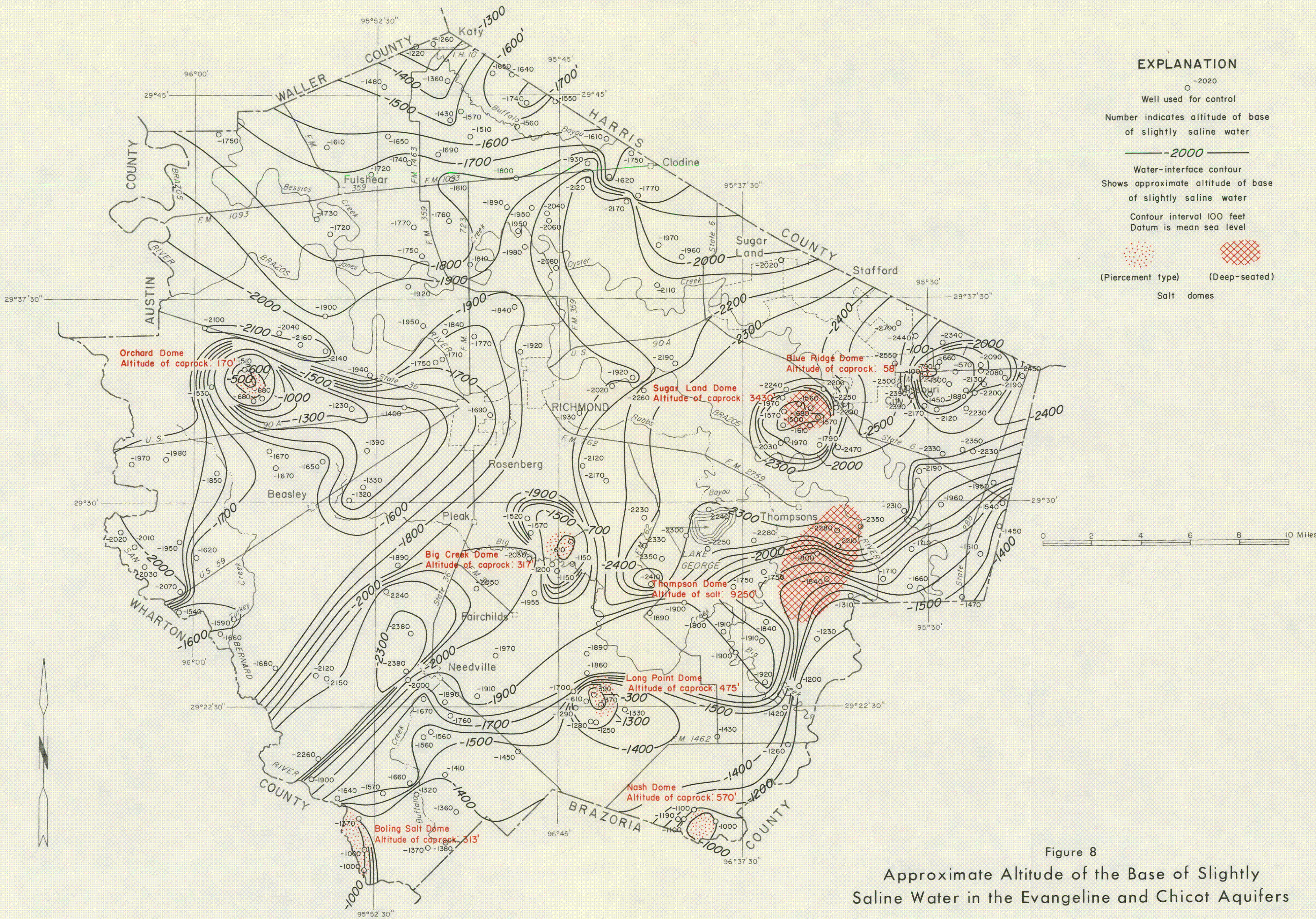


Figure 8

Approximate Altitude of the Base of Slightly Saline Water in the Evangeline and Chicot Aquifers

Base from U.S. Geological Survey topographic quadrangles

Altitude of salt domes modified from Hawkins and Jirik, 1966

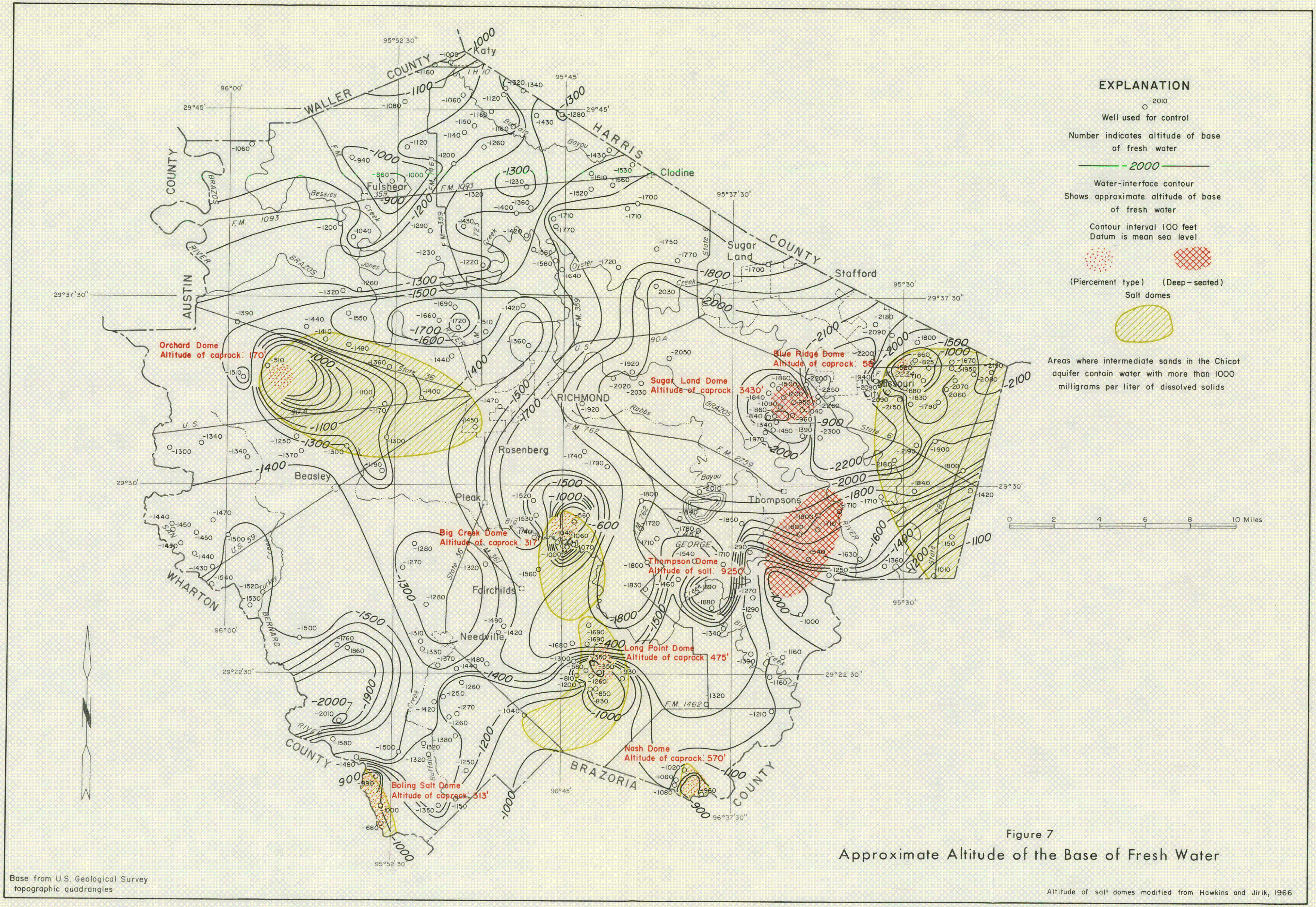


Figure 7
Approximate Altitude of the Base of Fresh Water

Unique relationships between fresh water and saline water often are found near the salt domes which pierce the aquifers. The presence of the salt domes has apparently affected the quality of the water in the vicinity of at least some of the domes. The interbedding of sands containing fresh water with beds containing saline water in the vicinity of the Orchard, Big Creek, and Long Point Domes is shown on Figures 32 and 33. Areas of interbedding of sands containing fresh water with beds containing saline water in the Chicot aquifer are shown on Figure 28. The presence of the saline water is related, at least in part, to the presence of the salt domes.

The sands of the Evangeline aquifer are thinned and arched over the Sugar Land Dome (Figure 4), and the top of the dome is beneath the Burkeville aquiclude. The anomaly in the base of fresh water (Figure 7) is probably due to incomplete flushing of the sands rather than degradation of the water by the salt dome.

A diagram illustrating ground-water circulation around salt domes, published by Hanna (1958, Figure 8), is reproduced as Figure 9. Hanna described the movement as follows: "Water in these sloping beds is under artesian head. Figure 8 is an idealized block diagram showing how these artesian waters in the formation will flow upward around a salt dome if an escape route is available. Water does not move down around these salt domes but upward and goes into the shallow sands or to the surface."

Heavy pumping from the lower unit of the Chicot aquifer and from the Evangeline aquifer has changed the pressure relationships. At some of the domes, water may now be moving downward instead of upward.

Protection of Water Quality in Oil-Field Operations

A potential source of contamination of the fresh-water sands in Fort Bend County is from the improper disposal of oil-field brines. The following tabulation from the records of the Railroad Commission of Texas lists the reported quantity and methods of disposal of salt water produced in the oil fields of Fort Bend County in 1967:

OIL FIELD	SALT-WATER PRODUCTION BARRELS	METHOD OF DISPOSAL: INJECTION WELLS		UNDERLINED PITS	
		BARRELS	PERCENT	BARRELS	PERCENT
Barb-Mag	30,050	30,050	100	0	0
Big Creek	359,449	353,345	98.3	6,104	1.7
Blue Ridge 1/	177,756	152,161	85.6	25,425	14.3
Blue Ridge (east)	31,091	31,091	100	0	0
Blue Ridge (north)	24,000	0	0	24,000	100
Boling	82,420	70,520	85.5	11,900	14.5
Clodine	112,017	53,617	48	58,400	52
Clodine (SW)	120	0	0	120	100
Clodine (north)	27,375	0	0	27,375	100
Fulshear	49,175	0	0	49,175	100
Katy	5,523	0	0	5,523	100
Moores	657,147	657,147	100	0	0
Nash Dome	59,362	17,885	30.2	41,477	69.8
Needville	301,290	301,290	100	0	0
Randon	1,054	0	0	1,054	100
Sugar Land	491,333	491,333	100	0	0
Thompson (north)	358,337	29,861	8.3	328,476	91.7
Thompson (south)	662,271	662,271	100	0	0
Thompson (seg. 13-A)	54,191	54,191	100	0	0
Thompson (SE)	36,757	36,757	100	0	0
Thompson	12,766,682	12,766,682	100	0	0
Totals	16,287,400	15,708,201	96.5	579,029	3.5

1/ One hundred seventy barrels (0.1 percent) was in the production tanks.

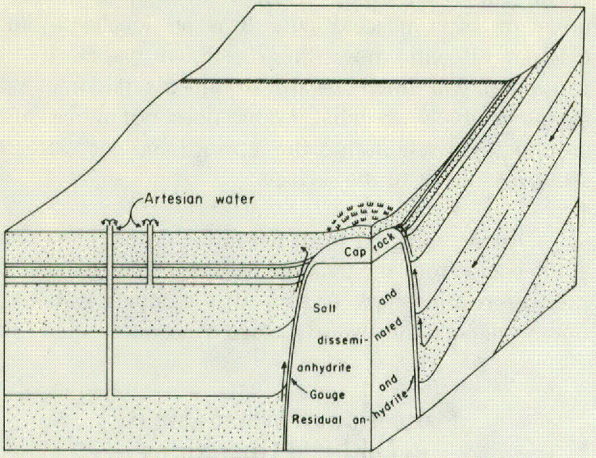


Figure 9.—Ground-Water Circulation Around Salt Domes

This tabulation shows that 96.5 percent of the salt water produced in 1967 was returned to the ground by injection, and about 3.5 percent of the salt water was placed in unlined pits. At least part of the water seeped from the pits into the ground, and part of it probably made its way to the streams.

Because of this source of contamination, State law now prohibits disposal of salt water in pits, but improper construction of disposal wells could also result in the contamination of fresh-water sands. Therefore, State laws require permits to be issued for disposal by wells.

Another potential source of ground-water contamination exists where improperly cased oil or gas wells may allow upward movement of brine from the underlying formations into the zones of fresh and slightly saline water.

The Texas Railroad Commission, in its effort to eliminate contamination by oil-field brines, has issued rules regarding the minimum casing requirements in some oil fields. A comparison between the depths of sands containing fresh to slightly saline water and the surface-casing requirements in oil fields in Fort Bend County is shown on Figure 10. This illustration shows that the fresh to slightly saline water is not adequately protected in five of the seven fields that have field rules.

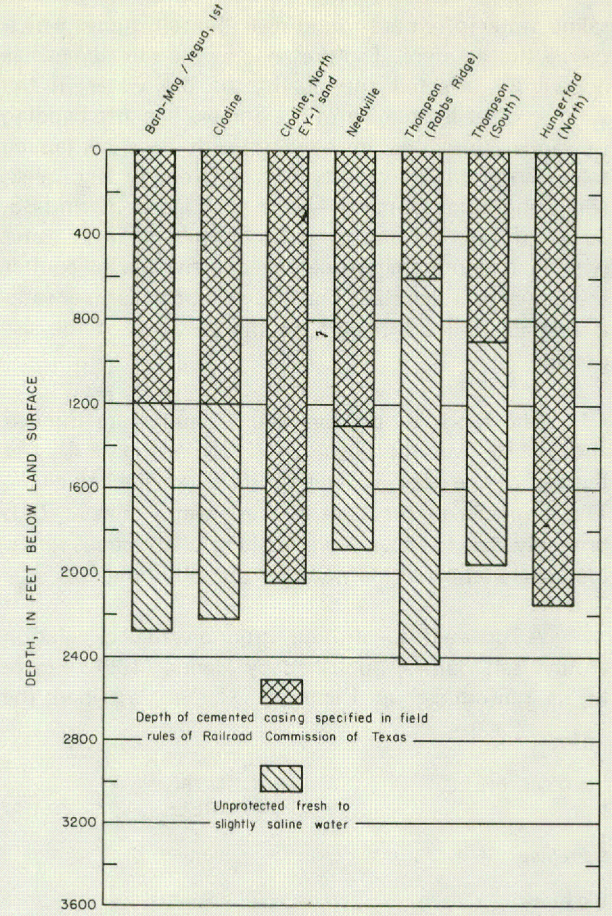


Figure 10.—Comparison Between the Depths of Sands Containing Fresh to Slightly Saline Water and the Surface-Casing Requirements in Oil and Gas Fields

RECHARGE, MOVEMENT, AND DISCHARGE OF GROUND WATER

Recharge to the Aquifers

The climate of Fort Bend County is predominatly maritime; rainfall, which is the source of most of the ground-water recharge, is abundant. The average monthly temperature, evaporation, and precipitation at Sugar Land is shown on Figure 11. The annual precipitation at Sugar Land during the period 1899-1968 is shown on Figure 12. The illustrations show that the precipitation is about evenly distributed throughout the year; however, most of the recharge probably occurs in the winter, because much of the precipitation is consumed by evapotranspiration during the summer.

Recharge to the aquifers, except for parts of the upper unit of the Chicot, occurs principally in the outcrop areas in adjoining Austin, Waller, and Harris Counties. In Austin and Waller Counties, the Goliad Sand, which composes much of the Evangeline aquifer, is overlapped by the Willis Sand in most places (Wilson, 1967, p. 31, 34). Recharge to the Goliad must occur by percolation of water through the Willis into the sandy units of the Goliad. Thus, in the area of overlap, much of the recharge to the Evangeline aquifer occurs through basal sands of the Chicot.

Wilson (1967, p. 31) further states that physiographically the recharge areas in Austin and Waller Counties range from the relatively flat Willis, Bentley,

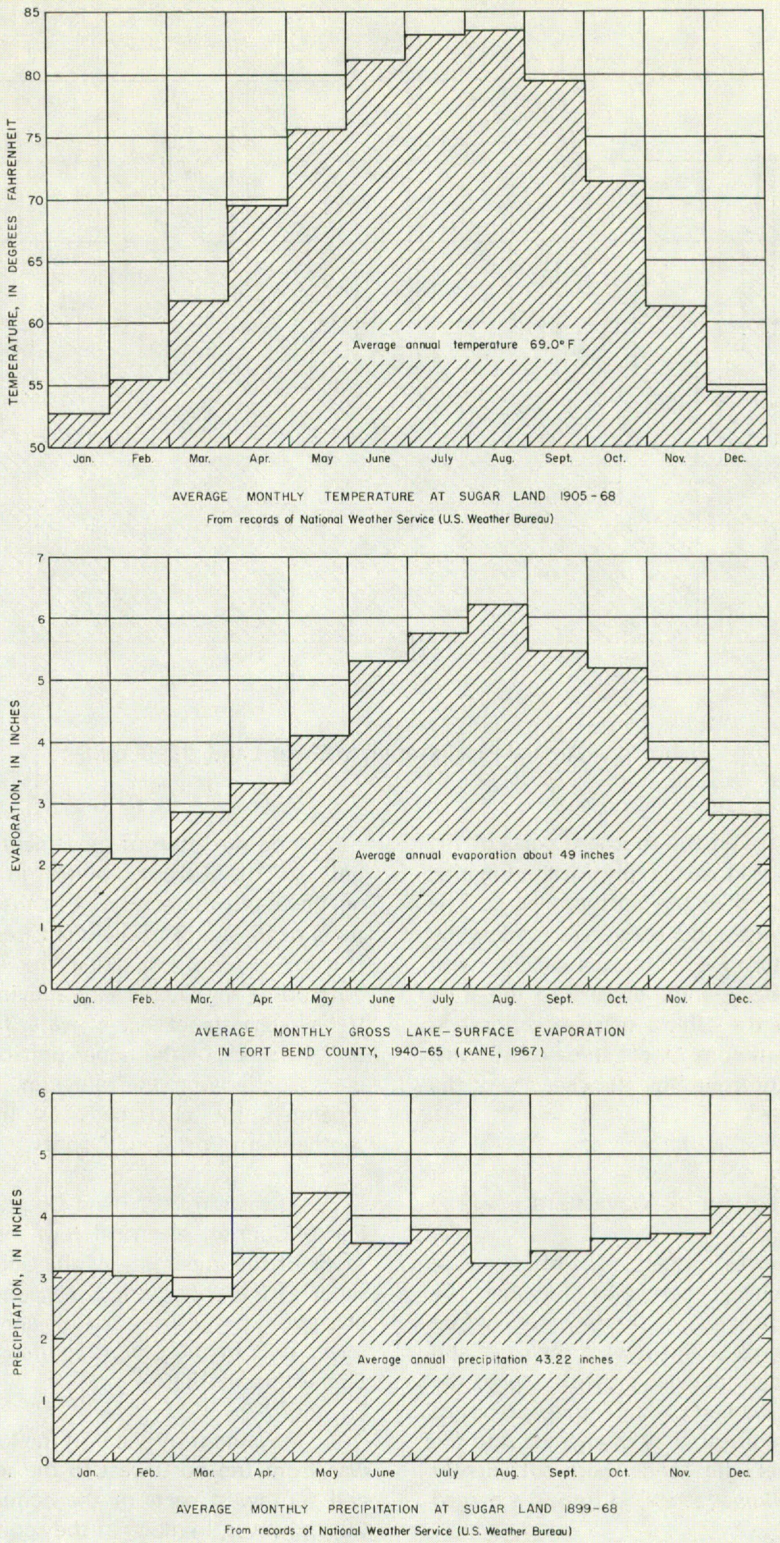


Figure 11

Average Monthly Temperature, Precipitation, and Gross Lake-Surface Evaporation at Sugar Land

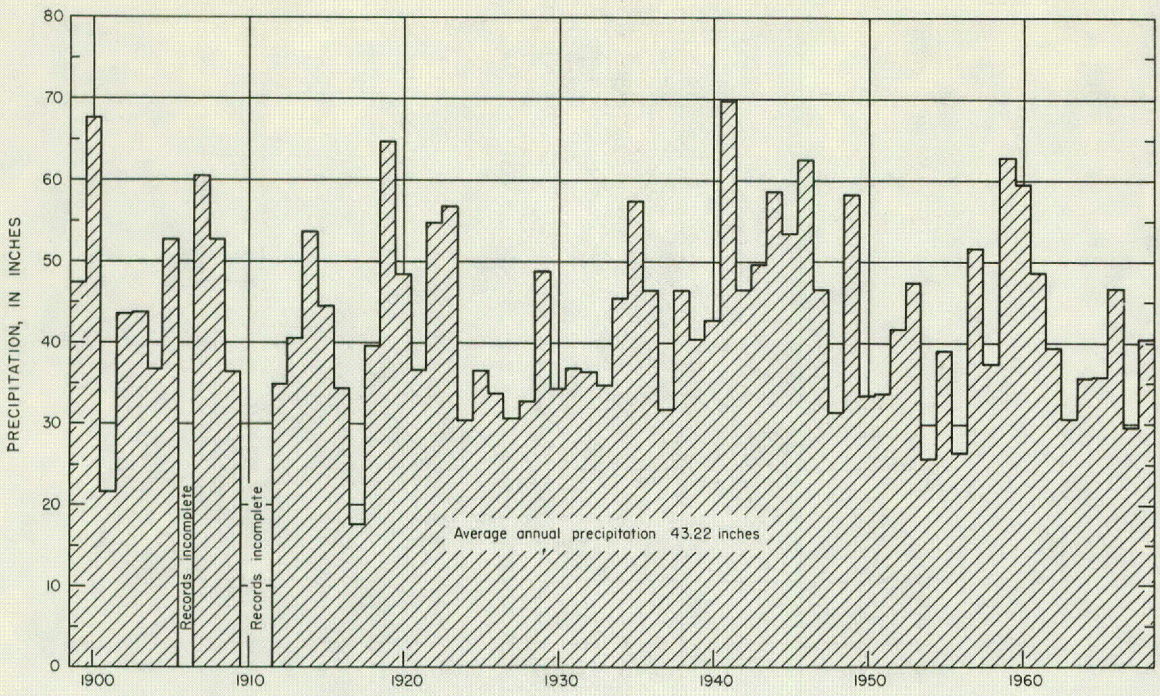


Figure 12.—Annual Precipitation at Sugar Land, 1899-1968

and Montgomery outcrops in the southern parts of the counties to the more rugged topography of the Fleming Formation and Willis Sand in the northern parts. The outcrop areas of the Willis and Bentley are moderately sandy; the Fleming outcrop is composed of clay with some sand intervals. Water stands in parts of the areas during the winter when the effects of evaporation and transpiration are at a minimum. Under these conditions, the rate of recharge is controlled by the capacity of the aquifers to transmit water.

Rate and Direction of Movement

Ground water moves under the influence of gravity from areas of recharge to areas of discharge. The general direction of movement of fresh water, before pumping began, was down-gradient toward the coast and toward areas in the major alluvial systems where the aquifers are interconnected vertically. The deeper sands had the highest head; therefore, they discharged into the overlying sands wherever the sands were sufficiently interconnected. The shallower sands, in turn, discharged to the streams.

Heavy withdrawals from the aquifers, especially in the Houston and Katy areas, have altered the movement patterns. Now the highest head is in the upper unit of the Chicot aquifer; the lowest head is in the Evangeline aquifer. Therefore, in addition to the horizontal component of movement, the water is moving downward instead of upward.

The direction of movement of water in the lower unit of the Chicot aquifer in 1947 was from the northwest to the southeast in the central and southwest parts of the county. The slight trend of the contour lines (Figure 19) upriver along the southern edge of the outcrop of the Quaternary alluvium in the Brazos River Valley suggests leakage of water from sands of the lower unit to sands of the upper unit of the Chicot. In many places underlying the alluvium, the two units are not separated by clay beds as they are in most of southeastern Fort Bend County.

In eastern Fort Bend County and in southwestern Harris County, electrical logs show that some massive sands of the lower unit of the Chicot are in contact with sands of the underlying Evangeline. The interconnection provides a passageway for movement of water from the lower unit of the Chicot aquifer to the lower-pressured Evangeline aquifer.

Movement of water in the lower unit of the Chicot was from the northwest to the southeast in the central and southwest parts of the county in 1968-69 (Figure 20); however, in much of the county, the movement was toward the east and northeast. In the eastern part of the county, an increase in the altitude of the piezometric surface is outlined on Figure 20 by the 10-foot contour in the vicinity of the Thompson oil field. This "high" probably reflects water levels in the upper unit of the Chicot where it is in direct connection with the lower unit.

The altitude of the piezometric surface of the upper unit of the Chicot aquifer in 1947 was greater than the altitude of the Brazos River (Figure 23). The contours show that the movement of water in the aquifer was to the southeast and toward the river. By 1968-69, the direction of movement had changed along the northeastern boundary of the county, and water was moving out of the county toward the northeast (Figure 24).

The average gradient of the piezometric surface in the lower unit of the Chicot aquifer in 1968-69 was about 5.5 feet per mile (Figure 20). If the porosity of the sand is about 30 percent and the permeability is about 645 gpd per square foot, the water in the aquifer was moving about 0.30 foot per day (110 feet per year).

The average gradient of the piezometric surface in the upper unit of the Chicot aquifer (Figure 24) in southern Fort Bend County in 1968-69 was about 2.5 feet per mile. Assuming a porosity of 30 percent and a permeability of 645 gpd per square foot, the water was moving at a rate of about 0.14 foot per day (51 feet per year). The gradient of the piezometric surface in the upper unit was about 20 feet per mile along the northeastern border of the county in 1968-69. In this area, the water was moving at a rate of about 1.1 feet per day (400 feet per year).

Discharge From the Aquifers

Ground water is discharged naturally through seeps and springs and by evaporation and transpiration. Ground water is discharged artificially by wells which in turn affects the natural discharge.

Before large-scale pumping began, probably a large percentage of the water infiltrating to the water table was being discharged to the streams because the aquifers were saturated. That is, more water was entering the aquifer than could be transmitted downdip. The amount of this rejected recharge has decreased because of ground-water development which has lowered the water levels in sands near the surface. In places, the water table has been lowered below the stream levels, which results in water moving from the streams into the aquifers. Sufficient information is not available to estimate the amount of natural discharge in the county. Estimates of the amount of water pumped from wells are given in the following section on development and use of ground water.

DEVELOPMENT AND USE OF GROUND WATER

Pumpage of Ground Water

Fort Bend County was settled in the early 1800's, and the first wells were developed for domestic-supply and livestock use. During the plantation era that followed, some ground water probably was used for irrigation.

In the late 1800's the cultivation of rice stimulated the construction of irrigation wells. By 1900, withdrawals of ground water largely for irrigation may have averaged several mgd.

The use of ground water has increased greatly since 1900, and by 1960, the withdrawal rate was approximately 35 mgd; in 1968, it was approximately 59 mgd. The following table shows the pumpage of ground water by use for 1968.

Estimated Pumpage of Ground Water in Fort Bend County, 1968

USE	MILLION GALLONS PER DAY	ACRE-FEET PER YEAR
Industrial use	13.6	15,200
Municipal supply	5.0	5,600
Irrigation	39.2	43,900
Rural-domestic and livestock use	1.3	1,500
Totals 1/	59	66,000

1/ Totals are rounded to two significant figures.

Estimates of annual pumpage for the period 1960-68 are shown on Figure 13. The data show that the principal use of ground water was for irrigation—about 66 percent of the total in 1968. Industry used about 23 percent of the water; only about 11 percent of the water was pumped for municipal supply and rural-domestic and livestock uses. A significant increase (about 13 mgd) in pumpage for rice irrigation in 1967 was caused by increases in acreage allotments.

Well Construction

The type of well construction used in Fort Bend County depends on the desired capacity of the well, the intended use of the water, the allowable cost of construction, and the methods employed by the individual drillers.

Most of the recently constructed small-capacity wells, such as those used for rural-domestic and livestock needs, were drilled by hydraulic-rotary equipment. The diameter of the holes ranges from 3 to 6 inches with 2- to 4-inch casing and screen commonly being used. Each well is normally completed with a single interval of screen (r to 20 feet in length), which is set within the water-bearing unit. Most of these wells are

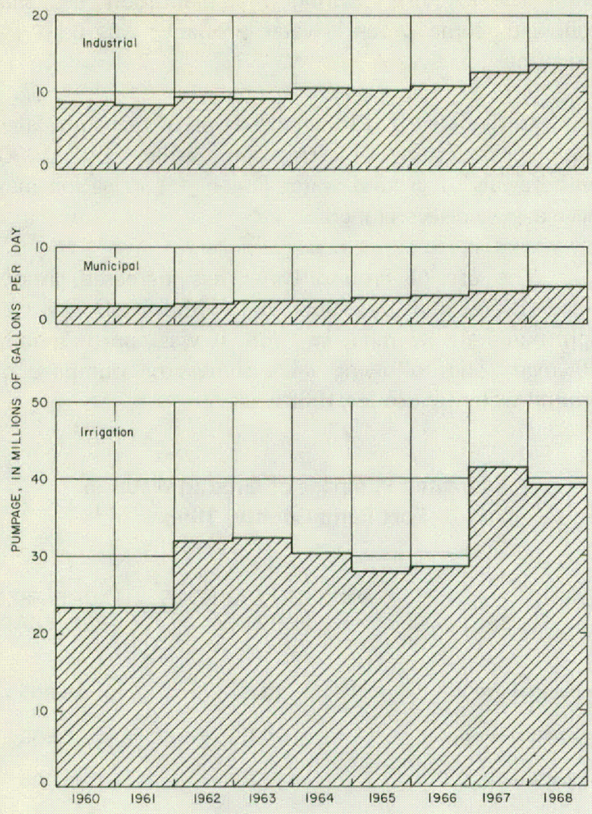


Figure 13.—Estimated Pumpage of Ground Water, 1960-68

equipped with jet or submergible pumps powered by electric motors.

Large-capacity wells such as those used for irrigation, industry, or public supply are drilled by hydraulic-rotary methods. First a test hole (usually 6 inches in diameter) is drilled and logged to determine the depth and thickness of the sand intervals. Water samples and formation samples may be collected to determine the aquifer characteristics and water quality. If the test-hole log and other data indicate that sufficient water-bearing sands are present, the test hole is then reamed to make the well.

Construction of municipal or industrial wells usually differs from that of irrigation wells. A public-supply or industrial well is screened in selected sand units, while irrigation wells generally use slotted casing that extends from near the surface through the entire depth of the well. Casing that is slotted above the pumping level should be avoided, because water (and entrained air) cascading into the well may decrease pump efficiency and durability.

The upper part of the test hole of a municipal or industrial well is usually reamed to 14 to 30 inches in diameter. Then, a slightly smaller surface casing is set and cemented in place to form the pump pit. The remaining part of the test hole is then reamed to a diameter slightly less than that of the surface casing. The reamed hole is then underreamed usually to 30 inches in diameter in the sections to be screened. Eight- to 12-inch diameter wire-wrapped screens and blank casing are installed. The annular space between the screen or casing and the wall of the hole is filled with sorted gravel. The gravel-pack stabilizes the hole and provides a transfer medium for water moving from the sand into the well, thus increasing the effective diameter of the well.

Large-capacity wells are developed and tested by using large-capacity test pumps. The wells are then fitted with deep-well turbine pumps powered by internal combustion engines or electric motors. Fawcett (1963, p. 16) discusses the methods used for construction of such wells in the Houston area.

Water Levels and the Effects of Pumping

Before ground-water withdrawals began, the aquifers in Fort Bend County were in a state of natural hydraulic equilibrium. The hydraulic head of the water (water level) in an aquifer was controlled by the altitude of the surface of the ground-water body in the recharge areas, the altitude of the natural discharge areas, and the permeabilities of the aquifers. Originally, water in any sand bed had a higher head than the water in the overlying sand bed because the deeper sand beds crop out at successively higher altitudes.

The natural equilibrium is disturbed by pumping of the ground water. As water is withdrawn, a slope in the piezometric surface is established toward the pumped well from all directions. This sloping surface assumes the shape of an inverted cone that is called the cone of depression. As pumping continues, the cone of depression becomes larger until equilibrium is reached—that is, until the hydraulic gradient is sufficient to force water through the aquifer at a rate equal to the discharge. Withdrawal from wells drilled close together creates cones of depression that may intersect and cause additional lowering of water levels.

Estimates of water-level declines that will be caused by pumping may be made if the hydrologic characteristics of the aquifer are known. The theoretical relationship between drawdown and distance from the center of pumping for different aquifer coefficients is shown in Figure 14. Calculations of drawdown are based on a withdrawal of 1 mgd for 1 year from an aquifer having transmissibilities and storage coefficients as shown. For example, if the transmissibility and storage coefficient are 50,000 gpd per foot and 0.001, respectively; the drawdown or decline in the water level would be 12 feet at a distance of 1 mile from a well or group of wells discharging 1 mgd for 1 year. If the transmissibility and storage coefficient are 5,000 gpd per foot and 0.0001, respectively, the same pumping rate for the same time would cause 84 feet of decline at the same distance.

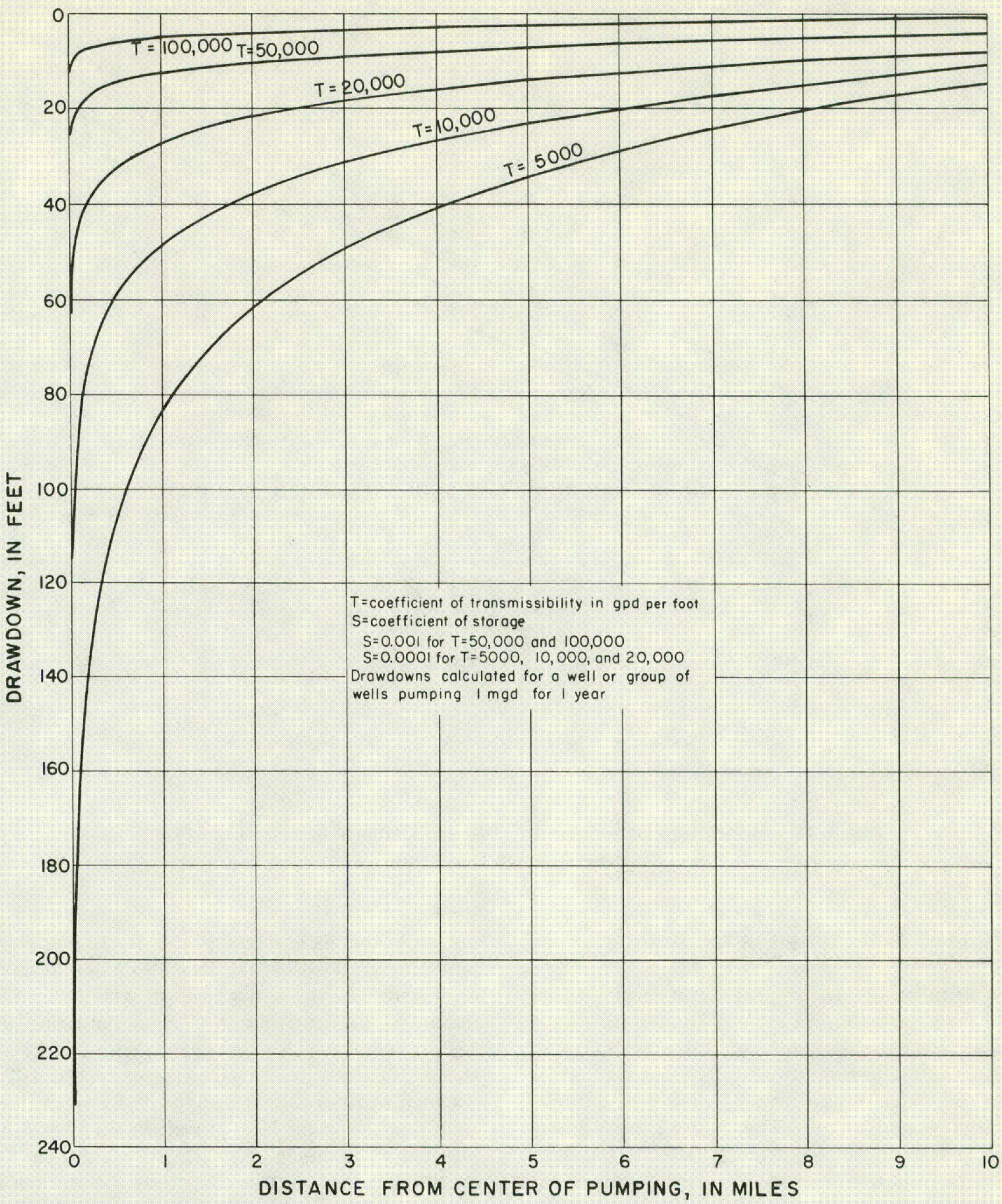


Figure 14.—Relation of Drawdown to Aquifer Coefficients and Distance

Figure 15 shows the relation of drawdown to distance and time as a result of pumping from an aquifer. with characteristics similar to those found in the artesian aquifers in Fort Bend County. This figure shows that the rate of increase of drawdown decreases with time. For example, the drawdown at 100 feet from a well is 11 feet after 1 mgd has been pumped for 1 year, and the drawdown is about 14 feet after 1 mgd has been pumped for 100 years. The total drawdown at any one place within the cone of depression (or influence) of several wells is the sum of the influences of the several wells. The equilibrium curve shown on Figure 15 is the time-drawdown relation when a line source of recharge is 25 miles from the point of discharge.

Figure 16 shows the relation of drawdown to distance and time as a result of pumping a well completed in a water-table aquifer with characteristics similar to those that could be expected in the upper unit of the Chicot aquifer. The drawdown is less than that in an artesian aquifer because under water table conditions, the storage coefficient is larger.

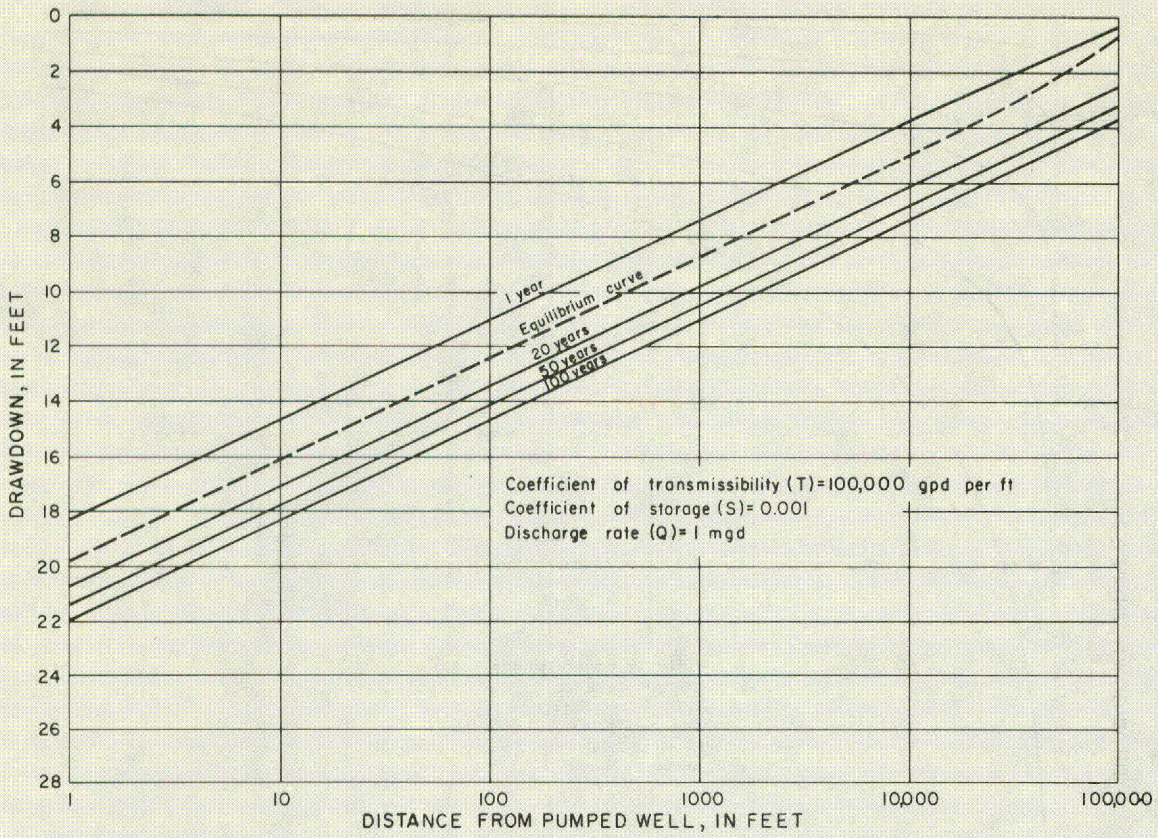


Figure 15.—Relation of Drawdown to Time and Distance as a Result of Pumping Under Artesian Conditions

Decline of Water Levels in the Aquifers

The altitudes of the original water levels in the aquifers in Fort Bend County are not known. However, the pressures in the deeper sands were sufficient to cause water to flow naturally from some wells. Deussen (1914) listed four wells that flowed and 24 wells that did not flow in Fort Bend County. The flowing wells were completed at depths ranging from 910 to 1,760 feet. Darton (1905) reported a head of 9 feet above land surface in one of the four flowing wells. This well, which was 1,550 feet deep, was located at Sugar Land.

Evangeline Aquifer

The flowing wells described by Deussen (1914) were completed in the Evangeline aquifer. In 1968, there were only 12 wells in the county that were completed solely in this aquifer. The highest water level measured in the Evangeline in 1968 was 61 feet below land surface in well JY-65-17-404. The lowest level measured was 194 feet below land surface in a well near Stafford. On the basis of these measurements, the decline in the piezometric surface of the Evangeline aquifer since about 1900 has ranged from about 60 feet in the northwest part of the county to more than 190 feet in the eastern part.

Hydrographs showing the fluctuations in water levels in two wells in the Evangeline aquifer are shown on Figure 17. The water level in well JY-65-17-404 at Simonton declined about 42 feet between 1947 and 1968. The water level in well JY-65-27-312 declined about 168 feet in the 46 years of record 1920-66; it declined about 140 feet during the 23 years from 1943 to 1966. The water level in well JY-65-17-404 has been affected by pumping in the irrigation area near Katy and in the Houston district. Most of the decline in well JY-65-27-312 was probably caused by withdrawals of water in the Houston area. The rates of decline were about 2 feet per year in the well nearest the outcrop (JY-65-17-404) since 1947 and more than 6 feet per year in well JY-65-27-312 since 1943.

Chicot Aquifer

The upper and lower units of the Chicot aquifer merge in the northern part of Fort Bend County. This area, where the Chicot is basically one aquifer, is shown on Figures 19-21 and 23-25. Even though the units merge, some clay lenses within the aquifer cause small differences in water levels between the shallow and deep parts. Water levels in shallow wells are more representative of levels in the upper unit, and these were

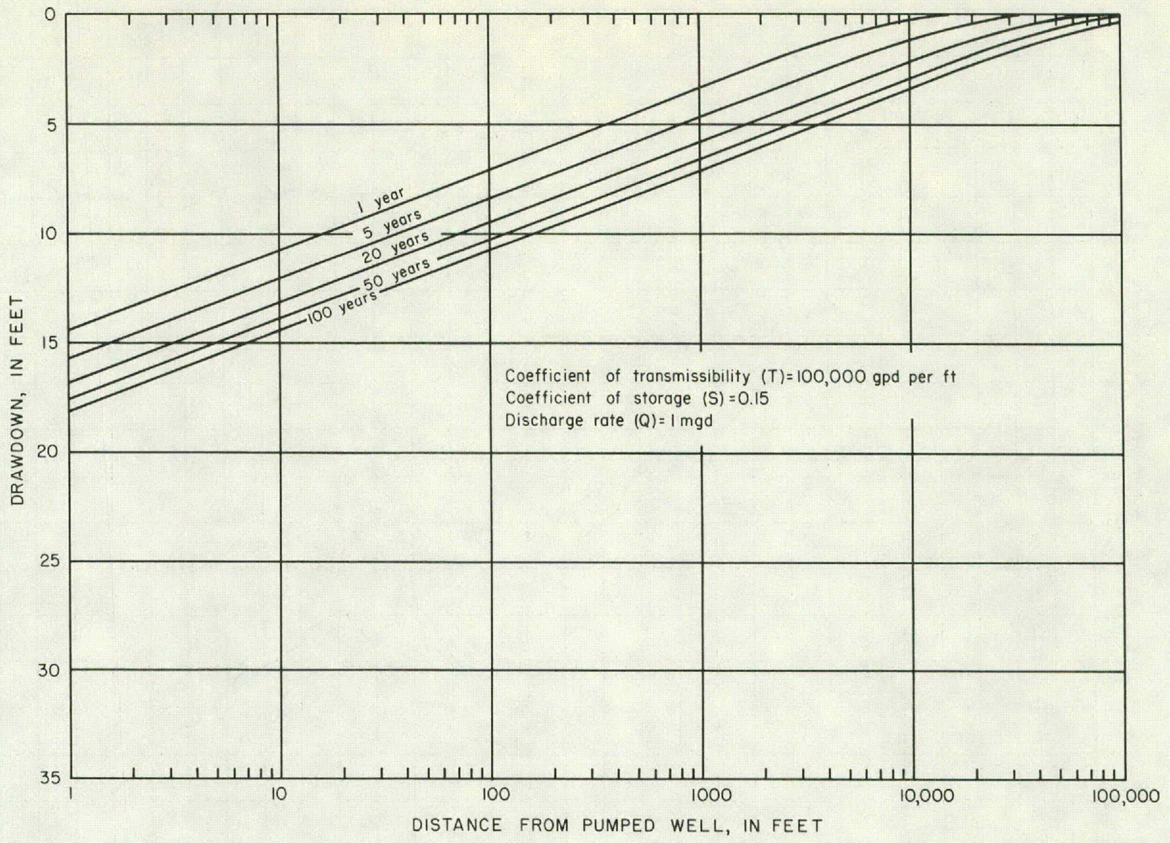


Figure 16.—Relation of Drawdown to Time and Distance as a Result of Pumping Under Water-Table Conditions

used to project the contours of water levels (Figures 19-21). Water levels in the deeper wells in the Chicot were used to project the contours of water levels in the lower unit (Figures 23-25).

No regional map of water levels in the Chicot as a unit was prepared, but three hydrographs of wells completed in the Chicot aquifer are shown on Figure 18.

Well JY-65-25-301 is an irrigation well near the industrial well field that supplies the sulfur mine at Orchard. At this location, the water level has fluctuated in response to the industrial pumpage since 1947, but there has been less than 10 feet net decline.

Wells JY-65-10-702 and JY-65-10-703, near Katy, show the effects of the pumpage for irrigation. Well JY-65-10-703 is 170 feet deep and well JY-65-10-702 is screened from 176 to 346 feet below land surface. The water level in the deeper well has been a few feet lower than that in the shallow well, although about 4 feet of the difference is due to the difference in altitude. The average rate of decline since 1947 (the period of more rapid decline) has been about 1.7 feet per year.

Lower Unit of the Chicot Aquifer

The original piezometric surface of the lower unit of the Chicot aquifer was probably higher than land surface at least at some locations. Well JY-65-28-806, in the southeastern part of the county, reportedly flowed when drilled in 1935. The well was located on the bank of the Brazos River at an altitude of about 57 feet.

The approximate altitudes of water levels in wells in the lower unit of the Chicot aquifer in 1947 and 1968-69 are shown on Figures 19 and 20. Figure 21 shows the decline of water levels between 1947 and 1968-69.

The decline of water levels in the lower unit of the Chicot ranged from less than 10 feet in western Fort Bend County to about 130 feet in the Blue Ridge Dome area. The rates of decline, estimated from the data compiled on Figure 21, ranged from less than 0.5 foot per year in western Fort Bend County to about 6 feet per year in the Blue Ridge Dome area. In most of the county, the rate was less than 3 feet per year. Much of the decline in the eastern part of the county is probably

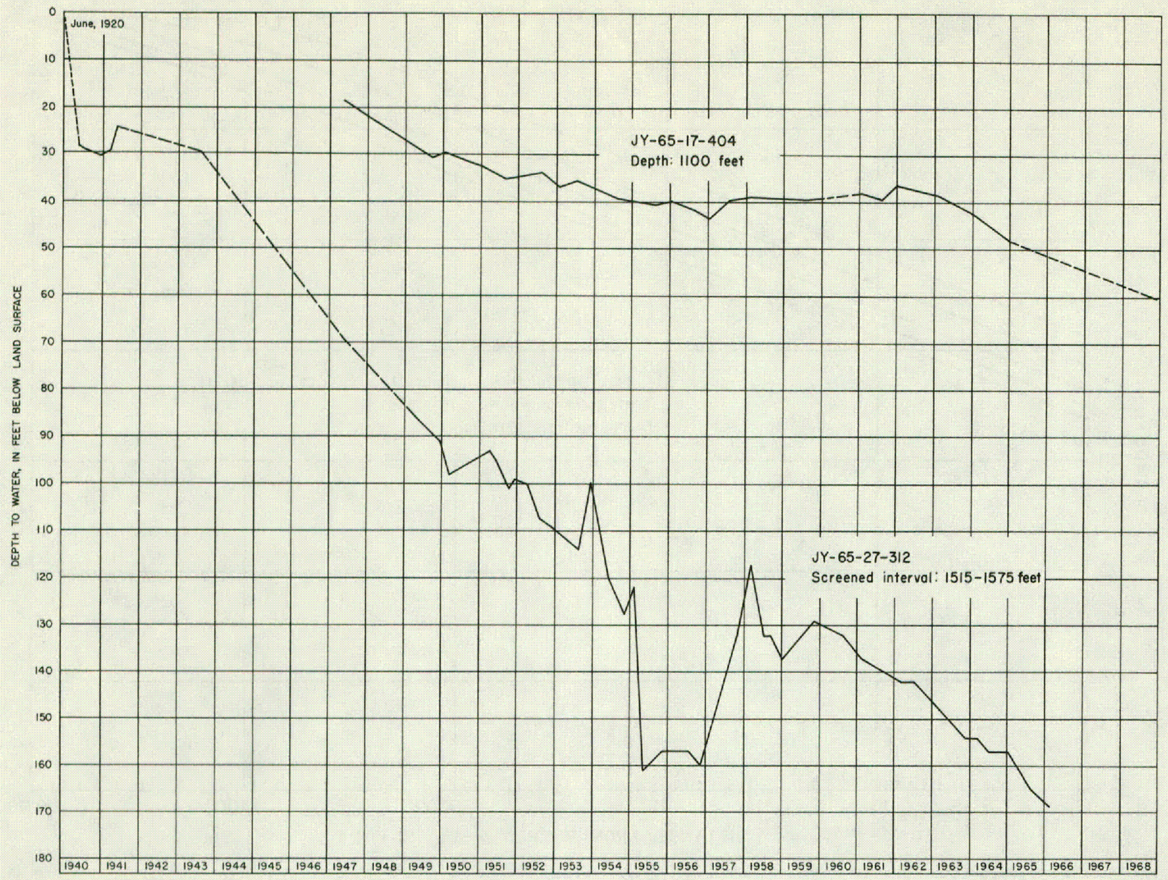


Figure 17.—Fluctuations of Water Levels in Wells Tapping the Evangeline Aquifer

due to movement of water out of the lower unit of the Chicot aquifer into the lower-pressured Evangeline aquifer which underlies the Chicot.

Hydrographs of five wells completed in the lower unit of the Chicot aquifer are shown on Figure 22. Three of the wells, JY-65-28-402, JY-65-28-403, and JY-65-28-404 are near each other in the southeastern part of the county, but produce water from different depths. The rates of decline in the wells are about equal (3 feet per year), but the depth to water is related to the depth of the well; the deeper the screen setting, the lower the water level. This condition indicates that water is moving from the shallower to the deeper sands.

The hydrograph of well JY-65-29-403 in northeastern Fort Bend County shows a decline in water level of about 80 feet at an average rate of about 5 feet

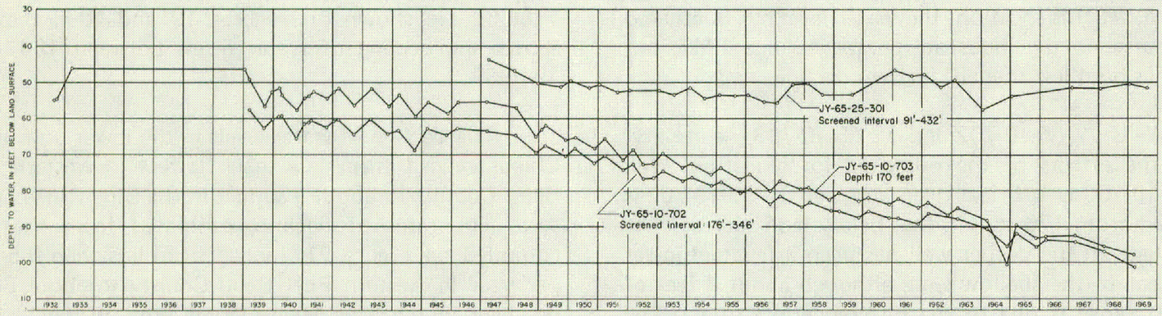


Figure 18.—Fluctuations of Water Levels in Wells Tapping the Chicot Aquifer

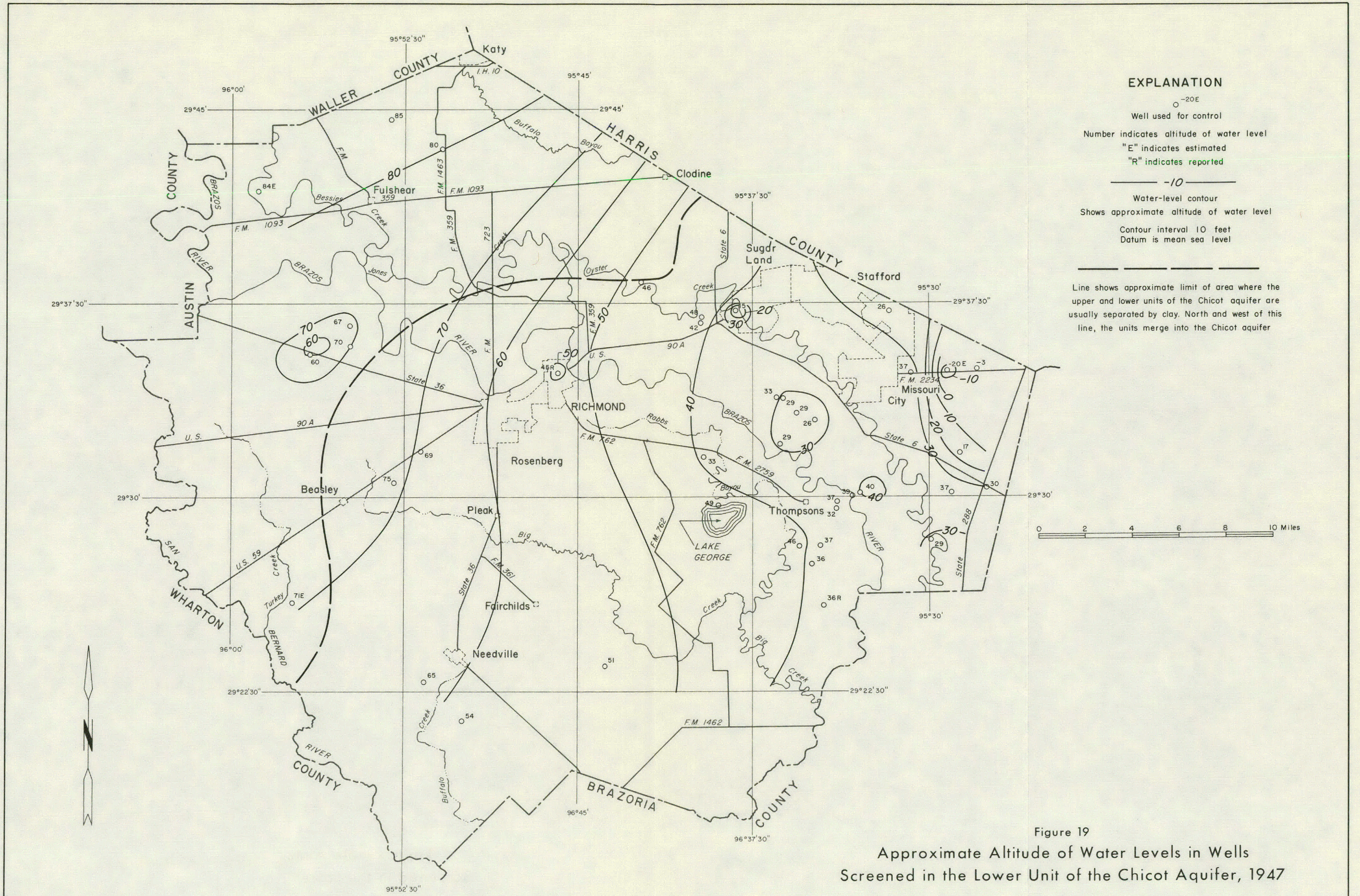


Figure 19

Approximate Altitude of Water Levels in Wells Screened in the Lower Unit of the Chicot Aquifer, 1947

Base from U.S. Geological Survey topographic quadrangles

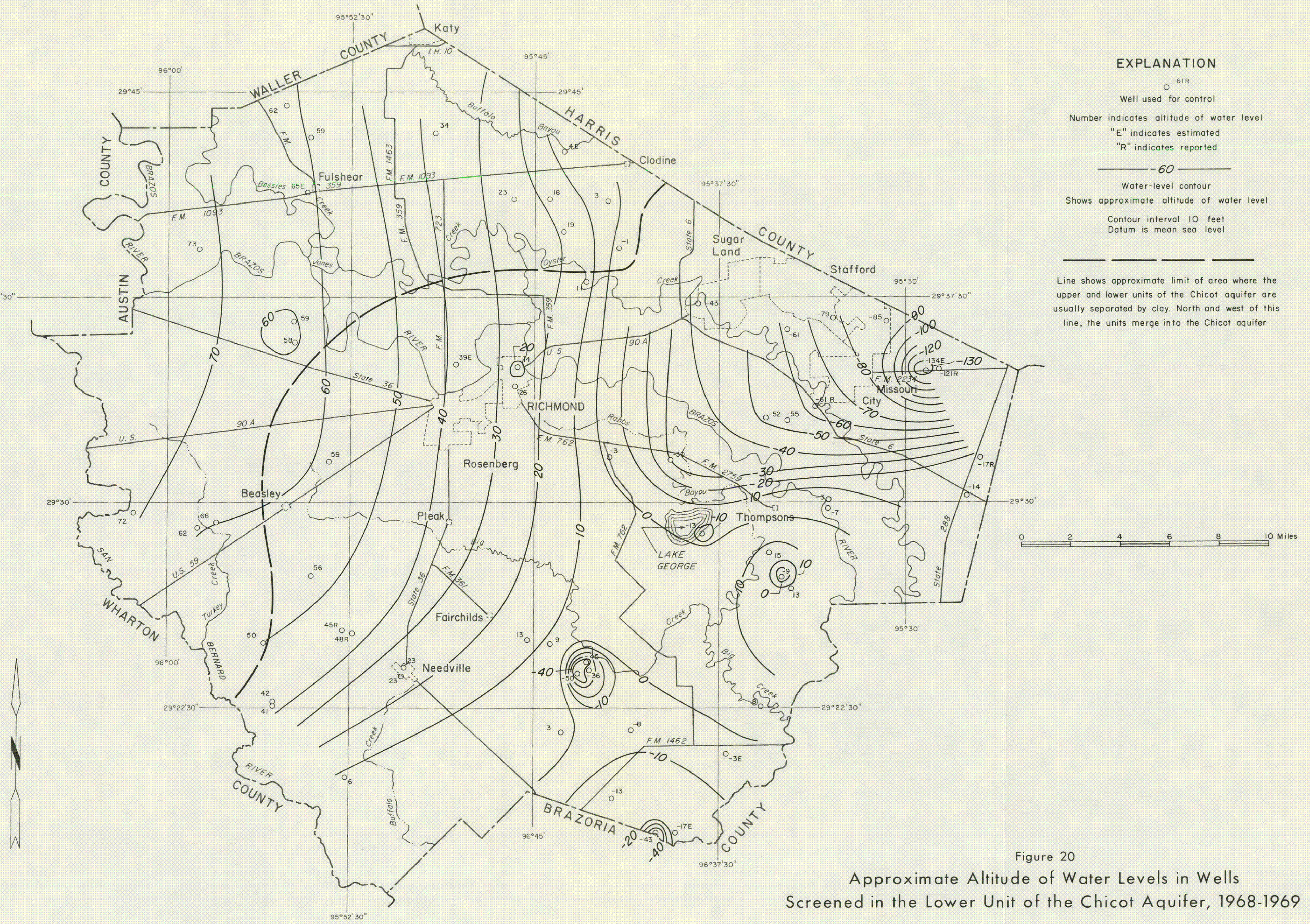


Figure 20

Approximate Altitude of Water Levels in Wells Screened in the Lower Unit of the Chicot Aquifer, 1968-1969

Base from U.S. Geological Survey topographic quadrangles

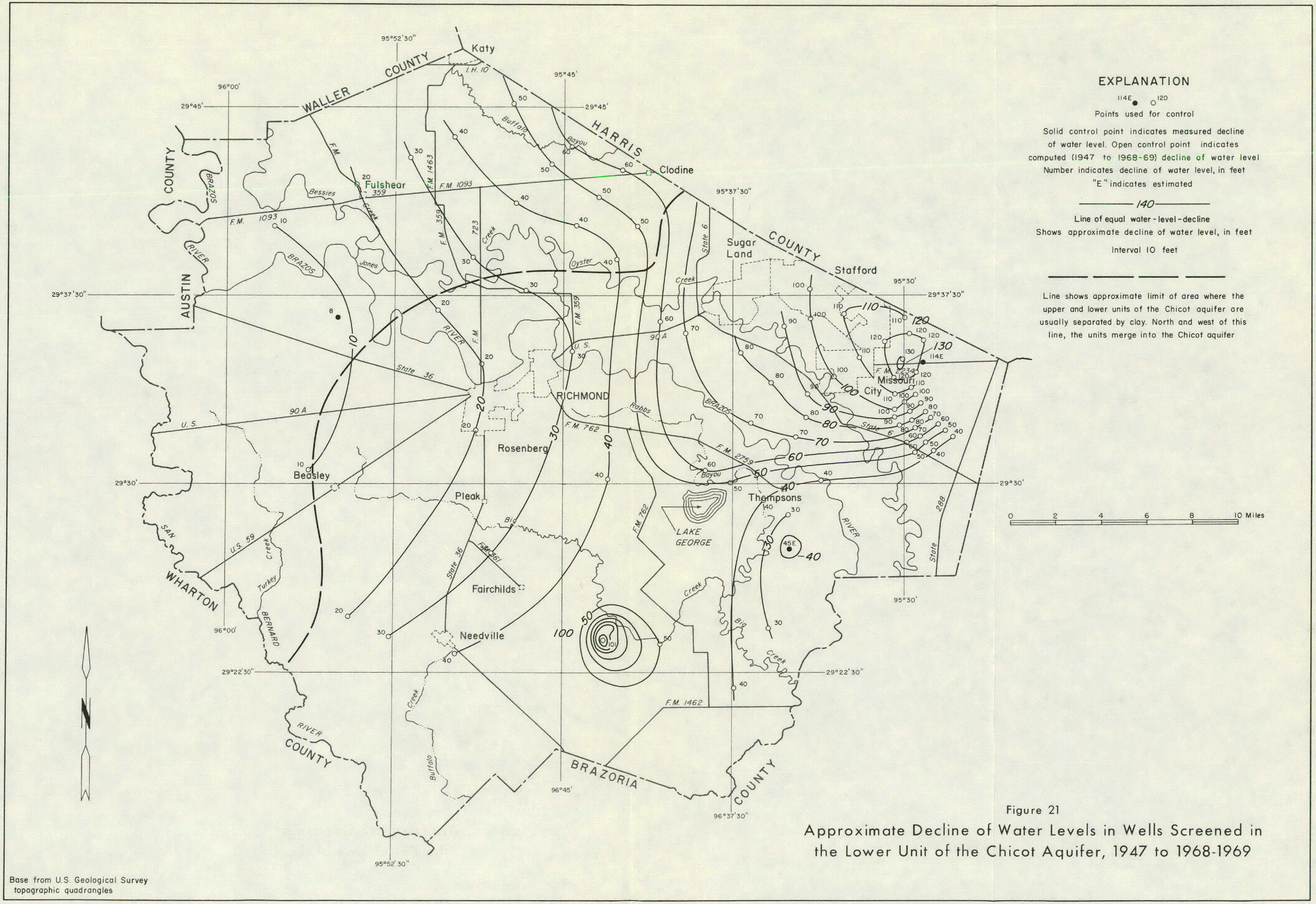


Figure 21

Approximate Decline of Water Levels in Wells Screened in the Lower Unit of the Chicot Aquifer, 1947 to 1968-1969

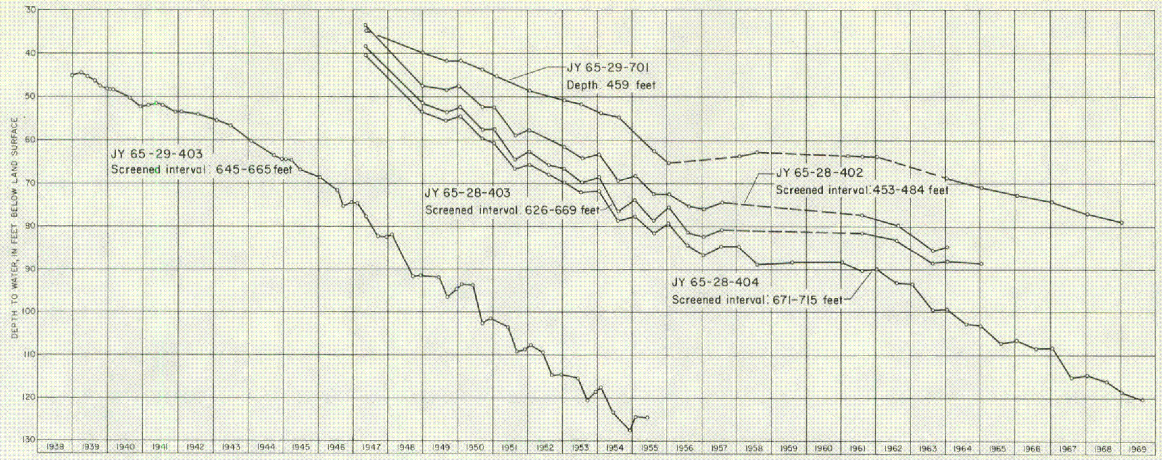


Figure 22.—Fluctuations of Water Levels in Wells Tapping the Lower Unit of the Chicot Aquifer

per year from 1938 to 1955. In well JY-65-29-701, about 5 miles south of JY-65-29-403, the water level decline was about 44 feet and the average rate of decline was about 2 feet per year from 1947 to 1969. The difference in rates of decline at these two locations, although from different periods, reflects differences in the depths and locations of the two wells. Well JY-65-29-701 is 459 feet deep. Well JY-65-29-403 is screened between 645 and 665 feet. Well JY-65-29-403 is in the Blue Ridge Dome area, where the lower unit of the Chicot aquifer is probably in hydraulic continuity with the Evangeline aquifer.

Upper Unit of the Chicot Aquifer

Originally, the water levels in wells completed in the upper unit of the Chicot aquifer were slightly below the land surface at most locations.

The approximate altitudes of water levels in wells in the upper unit of the Chicot aquifer in 1947 and 1968-69 are shown on Figures 23 and 24. Figure 25 shows the decline of water levels between 1947 and 1968-69.

The contours shown on Figure 23 indicate that the alluvium of the Brazos River acted as a conduit to the upper unit of the Chicot aquifer in Fort Bend County in 1947. In 1969 (Figure 24), the contours still trended upstream, which indicates that the river still drains the upper unit of the Chicot along most of its length in the county.

Near Richmond, however, the altitude of the water surface in well JY-65-26-305 was 35 feet above sea level in 1969. According to the topographic map of the area, the normal altitude of the water surface in the Brazos River, just east of the well, is approximately 44 feet. The hydraulic gradient in this local area indicates that this section of the river is a losing reach.

The lowering of water levels in the upper unit of the Chicot aquifer must be caused by leakage into deeper sands because no large amounts of water are being withdrawn from the upper unit in this area. The nearest sustained withdrawal is from the lower unit of the Chicot by the city of Richmond.

The decline in water levels during the period 1947 to 1968-69 shown by Figure 25 ranged from less than 10 feet in most of the southwestern half of the county to more than 40 feet along the northeastern edge. The rate of decline for this period ranged from less than 0.2 foot per year to about 2 feet per year. The declines at the closed 10- and 20-foot contour lines in eastern and central Fort Bend County are probably due to leakage from the upper unit to the lower unit of the Chicot. Drainage to the lower unit may also have caused most of the 10- to 40-foot declines in eastern Fort Bend County because there are no sustained withdrawals from the upper unit in these areas. The decline in the area encircled by the 10-foot contour line south of Beasley in the western part of the county probably reflects withdrawals by irrigation wells.

Land-Surface Subsidence

One of the effects of ground-water development in Fort Bend County is subsidence of the land surface caused by the lowering of water levels. The withdrawals of water from the artesian aquifers results in an immediate decrease in hydraulic pressure, which partially supports the weight of the overburden. With this reduction in pressure, an additional load is transferred to the skeleton of the aquifer; and a pressure difference between the sands and clays causes water to move from the clays to the sands. This causes compaction of the clays which results in subsidence of the land surface.

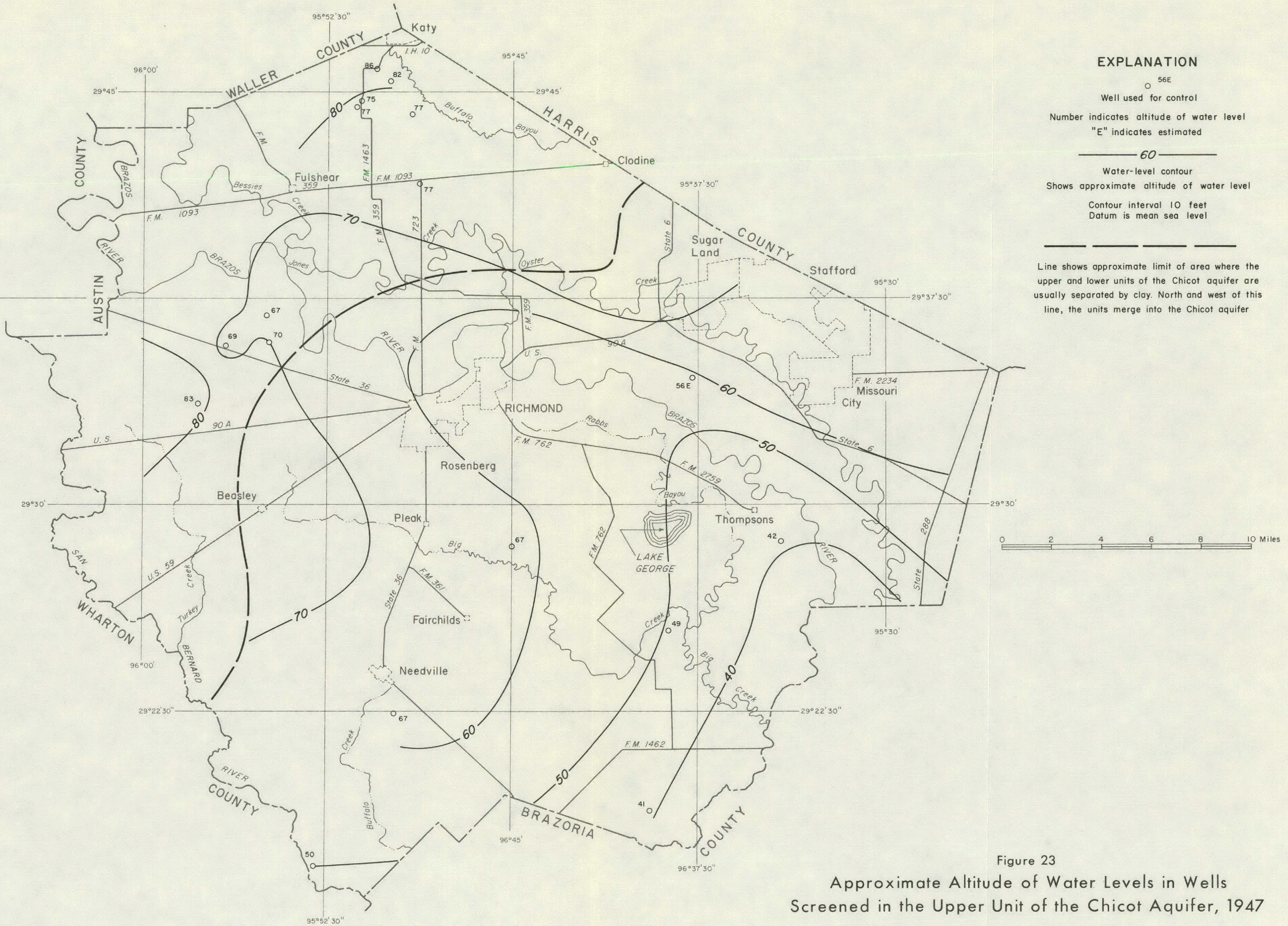


Figure 23

Approximate Altitude of Water Levels in Wells Screened in the Upper Unit of the Chicot Aquifer, 1947

Base from U.S. Geological Survey topographic quadrangles

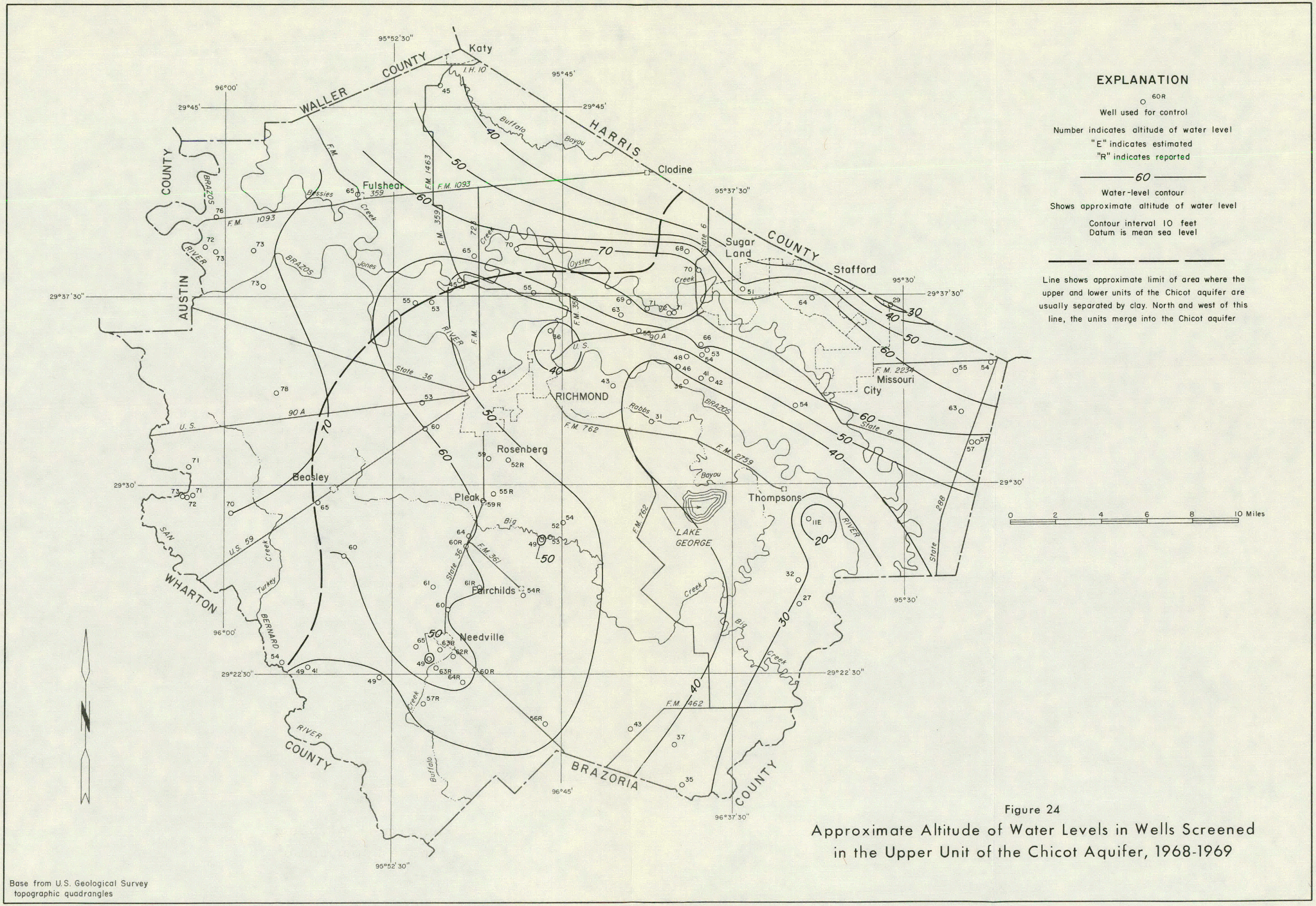
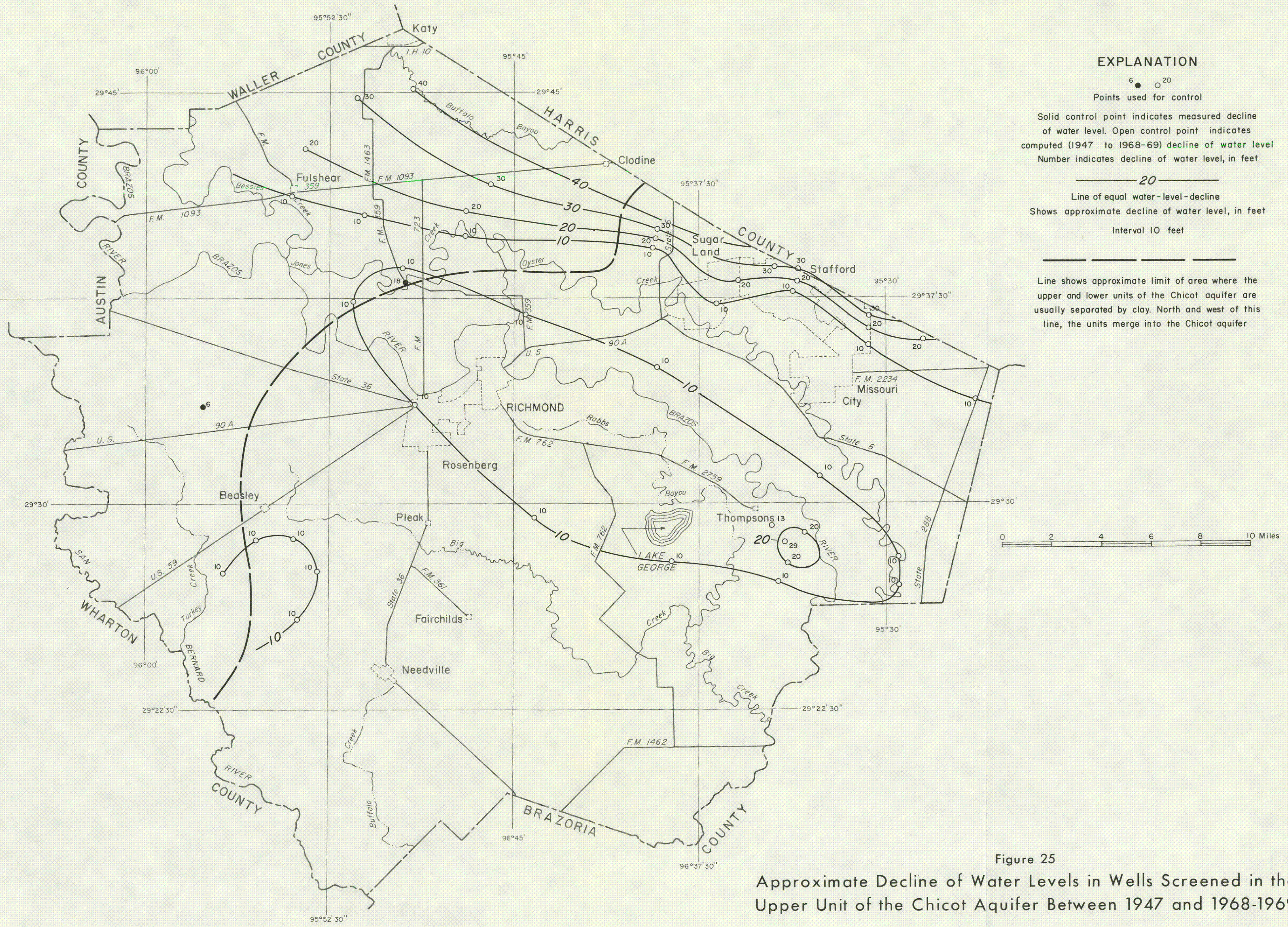


Figure 24

Approximate Altitude of Water Levels in Wells Screened in the Upper Unit of the Chicot Aquifer, 1968-1969



EXPLANATION

Points used for control

Solid control point indicates measured decline of water level. Open control point indicates computed (1947 to 1968-69) decline of water level. Number indicates decline of water level, in feet

20

Line of equal water-level-decline

Shows approximate decline of water level, in feet

Interval 10 feet

Line shows approximate limit of area where the upper and lower units of the Chicot aquifer are usually separated by clay. North and west of this line, the units merge into the Chicot aquifer

Figure 25

Approximate Decline of Water Levels in Wells Screened in the Upper Unit of the Chicot Aquifer Between 1947 and 1968-1969

Base from U.S. Geological Survey topographic quadrangles

This phenomenon of land-surface subsidence resulting from the withdrawals of ground water has been observed in several places on the gulf coast of Texas and has been reported by Pettit and Winslow (1957), Wood and Gabrysch (1965), and Gabrysch (1970).

The extent of land-surface subsidence in Fort Bend County is shown on Figure 26. This map (adapted from Gabrysch, 1970, Figure 7) shows that subsidence has occurred in the eastern one-third of the county between 1943 and 1964. The maximum subsidence for the period exceeded 1 foot, and water levels in the lower unit of the Chicot aquifer and in the Evangeline aquifer declined more than 100 feet during the same period. Elsewhere in the county, water-level declines have been less than 50 feet, and as a result, less than 0.5 foot of subsidence has occurred.

AVAILABILITY OF GROUND WATER

Large quantities of fresh ground water are available almost everywhere in Fort Bend County. The Evangeline aquifer contains from 100 to more than 600 feet of sands containing fresh water. The Chicot aquifer contains from 200 to more than 400 feet of fresh-water sands. The sand thicknesses in both aquifers are shown on Figures 27 and 28.

Large-capacity fresh-water wells (wells capable of yielding 500 to 4,000 gpm) can be constructed anywhere in the county except in the areas affected by salt domes. However, care should be taken in choosing locations for new wells because 100 to 600 feet of sand containing saline water underlies or is interbedded with sands containing fresh water in the Evangeline aquifer. Also, saline water occurs in sands in the Chicot aquifer near the salt domes.

The average thickness of sand containing fresh water in transient storage in Fort Bend County is about 650 feet (300 feet in the Evangeline aquifer and 350 feet in the Chicot aquifer). Based on a porosity of 30 percent, this sand contains about 120 million acre-feet of water; however, it is economically impractical to recover more than a small percentage of this total amount of water.

Pumping lifts of as much as 500 feet are probably economical in Fort Bend County for most purposes. The amount of water in storage above a depth of 500 feet is about 15 trillion gallons (45 million ac-ft). Of this amount, possibly one-half or 7.5 trillion gallons (23 million ac-ft) could be pumped. At the 1968 rate of withdrawal (58 mgd), this supply would last for 350 years.

These estimates are based on the assumption that there is no recharge to the aquifers. More realistically, recharge does occur and is taken into consideration in the following estimates of availability and development:

1. Wells will be installed in such a way that water levels will be lowered to a maximum depth of 500 feet along a line of discharge 33 miles long, approximately parallel to the coastline and extending through Stafford from the western edge to the eastern edge of the county.

2. The aquifers are recharged only at the outcrops, and all recharge is assumed to occur along a line parallel to the strike and in the middle of the outcrop.

3. For computation of water available from storage:

   (a) The altitude of the water levels is the same and remains the same at all points along the center line of the outcrop; the altitude of the water levels is the same at all points along the salt-water interface; and the altitude of the water levels is the same at all points along the line of discharge.

   (b) The net coefficient of storage is 0.10 and includes those parts of the storage coefficient related to water released from storage as the result of draining, compaction, and depressurizing.

   (c) The slope of the water surface will be constant after drawdown to 500 feet at the line of discharge.

4. For computations of the average transmission capacity of the aquifer (defined here as the quantity of water which can be transmitted through a given width of an aquifer at a given hydraulic gradient):

   (a) No further decline in the water levels will occur along the line source of recharge.

   (b) The hydraulic gradient is the slope of a straight line from the water level at the line source of recharge to the water level along the line of discharge.

   (c) The average hydraulic gradient is the average of the present hydraulic gradient and the maximum hydraulic gradient that can be attained with a water level at a depth of 500 feet at the line of discharge.

   (d) All sands between the line source of recharge and the line of discharge

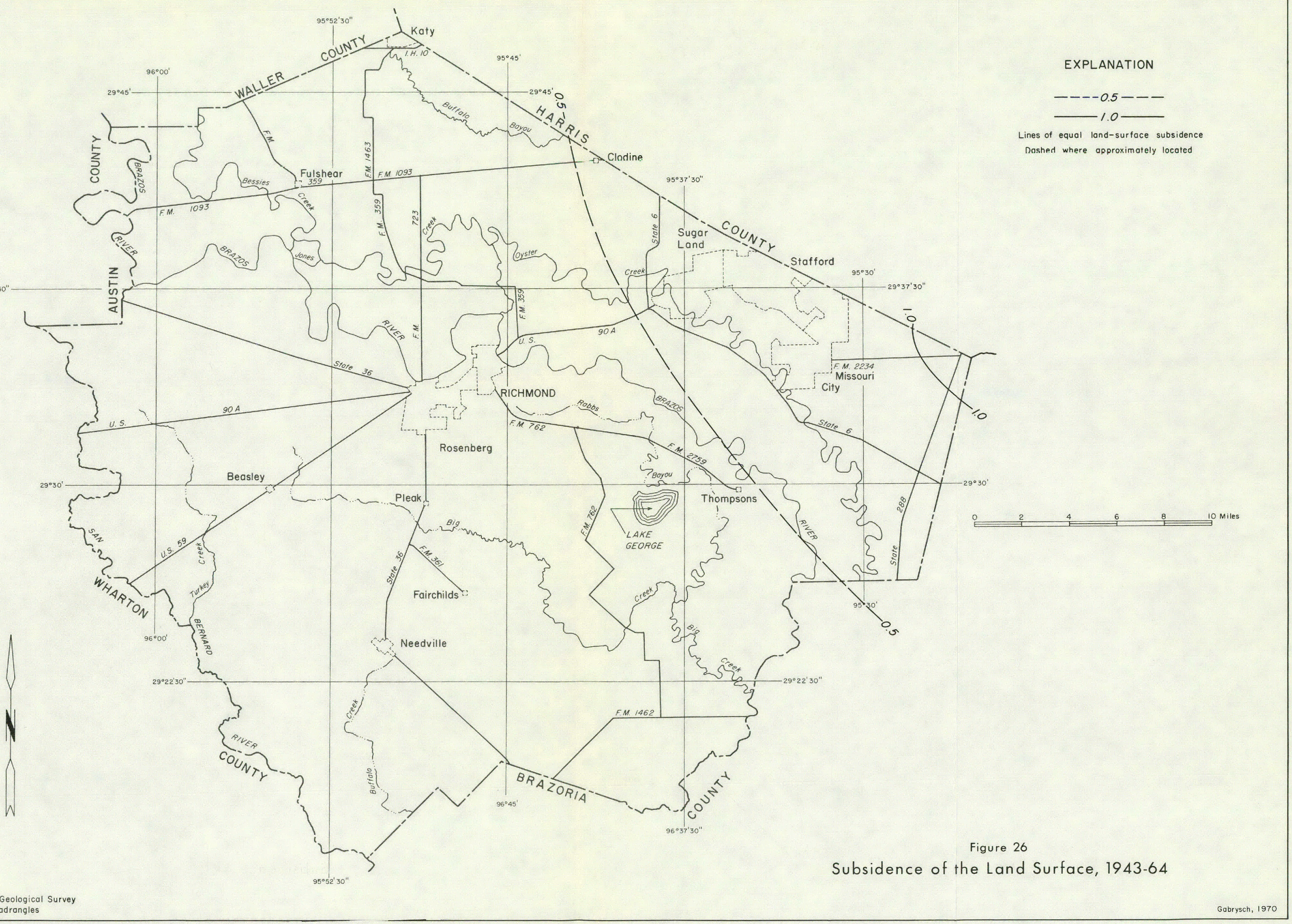


Figure 26
Subsidence of the Land Surface, 1943-64

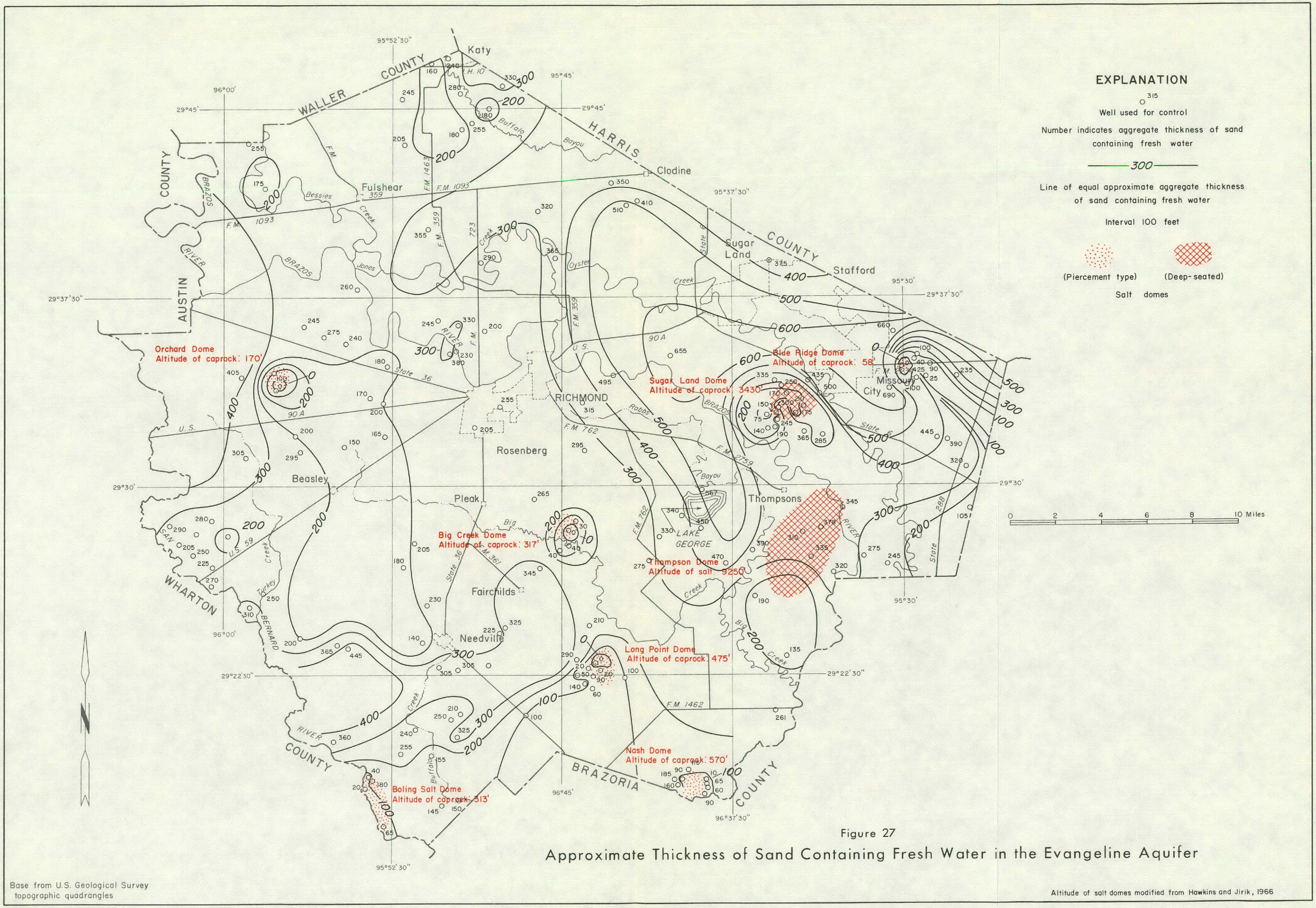


Figure 27

Approximate Thickness of Sand Containing Fresh Water in the Evangeline Aquifer

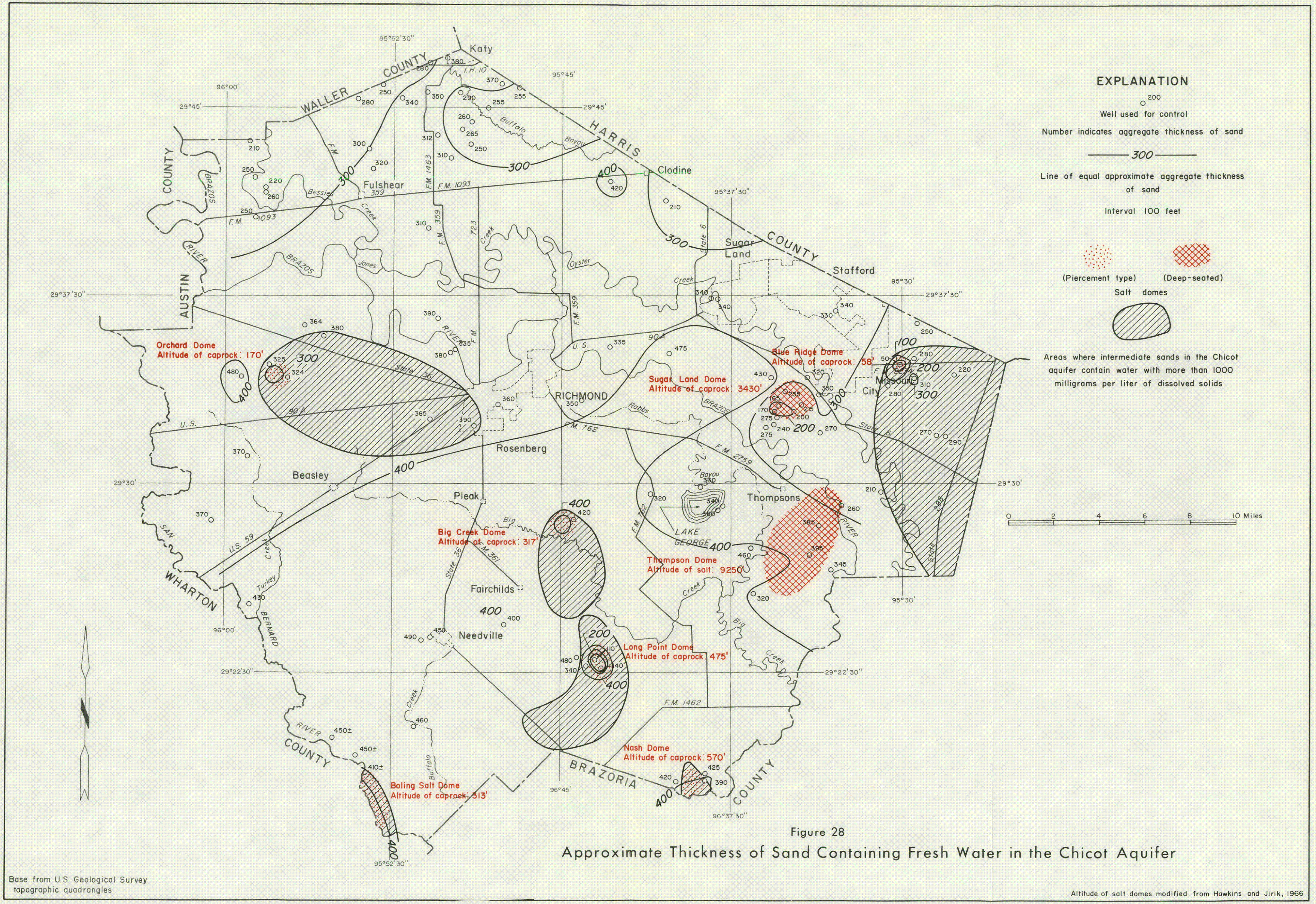


Figure 28

Approximate Thickness of Sand Containing Fresh Water in the Chicot Aquifer

Base from U.S. Geological Survey topographic quadrangles

Altitude of salt domes modified from Hawkins and Jirik, 1966

transmit water from the outcrop area to the line of discharge, and the assumed average coefficient of transmissibility of these sands is 250,000 gpd per foot.

(e) The only increase in the amount of water moving toward the line of discharge from the coastal side is the water released from storage as a result of lowering the water levels.

Calculations based on these assumptions show that at the present gradient, about 35 mgd is being transmitted to the theoretical line of discharge. At the present rate of withdrawal (58 mgd), water levels will never be drawn down to a depth of 500 feet below the land surface. If 500 mgd were withdrawn, it would take more than 50 years to dewater the sands above 500 feet, after which time 150 mgd would be continuously available.

Probably one of the best tools available for analyzing a complex ground-water system is the electrical analog model. Basically, the model is constructed of resistors and capacitors pulsed by electrical current. The electrical system is analogous to the hydraulic system, and permits a very rapid analysis of changes in water levels with changes in pumping.

An analog model of the Houston area, which included a part of Fort Bend County, was constructed in 1963 by the U.S. Geological Survey in cooperation with the city of Houston and the Texas Water Development Board. Wood and Gabrysch (1965) reported the details and results of the construction of this model. Their report included illustrations which showed the computed decline of water levels to 1970 based on 416 mgd of ground-water pumpage. From unpublished analyses using the model, it was concluded that possibly as much as 750 mgd could be pumped without lowering the water levels below 500 feet by the year 2020, if the pumping centers were spread across the northwestern part of the area of the model. By comparison, much of the Chicot aquifer is more prolific in Fort Bend County than in Harris County, but the areal extent is not as great. Considering quantity only, probably less than 500 mgd could be developed in Fort Bend County.

CONCLUSIONS AND NEEDS FOR ADDITIONAL STUDIES

Ground-water use is an essential factor in the economic development of Fort Bend County, but only a small part of this resource is presently being used. Enough water is available to supply several times the present rate of withdrawal on a perennial basis, and much larger withdrawals could be made for extensive periods of time.

The quality of the fresh ground water needs to be protected. The placement of wells and the choice of which sands to develop should be regulated in order to minimize the deterioration of the quality of the water. This is especially true in the salt-dome areas and in the fresh water-salt water interface areas.

The effects of withdrawals of ground water in the county have been minor. Most of the water-level declines are due to pumping in the adjoining areas, especially in Harris County. The water-level declines have resulted, however, in subsidence of the land surface in some area.

Increased withdrawals will cause additional declines in water levels and additional subsidence of the land surface. The location and magnitude of the declines will be dependent on recharge, the extent of hydraulic continuity between the aquifers, the permeability of the aquifers, and the amount and location of withdrawals.

An expanded and continuing program of data collection and analysis should be established in Fort Bend County to obtain more detailed data and to keep pace with development. The program should include the following items:

1. An extensive network of observation wells to determine water levels periodically should be established. Wells screened in individual sands in each of the aquifers at many locations in the county should be added to the wells currently being measured. If satisfactory observation wells are not available at locations such as in the heavily pumped Katy rice irrigation area, the Blue Ridge Dome area, and the alluvial areas where recharge is occurring, a program of locating and drilling suitable wells should be initiated.

2. An extensive network of observation wells to determine water quality and changes in water quality should be established. Water samples should be collected and analyzed on a systematic basis. All large wells should be sampled when drilled and resampled at a later date. Resampling should be frequent in the salt-dome areas, where poorer quality water might be encroaching on the fresh-water sources. Considerable development of the aquifers in the Blue Ridge area is planned, and establishment of a monitoring system in this area is needed now.

3. Aquifer tests to determine the aquifer characteristics should be made in existing wells not previously tested and in new wells when they are drilled.

4. Low-flow studies should be made in the streams to help determine the areas and amounts of ground-water recharge.

5. The Houston electrical analog model should be refined. This model is the best tool available for the analysis of pumping effects.

6. Bench marks should be re-leveled periodically to determine the magnitude of land-surface subsidence.

This program should be coordinated with similar programs in adjacent areas. Recent studies, similar to the Fort Bend study, have been completed in all adjacent and nearby counties except Wharton and Colorado Counties. For optimum development of the water resources in the entire area, detailed ground-water investigations in these counties should be made.

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Table 4.--Records of Wells and Test Holes

Water Level : Reported water levels are given in feet; measured water levels are given in feet and tenths.
Method of lift and type of power: A, air; B, bucket; Bg, butane gas engine; C, centrifugal; D, diesel engine; E, electric motor; G, gasoline engine; H, hand; J, jet; LPg, LP gas engine; N, none; Ng, natural gas engine; P, piston; S, submergible; T, turbine; W, windmill. Numbers indicate horsepower.
Use of water : D, domestic; Ind, industrial; Irr, irrigation; P, public supply; S, stock; U, unused.
Water-bearing unit : C, Chicot; Cu, upper Chicot; Cl, lower Chicot; E, Evangeline.

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-09-906	Don McMillian	Katy Drilling Company	1951	575	20 12	220 57c	83	492	C,E	149	86.8 97.6 a/	Nov. 13, 1959 Mar. 13, 1969	T,Ng 140	Irr	3,000	--	May 1951
907	Louis Young	do.	1953	409	16 12	213 409	110	299	C	153	--	--	T	Irr	--	--	-- 2/
909	Chester Jordan	do.	1967	895	14	895	197	698	C,E	156	114	Nov. 1967	T,Ng	Irr	1,910	47	Nov. 1967 2/
* 10-701	L. D. Brown	A. Justman	1949	421	20 12	198 421	100	321	C	143	--	--	T,E 75	Irr	2,000	--	Mar. 1949 2/
702	Earl MacMillian	Bud Southerd	1938	346	15	346	176	170	C	144	57.8 101.3 a/	Mar. 15, 1939 Nov. 13, 1969	T,E 50	Irr	1,530	--	--
* 703	P. V. Cook	do.	1929	170	28 12	--	--	--	C	140	55.8 97.8 a/	Aug. 11, 1932 Mar. 12, 1969	T,E	U	570	--	July 24, 1940
* 709	L. D. Brown	do.	1925	174	26 10	--	--	--	C	143	57.6	Mar. 17, 1942	N	U	910	--	July 19, 1940
710	Humble Oil Company	Lowry Water Wells	1967	304	4 2 1/2	293 304	293	10	C	135	95	Oct. 1967	S,E 1	Ind	--	--	-- 2/
711	F. C. Albright	Humble Oil & Ref. Co.	1953	7,521	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
801	Clyde Nelson	Katy Drilling Company	1956	365	16 14	244 365	92	273	C	133	--	--	T,Ng	Irr	--	--	-- 2/
* 809	Cora B. Weller	Layne-Texas Company	1908	206	24 11 5/8	30 206	--	--	C	133	51.2	Apr. 14, 1947	N	U	650	--	--
901	Walter Roesner	A. H. Justman	1951	390	20	390	142	248	C	127	60.7	Apr. 29, 1952	T,Ng	Irr	--	--	--
17-102	T. N. Hunt	Texas Water Wells	1949	320	12 10	100 320	--	--	C	114	35.4	Mar. 17, 1964	T	Irr	--	--	--
* 103	Rea Ranch	Katy Drilling Company	1962	601	12	601	322	279	C,E	110	76	Oct. 1962	T,E	Irr	1,050	30	Oct. 22, 1962
* 106	T. N. Hunt	do.	1956	569	20	244	188	381	C,E	114	39.2	Mar. 17, 1964	T,E 75	Irr	2,490	66	June 1956 2/
109	Rea Ranch	--Swinehart	1962	322	7 4	--	285	25	C	112	35	Sept. 1962	T,E 10	D	200	--	Sept. 28, 1962
110	W. T. Roberts	Katy Drilling Company	1964	660	16 12	282 660	230	430	C,E	120	52	Aug. 1964	T,Ng	Irr	1,150	58	Aug. 1964 2/
111	P. M. Hunt	--	--	160	2	160	--	--	C	113	13.2	Apr. 16, 1947	N	U	--	--	--
* 112	do.	--Moller	1947	175	2	175	--	--	C	113	15	1947	J,E 1/2	D	--	--	--
113	C. N. Frost	Michel T. Halbouty	1955	8,524	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
201	Richard Woods	Katy Drilling Company	1957	335	20	335	100	235	C	157	84.6 93.7 a/	Mar. 19, 1958 Mar. 14, 1969	T,Ng	Irr	--	--	-- 2/
202	L. D. Ware	Texas Water Wells	1957	352	20	352	--	--	C	158	--	--	T,Ng	Irr	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING: DIAM-ETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
* JY-65-17-203	L. D. Ware	Texas Water Wells	1947	840	18 13 8 6	200 343 738 840	104	188	C,E	155	83.6 89.2	Feb. 2, 1960 Dec. 17, 1968	N	U	1,800	--	1947 2/
* 204	Richard Woods	Owner	1945	330	20	330	--	--	C	157	91.4 97.5	Mar. 14, 1966 Dec. 17, 1968	T,Ng	Irr	--	--	--
* 205	do.	do.	1936	334	16 12 8	118 123 334	74	128	C	156	69.1 86.5 a/	Oct. 2, 1940 Dec. 2, 1957	N	U	1,755	--	Aug. 17, 1940
* 301	L. D. Ware	Texas Water Wells	1950	400	20	400	--	--	C	148	--	--	T,Ng	Irr	--	--	--
302	A. L. Stern	Katy Drilling Company	1953	810	20 12	292 810	163	647	C,E	144	--	--	T,E 150	Irr	--	--	-- 2/
303	Cardiff Bros.	do.	1951	446	20 10	224 446	93	353	C	150	76 86.1	May 1951 Feb. 2, 1960	T,E 75	Irr	1,600	42	May 1951
* 304	P. V. Cook	Bud Southard	1930	596	16	110	--	--	C,E	147	63.1 88.1 a/	Mar. 15, 1939 Dec. 17, 1968	N	U	1,130	--	July 26, 1940
* 305	L. D. Ware	Ware & Ginn	1940	590	18 12	--	148	442	C,E	151	70 92.1	Apr. 1940 Dec. 17, 1968	T,Ng	U	1,500	40	Apr. 1940
* 306	C. C. Cardiff	Ray Woods	1939	496	18 14	--	261	235	C	150	66.2 85.7 a/	Oct. 1, 1940 Feb. 2, 1960	T,E 60	Irr	1,600	--	July 29, 1940
307	Walter P. Cook	Katy Drilling Company	1966	617	20 12	329 617	232	385	C,E	147	114	Nov. 1966	T,E 125	Irr	2,700	65	Nov. 1966
401	Vernon W. Frost	do.	1952	378	20	378	85	293	--	114	42 38.0	May 1952 Dec. 17, 1968	T,LPg	Irr	3,500	73	May 21, 1952 2/
402	Gail W. Spencer	do.	1956	367	16 12	241 367	117	250	C	112	36.5	Dec. 16, 1968	T	Irr	--	--	-- 2/
403	Unknown	--	--	34	2	34	--	--	C	112	30.4	Apr. 20, 1964	N	U	--	--	--
* 404	Southern Pacific RR Co.	Layne-Bowler	1908	1,100	6	1,100	--	--	E	114	18.5 60.6 a/	May 14, 1947 Dec. 16, 1968	N	U	180	--	Jan. 30, 1932
* 405	D. F. McMahon	Layne-Texas	1963	785	16 9 5/8	361 785	535	150	E	110	41.4	Mar. 17, 1964	T	Irr	1,100	50	Oct. 1963 1/ 2/
406	Pecan Acres, Inc.	Layne-Texas	1913	205	18 11 5/8	--	59	101	C	114	27.4 29.4 a/	Sept. 11, 1931 Oct. 1, 1940	N	U	1,128	--	Sept. 11, 1931 2/
407	Southern Pacific RR Co.	A. E. Fawcett, Jr.	1947	639	8 6	--	618	20	E	115	23	June 1947	T,E 5	P	300	39	1947 2/
* 408	Dan H. Mullins	Lidge Hrancky	1947	213	4	213	193	20	C	114	16	Mar. 1947	N	U	--	--	--
* 409	V. W. Frost	--	1946	225	4	225	216	--	C	114	20	1946	N	U	--	--	-- 2/
501	Unknown	--	--	60±	--	--	--	--	C	109	19.9	Apr. 20, 1964	P,W	S	--	--	--
502	--	U. S. Geol. Survey	1964	62	--	--	--	--	C	107	30	Jan. 1964	N	U	--	--	-- 2/
503	--	do.	1964	7	--	--	--	--	--	133	Dry	Jan. 22, 1964	N	U	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING: DIAM-ETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-17-504	--	U. S. Geol. Survey	1964	87	--	--	--	--	C	116	42	Jan. 1964	N	U	--	--	-- 2/
601	--Hughes	--	--	61	4	61	--	--	C	101	37.2	Apr. 21, 1964	P,W	S	--	--	--
602	Ollie McNeil	Leon Marlin	1967	160	4	160	--	--	C	134	68.7	Oct. 24, 1967	S,E	D	--	--	--
604	K. G. McCann	Owner	1962	400±	4 3	200 400	385	15	C	130	65	Nov. 1967	S,E 1 1/2	D	--	--	--
605	do.	do.	1955	210	4	210	170	40	C	130	60	Nov. 1967	S,E 2	Irr	--	65	1955
701	H. Kellner	--	1959	139	2	139	134	5	C	126	57.9 53.4	Apr. 15, 1964 Dec. 19, 1968	N	U	--	--	--
* 702	R. C. Hill	--	--	376	4	376	--	--	C	110	--	--	S,E	D	--	--	--
* 703	do.	--	--	67	2	67	--	--	C	110	--	--	P,W	D	--	--	--
* 704	Joe Hede	--	--	76	2	76	--	--	C	100	36	Mar. 1936	P,W	D	--	--	--
705	--Perez	--	--	200	4	200	--	--	C	110	36.9	Dec. 19, 1968	S,E	D	--	--	--
801	Harris Estate	--	--	140	--	--	--	--	C	110	43.3	Apr. 21, 1964	T,LPg	Irr	--	--	--
803	--	U. S. Geol. Survey	1964	117	--	--	--	--	C	104	37.5	Jan. 21, 1964	N	U	--	--	-- 2/
804	--	do.	1964	87	--	--	--	--	C	109	44	Jan. 1964	N	U	--	--	-- 2/
805	W. A. Hinsch	--	--	371	24 10	60 371	120	251	C	105	52	Mar. 1936	N	U	800	--	Apr. 1909
* 18-101	C. C. Cardiff	--Justman	1949	818	20	818	--	--	C,E	142	73.8 97.5 a/	Nov. 6, 1950 Mar. 12, 1969	T,Ng	Irr	--	--	--
* 102	Sam Poorman	Layne-Texas	1945	670	24	670	60	610	C,E	155	--	--	T,E 150	Irr	2,600	--	--
* 103	C. C. Cardiff	do.	1925	628	24 12 10	90 198 628	137	142	C	139	53.2 97.3 a/	Nov. 24, 1931 Mar. 12, 1969	T,Ng	Irr	1,375	--	1940 2/
* 104	P. V. Cook	--	1964	--	--	--	--	--	--	143	--	--	T,E 150	Irr	2,260	--	Nov. 1964
* 105	do.	--Lawson	Old	172	24 10	--	--	--	C	143	51.8 77.6 a/	Mar. 24, 1931 Mar. 15, 1954	T,E 50	Irr	575	--	--
* 106	C. C. Cardiff	C. R. Jensen	1925	337	24 6	--	--	--	C	142	62.8 62.3 a/	Aug. 25, 1931 Apr. 14, 1947	N	U	--	--	--
* 107	do.	--	1939	315	18 12	--	--	--	C	135	56.2	Oct. 24, 1941	T,Ng	Irr	1,740	--	--
108	do.	--	1947	261	4	261	--	--	C	135	55.2	Apr. 14, 1947	N	U	--	--	--
* 109	J. L. Rose	Harry Bonnett	1916	118	4	118	112	6	C	143	65.6	Apr. 15, 1947	N	U	--	--	--
110	do.	do.	1922	123	3	123	--	--	C	143	62.7 63.4 a/	June 2, 1941 Sept. 22, 1942	N	U	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
* JY-65-18-111	Cardiff Bros.	Katy Drilling Company	1967	1,000	20 12	419 1,000	339	661	C,E	138	122	Mar. 1967	T,Ng 200	Irr	3,511	64	Mar. 1967 2/
201	do.	do.	1952	530	20 12	--	108	422	C	132	--	--	T,Ng	Irr	--	--	-- 2/
* 202	Cinco Ranch	Layne-Texas	1945	536	26 12 3/4	172 536	100	340	C	127	62 93.2 a/	May 1945 Mar. 12, 1969	T,E 125	Irr	2,225	14	May 30, 1945 2/
* 203	R. Robertson	T. W. Lawson	1926	545	10 6	--	--	--	C	120	34.5 43.8 a/	Mar. 24, 1931 Apr. 14, 1947	N	U	--	--	--
* 204	Cardiff Bros.	do.	1926	586	24 12 8	100 240 586	--	--	C,E	130	60.6 68.5 a/	Oct. 1, 1940 Mar. 11, 1952	N	U	--	--	--
205	Frazier & Ranger	--	1943	135	4	135	--	--	C	128	51.3	Apr. 14, 1947	N	U	--	--	--
* 301	Cinco Ranch	Layne-Texas	1941	600	24	600	--	--	C,E	104	--	--	T,E	Irr	--	--	--
301	do.	do.	1946	680	20	680	--	--	C,E	119	20.7	Apr. 17, 1947	T,E 100	Irr	--	--	--
303	Mrs. P. H. Brown	Katy Drilling Company	1962	825	20 12	366 825	190	635	C,E	118	75	Feb. 1962	T,E	Irr	3,219	73	Feb. 27, 1962
* 401	Sam Poorman	Layne-Texas	1928	723	26 12	--	--	--	C,E	134	48.7	Mar. 24, 1931	N	U	1,370	--	Aug. 5, 1950 2/
402	--McKennon	Magnolia & Seaboard	1954	12,801	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 501	L. Pauli	--	--	250	36	250	--	--	C	120	39.4 59.9 a/	Mar. 24, 1931 Mar. 9, 1956	T,E 50	Irr	--	--	--
* 502	Van Poorman	Layne-Texas	1950	670	20	670	--	--	C,E	123	--	--	T,Ng	Irr	--	--	--
503	L. Pauli	I. W. Lawson	1913	250	24 10	--	--	--	C	114	45.2 59.4 a/	June 11, 1931 Mar. 25, 1953	J,E	D	--	--	--
* 504	M. A. McDonald	--	Old	131	6	131	--	--	C	124	47.0 88.6 a/	Apr. 18, 1947 Aug. 5, 1958	N	U	--	--	--
* 601	Walter Ludwig	A. H. Justman	1949	561	24	--	130	431	C	113	70.4	Mar. 29, 1960	T,E 100	Irr	--	--	--
602	E. W. Gless	do.	1951	520	24 12 3/4	--	120	400	C	103	50.1 79.9 a/	Apr. 29, 1952 Mar. 12, 1969	T,Ng	Irr	--	--	--
603	S. N. Adams	L. Mickelson	1946	535	18 16 12	122 164 535	185	350	C	103	18.2	Mar. 28, 1947	T,E 125	Irr	--	--	-- 2/
* 604	Ed Helwig	Katy Drilling Company	1965	620	20 12	--	230	390	C	100	92	Feb. 1965	T,Ng	Irr	4,200	105	Feb. 10, 1966 2/
605	E. D. Helwig	El Campo Drilling Co.	1946	350	18	350	--	--	C	115	80.6	Apr. 17, 1964	T,Ng	Irr	--	--	--
* 606	--Settegest	--	--	156	8	156	--	--	C	111	40.4 81.5 a/	June 2, 1941 Jan. 21, 1957	P.W.	S	--	--	--
* 607	S. N. Adams	Otto Mickelson	1941	517	18 16 12	120 200 517	100	--	C	103	32.3	Apr. 15, 1947	N	U	2,600	--	1941

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-18-608	S. N. Adams	M. Mouller	1941	80	2 1/2	80	--	--	C	103	--	--	N	U	--	--	--
701	Dan. J. Harrison	Katy Drilling Company	1965	538	14	538	--	--	C	100	--	--	T,LPg	P	--	--	--
* 703	Sugarland Industries	Prison System	1932	400	4	400	--	--	C	100	--	--	N	U	--	--	--
* 704	George Phillips	--	1919	70	3	70	--	--	C	100	--	--	N	U	--	--	--
* 801	John Rosenbush	Owner	Old	70	2	70	--	--	Cu	95	30 ±	Mar. 1964	P,E	S	--	--	--
* 802	J. E. Rosengush	--	1958	206	4	206	--	--	C	96	--	--	S,E	D	--	--	--
* 803	Mason Briscoe	Gene Davis	1943	150±	3	150	144	6	C	111	--	--	P,E	D	--	--	--
804	Unknown	--	Old	135	2	135	--	--	C	90	44.8	Dec. 20, 1968	N	U	--	--	--
805	--Briscoe	--	Old	100	4	100	--	--	C	107	41.7	Dec. 20, 1968	N	U	--	--	--
901	Unknown	--	--	60?	2	60	--	--	C	95	26.4 25.0	Apr. 22, 1964 Dec. 20, 1968	N	U	--	--	--
* 902	Mrs. K. Winston	--	Old	16	2	16	--	--	Cu	91	--	--	N	U	--	--	--
903	J. J. Adams Est.	--	--	70	2	70	--	--	Cu	88	33.0	Dec. 20, 1968	N	U	--	--	--
* 19-101	W. M. Wheeless	--	1939	400±	8	400	--	--	C	96	91.6	Jan. 7, 1969	S,E	D	--	--	--
401	Philip H. Brown	Katy Drilling Company	1957	680	20 12	305 680	--	--	C	95	--	--	T,E	Irr	--	--	-- 2/
402	Leon Miles	do.	1966	855	20 12	405 855	200	655	C,E	95	85.0	Aug. 16, 1966	T,Ng	Irr	3,477	56	Mar. 11, 1966 2/
* 403	do.	Ray Woods	1939	500	20 14	127 500	85	320	C	96	34.8 a/ 77.8	Oct. 1, 1940 Mar. 15, 1968	T,E 50	Irr	1,700	--	Mar. 1939
* 404	Texas Industries, Inc.	Katy Drilling Company	1966	445	12 3/4 6 5/8	300 445	306	80	C	94	100	Dec. 1966	T,E 20	Ind	504	53	Dec. 14, 1966
405	W. G. Wing, et al.	Standard of Texas	1957	8,391	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
501	Wing & Grimes	Katy Drilling Company	1951	575	24 12 10	257 408 575	100	475	C	95	61.4 a/ 92.4	Apr. 29, 1952 Jan. 7, 1969	T,E 125	Irr	--	--	--
502	Josey Estate	Layne-Texas	1950	1,553	24	1,553	--	--	C,E	97	101.0 100.1	Mar. 29, 1960 Mar. 29, 1961	T,E 250	Irr	--	--	--
503	J. A. Bond	A. H. Justman	1950	550	20 12	--	250	300	C	97	--	--	T,E 100	Irr	--	--	-- 2/
504	Joe Bono	Katy Drilling Company	1964	619	20 12	278 619	--	--	C	95	101	Mar. 1964	T,E	Irr	2,610	81	Mar. 1964 2/
505	C. Pillot	Southern Well Drilling Co.	1923	657	26 12	82 657	135	--	C	95	27.2 a/ 25.2	Jan. 6, 1939 Mar. 11, 1959	N	U	--	--	--
* 506	do.	Ray Woods	1939	500	20 14	120 500	90	410	C	96	33.5 a/ 58.5	Sept. 1939 Mar. 15, 1954	N	U	2,045	75	Aug. 15, 1954 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-19-507	Southern Pacific RR Co.	--	--	260	10	260	--	--	C	96	--	--	N	U	--	--	--
508	R. F. Gonsculin	Rychlik Water Well Drilling Company	1965	27	2	27	21	6	C1	95	9	Aug. 11, 1965	P	S	--	--	-- 2/
701	Walter Ludwig	A. H. Justman	1951	548	24 12	200 548	160	388	C	98	60.2 79.3	Mar. 29, 1961 Jan. 7, 1969	T 100	Irr	--	--	--
702	State Prison	J. Siegert & Son	1958	260	16	260	200	60	C	92	60.7	Mar. 10, 1964	T,E	Irr	977	54	1958 1/ 2/
703	do.	Layne-Texas	1949	336	10	336	--	--	C	87	65.1 76.2	Oct. 10, 1959 Jan. 7, 1969	T,E 7.5	P	300	42	July 23, 1949 2/
704	Cinco Ranch	Katy Drilling Company	1964	528	16	528	161	367	C	101	--	--	T,Ng	Irr	--	--	--
* 801	State Prison	J. Siegert & Son	1958	256	16	256	196	60	C	92	73.7 93.1	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	1,300 927	35.5 65	July 2, 1969 Mar. 10, 1964 2/
* 802	do.	J. B. Dunn	1957	91	16	91	49	42	Cu	84	13.5 13.8	Mar. 10, 1964 Jan. 10, 1969	T,E	Irr	889	46	Mar. 10, 1964 2/
* 803	do.	do.	1956	233	12	233	137	96	C	85	63.5 74.0	Mar. 10, 1964 Jan. 10, 1969	T,E	Irr	1,110 --	-- --	July 1957 -- 2/
* 804	do.	do.	1956	231	16 14	--	128	103	C	85	62.2 52.5	Jan. 10, 1969 Mar. 10, 1964	T,E	Irr	1,300	--	July 1957 2/
* 805	Texas Prison System	Tom Worrel	1946	320	6 4	--	280	40	C1	80	41.5 33.9	Dec. 30, 1948 Oct. 8, 1946	N	U	--	--	--
* 806	do.	do.	1942	--	6	--	--	--	--	80	--	--	N	U	--	--	--
901	Unknown	--	--	40	2	40	--	--	Cu	88	19.5	Jan. 8, 1969	N	U	--	--	--
902	State Prison	--	1963	70	4	70	--	--	Cu	87	16.9	Jan. 10, 1969	S,E	S	--	--	--
903	do.	--	1963	70	4	70	--	--	Cu	87	16.9	Jan. 10, 1969	S,E	S	--	--	--
20-701	Dorrance & Wing	A. H. Justman	1950	761	20 12	761	461	300	C1	87	--	--	T,E 125	Irr	--	--	-- 2/
* 702	The Austin Co., et al.	Layne-Texas	1957	1,017	16 8 5/8	810 1,017	823	165	E	83	110.0	Oct. 16, 1959	T,E 60	Ind	1,227	69	Feb. 11, 1957 2/
703	Thommy Hefner	Rychlik Water Wells Drilling	1965	199	4	199	189	10	Cu	86	107	Oct. 1965	S,E 3/4	D	--	--	-- 2/
704	Parker Bros. Co.	American Drilling Company	1968	298	4 2 1/2	260 298	283	15	C1	80	90	June 1968	S,E 5	Ind	80	18	June 29, 1968 2/
705	Unknown	--	--	40	--	--	--	--	Cu	86	35.4	Jan. 10, 1969	N	U	--	--	--
* 801	Texas Instruments	Texas Water Wells Drilling	1967	1,030	8 5/8	1,030	645	165	E	84	158	Jan. 1967	T,E 75	Ind	760	41	Jan. 1967 2/
802	Weatherford Farms	--	1957	387	--	--	--	--	C1	84	110.9	Mar. 15, 1968	S,E	Irr	50	--	--
25-101	Duval Sulph. & Potash Company	Owner	1953	260	12 8	--	126	54	C	123	53	Mar. 1960	T,E 25	Ind	245	56.5	Mar. 1960

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-25-102	H. H. Aylor Estate	--	--	85	2	85	--	--	C	125	--	--	P,H	Irr	--	--	-- 2/
* 103	Sam Zdumkawicz	--	--	139	2	--	--	--	C	108	32	Mar. 1936	N	U	--	--	--
104	A. F. Sager	Layne-Texas	1909	361	24 9 5/8	--	175	135	C	126	--	--	N	U	--	--	--
105	Gulf Oil Corporation	Roper Drilling Company	1938	76	6	76	65	10	C	121	--	--	N	U	--	--	-- 2/
201	Duval Sulph. & Potash Company	Owner	1957	284	16 8	--	144	126	C	115	54	Mar. 1960	T,E 60	Ind	645	11.5	Mar. 1960 2/
202	do.	do.	1956	292	16 8	--	120	116	C	115	54	Mar. 1960	T,E 60	Ind	810 309	41 54	Mar. 1960 2/ June 20, 1969
* 203	do.	Owner	1956	280	16 8	276	151	110	C	115	55	Mar. 1960	T,E 60	Ind	540	15	Mar. 1960
204	do.	do.	1956	312?	16	312	127	115	C	115	--	--	T	Ind	467	--	June 20, 1969 2/
205	do.	do.	1951	240	13	--	138	59	C	121	54	Mar. 1960	T,E 25	Ind	245	55	Mar. 1960
206	do.	do.	1949	206	13 8	--	132	63	C	121	55	Mar. 1960	T,E 25	Ind	203	29	Mar. 1960 2/
207	do.	do.	1949	182	13 10	124 134	138	37	C	121	54.0	Mar. 1960	T,E 25	Ind	255	53	Mar. 1960 2/
					8	182	--	--	C	117	54	Mar. 1960	do.	Ind	320	14	Mar. 1960
208	do.	do.	1955	301	20 10	105 301	--	--	C	117	54	Mar. 1960	T,E 25	Ind	320	14	Mar. 1960
209	do.	Texas Water Wells Drilling	1954	303	20 18	132 303	132	106	C	117	54	Mar. 1960	T,E 25	Ind	400	28	Mar. 1960 2/
210	do.	Layne-Texas	1937	236	13 8	139 236	166	68	C	115	43 48.0	Aug. 1937 June 14, 1941	--	--	341 340±	36	Aug. 7, 1942 2/ June 14, 1941
211	do.	Owner	1940	240	13 8	126 240	151	75	C	115	54 49	June 1940 Jan. 1941	N	U	--	24	Jan. 6, 1941
212	do.	Layne-Texas	1937	247	13 8	138 247	156	70	C	115	51 43	Aug. 1940 Sept. 1937	N	U	420	26	Mar. 17, 1947 2/ Aug. 27, 1940
* 213	do.	do.	1937	244	13 8	137 244	138	68	C	115	43	Aug. 1937	N	U	--	--	--
214	do.	Owner	1941	216	13 8	145 216	154	55	C	115	58	Dec. 1941	N	U	450	40	Dec. 16, 1941
215	do.	do.	1945	252	13 8	128 252	128	65	C	115	61 49	Feb. 1946 Mar. 1947	N	U	318	40	Mar. 17, 1947
* 216	do.	do.	1946	233	13 8	233	170	66	C	115	60	Aug. 1944	N	U	--	17	Aug. 17, 1944
* 217	do.	do.	1944	248	13 8	146 248	162	58	C	115	63	Aug. 1944	N	U	366	12	Aug. 17, 1944

See footnotes at end of table.

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-25-218	Duval Sulph. & Potash Company	Owner	1947	238	13 8	134 238	142	53	C	115	55	Mar. 1947	N	U	396	34	Mar. 17, 1947 2/
* 219	do.	do.	1943	250	13 8	150 250	162	70	C	117	50	May 1943	N	U	-- 360	14	May 14, 1943 Oct. 11, 1943
* 220	do.	do.	1941	256	13 8 6	133 252 256	133	123	C	117	50	June 1942	N	U	482	35	June 19, 1942 2/
* 221	do.	Layne-Texas	1937	242	13 8	137 242	137	68	C	115	55	Feb. 1945	N	U	300	49	Feb. 16, 1945 2/
222	do.	do.	1964	295	16 13	134 295	140	145	C	115	--	--	T	Ind	586	--	June 20, 1969 1/
223	do.	do.	1968	300	18 14	128 300	128	112	C	115	--	--	T 60	Ind	968	--	June 20, 1969 1/
* 301	R. E. Smith Ranch	do.	1945	438	18 12	222 438	91	339	C	111	43.7 51.8 a/	Apr. 24, 1947 Aug. 11, 1969	T,E 75	Irr	2,500	26	Feb. 1, 1967 2/
* 302	R. E. Smith	do.	1944	435	18 5/8 13 3/4 12 3/4	216 431 435	111	232	C	113	42.9 55.1 a/	Apr. 24, 1947 Aug. 11, 1969	T,E	Irr	2,500	--	-- 2/
* 304	H. F. Montogomery	--	--	75±	2 1/2	75	--	--	C	100	--	--	--	D	--	--	--
305	W. L. Ansel	Layne-Texas	1943	130	4	130	--	--	C	113	43.0	Apr. 24, 1947	N	U	--	--	--
401	Edwin Dusek	Texas Irr. Co.	1957	275	12	275	--	--	C	120	46	Dec. 1957	T,LPg	Irr	1,450	12	Dec. 1957 2/
* 402	Jerry Kulhanek	American Water Co.	1958	245	12	245	--	--	C	120	40.2 40.6	July 28, 1960 Jan. 8, 1969	T,LPg	Irr	1,000	--	Apr. 1958 2/
403	Tex Tavener	do.	1957	297	12	297	--	--	C	116	--	--	T,LPg	Irr	--	--	-- 2/
404	Gulf Oil Corporation	Roper Drilling Co.	1937	173	6	75	75	30	C	115	32.2 38.1 a/	May 21, 1947 Jan. 8, 1969	N	U	117	--	May 1937 2/
405	--Dusek	Sterling Oil & Ref. Company	1949	8,510	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
406	Unknown	--	1958	1,086	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
501	Gulf Oil Corporation	Roper Drilling Company	1936	158	6	158	136	20	C	115	--	--	N	U	--	--	-- 2/
* 502	A. E. Quimm	--Mahler	1923	85	2 1 1/2	--	--	--	C	114	22	1923?	P,W	S	--	--	--
503	Duval Sulph. & Potash Company	Layne-Texas	1937	214	13 8	115 214	118	68	C	115	43 51	Sept. 1937 Dec. 1941	N	U	-- 386	-- 45	-- 2/ Dec. 16, 1941
504	Unknown	--	1956	1,841	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 601	Willie Mae Wenzel	--Ellerson	1929	64	--	--	--	--	Cu	115	34	Apr. 1936	N	U	--	--	--
* 602	F. J. Mikulancak	Jap Sanders	--	110	--	--	--	--	Cu	109	--	--	N	U	--	--	--
* 603	H. F. Miller	--Ellerson	1928	112	2	--	--	--	Cu	110	38	1936	P,E	D	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-65-25-604	--Moore	Russell Maguire	1956	8,522	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
701	H. and L. Engle	Crowell Bros.	1957	285	12	285	98	170	C	115	42.0	Jan. 8, 1969	T,LPg	Irr	--	--	-- 2/
702	Wayne Nelson, Jr.	do.	1956	242	12	242	--	--	C	114	--	--	T,LPg 30	Irr	--	--	-- 2/
703	August Blazek	American Water Well Company	1958	295	12	295	--	--	C	114	39.0	Jan. 8, 1969	T,LPg	Irr	--	--	-- 2/
704	R. Drachinberg	do.	1957	300	12	300	145	155	C	110	--	--	T,LPg	Irr	--	--	-- 2/
* 705	C. N. Williamson	--	Old	95	2	95	--	--	C	115	--	--	N	U	--	--	--
* 706	Ed Behrens	--Sharp	1901	32	2	32	--	--	C	111	15	1936	N	U	--	--	--
* 707	Farmers Gin	C. Mahler	1930	105	4	105	--	--	C	117	25	1936	N	U	--	--	--
* 708	Willie Sbrush	Fritz Gruenwald	1926	82	2	82	--	--	C	111	35	1936	N	U	--	--	--
709	Loyd Engel	--Powell	1964	305	12	305	96	--	C	108	40.1	Jan. 9, 1969	T,LPg	Irr	--	--	--
710	R. Ludwig	--	--	--	12	--	--	--	--	107	--	--	T,LPg	Irr	--	--	--
801	Unknown	--	--	--	--	--	--	--	--	111	46.2	Jan. 9, 1969	T,E 75	Irr	--	--	--
* 901	Walter Ludwig	--	--	--	--	--	--	--	--	108	--	--	T,D	Irr	--	--	--
* 902	F. E. Albright	H. Ellerson	--	84	--	--	--	--	Cu	108	--	--	N	U	--	--	--
903	H. W. Snowden	Jack Frazier Drlg. Co.	1947	285	4	285	--	--	Cl	106	31.0	Apr. 24, 1947	N	U	--	--	--
* 904	W. M. Bolton	Gates Tanking Company	1935	110	2	--	--	--	Cu	108	30	1936	N	U	--	--	--
* 905	F. X. Joerger	H. Ellerson	1934	96	--	--	--	--	Cu	106	35	1936	N	U	--	--	--
* 906	Hodde & Glissman	do.	1931	22	--	--	--	--	Cu	106	20	1936	N	U	--	--	--
* 907	Henry Kumaga	--	1920	70	2	70	--	--	Cu	110	--	--	N	U	--	--	--
908	Melvin Gerke	Davis Water Wells	1957	284	12	284	120	164	Cu,Cl	110	50.5	Jan. 9, 1969	T,Ng	Irr	--	--	--
26-101	H. Masterson	--	--	60	4	60	--	--	Cu,Cl	92	37.7	Apr. 21, 1964	P,W	S	--	--	--
102	Sugarland Industries	Layne-Texas	1958	190	--	--	--	--	Cu,Cl	93	37.1 37.9	Apr. 21, 1964 Jan. 14, 1969	T	Irr	--	--	-- 2/
103	do.	--	--	165	2	165	--	--	Cu,Cl	94	38.8 40.5	Apr. 21, 1964 Jan. 14, 1969	N	U	--	--	--
* 201	R. E. Smith	Katy Drilling Company	1956	575	20 12	240 575	--	--	Cl	90	--	--	T,E 100	Irr	--	--	-- 2/
202	--Dickerson	A. A. Wuensch	1957	305	12	305	--	--	Cl	89	46.8 50.0	Mar. 18, 1964 Jan. 14, 1969	T,E	Irr	1,400	--	1957
203	Unknown	--	--	60	2	60	--	--	Cu	91	29.6	Apr. 22, 1964	N	U	--	--	--
* 301	John Pultar	Gene Davis	1915	90	3	90	--	--	Cu	102	--	--	J,E 3/4	D	--	--	--

See footnotes at end of table.

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
* JY-65-25-302	J. J. Adams	Gene Davis	1916	170	2	170	--	--	Cu	85	--	--	N	U	--	--	--
303	C. W. Mertz	M. Mahler	1968	--	4	--	--	--	--	88	48.4	Dec. 20, 1968	S,E	D	--	--	--
* 304	L. D. Tarrant	L. Hardin	--	72	4	72	--	--	Cu	87	41.5	Apr. 17, 1964	P,W	S	--	--	--
305	Herman Proler	Ondrey Water Well Service	1968	80±	4	80	74	6	Cu	90	54.3	Jan. 16, 1969	S,E 1	D	--	--	--
401	A. L. Stern	Katy Drilling Company	1956	396	14 12	216 396	182	214	Cu,Cl	111	60	1960	LPg,T	Irr	1,500±	30	1960 2/
402	J. E. Junker	--	--	--	--	--	--	--	--	104	--	--	T,LPg	Irr	--	--	--
* 403	Gulf States	Layne-Texas	1956	875	12 6	675 875	692	100	Cl,E	103	72	Oct. 1956	T,E 60	Ind	608	70	Oct. 2, 1956 1/ 2/
404	J. A. Guntle	C. Mahler	1928	77	2	77	71	6	Cu	107	53.8 53.9	Oct. 20, 1967 Jan. 14, 1969	N	U	--	--	--
405	do.	--Ondrey Water Well Service	1967	120	2	120	114	6	Cu	107	54	Oct. 1967	J,E 1	D	--	--	-- 2/
* 26-406	Gulf States	Layne-Texas	1967	1,178	12	963	968	100	E	103	91.9	Nov. 22, 1967	T,E	Ind	524	50	Nov. 22, 1967 1/ 2/
* 501	City of Rosenberg	Texas Water Wells Co.	1947	840	16 8	300 840	545	120	Cl,E	103	82.4	Jan. 16, 1969	T,E 75	P	525	--	July 16, 1968
* 502	do.	Layne-Texas	--	--	14 8	--	629	143	Cl,E	103	81.6	Jan. 16, 1969	T,E 100	P	750	--	Oct. 1951 1/
* 503	do.	Katy Drilling Company	1957	1,594	16 10	840 1,594	970	200	E	103	99.1	Jan. 16, 1969	T,E 125	P	2,232	108	Aug. 1957 2/
504	Unknown	--	--	39	2	39	--	--	Cu	87	37.7	Apr. 22, 1964	P,H	U	--	--	--
* 505	John Duran	A. B. Hardin	1954	65	--	--	--	--	Cu	88	--	--	J,E	D	--	--	--
* 506	do.	do.	1955	140	2	140	--	--	Cu	85	39.8 41.1	Mar. 18, 1964 Jan. 14, 1969	J,E	D	--	--	--
* 507	Austin Young	Mohler	1936	92	2	92	92	--	Cu	101	30	1936	N	U	--	--	--
* 508	G. C. Baker	Gene Davis	1931	97	2	--	--	--	Cu	102	23	1936	N	U	3	--	1931
* 509	W. F. Kelm	W. H. Roper	1931	82	2	--	--	--	Cu	101	30	Apr. 1936	N	U	2	--	1931
* 510	S. P. Ry. Company	Layne-Texas	1913	351	16	351	281	60	Cl	103	32	July 1913	N	U	270	--	1947
* 511	City of Rosenberg	do.	1931	490	12 1/2	490	400	80	Cl	103	--	--	N	U	250	--	1947 2/
512	Belen Romero	Ondrey Water Well Service	1968	74	2	74	68	6	Cu	103	54	Aug. 1968	J,E	D	--	--	-- 2/
* 513	R. E. Hollock Ice Co.	Unknown	Old	300±	--	--	--	--	Cl	103	--	--	N	U	--	--	--
514	Manuel Gonzales	Rychlik Water Well Drlg.	1966	104	2	104	98	6	Cu	87	48	July 1966	J,E 3/4	D	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-65-26-515	Ruby Antich	Rychlik Water Well Drlg.	1965	77	2	77	71	6	Cu	98	45	June 1965	J,E 3/4	D	--	--	--
* 516	City of Rosenberg	Layne-Texas	1934	515	10	--	400?	80?	Cl	103	41	Nov. 1934	N	U	570	34	Nov. 28, 1934 2/
517	Lawson & Wood	do.	1905	298	9	--	48	--	Cl,E	103	28	July 1905	N	U	1,200	--	1905 2/
* 601	- City of Richmond	Abe Hardin	1953	448	14 8	315 448	317	30	Cl	95	55 69.4	Oct. 1955 June 25, 1969	T,E 40	P	1,380 750	83 47	1955 Jan. 25, 1969 2/
* 602	J. Wendt & Moore	Layne-Texas	1951	400	18 12	144 400	119	241	Cu,Cl	99	59.9	July 28, 1955	N	U	1,750	34	July 28, 1955 1/2/
* 603	City of Richmond	Katy Drilling Company	1959	518	16 10	236 518	342	130	Cl	90	76.2	Jan. 17, 1969	T,E 60	P	1,022 890	92 102	Sept. 21, 1959 1/2/ June 25, 1969
* 604	do.	A. E. Fawcett	1934	331	10 8	--	260	34	Cl	92	28.2	July 3, 1935	T,E	P	480 210	30 32	1935 2/ 1943
* 605	do.	Layne-Texas	1948	433	12 6	326 433	326	105	Cl	90	45	1948	T,E 15	P	375	58	1948 1/2/
* 606	Mrs. S. L. Ferris	--	1919±	86	2	86	--	--	Cu	100	30	1936	N	U	--	--	--
* 607	Joe Vasek	--	Old	50	18	50	--	--	Cu	101	48.8	Apr. 14, 1936	N	U	--	--	--
* 608	County Fair Grounds	C. Mahler	1936	82	2	--	--	--	Cu	--	40	1936	N	U	--	--	--
* 609	Adolph Patillo	C. Mahler	1936	82	2	--	78	4	Cu	100	45	1936	N	U	--	--	--
610	L. E. Neese	Rychlik Water Well Drilling	1965	89	2	--	83	6	Cu	98	44	Mar. 1965	J,E	D	--	--	-- 2/
611	B. Lindemann	do.	1965	93	4	--	85	8	Cu	97	41	Apr. 1965	J,E 3/4	D	--	--	-- 2/
701	Bay City Drilling Company	B & P Drilling Company	1967	146	4 3	124 146	124	22	Cu	105	44.9	Oct. 26, 1967	N	U	--	--	-- 2/
702	K. Dzierzanowski	--	1939	243	4	--	--	--	Cl	106	36.7 a/ 48.7	Apr. 28, 1947 Aug. 2, 1957	N	U	--	--	--
* 703	K. Hillyer	C. Mahler	1924	82	2	--	--	--	Cu	99	35	1936	N	U	--	--	--
* 704	F. Rosenbaum	C. Mahler	1900	90	2	--	--	--	Cu	98	40	1936	N	U	--	--	--
* 705	F. M. Stripka	G. A. Bohache	1920	86	--	--	--	--	Cu	104	30	1936	N	U	--	--	--
* 706	K. Dzierzanowski	C. Mahler	1931	76	--	--	--	--	Cu	106	26	1936	N	U	--	--	--
801	Jack Massey	Ondrey Water Well Service	1967	72	2	--	66	6	Cu	93	34.1	Oct. 20, 1967	J,E 1	D	--	--	--
* 802	H. A. Hartlage	--	1910	80	3	--	--	--	Cu	88	20	1930	N	U	--	--	--
* 803	Max Band	C. Mahler	1927	85	2	--	--	--	Cu	92	30	1930	N	U	--	--	--
* 804	Emil Frank	--	1916	132	--	--	--	--	Cu	97	35	1936	N	U	--	--	--

See footnotes at end of table.

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-26-805	R. F. Vacek	C. C. Padon	1965	78	2	78	60	14	Cu	98	40	Dec. 1965	J,E 1/2	D	--	--	-- 2/
806	Bob Schumm	Rychlik Water Well Drilling	1964	70	2	--	64	6	Cu	102	--	--	J,E 3/4	D	--	--	-- 2/
807	E. Gardovsky	Ondrey Water Well Svc.	1966	77	2	--	--	--	Cu	98	36	1966	J,E 3/4	D	--	--	-- 2/
808	Pearl Wleckyk	Ondrey Water Well Svc.	1967	70	2	--	64	6	Cu	97	--	--	J,E 3/4	D	--	--	-- 2/
809	Art Dabelgott	Rychlik Water Well Drilling	1964	80	2	--	74	6	Cu	92	38	Oct. 1964	J,E 3/4	D	--	--	-- 2/
810	Joe J. Janeckh	Ondrey Water Well Svc.	1966	65	2	--	65	6	Cu	91	34	1966	J,E 3/4	D	--	--	-- 2/
* 812	City of Rosenberg	Texas Water Wells	1967	1,313	12	--	810	195	E	99	97 95.9	Aug. 1967 Jan. 16, 1969	T,E 150	P	1,843	84	Aug. 10, 1967
* 901	Anton Barcak	--Myricks	1926	82	2	--	--	6	Cu	95	21	1936	N	U	--	--	--
* 902	Aug. Dolezal	Joe Gaydosik	--	106	2	--	--	--	Cu	93	20	1928	N	U	--	--	--
* 903	F. T. Cobb	Gene Davis	1935	140	2	--	--	5	Cu	85	25	1936	N	U	--	--	--
* 904	Elo Ondrey	--Pimpler	1921	85	2	--	--	--	Cu	89	--	--	N	U	--	--	--
905	August Kovar	Ondrey Water Well Svc.	1968	75	2	--	68	6	Cu	91	39	July 1968	J,E	D	--	--	-- 2/
906	Hubert Blume	Rychlik Water Well Drilling	1965	181	2	--	175	6	Cu	95	46	Sept. 1965	J,E 1	D	--	--	-- 2/
907	Carson Dobbs	do.	1965	180	2	--	174	6	Cu	90	47	Dec. 1965	J,E 3/4	D	--	--	-- 2/
27-101	Smith Ranches	Katy Drilling Company	1957	930	20	297	315	615	Cl,E	61	48	Jan. 1957	T,E 150	P	3,200	78	Jan. 11, 1957 2/
102	Joe Wessendorf	Texas Irr. Company	--	375?	12	--	--	--	Cu,Cl	75	40.6	June 30, 1960	T,Ng	Irr	--	--	--
103	Unknown	--	--	--	2	--	--	--	Cu	84	29.6	Apr. 22, 1964	P,H	U	--	--	--
104	C. L. Morris	Rychlik Water Well Drilling	1965	90	2	--	84	6	Cu	82	42	Sept. 1965	J,E 3/4	D	--	--	-- 2/
105	Smith Ranches	Layne-Texas Company	--	--	6 4	591 656	593	30	Cl	70	74	Sept. 1966	T,E 5	P	900	46	Sept. 28, 1966 1/ 2/
201	State Prison	do.	1956	721	10 6	--	570	70	Cl,E	84	84	July 1956	T,E 20	P	402	38	July 1956
* 202	do.	J. B. Dunn	1956	90	16 12	65 90	43	47	Cu	80	17.8 17.3	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	593	48	Mar. 10, 1964 2/
* 203	Smith Ranches	do.	1956	73	16 12	--	26	46	Cu	79	24.9 23.7	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	692	43	Mar. 10, 1964 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
* JY-65-27-204	State Prison	J. B. Dunn	1956	91	16	--	42	49	Cu	83	14.0 13.8	Mar. 10, 1964 Jan. 10, 1969	T,E	Irr	519	61	1956 2/
* 205	do.	do.	1956	86	12	--	47	39	Cu	84	13.9 12.8	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	540	59	1957
* 206	do.	do.	1956	62	12	--	17	44	Cu	80	9.1 8.1	Mar. 10, 1964 Jan. 10, 1969	T,E 15	Irr	419 350	43 33	1957 1969 2/
* 207	do.	do.	1956	62	12	--	25	37	Cu	80	10.2 9.1	Mar. 10, 1964 Jan. 10, 1969	T,E 15	Irr	593 475	44 30	1957 1969 2/
208	H. Helmcamp	do.	1957	138	--	--	--	--	Cu	78	33.0	Apr. 24, 1964	T,LPg	Irr	600	--	--
209	do.	do.	1957	100	--	--	--	--	Cu	74	28.7	Apr. 24, 1964	T,LPg	Irr	600	--	--
210	do.	do.	1957	100	18	--	--	--	Cu	77	25.4	Apr. 24, 1964	T,LPg	Irr	600	--	--
211	Clayton Foundation	H. C. Cockburn	1951	8,748	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
301	State Prison	Layne-Texas	1948	702	10	508	538	82	Cl	80	57.0 a/ 74.8	Dec. 30, 1948 Jan. 19, 1953	T,E 40	P	524	45	1948 1/ 2/
* 302	Fort Bend Utilities	do.	1944	1,565	16 8	--	1,260	169	E	80	57 187 a/	Jan. 1945 Dec. 13, 1969	T,E 75	P	847	55	1960 1/ 2/
* 303	do.	do.	1958	876	18 10	--	503	194	Cl,E	80	108 123 a/	Sept. 1958 Dec. 1969	T,E 150	Ind	1,599	63	1959
* 304	State Prison	J. B. Dunn	1956	103	16	--	46	45	Cu	80	25.9	Jan. 10, 1969	T,G	Irr	1,027	35	1956 2/
* 305	do.	do.	1956	72	16	--	27	45	Cu	73	26.8 a/ 25.4	Mar. 10, 1964 July 1, 1969	T,G	Irr	450 593	17 31	1969 1957 2/
* 306	do.	do.	1956	100	16	--	55	45	Cu	73	20.1	Jan. 10, 1969	T,G	Irr	1,027	19	1956 2/
* 307	do.	J. Siegert & Sons	1958	83	16	--	53	30	Cu	83	20.3 16.8	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	1,180	23	1958 2/
* 308	do.	do.	1958	104	16	--	46	43	Cu	76	19.1 20.1	Mar. 10, 1964 Jan. 10, 1969	T,G	Irr	1,321	37	1958 2/
* 309	do.	--	1931	700	8	--	250	--	Cl	80	32 54.7 a/	Apr. 1945 Aug. 29, 1951	N	U	200	--	--
310	H. Helmcamp	J. B. Dunn	1957	100	18	--	--	--	Cu	76	21.4	Apr. 24, 1964	T,LPg	Irr	600	--	--
311	State Prison	Katy Drilling Company	1961	406	16 10 6	302 302 406	309	60	Cl	80	70	Jan. 1961	T,E 25	P	300	37	Jan. 24, 1961 2/
* 312	Fort Bend Utilities	Layne-Texas	1920	1,606	24 10 8	92 1,492 1,606	1,515	60	E	76	1.0 a/ 169	1920 Feb. 1966	T,E	P	--	--	--
* 313	do.	do.	1941	726	16 10	420 726	501	180	Cl	77	48.5 a/ 107	Nov. 11, 1941 Aug. 1960	T,E	Ind	--	--	--
314	State Prison	J. Hobbs	1930	257	3	--	--	--	Cl	80	19.0 a/ 41.3	Oct. 23, 1930 Jan. 27, 1950	N	U	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-65-27-802	B. R. McNulty	Ondrey Water Well Svc.	1969	170	3	170	165	5	Cu	77	45.7	Jan. 9, 1969	N	S	--	--	--
* 803	Tex. Eastern Trans. Corp.	Layne-Texas	1955	614	8 4	563 614	575	20	Cl	79	62 82	Dec. 2, 1955 Jan. 17, 1969	T,E 5	Ind	75	14	Dec. 2, 1955 1/ 2/
* 901	A. E. Myers	do.	1944	720	6	720	627	47	Cl	70	30 a/ 99.6	Dec. 1964 Jan. 9, 1969	T,E 5	D	100	--	Feb. 1, 1967 2/
* 902	do.	--	1936	300	4	300	280	20	Cl	75	27.6 a/ 48.8	Apr. 30, 1947 Jan. 23, 1956	N	U	--	--	--
* 903	do.	Katy Drilling Company	1964	674	6 4	631 674	633	40	Cl	74	91	Nov. 1964	S,E 5	P	--	--	-- 2/
* 904	do.	Gene Davis	1935	179	4	--	171	8	Cu	76	17	1936	N	U	--	--	--
* 28-101	J. D. Nickleson	Davis Bros. Water Well Co.	1966	465	4	465	455	10	Cl	82	111	July 1966	S,E 1	D	--	--	-- 2/
201	W. C. & I. D.	Layne-Texas	1954	690	14 8	460 690	569	116	Cl	82	160.9	Mar. 15, 1968	T,E 60	P	503	30	May 10, 1954 1/
* 202	do.	--	1956	1,690	16 8	1,032 1,690	1,120	200	E	82	194.4	Mar. 15, 1968	T,E 100	P	1,016	38	1956 1/
203	Haydite Company	B&D Water Well Service	1957	440	8	440	175	255	Cu,Cl	80	103.0	Dec. 5, 1968	N	U	96	--	1957 2/
204	Southern Pac. R.R. Co.	Al Joland	Old	41	2	41	--	--	Cu	84	20.0	Mar. 14, 1968	N	U	--	--	-- 2/
* 205	do.	Layne-Texas	1946	275	8	275	--	--	Cl	82	--	--	T,E 7 1/2	U	175	--	--
* 206	River Bend Country Club	do.	1957	643	8 4	540 643	564	40	Cl	82	142.9	Jan. 9, 1969	T,E 10	Ind	254	35	June 25, 1957 1/ 2/
* 301	J. E. Roane	Jinks Hobbs	1925	298	2	298	286	12	Cl	77	51	Aug. 1945	N	U	--	--	--
302	Roland Mason	J. W. Jackson	1931	320	6	320	--	--	Cl	74	47.6 21.2	May 18, 1947 Dec. 5, 1968	N	U	--	--	--
* 303	do.	--	1944	300	4	300	--	--	Cl	74	--	--	N	U	--	--	--
* 304	do.	--Mahler	1946	300	3	300	--	--	Cl	74	--	--	N	U	--	--	--
305	John Congolosi	--	1963	54	--	54	--	--	Cu	71	42	Dec. 1968	T,E	Ind	1,000	--	1968
* 306	Willow Wisp Country Club	--	--	420	6	420	--	--	Cl	73	157.8	Dec. 4, 1968	T,E 15	Irr	180	--	--
307	do.	--	--	280	4	280	--	--	Cl	73	--	--	S,E 3	Ind	--	--	--
308	United Gas Company	Layne-Texas	1951	300	4	--	280	20	Cl	72	108.9	Dec. 4, 1968	S,E 3	Irr	--	18	Dec. 4, 1968
401	Humble Oil & Ref. Co.	L. Patterson, Inc.	1955	711	6 4	--	684	26	Cl	68	81	Mar. 8, 1955	T,E 15	Ind	80	--	Mar. 8, 1955 2/
402	do.	L. Patterson, Inc.	1946	484	5	--	453	23	Cl	67	33.7 a/ 84. 9	May 1, 1947 Jan. 27, 1964	N	U	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
* JY-65-29-404	State Prison	Owner	1925	600±	5	600	--	--	Cl	83	--	--	A	U	50	--	1925
* 405	Blue Ridge Elem. School	Layne-Texas	1968	565	8	508	518	35	Cl	72	193	Aug. 1968	S,E 5	P	105	25	1968 1/ 2/
406	Capitol City Broadcasting Corporation	Pomeroy & McMasters	1954	333	4	333	312	20	Cl	71	83	Aug. 1954	T,E 5	Ind	--	--	-- 2/
407	Houston Gun Club	--	1956	100±	4	100	90±	10	Cu	68	13.3	Nov. 21, 1968	S,E 3	Irr	--	--	--
408	United Salt Corp.	Leonard Michelson	1965	488	12	488	464	--	Cl	74	208	Nov. 1967	S,E 5	Ind	55	--	1965
501	Anchor Wate Company	Almeda Water Well Svc.	1958	355	4	355	258	20	Cl	66	109	1959	S,E 3	U	70	--	1958
502	Retzloff Chemical Co.	do.	1957	90	2	90	80	10	Cu	66	--	--	N	U	--	--	--
* 503	do.	American Drilling Co.	--	180	4	180	160	20	Cu	66	--	--	S,E 5	Ind	60	--	--
* 504	Dr. J. R. McIntyre	--	1946	235	4	235	--	--	Cl	65	--	--	J,E 1 1/2	D	--	--	--
* 505	Charles A. Bahr	--	1947	110	3	110	89	21	Cu	76	13.5	Nov. 14, 1968	C,E 3/4	D	--	--	--
506	Troy Construction Co.	Almeda Water Well Svc.	1964	354	4	354	337	17	Cl	65	115	1964	S,E 2	Ind	--	--	--
507	Ted Oliver	Owner	--	32	--	--	28	--	Cu	65	10.6	Nov. 15, 1968	J,E 1/2	D	--	--	--
508	T. D. Allen	--	1948	90	2	90	78	12	Cu	65	9.9	Nov. 15, 1968	N	U	--	--	--
509	do.	Allum's Drilling Co.	1948	71	2	71	63?	--	Cu	65	--	--	J,E 1	D	--	--	--
510	Anchor Wate Company	American Drilling Co.	1967	263	4	263	253	10	Cl	65	101.3	Nov. 15, 1968	S,E 3	Ind	--	--	--
* 511	Heatran Company	Unknown	1962	160	4	160	152	8	Cu	65	--	--	S,E 1	Irr	--	--	--
* 512	do.	Bussell and Son	1964	475	4	--	436	30	Cl	65	115	Mar. 1964	S,E 5	Ind	--	--	--
513	Tam-Can, Inc.	American Water Wells	1965	300±	--	--	--	--	Cl	63	--	--	S,E 5	Ind	--	--	--
514	do.	do.	1965	100?	--	--	--	--	Cu	63	--	--	S,E 3	Ind	--	--	--
701	Julia Taque	Gray-Wolf	1945	459	4	459	--	--	Cl	65	35.2 78.9 a/	May 5, 1947 Jan. 27, 1969	N	U	--	--	--
702	Humble Oil & Ref. Co.	--	1946	584	4	584	560	23	Cl	72	54.8 78.2 a/	May 15, 1947 Jan. 16, 1953	A	U	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-29-703	Gulf Coast and Santa Fe R.R.	Layne-Texas	1925	271	10	271	110	59	Cl,Cu	68	18	1925	N	U	115	--	1925
* 704	do.	--	1941	500±	14	500	--	--	Cl	70	32.7	May 15, 1947	N	U	142	--	1941
807	R. H. Romine	Almeda Water Well Svc.	--	175	6	175	--	--	Cu	73	15.5	Nov. 14, 1968	S,E 15	Ind	--	--	--
* 808	do.	do.	1968	497	4	497	477	20	Cl	68	85	Nov. 1968	S,E 5	Ind	--	--	--
809	do.	do.	1955	36	8	36	36	--	Cu	68	11.0	Nov. 14, 1968	N	U	--	--	--
810	do.	do.	1962	89	4	89	74	--	Cu	68	10.7	Nov. 14, 1968	N	U	--	--	--
* 811	H. L. Taylor	C. B. Renfro	1917±	450±	2	--	--	--	Cl	73	35 ±	1938	N	U	10	--	1917
33-101	--Kubala	G. K. Dunn	1958	277	12	277	--	--	C	107	--	--	T,LPg	Irr	1,200	--	--
102	Ed Stasney	Lee Capps	1957	259	12	259	--	--	C	101	--	--	T,LPg	Irr	--	--	--
103	E. Pitts	American Water Company	1958	301	12	301	--	--	C	101	38.6	Oct. 16, 1968	T,LPg 50	Irr	--	--	-- 2/
104	R. Ludwig	do.	1957	282	12	282	133	149	C	104	38.4	Oct. 16, 1968	T,LPg 50	Irr	--	--	-- 2/
105	G. Krause	do.	1957	294	12	294	130	164	C	106	46.0	Oct. 16, 1968	T,LPg 50	Irr	--	--	-- 2/
* 106	Kendleton School	Joe Bohacek	1933	85	--	--	--	--	C	103	27	1933	N	U	--	--	--
* 107	W. H. Pinka	do.	1925	90	2	90	--	--	C	101	--	--	P,W	D	--	--	--
108	R. Ludwig	--Powell	1964	302	14	302	--	--	C	107	--	--	T,LPg 50	Irr	--	--	--
109	J. Stiles	Ondrey Water Well Svc.	--	101	2	101	94	7	C	103	33.4	Nov. 13, 1968	J	D	--	--	-- 2/
201	B. F. Krause	American Water Co.	1957	305	12	305	135	170	C	97	40.8	Oct. 7, 1968	T,LPg 50	Irr	--	--	-- 2/
* 202	Fred Grunwald	Owner	1930	100	2	100	--	--	C	105	40	1936	N	U	--	--	--
* 203	Vencil Bros.	H. Goshack	1931	90	2	90	--	--	Cu	105	--	--	J,E	D	--	--	--
* 204	J. Holub	Owner	1926	86	--	--	80	6	C	103	40	--	N	U	--	--	--
* 205	H. Fuchs Est.	--	1920	100	2	100	--	--	Cu	99	40	1936	N	U	--	--	--
* 206	Farmers Gin Company	Fred Grunewald	1934	96	4	96	--	--	Cu	107	--	--	J,E	Ind	--	--	--
* 207	L. A. Bushnell	--Swore	1948	265	2	265	260	5	C	102	--	--	J,E 1 1/2	D	--	--	--
208	E. Michulka	Ondrey Water Well Svc.	1968	85	4	85	75	10	Cu	104	38.9	Oct. 16, 1968	J,E	D	--	--	-- 2/
301	Arthur Engeling	--Janek	1959	96	2	96	86	10	Cu	106	34	1959	J,E 1/2	D	--	--	--
* 302	Frank Broecke	Owner	1925	84	--	--	--	--	Cu	104	30	1936	N	U	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING DIAM-ETER (IN.)	CASING DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA YIELD (GPM)	WELL PERFORMANCE DATA DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA DATE
JY-65-33-303	M. Hartman	Rychlik Water Well Drlg.	1966	87	2	87	81	6	Cu	106	41	July 1966	J,E 3/4	D	--	--	-- 2/
401	Clifton Martin	--Janek	1963	108	2	108	102	6	C	92	--	--	P,W	S	--	--	--
* 402	A. T. Taylor	Unknown	--	60	--	--	--	--	C	97	20	1936	N	U	--	--	--
* 403	Mrs. L. G. Lum	W. H. Ellison	1930	60	2	60	--	--	C	80	--	--	N	U	--	--	--
* 404	Homer Darst	--	--	19	--	--	--	--	C	90	14	May 22, 1936	N	U	--	--	--
501	Jack Wendt	Layne-Texas	1948	376	22	376	126	250	C	97	46.2	Oct. 3, 1968	T,E 100	Irr	--	--	--
* 502	do.	--	1948	590	18	590	--	--	C	95	24.2 31.1 a/	Dec. 29, 1948 Jan. 27, 1956	T,E 100	Irr	2,125	31	July 28, 1955
* 503	do.	--Weinberger	1947	240	14	240	--	--	C	95	23.5 50.0 a/	Mar. 4, 1948 Jan. 23, 1969	T,Ng	Irr	--	--	--
* 504	do.	--Michelson	1947	403	18 12 10	113 222 403	112	285	C	95	22.3 40.7 a/	Apr. 24, 1947 Jan. 23, 1969	T,Ng	Irr	1,500	--	July 16, 1968 a/
505	Elton Schroeder	--	1954	108	2	108	100	8	Cu	93	--	--	J,E 3/4	D	--	--	--
506	Jack Wendt	--	--	--	4	30	--	--	--	95	23.8 41.8	Mar. 4, 1948 Jan. 23, 1969	N	U	--	--	--
* 507	R. Darst	W. Roper	1935	105	6	105	--	--	C	96	20.0	Apr. 21, 1936	J,E	D	--	--	--
* 508	Jack Wendt	--Davos	1967	523	20 14	250 523	203	320	C	97	--	--	T,Ng	Irr	2,160	--	Oct. 2, 1968
601	George Isleib	Texas Irrigation Company	1958	260	12	260	--	--	Cu,Cl	103	53.1	Oct. 7, 1968	T,LPg 50	Irr	--	--	--
602	R. Leissner	Katy Drilling Company	1954	590	20 12	300 590	203 ?	387	Cl	95	50	Oct. 1968	T,E 100	Irr	1,800	--	Oct. 2, 1968 2/
603	Theo Wernecke	--Goodenburger	1965	105	4	105	99	6	Cu	97	36.5	Oct. 18, 1967	S,E 1/2	D	--	--	--
604	Hugo Eixmann	--Padon	1955	86	2	86	82	4	Cu	101	--	--	J,E 1/2	D	--	--	--
* 605	W. Otto	--Pimpler	1915	108	2	108	102	6	Cu	98	--	--	N	U	--	--	--
* 606	W. Fuchs Est.	--	1923	160	2	160	154	6	Cu	96	--	--	N	U	--	--	--
607	John H. Wiecker	Katy Drilling Company	1968	530	14	530	400	130	Cl	102	46.1	Oct. 3, 1968	T,Ng 70	Irr	--	--	--
608	Mrs. W. Ellerman	--	1965	67	2	67	55	12	Cu	93	37	Jan. 1965	J,E 1/2	D	--	--	-- 2/
* 801	Jack Wendt	Katy Drilling Company	1952	564	20 12	160 564	--	--	C	92	31.2 a/	Jan. 20, 1953	T,Ng 75	Irr	2,000	--	Aug. 6, 1952 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-34-305	R. Lubojacky	B & P Drilling Contrs.	1967	110	4	110	86	24	Cu	70	21.3	Oct. 19, 1967	A	U	200	--	July 17, 1967 2/
306	do.	--	1967	113	4	113	93	20	Cu	73	19.9	Oct. 19, 1967	A	U	200	--	July 25, 1967 2/
307	do.	Ike Padon	1960	120	5	120	100	20	Cu	73	--	--	A,J	Irr	--	--	--
308	Max Mahlmann	--Capps	1957	375	12	375	100	275	Cl,Cu	86	36.6	Jan. 15, 1969	T,LPg	Irr	1,200	--	1957
401	Marvin Leissner	Katy Drilling Company	1954	600	20	301	212	388	Cl	98	50	Oct. 1968	T 100	Irr	1,800	--	Oct. 2, 1968 2/
* 402	E. W. Kuban	C. C. Padon	1966	107	4	107	91	16	Cu	93	32.3	Oct. 19, 1967	S,E 1 1/2	Ind	60	14	Oct. 19, 1967 2/
403	do.	do.	1965	62	2	62	54	8	Cu	93	30	1965	J,E 1/2	D	--	--	--
* 404	J. Kubena	--	1919	52	2	52	--	--	Cu	90	18	May 1936	N	U	--	--	--
* 405	M. Schroeder	--	--	116	2	116	--	--	Cu	87	--	--	N	U	--	--	--
406	W. Raska	Bill Davis	--	165	8	165	90	75	Cu	86	25.8	Oct. 1, 1968	T,E 10	Irr	400	--	Oct. 1, 1968
407	do.	C. C. Padon	1965	100	2	100	92	8	Cu	87	30	May 1965	J,E 1/2	D	--	--	-- 2/
408	Vallet Bros.	Ondrey Water Well Svc.	1967	102	2	102	93	6	Cu	96	40	May 1967	P,W	S	--	--	-- 2/
501	Otto Schrader	Clifford Cwhar	1954	67	2	67	63	4	Cu	82	21	Oct. 1967	J,E 1/2	D	--	--	--
601	W. A. Gless	A. H. Justman	1951	542	24 12	200 542	160	382	Cl,Cu	75	--	--	T,E 100	Irr	--	--	--
602	Rudy Kunz	--	--	21	2	21	21	--	Cu	76	--	--	P 1/3	S	--	--	--
603	G. Hausler	Owner	1955	45	2	45	45	--	Cu	73	--	--	J,E 1/2	D	--	--	--
* 604	W. H. Gless	Katy Drilling Company	1964	660	20 12	245	220	440	Cl	74	76.9 61.3	Jan. 19, 1965 Jan. 19, 1969	T 100	Irr	--	--	-- 2/
* 605	Francis Psencik	Will Pcencik	1936	30	--	--	--	--	Cu	76	11	1936	N	U	--	--	--
* 606	Farmers Gin Company	Chas. Mahler	1936	100	2	100	--	--	Cu	80	14	1936	J,E 1/3	--	--	--	--
* 607	do.	Louis Kneitz	1916	67	2	67	--	--	Cu	80	14	1936	N	U	--	--	--
* 608	John Dudek	Owner	1928	26	2	26	--	--	Cu	80	14	1936	J,E 1/3	U	--	--	--
609	F. Kaninec	Ondrey Water Well Svc.	1968	107	2	107	94	12	Cu	78	24	June 1968	J,E 1/2	D	--	--	-- 2/
610	Fairchild Farmers Gin	C. C. Padon	1966	62	2	62	62	--	Cu	80	30	Feb. 1966	J,E 3/4	Ind	--	--	-- 2/
611	--Gajewski	--Scurlock	1957	7,821	--	660	--	--	--	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
* JY-65-34-701	City of Needville	Layne-Texas	1948	435	14 8	253 435	307	70	Cl	93	70.3	Oct. 2, 1968	T,E 50	P	540 450	74 61	Aug. 1948 1/ 2/ June 1969
* 702	H. Wilkenman	--	--	240	5	240	232	8	Cl	93	40	Oct. 1968	S,E 1 1/2	S	--	--	--
* 703	Arthur Schulze	E. Goodenberger	1959	160	8	160	65	60	Cu	90	41.3	Oct. 2, 1968	S,E	Irr	20	--	Feb. 5, 1968
* 704	G. N. Goldsmith	Dr. Boyce	1934	103	2	103	--	--	Cu	91	20	1936	N	U	--	--	--
* 705	H. Leisner	--Weinbrenner	1919	110	2	110	103	7	Cu	92	--	--	N	U	--	--	--
706	Troy Freund	--	1946	294	4	294	--	--	Cl	87	22.4 26.2	May 21, 1947 Dec. 29, 1948	N	U	--	--	--
707	Ed Hanzik	Joe Marek	--	135	4	135	--	--	Cu	84	20	1936	N	U	--	--	--
* 708	Arthur Schulze	Edwin Goodenberger	1957	140	2	140	135	5	Cu	88	--	--	J,E 1/4	D	--	--	--
* 709	H. Wilkenman	--	1966	110	2	110	104	6	Cu	93	28.3	Oct. 2, 1968	J,E 1/2	D	--	--	--
* 710	City of Needville	Layne-Texas	1962	430	6 10	295 430	306	79	Cl	91	67.5	Oct. 2, 1968	T,E 40	P	430	23	Oct. 2, 1968 2/
711	E. Brown	R. Matula	1968	55	2	55	49	6	Cu	81	18	June 1968	J,E	D	--	--	-- 2/
712	J. Suchma	do.	1968	54	2	54	48	6	Cu	91	28	July 1968	J,E 1/2	D	--	--	-- 2/
* 802	August Leus	Owner	1934	24	--	--	18	6	Cu	82	20	1936	N	U	--	--	--
803	P. LeGendre	Matula Waterwell Drlg.	1968	146	2	146	140	6	Cu	84	25	Apr. 1968	J,E 3/4	D	--	--	-- 2/
804	J. McRay	do.	1968	143	2	143	137	6	Cu	86	24	Mar. 1968	J,E 1	D	--	--	-- 2/
805	W. Smith	do.	1968	133	2	133	127	6	Cu	84	24	Mar. 1968	J,E 1	D	--	--	-- 2/
806	E. Reininger	Industrial Drillers	1968	143	2	143	137	6	Cu	86	--	--	J,E 1/2	D	--	--	-- 2/
807	R. Kramer	C. C. Padon	1966	136	2	136	130	6	Cu	84	30	Mar. 1966	J,E 1/2	D	--	--	-- 2/
808	W. Todd Drier	do.	1965	56	2	56	48	8	Cu	84	30	May 1965	J,E 1/2	D	--	--	-- 2/
* 809	E. Miller	do.	1966	92	4	92	81	11	Cu	82	23	July 1966	S,E 3/4	D	--	--	-- 2/
* 810	R. Eiteman	do.	1965	81	4	81	73	8	Cu	87	30	July 1965	J,E 3/4	D	--	--	-- 2/
* 811	C. Staffin	Owner	1926	38	2	38	--	--	Cu	86	26	1936	P,H,W	D	--	--	--
* 901	Walter Gless	--Mickelson	1947	636	18 12 10	117 564 636	84	552	Cl,Cu	73	11.7 a/ 49.0	Apr. 24, 1947 Jan. 23, 1969	N	U	1,590	32	July 27, 1955 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-65-34-902	T. Butterworth	--Matula	1965	100	2	100	94	6	Cu	72	19	Apr. 1965	J,E 1	D	--	--	--
* 903	E. Sabrsula	C. C. Padon	1965	93	2	93	85	8	Cu	73	22	Jan. 1965	J,E 1/4	D	--	--	-- 2/
* 35-101	Gulf Oil Corp.	--	1936	86	6	86	--	--	Cu	81	9.2 28.6 a/	Apr. 30, 1947 Aug. 12, 1969	A	U	--	--	--
* 102	do.	--	1924	180	6	180	--	--	Cu	81	14.0 26.5 a/	Apr. 30, 1947 Aug. 12, 1969	A,E 40	Ind	--	--	--
103	--Davis	Gulf Oil Corp.	1949	3,469	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 201	A. P. George Est.	Texas Water Wells	1956	884	10 6	--	735	68	E	75	84.8	Jan. 23, 1969	T,E 30	D	250	--	July 31, 1956 1/
* 202	Percy Gonyo	Gene Davis	1925	85	2	85	--	--	Cu	74	15	1936	N	U	--	--	--
301	Humble Oil & Ref. Co.	L. Patterson, Inc.	1946	302	4	302	266	34	Cl	61	12.1 18.2 a/	Apr. 30, 1947 Sept. 6, 1949	N	U	--	--	-- 2/
* 302	Houston Ltg. & Pwr. Co.	Layne-Texas	1956	702	18 10	--	540	80	Cl	74	54	Apr. 1956	S,E 25	Ind	351	48	Apr. 1956 1/
303	do.	do.	1956	803	18 10	450	457	72	Cl,E	72	85.2	Jan. 20, 1969	T,E 125	Ind	1,016	35	1956 1/2/
* 304	A. P. George	Texas Water Wells	1967	853	14 8	443 853	453	203	Cl,E	70	102	Dec. 1968	S,E 60	Ind	1,200	66	1967 1/
305	do.	Humble Oil & Ref. Co.	1946	8,147	--	803	--	--	--	--	--	--	--	--	--	--	-- 1/
* 501	Slavik Estate	Gene Davis	1910	95	2	95	--	--	Cu	66	--	--	N	U	--	--	--
601	Martin Thompson	--Thompson	1947	160	4	160	--	--	Cu	62	13.3	Apr. 25, 1947	N	U	--	--	--
701	Jefferson Lake Sulph.	Owner	1953±	285	12 10	--	--	--	Cl,Cu	69	81.8	Jan. 21, 1969	T,E 60	Ind	--	--	--
702	do.	Katy Drilling Company	1957	725	20 10	251	220	--	Cl,E ?	67	72	June 1960	N	U	1,800 3,200	-- 68	1968 2/ 1957
* 703	do.	Owner	1945	434	14 10	--	374	39	Cl	69	--	--	N	U	780	--	1945
704	do.	--	1929	556	12	556	247	15	Cl	67	--	--	T,E 30	Ind	--	--	--
* 705	do.	Owner	1945	487	14 10	--	416	54	Cl	70	--	--	N	U	1,150	--	1945
* 706	F. Dedek	Owner	1935	40	--	--	38 ?	--	Cu	68	18	1936?	N	U	--	--	--
707	Jefferson Lake Sulph.	do.	1963	491	20 10	220 491	235	90	Cl	67	112	Jan. 1969	T,E 60	Ind	922	52	Jan. 6, 1969
708	do.	Katy Drilling Company	1965	505	20 10	281 505	285	90	Cl	67	103.3	Jan. 21, 1969	T,E 60	Ind	1,023 1,064	60 66	1965 1969

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-35-709	Jefferson Lake Sulph.	Katy Drilling Company	1966	505	20 10	336 505	344	90	Cl	70	113	June 1968	S,E 60	Ind	901 757	107 99 ±	Mar. 11, 1966 Jan. 21, 1969
* 710	do.	do.	1967	508	20 10	236 508	240	165	Cl	68	104	June 1968	S,E 60	Ind	1,022	55	June 30, 1969 2/
711	do.	Owner	1961	497	20	497	407	90	Cl	68	118.4	Jan. 21, 1969	T,E 40	Ind	550	--	1968
* 712	Texas Gulf Sulphur Co.	--	1929	262	12	262	247	15	Cl	71	19.6	Apr. 25, 1947	N	U	--	--	-- 2/
713	F. I. Cobb	Katy Drilling Company	1956	620	16 12	244 620	200	420	Cl	72	63.2	Jan. 22, 1969	T	Irr	3,500	--	1956 2/
714	Ruby Myers	R. O. Magnum & P. H. Welder	1955	7,813	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
715	Louis Wolf, et al.	C. C. Gilger, et al.	1958	706	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 901	Ralph Rawlings	Joe Gueidershek	1926	105	2	105	--	--	Cu	57	--	--	N	U	--	--	--
* 902	T. A. Brown	Gene Davis	1924	130	2	130	--	--	C	63	20	1936	N	U	3	--	1924
903	Frank Forka	C. C. Padon	1965	112	2	112	106	6	C	66	25	Apr. 1965	N	U	--	--	-- 2/
36-101	Cecil Hagen	--	1942	307	4	307	--	--	C	59	12.6 43.9 a/	Apr. 29, 1947 Jan. 9, 1969	N	U	--	--	--
* 102	County School	Chas. Mahler	1933	420	2	420	--	--	C	63	20	1936	N	U	--	--	--
* 103	Y. U. Jones Est.	Gene Davis	--	209	2	209	--	--	Cu	70	--	--	N	U	--	--	--
* 104	Rudolph Gubbels	--	1919	185	2	185	--	--	--	69	20	1936	N	U	--	--	--
201	Chicago Corp.	L. Patterson, Inc.	1948	375	4	375	299	39	Cl	58	21.3 41.8 a/	Dec. 30, 1948 Aug. 6, 1958	J,Ng	Ind	--	--	-- 2/
* 202	H. M. Naylor Oil Co.	--	1938	400 ±	4	400	--	--	Cl	58	--	--	N	U	--	--	--
203	The Texas Company	L. Patterson, Inc.	1932	600	6	600	580	20	Cl	58	9 77.3 a/	1940 Feb. 1, 1967	N	U	--	--	--
204	Houston Oilfield Eq. Co.	--	1932	150	4	150	--	--	Cu	58	16.2 47.0 a/	Apr. 29, 1947 Jan. 27, 1966	N	U	--	--	--
205	Chicago Corp.	--	1939	400 ±	8	400	--	--	Cl	60	22.4	Dec. 30, 1948	N	U	--	--	--
* 206	Gulf Oil Corp.	L. Patterson, Inc.	1939	420	6	420	399 ?	--	Cu	59	66.3	Oct. 10, 1968	J,E 3/4	S	--	--	--
* 207	Chicago Corp.	do.	1943	400 ±	4	400	--	--	Cl	58	26.3	Apr. 29, 1947	P,E 1/4	Ind	--	--	--
* 301	T. H. Scanlon Est.	--	Old	455	4	455	--	--	Cl	60	--	--	N	U	--	--	--
401	Lockwood & Sharp	Humble Oil & Ref. Co.	1955	9,021	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 501	Humble Oil & Ref. Co.	L. Patterson, Inc.	1932	534	10 9	340	468	34	Cl	66	29.7	Apr. 29, 1947	N	U	114	--	Jan. 1943 2/
502	Humble Oil & Ref. Co.	L. Patterson, Inc.	1945	503	7	503	441	62	Cl	66	74.6	Jan. 28, 1969	N	U	--	--	-- 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-65-36-503	Humble Oil & Ref. Co.	L. Patterson, Inc.	1945	495	6	495	439	56	Cl	66	--	--	S,E 3	Ind	--	--	-- 2/
* 504	John H. Blaffer	--	1939	300 ±	4	300	--	20	Cl	56	20	1947	N	U	--	--	--
505	Humble Oil & Ref. Co.	L. Patterson, Inc.	1964	765	7 5	439 765	541	40	Cl	66	--	--	S,E 3	Ind	--	--	--
506	George Estate	--	--	125 ±	--	--	--	--	Cu	54	21.9	Jan. 28, 1969	S,E 1	S	--	--	--
507	do.	Abe Hardin	--	400	4	400	--	--	Cl	54	40.6	Jan. 28, 1969	S,E 3	S	--	--	--
* 508	W. P. Swaringen	--	1952	380	4	380	--	--	Cl	56	--	--	T,E 3	Ind	--	--	--
509	George Estate	Abe Hardin	1967	87	4	87	--	--	Cu	51	24.2	Jan. 29, 1969	J,Ng	S	--	--	--
701	Hale Ranch	--Griffith	1963	300 ±	6	300	290 ±	10	Cl	65	56.6	Jan. 22, 1969	S,E 3	D	--	--	--
* 37-101	T. H. Scanlon Estate	J. W. Walling	1937	522	6	522	--	--	Cl	60	31.2	May 5, 1947	N	U	--	--	--
* 41-301	N. E. Bushnell	Joe Marek	Old	90	2	90	--	--	Cu	80	20	1924	N	U	--	--	--
* 302	Peter Harleeq	--	1906	48	2	48	--	--	Cu	75	22	1936	N	U	--	--	--
* 303	C. H. Stegemiller	--	1918	48	2	48	--	--	Cu	85	--	--	N	U	--	--	--
304	I. Mund	--	1968	200	14	200	--	--	Cu	83	34.2	Oct. 8, 1968	T,E 100	Irr	--	--	--
601	A. Rychlik	Owner	1964	610	10	610	--	--	Cl	72	65.9	Oct. 8, 1968	T,Ng 70	Irr	--	--	--
* 602	J. Winston	Marion Mahler	1967	325	2	325	--	--	Cl	68	53	Nov. 1968	J,E 3/4	D	--	--	--
* 901	Mackhank Petr. Co.	Owner	1936	84	4	84	69	15	Cu	68	18	1947	N	U	--	--	--
42-101	L. Krobot	Bill Davis	1958	261	8	261	110	151	Cl,Cu	78	39.6	Oct. 1, 1968	T,LPg	Irr	--	--	--
* 102	J. Farmar	--	--	22	30	22	--	--	Cu	77	18.9	May 28, 1936	N	U	--	--	--
* 103	J. Petrusek	--	1914	58	2	58	54 ?	4	Cu	77	20	Oct. 1968	J,E	D	--	--	--
* 104	Wm. C. Banker	--Gajgdpsok	1932	108	2	108	--	4	Cu	77	--	--	P,W	U	--	--	--
105	W. L. Gray	Katy Drilling Company	--	1,200	18	1,200	--	--	Cl,Cu	72	69.4	Oct. 8, 1968	T,G 150	Irr	--	--	--
201	R. Leissner	do.	1955	759	20 12	321 759	348	411	Cl	83	--	--	T,E	Irr	--	--	-- 2/
* 202	Danglefs & Wendt	do.	1953	1,099	24 12	269 1,099	288	811	Cl,E	78	96.8	Oct. 3, 1968	T,E 75	Irr	3,420	--	1960 2/
203	John Moore	Katy Drilling Company	1953	792	20 12	341 792	180 ?	612	Cu,Cl	82	86.4	Oct. 3, 1968	T,E 125	Irr	2,240	--	July 11, 1960 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING: DIAMETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-42-204	W. Goldston Oil Co.	L. Patterson, Inc.	1943	400 ±	4	400	380	20	Cl	81	26.6 a/ 31.6	May 20, 1947 Feb. 7, 1951	N	U	--	--	--
* 205	do.	--	1940	149	4	149	--	20	Cu	85	17.5	May 20, 1947	N	U	175	--	1940
* 206	Danklefs & Wendt	Katy Drilling Company	1968	1,082	20 14 12	644 800 1,082	184	898	Cl,Cu,E	81	85	Jan. 1968	T,E 150	Irr	3,992 3,180	30	Jan. 12, 1968 2/ Oct. 3, 1968
207	J. Moore	do.	1967	1,105	20 12	361 1,105	295	810	C,E	82	83	Jan. 1968	T,E 150	Irr	3,002	31	Dec. 19, 1967 2/
208	E. Mesecke	R. Matula	1968	54	2	54	48	6	Cu	84	20	July 1968	J,E 1/2	D	--	--	-- 2/
* 209	J. Suchma Est.	C. C. Padon	1966	73	2	73	67	6	Cu	73	20	Sept. 30, 1966	J,E 1 1/4	D	--	--	-- 2/
* 301	C. A. Danklefs	Otto Michelson	1940	545	20 12	--	65	--	Cl,Cu	77	21.1 a/ 24.4	Mar. 4, 1948 Jan. 23, 1969	N	U	800	--	1940
* 302	do.	Layne-Texas	1944	556	20	--	64	304	Cl,Cu	55	54 a/ 25.4	May 1944 Oct. 9, 1968	N	U	2,000	30	1947 2/
* 303	C. A. Danklefs	Katy Drilling Company	1952	1,090	20 12	524 1,090	234 ?	856	Cl,E	77	74.6	July 28, 1955	T,E 150	Irr	2,375	30	July 28, 1955 2/
* 304	A. Bosak	Owner	1926	110	2	110	--	--	Cu	76	20	Oct. 1968	P,W	D	--	--	--
* 305	L. Knoll	--	1913	100	2	100	--	--	Cu	74	20	1936	N	U	--	--	--
* 306	Mrs. F. Marek	C. C. Padon	1965	60	2	60	54	6	Cu	76	22	Aug. 1965	J,E 1/3	D	--	--	-- 2/
* 307	G. Armstrong Est.	do.	1966	86	3	86	80	6	Cu	78	22	July 1966	J,E 1/3	S	--	--	-- 2/
* 601	R. Swahr	P. Griffith	1968	130	2	130	121	6	Cu	69	--	--	J,E 1/2	D	--	--	-- 2/
43-101	C. A. Danklefs	Katy Drilling Company	1956	1,195	20 12	--	275	880	Cl,E	76	73.4	Jan. 10, 1969	T,Ng 1	Irr	--	--	-- 2/
102	Mary Allen	Kenon & Cantrell	1959	5,418	--	--	--	--	--	--	--	--	--	--	--	--	-- 1/
* 201	W. Gless & Beard	Katy Drilling Company	1953	1,158	24 12	297 1,158	297	861	Cl,E	69	79.5 76.6	July 27, 1955 Jan. 10, 1969	T,E 150	Irr	3,100	39	July 27, 1955 2/
202	John Mahlman	--Wench	1957	212	12	212	150	--	Cu	58	14.6	Jan. 10, 1969	T,LPg 50	Irr	1,200 ±	--	1957
* 203	J. H. P. Davis	--Weinbrenner	1930	80	2	80	80 ?	--	Cu	70	--	--	P,W	D	3	--	1930
* 301	J. Frank Jungman	Katy Drilling Company	1953	1,155	20 12	291 1,155	286 ?	--	Cl,E	71	80.6	Jan. 10, 1969	T,E 75	Irr	2,419	--	June 15, 1967 2/
* 302	J. M. Mitchell	--Weinbrenner	1929	86	2	86	86	--	Cu	64	--	--	N	U	4	--	1929
502	Robert Mueck	Bell Bottom Company	1956	128	12	128	108	20	Cu	54	17.2	Jan. 13, 1969	T,Bg	Irr	550	--	1956

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING: DIAM-ETER (IN.)	CASING: DEPTH (FT.)	DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	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	WELL PERFORMANCE DATA: YIELD (GPM)	WELL PERFORMANCE DATA: DRAWDOWN OR RECOVERY (FT.)	WELL PERFORMANCE DATA: DATE
JY-65-43-504	C. & J. Gless	Katy Drilling Company	1967	756	24	756	277	479	Cl	56	69.3	Jan. 10, 1969	T 20	Irr	2,050	--	May 25, 1967 2/
* 601	Nash Estate	A. H. Justman	1951	482	12	481	122	359	Cl,Cu	53	19.5	Apr. 30, 1952	N	U	619	--	June 19, 1967 2/
* 602	Unknown	--	1925	482	6	482	121	--	Cl,Cu	57	16.1 a/ 74.0	May 21, 1947 Aug. 12, 1969	B,H	D	--	--	--
603	Danciger Oil & Ref. Co.	--	1945	100 ±	4	150	--	--	Cu	53	11.5	May 21, 1947	N	U	--	--	--
604	Phelan Sulph. Company	Freeport Sulph. Company	1953	321	--	--	--	--	Cl,Cu	51	57.4	Jan. 14, 1969	T,E 25	Ind	335	--	1966
* 606	Phelan Sulph. Co.	do.	1953	504	16 14 10	113 133 504	424	74	Cl	51	93.7	June 19, 1969	T,E 30	Ind	300	--	June 27, 1969
* 607	do.	do. ?	1953	800	16 10 8	160 460 746	746	50	Cl	51	--	--	T,E 50	Ind	530	--	--
* 608	do.	do.	1953	116	--	--	--	--	Cu	51	15.6	Jan. 14, 1969	S,E 15	Ind	--	--	--
611	Nash Estate	--	1968	--	--	--	--	--	--	53	65.4	Jan. 10, 1969	T 75	Irr	--	--	--
* 44-101	J. Q. Vencil	Katy Drilling Company	1959	874	20 12	306	216	660	Cl,E	59	58.7 61.7	Feb. 1, 1967 Jan. 9, 1969	T,D 180	Irr	2,240	47	June 16, 1967 2/
102	Edward Bailey	C. C. Padon	1965	93	2	93	85	8	Cu	59	30	July 1965	J,E	D	--	--	-- 2/
103	S. Q. Vencil	William K. Davis	1962	6,710	--	874	--	--	--	--	--	--	--	--	--	--	-- 1/
JY-66-24-601	Valley Lodge	--	1963	227	12	227	--	--	C	105	32.2	Mar. 17, 1964	T,E 40	Irr	1,250	--	1963
604	--Tallman	--	Old	50	2	50	--	--	C	109	36.1 33.0	Apr. 15, 1964 Jan. 7, 1969	N	U	--	--	--
605	Sam Taylor	Bud Rheman	1964	373	3	373	363	10	C	108	31	Apr. 1964	J,E	D	--	--	--
606	do.	do.	1964	360	--	--	--	--	C	108	31	Apr. 1964	J,E	D	--	--	--
* 607	R. E. A. Ranch	G. S. Rheman	1968	293	4 2	210 293	287	6	C	111	--	--	S,E 1	S	--	--	-- 2/
902	Wayne Roberts	--	--	145	16	145	--	--	C	107	37.6 34.8	Apr. 21, 1964 Jan. 7, 1969	T,Bg	Irr	--	--	--
903	do.	--	--	145	16	145	--	--	C	107	37.8 34.0	Apr. 21, 1964 Jan. 7, 1969	T,Bg	Irr	--	--	--
32-201	Jerry Kulhanek	American Water Company	1958	182	12	182	--	--	C	123	--	--	N	U	1,000	--	-- 2/
601	Joe Somers	do.	1956	274	12	274	--	--	C	122	--	--	T,LPg	Irr	--	--	-- 2/
* 805	A. P. Griger	Vince Galliea	1946	85	2	85	80	5	C	120	--	--	N	U	--	--	--
901	--	Katy Drilling Company	1958	366	16 12	216 366	160	205	C	117	41.2	Oct. 15, 1968	T,LPg	Irr	1,500	--	1959 2/

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COM-PLET-ED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAM-ETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-66-32-902	Simon Kucera	American Water Co.	1958	304	12	304	--	--	C	113	42.8	Oct. 10, 1968	T,LPg	Irr	--	--	-- 2/
903	A. Vacel	do.	1959	310	12	310	--	--	C	117	43.9	Oct. 10, 1968	T,LPg 50	Irr	--	--	-- 2/
904	Leroy Stade	do.	1957	321	12	321	--	--	C	114	40.6	June 28, 1960	T,LPg 50	Irr	1,300 ±	--	1957 2/
905	W. Duncan	do.	1957	270	12	270	--	--	C	112	35.6 50.6	May 9, 1960 Oct. 9, 1968	T,LPg 50	Irr	1,500	--	1957 2/
906	Bay Ridge Christian College	Davis Bros.	1967	115	10	115	75	40	C	112	41.0	Oct. 26, 1967	T,LPg 30	Irr	--	--	--
* 907	do.	--	1930	30	2	30	--	--	C	110	--	--	T,E 1/2	S	--	--	--
* 908	Mary Jones	--	1933	110	--	110	--	--	C	118	--	--	N	U	--	--	--
* 909	West Production Company	--	1947	180	4	180	160	20	C	117	--	--	N	U	100 ±	--	1947
910	F. Buxkemper & Son	Davis Bros.	1966	295	12	295	--	--	C	118	--	--	T,Bg 30	Irr	--	--	--
911	do.	do.	1967	285	12	285	--	--	C	116	--	--	T,LPg 50	Irr	--	--	--
40-201	Charles King	--Hughes	1967	72	3	72	68	4	C	112	--	--	P,E 1/4	S	--	--	--
301	R. Sablatura	Crowell Bros.	1959	290	10	290	177	109	C	106	--	--	T,LPg	Irr	--	--	-- 2/
302	Clifton Martin	--Goodenberger	1966	228	4	228	222	--	C	102	--	--	J,E 1/4	D	--	--	--
303	do.	Bill Janek	1963	114	2	114	102	12	C	102	14.8	Oct. 17, 1967	N	U	--	--	--
* 304	Bay Ridge Christian College	do.	1964	115	4	115	105	10	C	105	33.4	Oct. 17, 1967	S,E 1	P	--	--	--
305	do.	do.	1965	95	2	95	87	8	C	112	--	--	J,E 1 1/2	S	--	--	--
306	do.	do.	1961	105	2	105	97	8	C	106	32.5	Oct. 17, 1967	J,E	S	--	--	--
307	do.	Davis Water Wells	1967	324	14 12	179 324	179	145	C	111	38.5	Oct. 17, 1967	T,E 50	Irr	1,250	--	Oct. 25, 1967
308	do.	do.	1967	110	4	110	110	100	C	109	37.9	Oct. 17, 1967	N	U	--	--	--
* 309	A. Toliver	--	1910	33	12	33	--	--	C	108	26.2	May 4, 1936	N	U	--	--	--
* 310	Joe Leonard	--Bohach	--	115	2	115	--	--	C	108	--	--	N	U	--	--	--
* 311	Manuel King Est.	--	1923	60	2	60	--	--	C	101	--	--	P,H	D	--	--	--
* 601	V. L. King	--	1916	100	2	100	--	--	C	103	--	--	P,E	D	--	--	--
602	H. M. Moore	E. Henson	--	90	2	--	--	--	C	98	30	1936	N	U	--	--	--

See footnotes at end of table.

Table 4.--Records of Wells and Test Holes--Continued

WELL NUMBER	OWNER	DRILLER	DATE COMPLETED	DEPTH OF WELL (FT.)	CASING		DEPTH TO FIRST WELL OPENING (FT.)	LENGTH OF WELL OPEN TO AQUIFER	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT.)	WATER LEVEL		METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA		
					DIAMETER (IN.)	DEPTH (FT.)					ABOVE (+) OR BELOW LAND SURFACE (FT.)	DATE OF MEASUREMENT			YIELD (GPM)	DRAWDOWN OR RECOVERY (FT.)	DATE
JY-66-40-603	G. Collins	Industrial Drillers	1968	78	2	78	70	8	C	99	--	--	J,E 1/2	D	--	--	-- 2/

* For chemical analyses of water from wells, see Table 7.
a/ For water levels, see Table 6.
1/ Electric logs in files of Texas Water Development Board or U.S. Geological Survey.
2/ For drillers' logs, see Table 5.

Table 5.—Drillers' Logs of Wells and Test Holes

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-09-907		
Owner: Louis Young Driller: Katy Drilling Co.		
Topsoil	22	22
Quicksand	13	35
Clay	23	58
Sand	23	81
Clay	21	102
Sand and rock	28	130
Clay	8	138
Sand and rock	15	153
Clay	5	158
Rock	1	159
Sand and rock	9	168
Sand, rocky	52	220
Sand and rock	10	230
Clay	12	242
Sand and rock	27	269
Clay	29	298
Sand and rock	20	318
Clay	20	338
Sand	12	350
Clay	16	366
Sand	43	409
Well JY-65-09-909		
Owner: Chester Jordan Driller: Katy Drilling Co.		
Surface clay	23	23
Sand w/clay breaks	151	174
Sand and rock	18	192
Clay	5	197
Sand and rock	91	288
Clay	5	293
Sand and rock	37	330
Clay	40	370
Sand and rock	28	398
Clay	28	426
Sand and rock	51	477

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-09-909—Continued		
Clay	34	511
Sand	25	536
Clay	14	550
Sand	9	559
Clay	8	567
Sand and rock	23	590
Clay	30	620
Sand and rock	39	659
Clay	9	668
Sand and rock	36	704
Clay	16	720
Sand and rock	70	790
Clay	53	843
Sand and rock	52	895
Clay	6	901
Well JY-65-10-701		
Owner: L. D. Brown Driller: A. Justman		
Clay	77	77
Sand	12	89
Clay	14	103
Sand	230	333
Clay	36	369
Sand	52	421
Bottom clay	0	421
Well JY-65-10-710		
Owner: Humble Oil Co. Driller: Lowry Water Wells Co.		
Clay, red	48	48
Clay, yellow	22	70
Sand	15	85
Clay, yellow	5	90
Sand and gravel	111	201
Sand rock	6	207
Sand, broken	9	216
Shale, sandy, hard	48	264
Sand rock, hard	23	287

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-10-710—Continued		
Sand	10	297
Sand rock, hard	7	304
Well JY-65-10-801		
Owner: Clyde Nelson Driller: Katy Drilling Co.		
Topsoil and clay	67	67
Sand and gravel	13	80
Clay	5	85
Sand and gravel	25	110
Clay w/sand strips	20	130
Clay	59	189
Sand	18	207
Clay and rocks	19	226
Sand	13	239
Rock, hard	2	241
Sand and rock	20	261
Clay	5	266
Sand and rock	29	295
Clay	21	316
Sand, fine and rock	26	342
Clay	6	348
Sand	17	365
Bottom clay	0	365
Well JY-65-17-106		
Owner: T. N. Hunt Driller: Katy Drilling Co.		
Topsoil and clay	48	48
Sand, quick	23	71
Clay	4	75
Sand and gravel	24	99
Clay	4	103
Sand and rock	40	143
Clay	9	152
Sand, fine	38	190
Clay	24	214
Sand	14	228
Rock	3	231

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-17-106—Continued		
Sand and rock	34	265
Clay	10	275
Sand	5	280
Clay and rock	15	295
Sand	49	344
Shale, sandy	83	427
Sand	34	461
Shale	36	497
Sand, rocky	72	569
Well JY-65-17-110		
Owner: W. T. Roberts Driller: Katy Drilling Co.		
Clay	35	35
Sand and rock	31	66
Sand and gravel	30	96
Sand, broken and rock	61	157
Sand and rock	17	174
Sand, rocky	11	185
Clay and sand strips	10	195
Clay, tough	15	210
Sand, rocky	8	218
Clay and sand strips	13	231
Sand	14	245
Rock	4	249
Sand	11	260
Clay	19	279
Sand	7	286
Clay and sand strips	24	310
Clay	141	451
Sand, coarse	20	471
Clay	49	520
Sand	8	528
Clay	43	571
Sand	5	576
Sand and rock	15	591
Sand	69	660

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-17-201		
Owner: Richard Woods Driller: Katy Drilling Co.		
Clay, surface	90	90
Sand and gravel	55	145
Clay	7	152
Sand and gravel	27	179
Rock, hard	1	180
Sand and rock	18	198
Clay	10	208
Rock	7	215
Sand and rock	30	245
Clay	23	268
Sand, clay and lime rock	41	309
Sand and lime rock	26	335
Well JY-65-17-203		
Owner: L. D. Ware Driller: Texas Water Wells		
No record	355	355
Shale	10	365
Shale and rock	71	436
Sand and lime rocks	11	447
Lime rocks and sand streaks	8	455
Shale and lime rocks	57	512
Sand and lime rocks	6	518
Shale and lime rocks	44	562
Lime rocks and sand	5	567
Shale, hard	15	582
Lime rocks and sand	21	603
Shale, hard and rock	31	634
Sand and rock	11	645
Shale, hard	11	656
Rock, hard	3	659
Shale	39	698
Sand and shale streaks	37	735
Shale and sand streaks	25	760
Shale	25	785
Shale and rock	36	821

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-17-203—Continued		
Sand and rock	8	829
Lime rocks and boulders	21	850
Shale, sticky	45	895
Shale and boulders	5	900
Shale, sticky	35	935
Sand, hard and boulders	7	942
Sand, rock and boulders	26	968
Shale, sticky	2	970
Well JY-65-17-302		
Owner: A. L. Stern Driller: Katy Drilling Co.		
Topsoil	21	21
Sand	68	89
Clay	16	105
Sand	52	157
Clay	7	164
Sand	57	221
Clay	31	252
Sand	13	265
Rock	2	267
Sand	79	346
Sand, rocky	43	389
Clay	61	450
Sand	12	462
Clay	7	469
Sand, rocky	53	522
Clay	7	529
Sand, rocky	99	628
Clay	42	670
Sand, rocky	8	678
Clay	85	763
Sand	47	810
Well JY-65-17-401		
Owner: Vernon W. Frost Driller: Katy Drilling Co.		
Topsoil	65	65
Sand and clay strips	41	106

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-17-401—Continued		
Gravel and sand	74	180
Sand	18	198
Clay	14	212
Sand	13	225
Clay	17	242
Rock	1	243
Sand, rocky	21	264
Shale	23	287
Sand	56	343
Rock	2	345
Sand	33	378
Well JY-65-17-402		
Owner: Gail W. Spencer Driller: Katy Drilling Co.		
Topsoil	35	35
Sand and gravel	40	75
Clay	20	95
Sand	18	113
Clay	15	128
Sand and rock	79	207
Rock, hard	10	217
Clay and sand strips	13	230
Clay	60	290
Sand and rock	42	332
Clay	14	346
Sand and rock	21	367
Well JY-65-17-405		
Owner: D. F. McMahon Driller: Layne-Texas Co.		
Clay	20	20
Sand, coarse	30	50
Sand, coarse and gravel	56	106
Clay	14	120
Sand and gravel	86	206
Clay	52	258
Sand	46	304
Clay	16	320

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-17-405—Continued		
Sand, fine white	43	363
Sand and shale streaks	17	380
Shale	11	391
Sand	9	400
Shale	65	465
Sand	6	471
Shale	62	533
Sand, coarse white	54	587
Shale	35	622
Shale and sand streaks	8	630
Sand, coarse white	40	670
Shale and sand streaks	11	681
Sand	9	690
Shale and sand	40	730
Shale and sand streaks	8	738
Sand, coarse	32	770
Shale and sand	25	795
Sand	7	802
Shale	6	808
Well JY-65-17-406		
Owner: Pecan Acres, Inc. Driller: Layne-Texas Co.		
Clay	43	43
Sand, fine	10	53
Sand, coarse	47	100
Clay	12	112
Rock	1	113
Sand, fine	4	117
Rock	1	118
Sand, fine	3	121
Rock	1	122
Clay	13	135
Sand	68	203
Gumbo	2	205

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-17-407

Owner: Southern Pacific Railroad Co.
Driller: A. E. Fawcett, Jr.

	THICKNESS (FEET)	DEPTH (FEET)
Clay and sand	75	75
Gravel	10	85
Sand and gravel	15	100
Shale, sandy	20	120
Sand, gravel and boulders	50	170
Shale, sandy	45	215
Rock and boulders	15	230
Shale, sandy	20	250
Sand rock and shale streaks	150	400
Rock, sandy	43	443
Shale, sandy and rock	22	465
Sand	13	478
Shale	22	500
Sand	10	510
Shale streaks	90	600
Sand	40	640

Well JY-65-17-409

Owner: V. W. Frost
Driller: –

	THICKNESS (FEET)	DEPTH (FEET)
Sand, red	28	28
Sand, gray	65	93
Gravel	8	101
Shale, sandy	23	124
Sand	43	167
Shale, sticky	38	205
Sand, gray and gravel	16	221
Shale	4	225

Well JY-65-17-502

Owner: U.S.G.S.
Driller: U.S.G.S.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, black clay	2	2
Clay w/gray to yellow streaks	52	54
Sand and gravel	8	62

Well JY-65-17-503

Owner: U.S.G.S.
Driller: U.S.G.S.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	2	2
Clay	5	7

Well JY-65-17-504

Owner: U.S.G.S.
Driller: U.S.G.S.

	THICKNESS (FEET)	DEPTH (FEET)
Soil and clay	2	2
Sand and clay	14	16
Sand, clay and gravel	6	22
Sand and gravel	5	27
Sand	8	35
Sand and gravel	4	39
Sand, hard and gravel	5	44
Sand, gravel and clay	43	87

Well JY-65-17-803

Owner: U.S.G.S.
Driller: U.S.G.S.

	THICKNESS (FEET)	DEPTH (FEET)
Soil	2	2
Clay, sandy	30	32
Sand and clay	15	47
Sand and gravel	49	96
Sand, gravel and clay	8	104
Sand and gravel	13	117

Well JY-65-17-804

Owner: U.S.G.S.
Driller: U.S.G.S.

	THICKNESS (FEET)	DEPTH (FEET)
Clay and sand	45	45
Sand, gravel and clay	24	69
Sand and clay	18	87

Well JY-65-18-103

Owner: C. C. Cardiff
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	3	3
Clay	42	45
Sand	65	110
Clay	5	115

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-18-103—Continued		
Sand	60	175
Sand and gravel	25	200
Rock	3	203
Clay	14	217
Sand, w/hard streaks	55	272
Rock	10	282
Sand, coarse	33	315
Sand, fine	16	331
Clay	8	339
Sand	70	409
Clay	10	419
Rock	1	420
Pack sand, hard	18	438
Rock	2	440
Sand	8	448
Clay	92	540
Rock	2	542
Clay	18	560
Sand	10	570
Sand and gravel	65	635
Clay	18	653

Well JY-65-18-111

Owner: Cardiff Brothers
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface and clay	22	22
Sand	20	42
Clay	17	59
Sand	37	96
Clay	5	101
Sand	94	195
Clay	5	200
Sand	6	206
Clay w/sand breaks	24	230
Sand and rock	62	292
Clay	15	307
Sand	33	340
Clay	8	348
Well JY-65-18-111—Continued		
Sand rock	18	366
Clay	16	382
Sand rock	28	410
Clay	16	426
Sand rock	59	485
Clay	63	548
Sand	100	648
Clay	58	706
Sand	9	715
Clay	34	749
Sand	11	760
Clay	8	768
Sand	21	789
Clay	61	850
Sand rock	52	902
Clay	65	967
Sand rock	54	1,021
Clay	5	1,026

Well JY-65-18-201

Owner: Cardiff Brothers
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	23	23
Sand	23	46
Clay	46	92
Sand	51	143
Clay	31	174
Sand	60	234
Clay	14	248
Sand	14	262
Clay	5	267
Rock	1	268
Sand	5	273
Clay	3	276
Sand	12	288
Rock	1	289
Sand	44	333
Clay	16	349

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-18-201—Continued		
Sand	49	398
Clay	9	407
Sand, rocky	74	481
Clay	14	495
Clay, bottom	35	530
Well JY-65-18-202		
Owner: Cinco Ranch Driller: Layne-Texas Co.		
Clay	15	15
Sand	20	35
Clay	68	103
Sand and gravel	50	153
Shale, sandy	42	195
Sand and gravel	32	227
Shale	16	243
Rock	3	246
Shale	11	257
Rock	1	258
Sand	31	289
Shale, sandy	16	305
Rock	2	307
Sand	13	320
Shale	31	351
Sand	34	385
Shale	33	418
Sand	47	465
Shale, sandy	36	501
Sand	34	535
Shale	173	708
Sand	20	728
Shale	102	830
Sand	17	847
Shale	53	900
Well JY-65-18-401		
Owner: Sam Poorman Driller: Layne-Texas Co.		
No record, pit	132	132
Sand and gravel	10	142

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-18-401—Continued		
Clay, yellow	1	143
Sand and gravel	47	190
Gumbo	4	194
Rock	3	197
Sand and gravel	15	212
Gumbo	3	215
Rock	4	219
Gumbo	35	254
Boulders and gumbo	61	315
Rock	10	325
Sand	12	337
Rock	6	343
Sand and gravel	25	368
Rock	5	373
Sand	12	385
Boulders	8	393
Rock	7	400
Gumbo	25	425
Gumbo, boulders and rock	185	610
Gumbo	35	645
Sand	10	655
Rock	2	657
Sand	10	667
Rock	4	671
Gumbo	12	683
Sand and gravel	30	713
Gumbo	10	723
Well JY-65-18-601		
Owner: Walter Ludwig Driller: A. H. Justman		
Clay	82	82
Sand	11	93
Clay	44	137
Sand	93	230
Clay	10	240
Sand	46	286
Clay	38	324
Sand	21	345

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-18-601—Continued		
Clay	8	353
Sand	42	395
Clay	6	401
Clay	61	462
Clay	10	472
Sand	36	508
Clay	7	515
Sand	48	563
Well JY-65-18-603		
Owner: S. N. Adams Ranch Driller: Leonard Mickelson		
Clay	12	12
Sand	10	22
Clay	40	62
Layers clay and sand	49	111
Sand	168	279
Shale	19	298
Sand	8	306
Shale, hard	20	326
Lime, shale, sand	45	371
Gumbo	29	420
Lime, shale, sand	77	497
Gumbo	16	513
No record	34	547
Well JY-65-18-604		
Owner: Ed Helwig Driller: Katy Drilling Co.		
No record	40	40
Clay	30	70
Sand	35	105
Clay	23	128
Sand, hard	21	149
Clay	13	162
Sand and gravel	23	185
Clay	25	210
Sand	5	215
Lime rock	5	220
Well JY-65-18-604—Continued		
Sand, rock	5	225
Clay	23	248
Sand, rocky	60	308
Clay	10	318
Sand	7	325
No record	2	327
Clay	4	331
Sand, rocky	30	361
Clay	17	378
Rock, hard; sand, good	73	451
Clay, lime, rock	31	482
Sand, lime, rock, clay	20	502
Sand breaks, lime rock	31	533
Sand, rocky, clay breaks	54	587
Sand, clay, small strips	23	610
Clay	10	620
Well JY-65-19-401		
Owner: Philip H. Brown Driller: Katy Drilling Co.		
Topsoil and clay	91	91
Sand	23	114
Clay	66	180
Sand	103	283
Clay	16	299
Sand	5	304
Clay	26	330
Sand	46	376
Lime, clay and sand strips	27	403
Sand	23	426
Lime, clay and sand strips	10	436
Sand	20	456
Lime and clay	11	467
Sand	12	479
Lime and clay	7	486
Sand and lime	31	517
Lime rock	9	526

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-19-401—Continued		
Sand and lime rock	42	568
Lime, shale and sand	15	583
Sand and lime	60	643
Shale and rock	7	650
Sand and rock	30	680
Well JY-65-19-402		
Owner: Leon Miles Driller: Katy Drilling Co.		
Topsoil	25	25
Sand strips	5	30
Clay, tough	28	58
Sand	6	64
Clay	19	83
Sand	10	93
Clay	8	101
Sand	15	116
Clay	9	125
Sand	38	163
Clay	16	179
Sand	15	194
Gravel and sand	32	226
Clay	16	242
Sand	40	282
Clay	5	287
Sand	31	318
Sand and lime rock	23	341
Clay	9	350
Clay and rock	21	371
Rock	6	377
Sand and lime rock	56	433
Clay and rock	9	442
Sand and rock	52	494
Clay	20	514
Sand, rocky	31	545
Clay	35	580
Sand and rock	18	598
Clay, hard	15	613

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-19-402—Continued		
Sand and rock	10	623
Clay, tough	17	640
Sand and rock	12	652
Clay	19	671
Sand and rock	49	720
Clay, tough	35	755
Sand and rock	36	791
Rock, hard	5	796
Sand and rock	4	800
Clay, tough	5	805
Rock, hard	1	806
Sand	49	855
Well JY-65-19-503		
Owner: J. A. Bono Driller: A. H. Justman		
Topsoil	17	17
Sand	55	72
Clay	23	95
Sand	20	115
Clay	56	171
Sand	73	244
Clay	86	330
Sand	40	370
Rock	2	372
Sand	16	388
Clay	11	399
Sand	21	420
Clay	18	438
Sand	82	520
Rock	2	522
Sand	2	524
Rock and gravel	2	526
Sand and rock	24	550
Well JY-65-19-504		
Owner: Joe Bono Driller: Katy Drilling Co.		
Clay, surface	42	42
Sand	9	51

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-19-504—Continued		
Clay	14	65
Sand	14	79
Clay	28	107
Sand	49	156
Clay	7	163
Sand and rock	112	275
Clay, tough	18	293
Sand, rocky and clay strips	100	393
Clay	5	398
Sand	22	420
Rock	2	422
Sand	7	429
Clay	11	440
Sand and rock	16	456
Rock	1	457
Clay	3	460
Sand	121	581
Clay	17	598
Sand	21	619
Clay	22	641
Well JY-65-19-506		
Owner: C. Pillot Driller: Ray Woods		
Clay	22	22
Sand, fine	6	28
Clay	107	135
Sand	80	215
Clay	26	241
Sand	14	255
Clay	17	272
Sand	74	346
Clay	9	355
Sand	16	371
Clay	11	382
Sand	30	412
Clay	10	422
Sand	4	426

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-19-506—Continued		
Clay	5	431
Sand	27	458
Clay	9	467
Sand	14	481
Clay	4	485
Sand	12	497
Clay	3	500
Well JY-65-19-508		
Owner: R. F. Gonsculin Driller: Rychlik Water Wells		
Clay	16	16
Sand	11	27
Well JY-65-19-702		
Owner: State Prison Driller: J. Siegert & Son		
Clay	5	5
Clay, red	55	60
Clay, mushy	18	78
Sand	12	90
Clay, red	54	144
Boulders	1	145
Clay and sand	25	170
Sand	16	186
Sand	15	201
Clay	7	208
Sand and gravel	13	221
Gravel and sand	6	227
Gravel, sand, and clay	13	240
Gravel and sand	20	260
Clay	8	268
Well JY-65-19-801		
Owner: State Prison Driller: J. Siegert & Son		
Topsoil	3	3
Clay, gray	3	6
Clay, red	25	31
Gravel and sand	20	51

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-19-801—Continued		
Clay, red	9	60
Sand, mushy	11	71
Clay, red	12	83
Sand, mushy	12	95
Sand, hard	9	104
Clay, soft	20	124
Sand	20	144
Clay, crumbly	24	168
Sand	21	189
Sand, hard	16	205
Gravel and sand	52	257
Sand, fine	25	282
Clay	6	288
Well JY-65-19-802		
Owner: State Prison Driller: J. B. Dunn		
No record	55	55
Gravel	5	60
Sand and gravel	30	90
Well JY-65-19-803		
Owner: State Prison Driller: J. B. Dunn		
No record	18	18
Sand and gravel	24	42
No record	98	140
Sand	65	205
Gravel	26	231
Well JY-65-20-701		
Owner: Dorrance & Wing Driller: A. H. Justman		
Topsoil	33	33
Quicksand	7	40
Clay	30	70
Clay and sand	18	88
Clay	87	175
Sand	50	225
Clay	10	235

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-20-701—Continued		
Sand	69	304
Clay	12	316
Sand	49	365
Clay	11	376
Sand	72	448
Clay	23	471
Sand and clay strips	21	492
Sand	84	576
Clay	5	581
Sand	12	593
Clay	9	602
Sand	10	612
Clay	5	617
Rock	1	618
Sand, rocky	51	669
Clay	15	684
Sand, rocky	33	717
Clay	7	724
Sand	37	761
Well JY-65-20-702		
Owner: Austin Co. et al. Driller: Layne-Texas Co.		
Soil, surface	3	3
Clay	32	35
Sand and clay	40	75
Clay, shale and shell	15	90
Shale and shell	27	117
Sand	16	133
Shale and sand	20	153
Shale and clay	21	174
Shale, sandy	9	183
Sand and gravel	26	209
Shale	25	234
Sand and gravel	46	280
Shale, sandy	65	345
Sand and shale	26	371
Shale, broken	30	401

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-20-702—Continued		
Sand	48	449
Shale and sand	43	492
Sand	56	548
Sand and gravel	15	563
Shale	12	575
Sand and shale	32	607
Sand and rock, white	60	667
Sand	30	697
Sand and gravel	31	728
Shale, sandy	15	743
Sand	40	783
Shale and sand layers	36	819
Sand	30	849
Sand, broken	41	890
Shale	10	900
Sand, hard layers	12	912
Sand	38	950
Shale	5	955
Sand	38	993
Sand and shale	29	1,022
Shale	8	1,030
Sand	67	1,097
Shale and sand	55	1,152
Shale	95	1,247
Sand and shale	25	1,272
Shale	30	1,302
Shale, hard and sand	33	1,335
Shale and sand	45	1,380
Shale	32	1,412
Shale, sandy	5	1,417
Sand and shale layers	19	1,436
Shale, sandy	7	1,443
Shale	10	1,453
Shale, sandy	5	1,458
Sand and shale layers	22	1,480
Shale, sandy	10	1,490
Shale	15	1,505

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-20-702—Continued		
Shale and sand	55	1,560
Shale, broken	47	1,607
Shale, sandy	19	1,626
Sand	42	1,668
Shale, sandy	15	1,683
Sand	10	1,693
Shale	3	1,696
Shale, sandy	12	1,708
Shale	11	1,719
Shale, sandy	3	1,722
Shale	5	1,727
Shale, sandy	8	1,735
Shale, hard	20	1,755
Shale, sandy	10	1,765
Sand, hard and sandy	35	1,800
Well JY-65-20-703		
Owner: Thommy Hefner Driller: Rychlik Water Wells		
Clay	21	21
Sand	9	30
Clay	66	96
Sand	2	98
Clay	77	175
Sand	24	199
Well JY-65-20-704		
Owner: Parker Bros. Co. Driller: American Drilling Co.		
Clay, surface	15	15
No record	76	91
Sand	14	105
Clay	51	156
Sand, fine	58	204
Clay	47	261
Sand	37	298

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-20-801		
Owner: Texas Instruments Driller: Texas Water Wells		
Shale	10	10
Sand	20	30
Sand and shale	5	35
Shale	20	55
Sand	15	70
Shale	10	80
Sand	5	85
Shale	2	87
Sand and shale	38	125
Sand	17	142
Shale	23	165
Shale, sandy	22	187
Shale	45	232
Sand and shale	20	252
Sand	16	268
Sand and shale	40	308
Sand	31	339
Sand and shale	126	465
Shale	15	480
Sand	25	505
Shale	10	515
Sand	16	531
Shale	17	548
Sand	12	560
Sand and shale	65	625
Shale, hard	15	640
Sand and shale	25	665
Shale	5	670
Sand	11	681
Shale	29	710
Sand	25	735
Shale	8	743
Shale and sand	35	778
Shale	10	788
Sand	42	830
Shale	20	850

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-20-801—Continued		
Sand	32	882
Shale	55	937
Sand and shale	20	969
Shale	21	990
Sand	30	1,020
Shale	10	1,030
Well JY-65-25-102		
Owner: H. H. Aylor Est. Driller: —		
Soil, surface	5	5
Clay, red	25	30
Sand, fine	47	77
Clay, red sandy	8	85
Well JY-65-25-105		
Owner: Gulf Oil Corp. Driller: Roper Drilling Co.		
Clay and sand	7	7
Sand	5	12
Clay and sand streaks	28	40
Sand, fine	20	60
Sand, coarse	4	64
Sand and gravel	11	75
Sand, fine white	3	78
Clay, tough red	6	84
Clay and sand streaks	16	100
Well JY-65-25-201		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Soil, surface	11	11
Clay	4	15
Sand	18	33
Sand and clay	19	52
Clay	45	97
Sand	6	103
Clay and sand	25	128
Sand	5	133
Sand and gravel	25	158

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-201—Continued		
Gravel, coarse and sand	5	163
Sand, gravel and shale	5	168
Sand and gravel	5	173
Gravel, coarse and sand	5	178
Sand, gravel and clay	20	198
Sand	5	203
Shale, hard gray	5	208
Sand and gravel	49	257
Shale, gray	2	259
Sand and gravel	14	273
Sand, coarse	13	286
Clay, red	7	293
Shale and sand	10	303
Sand	9	312
Shale	55	367
Sand, gravel, and clay streaks	47	414
Shale	119	533
Shale and lime rock streaks	106	639
Lime rock	6	645
Shale and lime rock	56	701
Well JY-65-25-202		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Soil, surface	8	8
Sand and clay	45	53
Shale	25	78
Clay and shale	38	116
Sand and gravel	42	158
Sand and shale streaks	12	170
Sand and gravel, fine	27	197
Gravel and sand, coarse	11	208
Gravel, coarse	10	218
Shale	15	233
Shale, sandy	15	248
Sand and rock	5	253
Sand	5	258
Well JY-65-25-202—Continued		
Gravel and sand, coarse	22	280
Shale	13	293
Well JY-65-25-203		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Soil, surface	8	8
Sand and clay	60	68
Clay	30	98
Clay, sandy	20	118
Sand and gravel	35	153
Shale, sandy	5	158
Sand and gravel	7	165
Shale, gray	14	179
Shale and sand	9	188
Sand and gravel	56	244
Sand, gravel, and lime rock	3	247
Sand and clay	5	252
Sand and gravel	21	273
Clay, red	47	320
Clay and lime rock	23	343
Lime rock	7	350
Sand, gravel, and lime	30	380
Lime rocks	23	403
Sand, gravel and lime rock	10	413
Shale, sandy and lime	16	429
Shale and lime rock	29	458
Well JY-65-25-204		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Clay and sand	44	44
Clay	10	54
Sand and clay	8	62
Clay	22	84
Sand and clay	27	111
Sand	11	122
Sand, gravel and clay	5	127

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-204—Continued		
Gravel, coarse and sand	20	147
Clay and gravel	5	152
Clay and shale	30	182
Clay and gravel	5	152
Gravel, coarse	7	194
Shale and gravel, fine	4	198
Gravel, coarse	29	227
Sand and gravel, fine	5	232
Gravel, coarse	15	247
Gravel and sand, coarse	15	262
Sand and gravel, fine	10	272
Gravel and sand, coarse	10	282
Clay and shale	58	340
Well JY-65-25-206		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Clay and sand	16	16
Sand and gravel	48	64
Sand	8	72
Sand and rock	2	74
Shale, sandy	7	81
Clay and sand	42	123
Sand	5	128
Sand and gravel	40	168
Gravel and sand	30	198
Shale	8	206
Well JY-65-25-207		
Owner: Duval S & P Driller: Duval Sulp. & Pot. Co.		
Soil, surface and clay	7	7
Clay and sand	8	15
Sand and gravel	74	89
Shale	19	108
Shale, sand	21	129
Sand	10	139
Sand and gravel	31	170
Shale	17	187
Well JY-65-25-207—Continued		
Sand and gravel	3	190
Shale, sandy	23	213
Sand and gravel	21	234
Shale, sandy	8	242
Well JY-65-25-209		
Owner: Duval S & P Driller: Texas Water Wells		
Clay, surface	30	30
Sand, gravel, shale, and rock	68	98
Sand and shale	20	118
Gravel, sand and rock	65	183
Sand	17	200
Sand, gravel, and shale streaks	40	240
Shale and lime rock	19	259
Gravel and sand	38	297
Shale, hard	18	315
Well JY-65-25-210		
Owner: Duval S & P Driller: Layne-Texas Co.		
Soil, surface	2	2
Clay	10	12
Sand and clay	66	78
Clay	23	101
Sand and gravel	133	234
Shale, brown	13	247
Sand	27	274
Shale	7	281
Sand	12	293
Shale	19	312
Sand	35	347
Shale and lime	31	378
Sand and rock	9	387
Rock, hard	5	392
Sand, shale, and rock	28	420
Sand	23	443
Sand, packed	12	455

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-210—Continued		
Rock, hard	1	456
Shale, sand and rock	14	470
Lime rock	4	474
Sand	9	483
Lime rock	2	485
Sand	13	498
Lime rock	1	499
Shale, sticky	4	503
Lime, hard	10	513
Lime, sticky	18	531
Lime rock	3	534
Lime, hard	14	548
Lime and sand	59	607
Lime, sticky and sand	42	649
Lime, sandy	59	708
Well JY-65-25-212		
Owner: Duval S & P Driller: Layne-Texas Co.		
Soil, surface	2	2
Clay	10	12
Sand	20	32
Clay	10	42
Clay and gravel	19	61
Sand and gravel	6	67
Clay and gravel	53	120
Sand and gravel	47	167
Shale, hard sandy	6	173
Sand, gravel and shale	21	194
Sand	49	243
Shale, sticky	2	245
Well JY-65-25-218		
Owner: Duval S & P Driller: Duval T. S. Co. Employees		
Clay, surface	6	6
Sand	18	24
Sand and clay	21	45
Sand and boulders	36	81
Well JY-65-25-218—Continued		
Shale	25	106
Shale, sandy	22	128
Sand and gravel	60	188
Sand, gravel and shale	10	198
Sand and gravel	5	203
Sand	10	213
Sand and gravel	16	229
Sand, gravel and shale	14	243
Sand and gravel	31	274
Sand, gravel and shale	10	284
Shale, sandy	18	302
Sand and shale streaks	23	325
Shale and boulders	6	331
Shale and sand streaks	18	349
Shale	25	374
Sand, boulders and shale	25	399
Sand and gravel	17	416
Sand, gravel and shale	18	434
Shale	17	451
Sand, boulders, and shale	13	464
Well JY-65-25-220		
Owner: Duval S & P Driller: Duval T. S. Co. Employees		
Soil, surface	2	2
Clay	8	10
Sand	66	76
Sand, gravel and boulders	1	77
Sand and boulders	8	85
Shale	7	92
Sand and gravel	6	98
Clay	27	125
Clay and sand streaks	5	130
Shale, sandy	5	135
Shale, sand and gravel streaks	3	138
Sand and gravel	15	153
Sand, coarse and gravel	21	174

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-220—Continued		
Sand, gravel, and clay streaks	18	192
Sand and gravel	12	204
Clay and shale, sandy	15	219
Gravel and sand, coarse	18	237
Sand, gravel and shale	14	251
Sand and gravel	25	276
Sand, gravel and shale	20	296
Clay and shale streaks	72	368
Clay and boulders	14	382
Rock, sand	2	384
Clay, red and sand	5	389
Sand	9	398
Sand, shale and boulders	8	406
Sand	15	421
Well JY-65-25-221		
Owner: Duval S & P Driller: Layne-Texas Co.		
Soil, surface	2	2
Clay	10	12
Sand, rock and clay layers	35	47
Rock, hard	2	49
Clay	14	63
Rock	1	64
Sand	13	77
Rock	1	78
Clay and boulders	2	80
Clay, tough	11	91
Clay, gravel, and sand	30	121
Clay, tough	6	127
Sand and gravel	202	329
Clay, tough	11	340
Well JY-65-25-301		
Owner: R. E. Smith Ranch Driller: Layne-Texas Co.		
Soil	7	7
Clay	8	15

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-301—Continued		
Sand and Clay	49	64
Clay	6	70
Sand and clay layers	57	127
Clay	34	161
Sand and gravel	58	219
Clay	12	231
Sand, coarse and gravel	52	283
Clay	4	287
Sand and gravel	18	305
Rock	2	307
Sand	21	328
Clay	4	332
Sand	18	350
Clay and rock layers	10	360
Sand, gravel, and rock layers	75	435
Clay	3	438
Well JY-65-25-302		
Owner: R. E. Smith Ranch Driller: Layne-Texas Co.		
Topsoil	2	2
Clay	8	10
Sand and gravel	15	25
Clay, sandy	6	31
Sand and gravel	9	40
Clay	2	42
Sand and gravel	13	55
Clay, tough	54	109
Sand and gravel	36	145
Clay, tough	19	164
Sand and gravel	32	196
Sand and clay breaks	23	219
Clay, tough	6	225
Rock	1	226
Clay, tough	12	238
Sand, gravel, and clay	15	253
Sand and clay	28	281
Clay, sandy	10	291

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-302—Continued		
Clay, tough	17	308
Sand	11	319
Rock	2	321
Sand and gravel	31	352
Sand, gravel and clay	38	390
Rock	1	391
Sand with hard layers	44	435

Well JY-65-25-401

Owner: Edwin Dusek
Driller: Texas Irr. Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	65	65
Sand and gravel	48	113
Clay	22	135
Sand and gravel	137	272
Clay	3	275

Well JY-65-25-402

Owner: Jerry Kulhanek
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	10	10
Clay	15	25
Sand	30	55
Clay	5	60
Sand and gravel	18	78
Shale	12	90
Gravel	18	108
Shale	22	130
Sand and gravel	54	184
Shale	8	192
Sand and gravel	53	245

Well JY-65-25-403

Owner: Tex Lavener
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	6	6
Clay	9	15
Sand	25	40
Clay	34	74
Sand	36	110
Well JY-65-25-403—Continued		
Shale	25	135
Sand	43	178
Shale	17	195
Sand	102	297

Well JY-65-25-404

Owner: Gulf Oil Corp.
Driller: Roper Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	18	18
Sand	4	22
Clay	38	60
Sand, fine	6	66
Sand, coarse	4	70
Gravel, small	5	75
Gravel, large	10	85
Clay	15	100
Sand, fine	5	105
Clay	35	140
Sand, fine	5	145
Gravel and sand	25	170
Clay	3	173

Well JY-65-25-501

Owner: Gulf Oil Corp.
Driller: Roper Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	6	6
Clay and sand	14	20
Clay	4	24
Sand, fine	11	35
Sand, coarse	5	40
Gravel	6	46
Clay and sand	14	60
Gravel, coarse	10	70
Clay and sand streaks	50	120
Sand, fine	5	125
Sand, coarse	11	136
Sand and gravel	21	157
Clay	1	158

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-503		
Owner: Duval S & P Driller: Layne-Texas Co.		
Soil, surface	2	2
Clay	7	9
Sand, fine	15	24
Clay and sand layers	20	44
Clay and gravel	6	50
Sand and gravel	9	59
Clay and gravel	4	63
Sand and gravel	18	81
Clay and gravel	15	96
Sand and gravel	49	145
Sand, gravel and shale	24	169
Sand and shale	34	203
Shale, sticky	9	212
Well JY-65-25-701		
Owner: H & L Engle Driller: Crowell Bros.		
Clay	52	52
Sand	18	70
Gravel	42	112
Clay	16	128
Sand	36	164
Clay	3	167
Gravel	46	213
Clay	8	221
Gravel and sand	35	256
Sand	14	270
Shale	20	290
Well JY-65-25-702		
Owner: Wayne Nelson Jr. Driller: Crowell Bros.		
Clay	47	47
Sand	19	66
Clay	12	78
Gravel	14	92
Clay	16	108

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-25-702—Continued		
Sand	44	152
Sand and gravel	92	244
Shale	4	248
Well JY-65-25-703		
Owner: August Blazek Driller: American Water Wells		
Surface	15	15
Sand	30	45
Clay	40	85
Sand	38	123
Shale	17	140
Sand	80	220
Shale	20	240
Sand	55	295
Well JY-65-25-704		
Owner: R. Drachinberg Driller: American Water Wells		
Surface	10	10
Clay	10	20
Sand	40	60
Clay	14	74
Sand	21	95
Shale	21	116
Sand	71	187
Clay	8	195
Sand	105	300
Well JY-65-26-102		
Owner: Sugarland Inds. Driller: Layne-Texas Co.		
Surface	21	21
Sand, fine	19	40
Clay	69	109
Sand and gravel	7	116
Clay	8	124
Sand and gravel	46	170
Gravel	20	190

Well JY-65-26-201

Owner: R. E. Smith
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	22	22
Sand and gravel	63	85
Clay	42	127
Sand	28	155
Clay	5	160
Sand	10	170
Clay	10	180
Sand	60	240
Sand, rock and clay strips	150	390
Clay	18	408
Sand and rock	47	455
Clay	20	475
Sand and clay strips	100	575

Well JY-65-26-401

Owner: A. L. Stern
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	55	55
Sand and clay strips	28	83
Clay	27	110
Sand and gravel	52	162
Clay	23	185
Sand and gravel	51	236
Clay and sand strips	15	251
Sand	10	261
Sand clay strips	20	281
Sand, rocky	7	288
Clay	19	307
Sand, rocky	89	396

Well JY-65-26-403

Owner: Gulf States
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay and sand	23	23
Sand	27	50
Gravel and sand	90	140
Shale	22	162

Well JY-65-26-403—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand and gravel	46	208
Shale and sand	10	218
Sand and gravel	50	268
Sand and shale breaks	20	288
Shale	29	317
Sand and gravel	94	411
Shale	13	424
Sand, gravel and shale breaks	94	518
Gravel and shale breaks	68	586
Shale, sandy and boulders	8	594
Shale, hard sandy and boulders	26	620
Shale, sandy	17	637
Sand and gravel	18	655
Shale and sand	28	683
Sand	32	715
Shale, hard sandy and boulders	24	739
Shale	11	750
Sand and shale breaks	32	782
Shale	40	822
Sand and shale breaks	41	863
Rock	1	864
Shale and sand	36	900

Well JY-65-26-405

Owner: J. A. Guntle
Driller: Ondrey Water Well Service

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	1	1
Clay, gray	2	3
Clay, tan	11	14
Sand	3	17
Clay	8	25
Sand	13	38
Clay, red	12	50
Sand	30	80
Clay, red and gray streaks	25	105
Sand and gravel	15	120

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-26-406		
Owner: Gulf States Driller: Layne-Texas Co.		
Soil, surface	15	15
Sand	17	32
Clay	11	43
Sand and gravel	55	98
Rock	1	99
Sand	10	109
Clay	9	118
Sand	12	130
Clay	6	136
Sand	10	146
Clay	21	167
Sand	18	185
Clay	34	219
Sand and lime streaks	73	292
Clay	21	313
Sand and shale streaks, hard	85	398
Clay	3	401
Sand and clay streaks	16	417
Clay and sand streaks	5	422
Sand, shale and clay streaks	144	566
Clay, sandy	22	588
Sand, clay and lime streaks	8	596
Clay and shale, hard	27	623
Sand	11	634
Clay	10	644
Lime	23	667
Clay	21	688
Sand, lime and clay streaks	62	750
Sand, broken	32	782
Clay, sandy	15	797
Sand and clay streaks	71	868
Clay	96	964
Sand	32	996
Clay and sand streaks	18	1,014

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-26-406—Continued		
Sand	18	1,032
Clay	6	1,038
Sand	9	1,047
Clay, sand and shale	59	1,106
Sand	11	1,117
Clay and lime	29	1,146
Sand	16	1,162
Clay and sand	13	1,175
Well JY-65-26-503		
Owner: City of Rosenberg Driller: Katy Drilling Co.		
Topsoil	38	38
Clay	17	55
Sand and gravel	37	92
Clay	8	100
Sand	30	130
Clay	3	133
Sand	42	175
Clay	35	210
Clay and sand strips	30	240
Sand	23	263
Clay	6	269
Sand	174	443
Clay	22	465
Sand, rocky	95	560
Clay	15	575
Sand, rocky	30	605
Clay	18	623
Sand and rock	108	731
Clay and sand strips	37	768
Sand and rock	84	852
Clay	93	945
Sand and rock, lime	74	1,019
Clay	29	1,048
Sand	24	1,072
Clay	18	1,090
Sand and rock	53	1,143

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-26-503—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay	128	1,271
Sand	4	1,275
Shale	32	1,307
Sand	45	1,352
Clay	39	1,391
Sand	17	1,408
Shale	31	1,439
Sand, rocky	21	1,460
Shale	6	1,466
Sand	34	1,500
Shale	8	1,508
Sand and rock	86	1,594
Shale	19	1,613
Shale and sand strips	72	1,685
Sand	21	1,706
Sand strips	27	1,733
Clay, tough	46	1,779
Sand and rock	61	1,840
Clay	12	1,852
Sand and shale	42	1,894
Sand and rock	30	1,924
Shale	110	2,034

Well JY-65-26-511

Owner: City of Rosenberg
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil	4	4
Clay	21	25
Sand	16	41
Clay	31	72
Sand	18	90
Clay	41	131
Sand	68	199
Clay	53	252
Sand	33	285
Clay	18	303
Gumbo	28	331
Sand and gravel	48	379

Well JY-65-26-511—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Gumbo	5	384
Sand	6	390

Well JY-65-26-512

Owner: Benen Romero
Driller: Ondury, Water Well Service

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	1	1
Clay, gray	2	3
Clay, tan	7	10
Sand	3	13
Clay, tan	5	18
Sand	22	40
Clay, reddish	5	45
Sand, coarse and gravel streaks	29	74

Well JY-65-26-514

Owner: Manual Gonzalas
Driller: Rychlik Water Well Drilling

	THICKNESS (FEET)	DEPTH (FEET)
Clay	21	21
Sand	27	48
Clay	21	69
Sand	13	82
Clay	15	97
Sand	7	104

Well JY-65-26-516

Owner: City of Rosenberg
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil	2	2
Clay	33	35
Sand, fine	20	55
Sand	70	125
Clay, sticky	47	172
Sand	18	190
Clay	57	247
Sand	43	290
Clay	14	304
Sand	152	456
Clay	6	462

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-26-516—Continued		
Sand	20	482
Clay	8	490
Sand	25	515

Well JY-65-26-517

Owner: Lawson & Wood
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil and clay	28	28
Sand	40	68
Shale	174	242
Sand	56	298

Well JY-65-26-601

Owner: City of Richmond
Driller: Abe Hardin

	THICKNESS (FEET)	DEPTH (FEET)
Clay and soil, black	15	15
Quicksand	10	25
Clay, red	35	60
Sand and gravel	26	86
Clay	24	110
Sand	10	120
Clay	20	140
Shale, broken	10	150
Sand	33	183
Sand, broken and rock	21	204
Clay	16	220
Sand	10	230
Clay	86	316
Sand and gravel	132	448

Well JY-65-26-602

Owner: J. Wendt & Moore
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	4	4
Clay	46	50
Sand	39	89
Sand and gravel	33	122
Sand	92	214
Sand and gravel	21	235
Clay	21	256

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-26-602—Continued		
Sand and gravel	95	351
Shale, blue; sand and gravel	29	380
Sand, gravel and shale, sandy	36	406
Shale, blue and yellow	2	418

Well JY-65-26-603

Owner: City of Richmond
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay, surface	39	39
Sand and rock	19	58
Rock, hard	2	60
Sand and rock	27	87
Clay	21	108
Sand	117	225
Clay	20	245
Sand	78	323
Clay	4	327
Sand	61	388
Rock, sand and gravel	28	444
Clay	21	416
Sand and gravel	28	444
Clay	9	453
Sand and gravel	21	474
Clay	10	484
Sand	25	509
Clay	20	529
Sand	12	541

Well JY-65-26-604

Owner: City of Richmond
Driller: A. E. Tawcett

	THICKNESS (FEET)	DEPTH (FEET)
Loam	10	10
Clay, red sandy	20	30
Clay, red	31	61
Clay, joint	39	100
Sand, gray	12	112
Sand, fine	30	142
Sand, joint	5	147

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-26-604—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, coarse gray	27	174
Clay, joint	3	177
Sand, coarse gray	46	223
Clay, yellow	22	245
Sand, coarse gray	39	284
Clay, joint	4	288
Sand, coarse gray	37	235
Clay, joint	8	333
Sand, coarse red	65	398

Well JY-65-26-605

Owner: City of Richmond
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, surface and clay, sandy	10	10
Sand, coarse brown	15	25
Clay and boulders	18	43
Sand and gravel	10	53
Sand	25	78
Sand and clay	23	101
Sand and clay streaks	54	155
Sand, coarse and gravel	413	568
Shale, limey	5	573

Well JY-65-26-610

Owner: L. E. Neese
Driller: Rychlik Water Well Drilling

	THICKNESS (FEET)	DEPTH (FEET)
Clay	17	17
Sand	6	23
Clay	55	78
Sand	11	89

Well JY-65-26-611

Owner: B. Lindemann
Driller: Rychlik Water Well Drilling

	THICKNESS (FEET)	DEPTH (FEET)
Clay	22	22
Sand	13	35
Clay	45	80
Sand	13	93

Well JY-65-26-701

Owner: Bay City Drlg. Co.
Driller: B & P Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, surface	4	4
Clay	6	10
Sand	65	75
Sand and gravel	6	81
Clay	18	99
Sand	46	145
Clay	1	146

Well JY-65-26-701

Owner: R. F. Vacek
Driller: C. C. Padon

	THICKNESS (FEET)	DEPTH (FEET)
Clay	60	60
Sand	18	78

Well JY-65-26-806

Owner: Bob Schumm
Driller: Rychlik Well Service

	THICKNESS (FEET)	DEPTH (FEET)
No record	4	4
Clay	15	19
Sand	8	27
Clay	36	63
Sand	7	70

Well JY-65-26-807

Owner: E. Gordovsky
Driller: Henry Ondrey

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil, sandy	1	1
Clay, gray	3	4
Clay, gray and streaks, yellow	2	6
Clay, red	9	15
No record	3	18
Sand	8	26
Clay, grayish tan	8	34
Sand and gravel	25	59
Clay, blue	6	65
Sand and gravel	11	76

Well JY-65-26-808

Owner: Pearl Wleczyk
Driller: Ondrey Water Well Drilling

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	1	1
Clay, gray and streaks, yellow	5	6
Clay, orange	11	17
Sand	23	40
Clay, red	4	44
Sand, coarse	26	70

Well JY-65-26-809

Owner: Art Dabelgott
Driller: Rychlik Water Well

	THICKNESS (FEET)	DEPTH (FEET)
No record	3	3
Clay	18	21
Sand	6	27
Clay	44	71
Sand and gravel	9	80

Well JY-65-26-810

Owner: Joe J. Janechk
Driller: Ondrey Water Well Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil, sandy	1	1
Clay, gray	2	3
Clay, yellow	2	5
Clay, red	14	19
Sand, fine	16	35
Clay, red	17	52
Clay, gray	8	60
Gravel	10	70

Well JY-65-26-905

Owner: August Kovar
Driller: Ondrey Water Well Service

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	1	1
Clay, gray	3	4
Clay, tan	14	18
Sand	14	32
Clay, tan	3	35
Sand	39	74

Well JY-65-26-906

Owner: Hubert Blume
Driller: Rychlik Water Well Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	19	19
Sand	7	26
Clay	55	81
Sand	16	97
Clay	72	169
Sand	12	181

Well JY-65-26-907

Owner: Carson Dobbs
Driller: Rychlik Water Well Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	18	18
Sand	5	23
Clay	38	61
Sand	17	78
Clay	81	159
Sand	21	180

Well JY-65-27-101

Owner: Smith Ranches
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	86	86
Clay	51	137
Sand	8	145
Clay	18	163
Sand	146	309
Clay	6	315
Sand, rocky	67	382
Clay	13	395
Sand	17	412
Clay	48	460
Sand	49	509
Sand and rock, hard	61	570
Clay	28	598
Rock	12	610
Sand	25	635
Clay	26	661
Sand and rock	25	686

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-101—Continued		
Clay	29	715
Sand	60	775
Clay	12	787
Sand and rock	68	855
Rock, hard	6	861
Sand and rock	69	930
Well JY-65-27-104		
Owner: C. L. Morris Driller: Rychlik Water Well Drilling		
Clay	17	17
Sand	9	26
Clay	35	61
Sand	29	90
Well JY-65-27-105		
Owner: Smith Ranches Driller: Layne-Texas Co.		
Soil, black	10	10
Clay, red	31	41
Sand	20	61
Sand, gravel, and clay	32	93
Clay, sandy	43	136
Clay, sandy and gravel	51	187
Gravel, sand, and clay	36	223
Shale, sandy	24	247
Shale, sandy and sand streaks	40	287
Sand and gravel	28	315
Clay	3	318
Sand and gravel	51	369
Clay, sandy	9	378
Sand and gravel	34	412
Clay, sandy	49	461
Sand and gravel	45	506
Sand, gravel, and clay	67	573
Shale, sandy	22	595
Rock	1	596
Sand and shale streaks	19	615

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-105—Continued		
Sand	30	645
Shale	11	656
Well JY-65-27-202		
Owner: State Prison Driller: J. B. Dunn		
No record	48	48
Sand	7	55
Sand and gravel	33	88
Well JY-65-27-203		
Owner: Smith Ranches Driller: J. B. Dunn		
No record	27	27
Sand	7	34
No record	11	45
Sand	11	56
Gravel	15	71
Well JY-65-27-204		
Owner: State Prison Driller: J. B. Dunn		
No record	44	44
Gravel	16	60
Shale	7	67
Sand	22	89
Well JY-65-27-206		
Owner: State Prison Driller: J. B. Dunn		
No record	27	27
Sand, white	25	52
Gravel	8	60
Well JY-65-27-207		
Owner: State Prison Driller: J. B. Dunn		
No record	29	29
Sand	4	33
Gravel	27	60

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-301		
Owner: State Prison Driller: Layne-Texas Co.		
Soil and shale	36	36
Sand and gravel	59	95
Shale	36	131
Gravel	25	156
Shale	32	188
Gravel	20	208
Shale	23	231
Gravel and sand	30	261
Shale	20	281
Sand	12	293
Shale	62	355
Sand and gravel	94	449
Shale	10	459
Sand	14	473
Shale	10	483
Sand and gravel, fine	83	566
Sand and shale rock layers	45	611
Sand	80	691
Shale, sandy	10	701
Shale	4	705
Well JY-65-27-302		
Owner: Ft. Bend Utils. Driller: Layne-Texas Co.		
Soil	2	2
Sand, red and clay	38	40
Sand, gray and clay	17	57
Sand, red and clay	34	91
Sand, white	84	175
Clay and sand	13	188
Sand, white and clay breaks	103	291
Sand	39	330
Clay, red	40	370
Sand and clay breaks	28	398
Clay	28	426
Sand	16	442

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-302—Continued		
Sand and clay	32	474
Clay	15	489
Sand	30	519
Clay and sand	9	528
Sand	33	561
Clay and sand	10	571
Sand	18	589
Sand, hard and clay	26	615
Sand	15	630
Sand, hard layers	123	753
Sand, hard and clay	27	780
Clay	13	793
Sand	10	803
Clay	10	813
Sand and clay breaks	30	843
Sand	24	867
Clay	15	882
Sand and clay	7	889
Sand	13	902
Sand and clay	5	907
Sand	50	957
Clay	10	967
Sand	41	1,008
Clay	4	1,012
Sand	9	1,021
Sand, broken and clay	27	1,048
Clay, tough	46	1,094
Sand and clay	17	1,111
Sand	21	1,132
Clay	123	1,255
Sand and clay breaks	36	1,291
Clay	14	1,305
Sand	27	1,332
Clay	23	1,355
Sand and clay	17	1,372
Clay, tough	9	1,381
Sand	23	1,404

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-302—Continued		
Clay, tough	21	1,425
Sand	21	1,446
Clay	39	1,485
Sand	75	1,560
Clay	5	1,565
Well JY-65-27-303		
Owner: Ft. Bend Utils. Driller: Layne-Texas Co.		
Sand	8	8
Shale, sandy	22	30
Sand and gravel	48	78
Shale	10	88
Shale, sandy	15	103
Sand, broken	75	178
Shale	15	193
Sand and gravel	20	213
Shale	10	223
Sand, broken	19	242
Sand	33	275
Shale	6	281
Sand	36	317
Sand, broken	10	327
Sand and gravel	18	345
Shale	14	359
Sand	38	397
Shale	20	417
Sand, hard layers	31	448
Shale	12	460
Sand, broken	20	480
Shale	16	496
Sand, broken	23	519
Shale	7	526
Sand	28	554
Sand and gravel	49	603
Sand, broken	38	641
Shale	7	648
Sand, broken	60	708

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-303—Continued		
Shale, sand and gravel	31	739
Sand and gravel	24	763
Sand, broken	22	785
Shale	23	808
Sand and shale, sandy	55	863
Shale	13	876
Well JY-65-27-304		
Owner: State Prison Driller: J. B. Dunn		
No record	38	38
Sand	11	49
Gravel	20	69
No record	7	76
Gravel	25	101
Well JY-65-27-305		
Owner: State Prison Driller: J. B. Dunn		
No record	48	48
Gravel	15	63
Shale	2	65
Sand	6	71
Well JY-65-27-306		
Owner: State Prison Driller: J. B. Dunn		
No record	40	40
Gravel	24	64
Shale	11	75
Gravel	23	98
Well JY-65-27-306		
Owner: State Prison Driller: J. B. Dunn		
No record	40	40
Gravel	24	64
Shale	11	75
Gravel	23	98

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-307		
Owner: State Prison Driller: J. Siegert and Sons		
Topsoil and clay	3	3
Clay, red	5	8
Sand, red, mushy	13	21
Sand	29	50
Gravel, good	5	55
Sand	3	58
Gravel and sand	15	73
Gravel and clay	7	80
Clay, mushy	5	85
Clay and sand	19	104
Well JY-65-27-308		
Owner: State Prison Driller: J. Siegert and Sons		
Clay	40	40
Clay, mushy	9	49
Gravel	18	67
Sand and rock	10	77
Clay, mushy	3	80
Sand	13	93
Clay	2	95
Sand	12	107
Clay, mushy	18	125
Well JY-65-27-311		
Owner: State Prison Driller: Katy Drilling Co.		
Topsoil and clay	43	43
Sand	20	63
Clay	11	74
Sand and clay strips	14	88
Clay	21	109
Sand	6	115
Clay	14	129
Sand and rocks	18	147
Clay	14	161
Sand	7	168

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-311—Continued		
Clay	22	190
Sand and rock	27	217
Clay	6	223
Sand and rock	40	263
Clay	23	286
Sand	10	296
Clay	13	309
Sand	17	326
Clay and sand strips	26	352
Sand	44	396
Clay	10	406
Well JY-65-27-314		
Owner: State Prison Driller: J. Hobbs		
Soil	17	17
Clay	23	40
Sand	45	85
Clay and rock	60	145
Sand and clay	25	170
Clay and rock	65	235
Sand	22	257
Well JY-65-27-316		
Owner: Ft. Bend Util. Co. Driller: Layne-Texas Co.		
Fill, artificial	8	8
Sand	12	20
Clay, soft	3	23
Sand	27	50
Sand, packed	4	54
Sand	45	99
Sand, packed	6	105
Sand	32	137
Clay	7	144
Sand	40	184
Clay	21	205
Sand	49	254

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-316—Continued		
Clay	3	257
Sand	28	285
Gumbo	15	300
Sand	75	375
Clay	15	390
Sand	13	403
Clay	10	413
Sand	46	459
Clay	5	464
Sand	12	476
Clay	9	485
Sand	83	568
Clay	9	577
Sand	27	604
Gumbo	17	621
Sand and gravel	16	637
Rock	1	638
Sand	9	647
Clay	5	652
Sand	81	733
Gumbo, tough	6	739
Clay, soft	22	761
Gumbo	11	772
Clay	6	778
Gumbo and boulders	6	783
Gumbo	39	822
Clay and boulders	8	830
Rock	2	832
Clay and boulders	13	845
Rock	2	847
Clay and boulders	17	864
Gumbo and boulders	2	866
Gumbo	19	885
Rock, sand	2	887
Sand	4	891
Rock	3	894
Sand and layers, hard	16	910
Clay, yellow	6	916
Sand and layers, hard	35	951
Clay and boulders	2	953
Clay	25	978
Rock, sand	2	980
Clay and boulders	12	992
Sand and gravel	42	1,034
Clay	15	1,049

Well JY-65-27-402

Owner: M. B. Pyle
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	45	45
Sand	8	53
Clay	7	60
Sand	5	65
Clay	6	71
Sand and gravel	12	83
Clay	4	87
Sand	3	90
Clay	22	112
Sand	7	119
Clay	9	128
Sand	24	152
Clay	2	154
Sand	3	157
Clay	16	173
Sand	9	182
Clay	8	190
Sand	5	195
Clay	6	201
Sand and rock	31	232
Clay	11	243
Sand	8	251
Clay	12	263
Sand and rock	79	342
Clay	23	365

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-27-402—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand and rock	61	426
Clay	8	434
Sand and clay strips	39	473
Clay and shale	12	485
Sand and rock	60	545

Well JY-65-27-606

Owner: Sugarland Inds.
Driller: J. Hobbs

	THICKNESS (FEET)	DEPTH (FEET)
Soil	16	16
Sand	86	102
Clay	3	105
Sand and rock	57	162
Clay and rock	134	296
Sand and rock	57	353

Well JY-65-27-701

Owner: August Myers
Driller: Rychlik Water Well Drilling

	THICKNESS (FEET)	DEPTH (FEET)
Clay	19	19
Sand	19	38
Clay	20	58
Sand	12	70

Well JY-65-27-803

Owner: Texas Eastern
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	6	6
Clay	53	59
Sand	15	74
Clay, sandy	53	127
Sand	5	132
Clay, sandy	13	145
Sand, fine, brown	22	167
Sand, coarse white	30	197
Clay	13	210
Sand, fine grey	16	226
Shale	20	246
Sand, coarse brown	16	262
Shale, sandy and shale	44	306

Well JY-65-27-803—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, fine grey	29	335
Shale	5	340
Sand and shale streaks	45	385
Shale	12	397
Sand, coarse	25	422
Shale	3	425
Sand, coarse	8	433
Shale	5	438
Sand, coarse and shale streaks	30	468
Shale, sandy	14	482
Sand, fine brown	29	511
Shale	35	546
Sand, white coarse	78	624

Well JY-65-27-501

Owner: Vallet Bros.
Driller: Ondrey Water Well Driller

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	2	2
Clay, brown	15	17
Clay, gray	3	20
Clay, brown	27	47
Sand and gravel	33	80

Well JY-65-27-602

Owner: State Prison
Driller: J. Siegert & Sons

	THICKNESS (FEET)	DEPTH (FEET)
Clay, black	10	10
Clay, red	21	31
Sand	17	48
Gravel and sand	8	56
Clay	28	84
Sand	18	102
No record	2	104

Well JY-65-27-604

Owner: State Prison
Driller: J. Siegert & Sons

	THICKNESS (FEET)	DEPTH (FEET)
Clay, top	3	3
Clay, red	7	10

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-604—Continued		
Clay, mushy	8	18
Sand, red	19	37
Sand, gravel	9	46
Gravel, good	12	58
Gravel and sand	5	63
Sand and gravel	11	74
Clay	8	82
Sand, fine	17	99
Well JY-65-27-605		
Owner: Sugarlands Inds. Driller: J. Hobbs		
Soil	14	14
Sand	76	90
Clay	7	97
Rock, clay, and sand	54	151
Sand	9	160
Well JY-65-27-803		
Owner: Texas Eastern Driller: Layne-Texas Co.		
Topsoil	6	6
Clay	53	59
Sand	15	74
Clay, sandy	53	127
Sand	5	132
Clay, sandy	13	145
Sand, fine, brown	22	167
Sand, coarse, white	30	197
Clay	13	210
Sand, fine, grey	16	226
Shale	20	246
Sand, coarse, brown	16	262
Shale, sandy and shale	44	306
Sand, fine, grey	29	335
Shale	5	340
Sand and shale streaks	45	385
Shale	12	397
Sand, coarse	25	422

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-803—Continued		
Shale	3	425
Sand, coarse	8	433
Shale	5	438
Sand, coarse, and shale streaks	30	468
Shale, sandy	14	482
Sand, fine, brown	29	511
Shale	35	546
Sand, white, coarse	78	624
Well JY-65-27-901		
Owner: A. E. Myers Driller: Layne-Texas Co.		
Soil	5	5
Clay	25	30
Sand	10	40
Shale, sandy	20	60
Sand	48	108
Shale	17	125
Sand	20	145
Shale	35	180
Sand	10	190
Shale	10	200
Sand	25	225
Shale	10	235
Sand	5	240
Shale	10	250
Sand	50	300
Shale	30	330
Sand	32	362
Shale	38	400
Shale, sandy	10	410
Sand	15	425
Shale	10	435
Sand	10	445
Shale	35	480
Sand	18	498
Shale	72	570

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-27-901—Continued		
Sand	10	580
Shale	12	592
Sand	8	600
Shale	5	605
Sand	15	620
Shale	5	625
Sand	55	680
Sand, layer, and shale, blue	40	720
Well JY-65-27-903		
Owner: A. E. Myer Driller: Katy Drilling Co.		
Clay	28	28
Sand	8	36
Clay	32	68
Sand	15	83
Sand and rock streaks	10	93
Clay	40	133
Sand	13	146
Clay	25	171
Sand	20	191
Clay	13	204
Sand	45	249
Clay	26	275
Sand	31	306
Clay	37	343
Sand	21	364
Clay	42	406
Sand	6	412
Clay	4	416
Sand	8	424
Clay	8	432
Sand	16	448
Clay	33	481
Sand and shale	31	512
Clay	80	592
Sand	16	608
Well JY-65-27-903—Continued		
Clay	23	631
Sand	43	674
Well JY-65-28-101		
Owner: J. D. Nickleson Driller: Daris Brs. Water Well Co.		
Clay	75	75
Sand	10	85
Clay	135	220
Sand	20	240
Clay	195	435
Water, sand	30	465
Well JY-65-28-203		
Owner: Haydite Co. Driller: B & D Water Well Service		
Clay	30	30
Sand	25	55
Clay	10	65
Sand and clay	50	115
Sand	35	150
Clay	25	175
Gravel	105	280
Clay	5	285
Gravel	15	300
Gravel	115	415
Gravel	20	435
Clay	5	440
Well JY-65-28-206		
Owner: River Bend County Club Driller: Layne-Texas Co.		
Surface soil	8	8
Clay	19	27
Sand and gravel	35	62
Sand	35	97
Clay	8	105
Sand and clay streaks	31	136
Sand	12	148

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-28-206—Continued		
Clay, sandy	18	166
Sand	58	224
Clay, sandy	6	230
Sand	17	247
Clay and shale, blue	8	255
Sand	55	310
Shale, sandy	8	318
Sand	20	338
Shale, sandy	65	403
Sand	10	413
Shale	22	435
Sand	26	461
Shale	6	467
Sand	10	477
Shale	27	504
Sand	32	536
Shale	12	548
Sand and shale breaks	10	558
Sand	100	658
Shale, sticky	15	673
Shale, sandy	20	693
Sand and shale breaks	23	716
Well JY-65-28-401		
Owner: Humble Co. Driller: L. Patterson Inc.		
Surface	25	25
Shale	22	47
Sand	70	117
Shale	6	123
Sand	9	132
Shale	24	156
Sand	31	187
Shale	24	211
Sand	35	246
Shale	36	282
Sand	13	295
Well JY-65-28-401—Continued		
Shale	8	303
Sand	23	326
Shale	19	345
Sand	14	359
Shale	36	395
Sand	34	429
Shale	25	454
Sand	4	458
Shale	24	482
Sand	50	532
Shale	6	538
Sand	12	550
Shale	31	581
Sand	13	594
Shale	27	621
Sand	14	635
Shale	13	648
Sand, hard	14	662
Sand	16	678
Shale	6	684
Sand	27	711
Well JY-65-28-402		
Owner: Humble Oil & Rf. Driller: L. Patterson, Inc.		
Surface soil	23	23
Clay	19	42
Sand	59	101
Shale	2	103
Sand	59	162
Shale	7	169
Sand	20	189
Shale	39	228
Shale, sandy	11	239
Sand	29	268
Shale	11	279
Sand	83	362

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-28-402—Continued		
Shale	18	380
Sand	21	401
Shale	43	444
Sand	40	484

Well JY-65-28-403

Owner: Humble Oil & Rf.
Driller: L. Patterson, Inc.

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	23	23
Clay	19	42
Sand	59	101
Shale	2	103
Sand	59	162
Shale	7	169
Sand	20	189
Shale	39	228
Shale, sandy	11	239
Sand	29	268
Shale	11	279
Sand	83	362
Shale	18	380
Sand	21	401
Shale	43	444
Sand	40	484
Shale	14	498
Sand	12	510
Shale	37	547
Sand	35	582
Shale	2	584
Sand	39	623
Shale	5	628
Sand	33	661
Shale	5	666
Sand	5	671

Well JY-65-28-404

Owner: Humble Oil & Rf.
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay	69	69
Sand	29	98

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-28-404—Continued		
Clay	70	168
Sand	22	190
Gumbo	45	235
Sand	10	245
Clay	62	307
Gumbo	27	334
Sand	13	347
Gumbo	44	391
Not available	325	716

Well JY-65-28-501

Owner: Humble Oil & Rf.
Driller: L. Patterson, Inc.

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	23	23
Sand	31	54
Shale	6	60
Sand	60	120
Shale	10	130
Sand	22	152
Shale	110	262
Sand	13	275
Shale	23	298
Sand	11	309
Shale	34	343
Sand	10	353
Shale	14	367
Sand	7	374
Shale	30	404
Sand	44	448

Well JY-65-28-807

Owner: William A. Smith
Driller: Pomeroy

	THICKNESS (FEET)	DEPTH (FEET)
Surface	5	5
Clay	27	32
Sand and gravel	37	69
Clay	31	100
Sand	14	114
Clay	35	149
Sand	14	163

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-28-807—Continued		
Clay	71	234
Sand	21	255
Clay	15	270
Sand, good	20	290
Clay	60	350
Sand	42	392
Well JY-65-29-101		
Owner: D. W. Black Driller: Layne-Texas Co.		
Soil and clay	18	18
Sand	22	40
Clay	46	86
Sand	34	120
Clay and sand breaks	133	253
Sand	50	303
Clay	5	308
Sand	6	314
Clay	6	320
Sand	40	360
Sand and clay	10	370
Sand	46	416
Clay	4	420
Sand	30	450
Clay, red	63	513
Sand	10	523
Clay, and clay, sandy	30	553
Sand	112	665
Clay	15	680
Sand	16	696
Clay	10	706
Sand	69	775
Clay, hard	5	780
Sand	34	814
Clay, hard	6	820

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-29-405		
Owner: Blue Ridge Elementary School Driller: Layne-Texas Co.		
Topsoil	5	5
Clay	35	40
Sand	23	63
Clay	5	68
Sand	35	103
Shale	5	108
Sand and shell	37	145
Shale	31	176
Gravel and shale	18	194
Shale	43	237
Shale, hard	49	286
Sand, hard	27	313
Shale	7	320
Sand and shale	11	331
Shale, hard	95	426
Shale, sandy	18	444
Shale and shale, sandy	73	517
Sand, shale, and gravel	31	548
Shale	17	565
Well JY-65-29-406		
Owner: Capitol City Broadcasting Corp. Driller: Pomeroy and McMasters		
Surface soil	3	3
Clay	27	30
Sand	15	45
Clay	42	87
Sand, good	34	121
Clay	8	129
Sand	9	138
Clay	18	156
Sand, fine	5	161
Clay	52	213
Shale	40	253
Sand	10	263

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-29-406—Continued		
Shale	11	274
Sand, fine	8	282
Shale	3	285
Sand	48	333
Shale	49	382
Shale, sandy	20	402
Clay	46	448
Shale	37	485
Sand	5	490
Shale	10	500
Well JY-65-29-702		
Owner: Humble Oil & Rf. Driller: —		
Surface	26	26
Sand	44	70
Sand and shale	22	92
Shale	65	157
Sand and shale	89	246
Shale	86	332
Sand and shale	22	354
Sand	22	376
Shale	89	465
Shale and sand	22	487
Shale	33	520
Sand	11	531
Shale	38	569
Sand	15	584
Well JY-65-33-103		
Owner: E. Pitts Driller: American Water Co.		
Surface	10	10
Clay	60	70
Sand	55	125
Clay	13	138
Sand and gravel	77	215
Shale	15	230
Sand and gravel	71	301

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-33-104		
Owner: R. Ludwig Driller: American Water Co.		
Surface	15	15
Sand	20	35
Clay	28	63
Sand	45	108
Shale	24	132
Sand	46	178
Shale	7	185
Sand	21	206
Shale	10	216
Sand	66	282
Well JY-65-33-105		
Owner: Garrett Krause Driller: American Water Co.		
Surface	10	10
Clay	15	25
Sand	85	110
Shale	20	130
Sand	40	170
Shale	15	185
Sand	45	230
Shale	10	240
Sand	54	294
Well JY-65-33-109		
Owner: J. Stiles Driller: Henry Ondrey		
Topsoil	1	1
Clay, gray	7	8
Clay, red	12	20
Clay, light gray	5	25
Clay, red	4	29
Sand	9	38
Clay, gray	22	60
Sand	15	75
Clay, red	13	88
Gravel	12	100

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-33-201		
Owner: B. F. Krause Driller: American Water Co.		
Surface	15	15
Sand	59	74
Shale	11	85
Sand	220	305
Well JY-65-33-208		
Owner: E. Michulka Driller: Henry Ondrey		
Topsoil	1	1
Clay, gray	4	5
Sand, fine	30	35
Clay, red	3	38
Sand coarse and gravel streaks	47	85
Well JY-65-33-303		
Owner: M. Hartman Driller: H. Rychlik		
Clay	11	11
Sand	24	35
Clay	42	77
Sand	10	87
Well JY-65-33-504		
Owner: Jack Wendt No. 1 Driller: Michelson		
Surface soil	2	2
Clay	12	14
Sand, pack	14	28
Sand	24	52
Clay	4	56
Sand	6	62
Clay and sand layers	5	67
Sand	84	151
Clay	4	155
Sand and gravel	58	213
Clay	3	216
Sand and gravel	27	243
Clay	7	250

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-33-504—Continued		
Sand and gravel	8	258
Clay	19	277
Sand and rock	49	326
Lime, shale, and sand	8	334
Gravel	25	359
Lime, shale, and sand	21	380
Sand and gravel	17	397
Clay	6	403
Well JY-65-33-602		
Owner: R. Leissner Driller: Katy Drilling Co.		
Topsoil and clay	31	31
Sand	36	67
Clay	3	70
Rock	1	71
Clay	60	131
Shale	72	203
Sand	79	282
Shale	27	309
Rock and sand	46	355
Shale	30	385
Rock and sand	34	419
Shale	26	445
Rock and sand	145	590
Well JY-65-33-608		
Owner: Mrs. W. Ellerman Driller: —		
Clay	42	42
Sand	25	67
Well JY-65-33-801		
Owner: Jack Wendt Driller: Katy Drilling Co.		
Topsoil	55	55
Clay	14	69
Sand and clay strips	71	140
Clay	6	146
Sand	119	265

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-33-801—Continued		
Clay	27	292
Sand	25	317
Clay	25	342
Sand	28	370
Clay	5	375
Sand	5	380
Clay	10	390
Sand	13	403
Clay	16	419
Sand	145	564

Well JY-65-33-801

Owner: Jack Wendt
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	55	55
Clay	14	69
Sand and clay strips	71	140
Clay	6	146
Sand	119	265
Clay	27	292
Sand	25	317
Clay	25	342
Sand	28	370
Clay	5	375
Sand	5	380
Clay	10	390
Sand	13	403
Clay	16	419
Sand	145	564

Well JY-65-33-802

Owner: United Gas Pipeline Co.
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, black	7	7
Clay, red	18	25
Sand, red	9	34
Clay, red	16	50
Clay and sand, fine	27	77
Sand	20	97

Well JY-65-33-802—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay, hard layers	38	135
Sand	12	147
Shale	10	157
Sand	20	177
Shale	8	185
Sand and shale breaks	21	206
Shale	9	215
Sand	10	225
Shale	29	254
Sand	13	267
Shale	7	274
Clay, red	43	317
Sand, coarse	26	343
Clay, blue	7	350
Sand	7	357
Clay	8	365

Well JY-65-33-803

Owner: United Gas Pipeline Co.
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, black	6	6
Clay, red	46	52
Sand, coarse	49	101
Clay, red	22	123
Sand	27	150
Clay, blue	12	162
Sand and gravel	66	228
Clay, red	22	250
Sand	18	268
Shale	48	316
Sand	30	346
Shale	7	353
Sand	3	356
Shale	8	364

Well JY-65-33-804

Owner: Ind. Gas Supply Corp.
Driller: Layne-Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface Soil	2	2
Clay	3	5

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-33-804—Continued		
Sand	30	35
Clay, red	17	52
Sand	10	62
Sand and gravel	29	91
Clay	27	118
Sand and clay streaks	29	147
Clay	6	153

Well JY-65-33-902

Owner: Dr. A. Thomas
Driller: C. C. Padon

	THICKNESS (FEET)	DEPTH (FEET)
Clay	50	50
Sand	47	97

Well JY-65-33-905

Owner: E. Straznicky
Driller: C. C. Padon

	THICKNESS (FEET)	DEPTH (FEET)
Clay	30	30
Sand	26	56

Well JY-65-34-205

Owner: W. Krenek
Driller: Henry Ondrey

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	2	2
Clay, gray	2	4
Clay, red	11	15
Sand	15	30
Clay, gray	3	33
Sand, coarse	28	61
Clay, red	9	70
Gravel	11	81

Well JY-65-34-206

Owner: E. Kovarcik
Driller: Henry Ondrey

	THICKNESS (FEET)	DEPTH (FEET)
Loam, sandy	1	1
Clay, gray	4	5
Clay, tan	3	8
Sand	12	20
Clay, red	12	32
Sand	14	46

Well JY-65-34-207

Owner: E. Bohacek
Driller: R. Matula

	THICKNESS (FEET)	DEPTH (FEET)
Clay, red	21	21
Sand, red	4	25
Clay, white	17	42
Sand, white	18	60
Clay, white	11	71
Sand and gravel	15	86

Well JY-65-34-305

Owner: R. Lubojacky
Driller: B & P Drilling Contractors

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	4	4
Clay	23	27
Sand	5	32
Clay	5	37
Sand	70	107
Clay	3	110

Well JY-65-34-408

Owner: G. Vallet
Driller: Henry Ondrey

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	1	1
Clay, yellow, gray	2	3
Clay, yellow, red	5	8
Clay, dark red	6	14
Sand	3	17
Clay, dark red	17	34
Clay, blue gray	4	38
Clay, red	9	47
Clay, gray	9	56
Clay, red	36	92
Sand, gravel	8	100

Well JY-65-34-604

Owner: W. H. Gless
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
No record	108	108
Clay	10	118
Sand, rocky	18	136

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-34-604—Continued		
Clay, sand breaks	60	196
Sand	40	236
Rock	1	237
Rocky, sand	33	270
Clay	65	335
Sand	20	355
Clay	13	368
Sand	10	378
Clay	7	385
Sand	54	439
Clay	15	454
Sand	33	487
Clay	28	515
Sand	18	533
Clay	10	543
Sand	117	660
Well JY-65-34-609		
Owner: F. Kalinec Driller: Henry Ondrey		
Sand, loam	1	1
Clay, gray	2	3
Clay, yellowish tan	6	9
Clay, red	9	18
Clay, gray, light	12	30
Clay, red	30	60
Sand, fine, red	6	66
Clay, gray	16	82
Sand, rock, clay streaks	16	98
Gravel, sand, coarse	8	106
Well JY-65-34-610		
Owner: Fairchild Farmers Gin Driller: C. C. Padon		
Clay	62	62
Well JY-65-34-701		
Owner: City of Needville Driller: Layne-Texas Co.		
Soil surface, clay	10	10
Sand and clay, sandy	35	45
Well JY-65-34-701—Continued		
Clay, sandy	24	69
Sand, brown	33	102
Sand and clay, sandy	34	136
Clay	19	155
Sand	19	174
Clay	7	181
Clay, sticky	18	199
Sand and gravel	8	207
Clay	56	263
Clay and clay, sandy	12	275
Sand and clay, sandy	33	308
Sand	30	338
Clay, sticky	20	358
Sand	65	423
Clay	12	435
Well JY-65-34-710		
Owner: City of Needville Driller: Layne-Texas Co.		
Soil and clay	8	8
Sand and clay streaks	42	50
Clay	6	56
Sand	48	104
Clay	6	110
Sand	22	132
Clay and sand streaks	21	153
Sand, coarse	24	177
Clay	22	199
Sand	10	209
Shale	41	250
Sand	30	280
Sand and shale streaks	17	297
Sand, coarse	33	330
Shale	25	355
Sand and shale	5	360
Sand, coarse	61	421
Shale	10	431

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-34-711		
Owner: Ed. Brown Driller: Raymond Matula		
Clay, red	15	15
Sand, red	11	26
Clay, white	4	30
Sand, white	25	55
Well JY-65-34-712		
Owner: J. Suchma Driller: Raymond Matula		
Clay, red	20	20
Sand, red	11	31
Clay, red	5	36
Sand, white	18	54
Well JY-65-34-803		
Owner: P. Le Gendre Driller: Raymond Matula		
Clay, white	20	20
Sand, red	38	58
Clay, red	38	96
Sand, red	27	123
Gravel	23	146
Well JY-65-34-804		
Owner: J. McRay Driller: Raymond Matula		
Clay, red	35	35
Sand, white	23	58
Clay, white	23	81
Sand, white, fine	20	101
Clay, yellow	19	120
Sand, white	10	130
Gravel	13	143
Well JY-65-34-805		
Owner: W. Smith Driller: Raymond Matula		
Clay, red	22	22
Sand, red	33	55
Clay, white	51	106
Gravel	27	133

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-34-806		
Owner: E. Reininger Driller: Industrial Driller		
Sand, brown	4	4
Clay, red	4	8
Sand, brown	46	54
Shale, gray	31	85
Sand, white	58	143
Well JY-65-34-807		
Owner: R. Kramer Driller: C. C. Padon		
Clay	70	70
Sand	20	90
Clay	30	120
Sand	16	136
Well JY-65-34-808		
Owner: W. Todd Drier Driller: C. C. Padon		
Clay	40	40
Sand	16	56
Well JY-65-34-809		
Owner: E. Miller Driller: C. C. Padon		
Clay	70	70
Sand	22	92
Well JY-65-34-810		
Owner: R. Eiteman Driller: C. C. Padon		
Clay	65	65
Sand	16	81
Well JY-65-34-901		
Owner: Walter Gless Driller: Mickelson		
Soil surface	4	4
Clay	23	27
Sand	71	98
Clay	12	110
Sand	18	128
Clay	28	156

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-34-901—Continued		
Sand	7	163
Clay	5	168
Sand	21	189
Lime shale	3	192
Sand	16	208
Lime shale	9	217
Sand	29	246
Lime shale	6	252
Sand	33	285
Gumbo	51	336
Sand	19	355
Gumbo	40	395
Lime shale and sand	11	406
Sand	14	420
Lime shale and sand	6	426
Sand	14	440
Lime shale and sand	8	448
Sand	24	472
Lime shale	27	499
Gumbo	22	521
Sand	9	530
Gumbo	14	544
Sand	73	617
Gumbo	20	637
Well JY-65-34-903		
Owner: E. Sabrsula Driller: C. C. Padon		
Clay	65	65
Sand	28	93
Well JY-65-35-301		
Owner: Humble Oil & Refining Driller: L. Patterson		
Surface material	24	24
Shale	16	40
Sand	25	65
Shale	24	89
Sand	14	103

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-35-301—Continued		
Shale	15	118
Sand	18	136
Shale	23	159
Sand	47	206
Shale	52	258
Sand	44	302
Well JY-65-35-303		
Owner: Houston Light & Power Co. Driller: Layne-Texas Co.		
Soil	2	2
Clay	9	11
Sand and clay	11	22
Clay	53	75
Clay and sand breaks	25	100
Sand	20	120
Clay	16	136
Sand	27	163
Clay	14	177
Sand and gravel	60	237
Gravel and sand	14	251
Shale	18	269
Shale	14	283
Sand, broken	18	301
Sand	21	322
Shale	67	389
Sand	14	403
Shale	10	413
Sand	6	419
Shale	23	442
Sand; gravel, small; shale breaks	41	483
Sand and gravel	120	603
Shale, sandy	10	613
Sand	20	633
Clay	6	639
Sand	29	668
Shale and sand	20	688

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-35-303—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand	34	722
Shale	5	727
Sand	10	737
Shale	8	745
Sand	56	801
Shale	2	803

Well JY-65-35-702

Owner: Jefferson Lake Sulphur
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	37	37
Sand	30	67
Clay	5	72
Sand and clay strips	73	145
Clay	74	219
Sand	59	278
Clay	17	295
Sand	12	307
Clay	78	385
Sand	15	400
Clay	22	422
Sand	62	484
Clay	114	598
Sand	52	650
Clay	30	680
Sand	45	725

Well JY-65-35-710

Owner: Jefferson Lake Sulphur
Driller: Katy Drilling Inc.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	84	84
Sand and gravel	50	134
Clay	40	174
Sand	12	186
Clay	15	201
Sand and clay strips	30	231
Clay	6	237
Sand and clay strips	25	262
Clay	7	269

Well JY-65-35-710—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand and clay strips	26	295
Clay	73	368
Sand and shale streaks	17	385
Clay	23	408
Sand	95	503
Clay	12	515

Well JY-65-35-712

Owner: Texas Gulf Sulphur Co.
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay, sandy	66	66
Sand	60	126
Shale	40	166
Sand	20	186
Shale	15	201
Sand and gravel	37	238
Shale	9	247
Sand and gravei	15	262
Clay	2	264
Shale	91	355
Sand and gravel	15	370
Shale	4	374
Shale, sandy	35	409
Shale, sandy and limestone	10	419
Shale, sticky	6	425
Shale	131	551

Well JY-65-35-713

Owner: J. I. Cobb
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	37	37
Sand	69	106
Clay	8	114
Sand	16	130
Clay	41	171
Sand	10	181
Clay	16	197
Sand, good	60	257
Clay	33	290

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-35-713—Continued		
Sand, rocky	8	298
Clay	39	337
Sand	21	358
Clay	12	370
Sand	8	378
Clay	32	410
Sand	77	487
Clay	21	508
Sand	11	519
Clay	38	557
Sand	63	620
Well JY-65-35-903		
Owner: Frank Gorka Driller: C. C. Padon		
Clay	90	90
Sand	22	112
Well JY-65-36-201		
Owner: Chicago Corp. Driller: L. Patterson		
Surface	26	26
Sand	21	47
Sand and shale	22	69
Shale	31	100
Sand	12	112
Sand and shale	22	134
Sand	24	158
Shale	84	242
Sand	22	264
Shale	22	286
Sand	22	308
Shale	43	351
Sand	24	375
Well JY-65-36-501		
Owner: Humble Oil & Refining Driller: L. Patterson		
Clay	10	10
Sand	10	20
Shale	26	46

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-36-501—Continued		
Sand	66	112
Shale	102	214
Sand	33	247
Shale	104	351
Sand	10	361
Shale	5	366
Sand	18	384
Shale	52	436
Sand, hard	6	442
Sand, water	12	454
Sand	43	497
Shale	37	534
Well JY-65-36-502		
Owner: Humble Oil & Refining Co. Driller: L. Patterson		
Surface	23	23
Sand	12	35
Shale	15	50
Sand	35	85
Shale	6	91
Sand	39	130
Shale	20	150
Sand	10	160
Shale	15	175
Sand	5	180
Shale	44	224
Sand	22	246
Shale	112	358
Sand	38	396
Shale	44	440
Sand	59	499
Shale	4	503
Well JY-65-36-503		
Owner: Humble Oil & Refining Co. Driller: L. Patterson		
Surface	23	23
Shale	22	45

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-36-503—Continued		
Sand	67	112
Shale	8	120
Sand	8	128
Shale	94	222
Sand	28	250
Shale	60	310
Sand	10	320
Shale	34	354
Sand	42	396
Shale	43	439
Sand	56	495
Well JY-65-42-201		
Owner: R. Leissner Driller: Katy Drilling Co.		
Topsoil, sand and clay	58	58
Gravel and clay	14	72
Clay	5	77
Sand and clay strips	76	153
Sand	9	162
Clay	18	180
Sand	21	201
Clay	37	238
Sand and clay strips	14	252
Clay	96	348
Sand	28	376
Clay	25	401
Sand	19	420
Clay	21	441
Sand	29	470
Clay	9	479
Sand	45	524
Clay	36	560
Sand	130	690
Sand and clay strips	13	703
Sand and rock	15	718
Clay	11	729
Sand and rock	30	759

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-42-202		
Owner: Danklefs and Wendt Driller: Katy Drilling Co.		
Clay	9	9
Sand	26	35
Clay	55	90
Sand	38	128
Clay	30	158
Sand	7	165
Clay	23	188
Sand	10	198
Clay	28	226
Sand	13	239
Clay	13	252
Sand	6	258
Clay	35	293
Sand	85	378
Clay	79	457
Sand, rocky	14	471
Shale	7	478
Sand, rocky	7	485
Shale	6	541
Sand	117	658
Shale	9	667
Sand	82	749
Shale	9	758
Sand	29	787
Shale	15	802
Sand	20	822
Rock	1	823
Sand	9	832
Shale	14	846
Rock	1	847
Sand	33	880
Sand	36	916
Shale	6	922
Sand	114	1,036
Shale	114	1,050

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-42-202—Continued		
Sand	15	1,065
Shale	13	1,078
Sand	21	1,099
Well JY-65-42-203		
Owner: J. Moore Driller: Katy Drilling Co.		
Topsoil	28	28
Sand	13	41
Clay	18	59
Sand	69	128
Clay	50	178
Sand, rocky	27	205
Clay	16	221
Sand, rocky	41	262
Clay	30	292
Sand	8	300
Clay	17	317
Sand, rocky	80	397
Clay	55	452
Sand	58	510
Clay	10	520
Sand	50	570
Sand, rocky	13	583
Clay	4	587
Sand	8	595
Clay	3	598
Sand	55	653
Clay	20	673
Sand and rock	63	736
Clay	5	741
Sand	18	759
Clay	7	766
Sand	26	792
Well JY-65-42-206		
Owner: Danklefs and Wendt Driller: Katy Drilling Co.		
Surface clay	25	25
Sand	15	40

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-42-206—Continued		
Clay	39	79
Sand	10	89
Clay	13	102
Sand	18	120
Clay	32	152
Sand and rocks	20	172
Clay	41	213
Sand	16	229
Clay	21	250
Sand	5	255
Clay	29	284
Sand	29	313
Clay	27	340
Sand	30	370
Clay	29	399
Sand	17	416
Clay	20	436
Sand, rocky	27	463
Clay	38	501
Sand	24	525
Clay	14	539
Sand and rock strips	20	559
Clay and rock strips	10	569
Sand and rock strips	79	648
Clay	6	654
Sand and rock strips	52	706
Shale	33	739
Sand and rock strips	6	745
Shale	9	754
Sand	20	774
Shale	6	780
Sand	26	806
Shale	5	811
Sand	4	815
Shale	7	822
Sand, rocky	96	918
Shale	15	933
Sand and limerock	106	1,039

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-42-206—Continued		
Shale	8	1,047
Sand	35	1,082
Well JY-65-42-207		
Owner: J. Moore Driller: Katy Drilling Co.		
Surface clay	20	20
Sand	100	120
Clay	27	147
Sand	17	164
Clay	24	188
Sand	10	198
Clay	19	217
Sand	22	239
Clay	8	247
Sand and rock	10	257
Clay	38	295
Sand	30	325
Clay	11	336
Sand	37	373
Clay	8	381
Sand	10	391
Clay and sand streaks	30	421
Clay	35	456
Sand	46	502
Clay	51	553
Sand and rock strips	101	654
Clay	11	665
Sand and rock strips	36	701
Lime rock	10	711
Sand	13	724
Clay	28	752
Sand	27	779
Clay and lime strips	5	784
Sand and rock strips hard	119	903
Clay	15	918
Sand, rocky	26	944
Well JY-65-42-207—Continued		
Clay	11	955
Sand, rocky	67	1,022
Clay and lime rock	11	1,033
Sand, rocky	21	1,054
Clay and lime strips	11	1,065
Sand and rock strips	40	1,105
Clay	46	1,151
Sand	3	1,154
Well JY-65-42-208		
Owner: E. Mesecke Driller: R. Matula		
Clay, red	10	10
Sand, red	11	21
Clay, white	10	31
Sand, white	5	36
Clay, white	4	40
Sand, white	14	54
Well JY-65-42-209		
Owner: J. Suchma Est. Driller: C. Padon		
Clay	60	60
Sand	13	73
Well JY-65-42-302		
Owner: C. A. Danklefs No. 2 Driller: Layne-Texas Co.		
Topsoil	2	2
Clay	14	16
Sand	14	30
Clay, sandy	65	95
Clay	10	105
Sand and gravel	65	170
Clay	113	283
Sand	12	295
Clay	22	317
Sand	58	375
Clay	80	455

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-42-302—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay, sandy	25	480
Sand	62	542
Clay	14	556

Well JY-65-42-303

Owner: C. Danklefs
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Sand	18	28
Clay	34	62
Sand	52	114
Clay	120	234
Sand	21	255
Clay	25	280
Sand	21	301
Clay	32	333
Sand	25	358
Clay	58	416
Sand	36	452
Clay	28	480
Sand, rocky	61	541
Clay, shale	105	646
Sand, rocky	31	677
Clay	15	692
Sand, rocky	9	701
Rock	1	702
Sand, rocky	33	735
Clay	103	838
Sand	12	850
Clay	33	883
Sand	17	900
Clay	3	903
Sand, rocky	41	944
Clay	19	963
Sand, rocky	19	982
Clay	4	986
Sand, rocky	104	1,090

Well JY-65-42-306

Owner: Mrs. F. Marek
Driller: C. Padon

	THICKNESS (FEET)	DEPTH (FEET)
Clay	40	40
Sand	20	60

Well JY-65-42-307

Owner: G. Armstrong Est.
Driller: C. Padon

	THICKNESS (FEET)	DEPTH (FEET)
Clay	70	70
Sand	16	86

Well JY-65-42-601

Owner: R. Swahr
Driller: P. Griffith

	THICKNESS (FEET)	DEPTH (FEET)
Loam, sandy, gray	6	6
Clay, yellow	9	15
Sand and clay, gray	23	38
Sand, brown	14	52
Shale, gray	36	88
Sand, broken and sand, brown	42	130

Well JY-65-43-101

Owner: Clarence Danklefs
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	80	80
Sand	35	115
Clay	15	130
Sand	15	145
Clay	72	217
Sand	23	240
Clay	40	280
Sand	22	302
Clay	110	412
Sand	60	472
Clay	51	523
Sand	37	560
Clay	55	615
Sand	25	640
Clay	53	693

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-65-43-101—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand	67	760
Clay	31	791
Sand	19	810
Clay	25	835
Sand	8	843
Clay	64	907
Sand and rock	32	939
Clay	9	948
Sand and rock	157	1,105
Shale	23	1,128
Sand and rock	67	1,195
Bottom shale	0	1,195

Well JY-65-43-201

Owner: Gless and Beard
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	30	30
Clay	15	45
Quicksand	20	65
Clay	25	90
Sand	35	125
Clay	9	134
Sand	16	150
Clay	145	295
Sand and rock	18	313
Clay	57	370
Sand	33	403
Clay	35	438
Sand and rock	40	478
Clay	10	488
Sand and rock	12	500
Clay	11	511
Sand and rock	67	578
Clay	60	638
Sand, rocky	20	658
Clay	20	678
Sand, rocky	43	721
Clay	13	734

Well JY-65-43-201—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, rocky	81	815
Clay	20	835
Sand, rocky	22	857
Clay and rock	23	880
Sand, rocky	73	953
Clay	12	965
Sand, rocky	40	1,005
Clay	18	1,023
Sand, rocky	16	1,039
Shale, sandy	29	1,068
Sand and rock	90	1,158
Bottom rock	0	1,158

Well JY-65-43-301

Owner: Jungman
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Sand	92	102
Clay	18	120
Sand	41	161
Clay	33	194
Sand	30	224
Clay	60	284
Sand	25	309
Clay	72	381
Sand	8	389
Clay	60	449
Sand	31	480
Clay	32	512
Sand	41	553
Clay	38	591
Sand	29	620
Clay	44	664
Sand	36	700
Clay	10	710
Sand	28	738
Clay	32	770
Sand	14	784

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-43-301—Continued		
Clay	56	840
Sand	65	905
Clay	21	926
Sand	76	1,002
Clay	5	1,007
Sand	58	1,065
Clay	25	1,090
Sand	65	1,155
Well JY-65-43-504		
Owner: Charles & James Gless Driller: Katy Drilling Co.		
Clay	15	15
Sand	60	75
Shale	15	90
Sand	18	108
Shale	32	140
Sand	24	164
Shale	16	180
Sand	5	185
Shale	140	325
Sand with hard strips	18	343
Shale	17	360
Sand	15	375
Clay	201	576
Sand	72	648
Clay	22	670
Sand	89	759
Clay	5	764
Well JY-65-43-601		
Owner: Mash Estate Driller: A. Justman		
Topsoil	55	55
Sand	47	102
Clay	26	128
Sand	10	138
Clay	82	220
Sand	30	250
Well JY-65-43-601—Continued		
Clay	16	266
Sand	39	305
Clay	100	405
Sand	77	482
Well JY-65-43-605		
Owner: Phelan Sulphur Co. Driller: Freeport Sulphur Co.		
Surface soil and clay	54	54
Sand and shale	9	63
Clay and shale	30	93
Sand and gravel	28	121
Gumbo and shale	45	166
Sand	7	173
Gumbo and shale	230	403
Sand	39	442
Shale	2	444
Sand	8	452
Gumbo and shale	30	482
Sand	23	505
Gumbo and shale	47	552
Sand	24	576
Shale	21	597
Sand	8	605
Gumbo and shale	75	680
Sand	114	794
Gumbo and shale	2	796
Sand	18	814
Shale	2	816
Sand	4	820
Shale	1	821
Well JY-65-43-609		
Owner: Phelon Sulphur Co. Driller: Layne-Texas Co.		
Topsoil	2	2
Clay, gray	3	5
Clay, yellow	8	13
Clay layers, red and yellow	20	33

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-43-609—Continued		
Clay, yellow	10	43
Clay, red	10	53
Sand, white, fine	14	67
Clay, red	33	100
Sand, white, fine	17	117
Sand, white coarse, fine, gravel	20	137
Clay, red	33	170
Clay and sandy clay	10	180
Clay, red	11	191
Clay, sandy	4	195
Clay, red and white	16	211
Clay, white	14	225
Clay, red and white	46	271
Clay, red and yellow	5	276
Shale, sandy, little gravel	25	301
Shale, sandy	14	315
Shale, sandy	14	315
Sand, coarse, fine gravel	18	333
Sand and gravel, coarse	16	349
Sand	3	352
Shale, sandy	6	358
Clay, yellow	8	366
Sand, gravel, and clay streaks	9	375
Clay, gray and red	22	397
Clay and sandy clay	13	410
Shale, gray and streaks of sandy shale	32	442
Shale, gray and streaks of gravel	19	461
Shale, gray	17	478
Sand, white, fine and layers of shale	25	503
Shale, gray	46	549
Shale, gray and fine gravel	15	564
Shale sandy and fine gravel	31	595

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-43-609—Continued		
Sand, gray	5	600
Clay, brown and gray	4	604
Shale and gravel streaks	10	614
Sand and gravel streaks	4	618
Clay, gray	9	627
Shale, sandy and fine gravel	7	634
Clay, gray	10	644
Shale and sand streaks	11	655
Sand and clay streaks	22	677
Sand and clay streaks	23	700
Shale, sandy	16	716
Sand and shale streaks	14	730
Clay and sand streaks	31	761
Shale and fine gravel	14	775
Sand and fine gravel	22	797
Sand, fine	16	813
Shale	7	820
Shale, sandy streaks	35	855
Shale	3	858

Well JY-65-44-101

Owner: J. Q. Vencil
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	61	61
Sand	42	103
Clay	11	114
Sand	55	169
Clay	12	181
Sand	33	214
Clay and sand strips	37	251
Rock	2	253
Sand and rock	99	352
Clay	9	361
Sand	2	363
Clay	8	371
Sand	25	396
Clay	128	524

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-65-44-101—Continued		
Sand	10	534
Clay	7	541
Sand	21	562
Clay	8	570
Sand, fine, tight	84	654
Clay, tight	31	685
Sand and small clay strips	45	730
Sand and rock	56	786
Clay	55	841
Sand	33	874
Clay	7	881
Sand	13	894
Clay	25	919
Sand	15	934
Well JY-65-44-102		
Owner: Edward Bailey Driller: C. C. Padon		
Clay	70	70
Sand	23	93
Well JY-66-24-607		
Owner: R. E. A. Ranch Driller: Phemann Water Well Service		
Surface, sandy	11	11
Clay, brown	44	55
Sand and gravel	85	140
Stone, soft, layers, with cream colored clay	91	231
Sand, white, fine	16	247
Stone, hard	6	253
Clay, white gummy	26	279
Stone, lime, hard	2	281
Sand, white, coarse	12	293
Rock	0	293
Well JY-66-32-201		
Owner: Jerry Kulhanek Driller: American Water Co.		
Surface	15	15
Clay	35	50

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-66-32-201—Continued		
Sand	20	70
Clay	10	80
Sand and gravel	35	115
Shale	9	124
Sand	21	145
Shale	15	160
Sand	22	182
Well JY-66-32-601		
Owner: Joe Somers Driller: American Water Co.		
Surface	10	10
Sand	10	20
Clay	30	50
Sand	20	70
Clay	10	80
Sand	40	120
Shale	20	140
Sand	134	274
Well JY-66-32-901		
Owner: George Buls Driller: Katy Drilling Co.		
Topsoil and clay	30	30
Sand	20	50
Clay	41	91
Sand and gravel	11	102
Clay	58	160
Sand	20	180
Clay	12	192
Sand	60	252
Clay	17	269
Sand and rock	27	296
Clay	6	302
Sand	17	319
Clay	15	334
Sand	32	366

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-66-32-902		
Owner: Simon Kucera Driller: American Water Co.		
Surface	15	15
Clay	15	30
Clay	45	75
Sand	43	118
Shale	12	130
Sand	42	172
Shale	33	205
Sand	45	250
Shale	13	263
Sand	41	304
Well JY-66-32-903		
Owner: A. Vacek Driller: American Water Co.		
Surface	10	10
Clay	55	65
Sand	50	115
Shale	30	145
Sand and gravel	165	310
Well JY-66-32-904		
Owner: Leroy Stade Driller: American Water Co.		
Surface	10	10
Sand	25	35
Clay	35	70
Sand	46	116
Clay	34	150
Sand	26	176
Shale	32	208
Sand	113	321
Well JY-66-32-905		
Owner: W. Duncan Driller: American Water Co.		
Surface	5	5
Clay	15	20
Sand	55	75

	THICKNESS (FEET)	DEPTH (FEET)
Well JY-66-32-905—Continued		
Clay	15	90
Sand	40	130
Shale	26	156
Sand	24	180
Shale	28	208
Sand	62	270
Well JY-66-40-301		
Owner: R. Sablatura Driller: Crawell Bros.		
Clay	38	38
Sand	34	72
Gravel	10	82
Clay	6	88
Gravel	5	93
Clay	17	110
Sand, fine	8	118
Shale	36	154
Sand, fine	10	164
Shale	7	171
Sand, fine	10	181
Shale	10	191
Sand	13	204
Gravel	21	225
Shale	20	245
Gravel	40	285
Shale	3	288
Sand streaks	2	290
Well JY-66-40-603		
Owner: G. Collins Driller: Industrial Drillers		
Clay, brown	12	12
Sand, brown	10	22
Shale, clay, gray	26	48
Sand and gravel, red	28	76
Clay, red	2	78

Table 6.—Water Levels in Wells

Well JY-65-09-906

Owner: Don McMillian Farms

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 13, 1959	86.84
Mar. 15, 1961	85.20
Mar. 19, 1962	85.44
Mar. 18, 1963	86.64
Nov. 23, 1964	94.75
Mar. 8, 1965	91.26
Nov. 16, 1965	95.85
Mar. 8, 1966	98.14
Nov. 18, 1966	103.01
Mar. 2, 1967	92.42
Mar. 5, 1968	96.77
Mar. 13, 1969	97.61

Well JY-65-10-702

Owner: Earl MacMillian

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 15, 1939	57.77
Sept. 19, 1939	62.90
Dec. 21, 1939	60.25
Mar. 12, 1940	59.50
Apr. 26, 1940	59.40
Oct. 4, 1940	65.82
Jan. 23, 1941	61.57
Mar. 11, 1941	61.32
May 15, 1941	60.62
Oct. 24, 1941	62.35
Jan. 19, 1942	60.95
Mar. 17, 1942	60.30
Sept. 22, 1942	64.22
Apr. 12, 1943	60.05
Nov. 8, 1943	64.18
Mar. 29, 1944	63.10
Oct. 5, 1944	68.70
Mar. 16, 1945	62.86
Nov. 1, 1945	64.57
Mar. 28, 1946	63.24
Mar. 28, 1947	63.66

Well JY-65-10-702—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 19, 1948	64.85
Nov. 19, 1948	69.66
Mar. 7, 1949	67.56
Nov. 23, 1949	70.28
Mar. 15, 1950	68.43
Nov. 16, 1950	72.17
Mar. 21, 1951	70.31
Nov. 13, 1951	74.10
Mar. 11, 1952	72.85
July 22, 1952	76.76
Nov. 21, 1952	76.59
Mar. 25, 1953	74.62
Nov. 23, 1953	77.04
Mar. 15, 1954	76.26
Nov. 30, 1954	78.85
Mar. 11, 1955	77.64
Nov. 15, 1955	80.70
Mar. 9, 1956	79.46
Nov. 16, 1956	83.67
Mar. 18, 1957	81.37
Dec. 2, 1957	84.26
Mar. 19, 1958	83.08
Dec. 1, 1958	85.41
Mar. 11, 1959	85.60
Nov. 13, 1959	87.15
Mar. 7, 1960	85.78
Nov. 29, 1960	87.59
Mar. 15, 1961	87.82
Nov. 20, 1961	89.20
Mar. 19, 1962	86.32
Mar. 18, 1963	87.77
Mar. 11, 1964	90.68
Nov. 23, 1964	95.52
Mar. 8, 1965	91.96
Nov. 16, 1965	95.79
Mar. 8, 1966	93.90

Well JY-65-10-702—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 2, 1967	94.16
Mar. 5, 1968	96.97
Mar. 13, 1969	101.28

Well JY-65-10-703

Owner: P. V. Cook, Well No. 3

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 11, 1932	55.76
Sept. 29, 1932	55.49
Mar. 18, 1933	46.66
Jan. 6, 1939	46.32
Mar. 10, 1939	49.01
Sept. 19, 1939	56.84
Dec. 21, 1939	52.64
Mar. 12, 1940	51.30
Apr. 26, 1940	53.19
Oct. 4, 1940	57.86
Jan. 23, 1941	54.04
Mar. 11, 1941	53.53
May 15, 1941	52.67
Oct. 24, 1941	54.52
Jan. 15, 1942	52.66
Mar. 17, 1942	51.57
Sept. 21, 1942	56.25
Apr. 12, 1943	51.45
Nov. 8, 1943	56.74
Mar. 29, 1944	53.23
Oct. 4, 1944	59.95
Mar. 16, 1945	55.67
Nov. 1, 1945	58.97
Mar. 21, 1946	55.29
Mar. 28, 1947	55.43
Mar. 19, 1948	57.45
Nov. 16, 1948	65.57
Jan. 25, 1949	63.34
Mar. 7, 1949	62.50
Nov. 23, 1949	66.72
Mar. 13, 1950	65.14

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-10-703—Continued	
Nov. 16, 1950	68.89
Mar. 21, 1951	65.92
Nov. 13, 1951	71.22
Mar. 11, 1952	68.85
July 22, 1952	72.64
Nov. 21, 1952	72.51
Mar. 25, 1953	69.87
Nov. 23, 1953	73.19
Mar. 15, 1954	72.11
Nov. 30, 1954	75.53
Mar. 11, 1955	73.83
Nov. 15, 1955	76.91
Mar. 9, 1956	75.45
Nov. 16, 1956	80.01
Mar. 13, 1957	77.39
Dec. 2, 1957	79.76
Mar. 19, 1958	79.19
Dec. 1, 1958	82.49
Mar. 11, 1959	80.50
Nov. 13, 1959	82.97
Mar. 7, 1960	81.94
Nov. 29, 1960	83.95
Mar. 15, 1961	82.09
Nov. 20, 1961	84.88
Mar. 19, 1962	83.21
Nov. 28, 1962	86.95
Mar. 18, 1963	84.98
Mar. 11, 1964	88.11
Nov. 23, 1964	100.42
Mar. 8, 1965	89.61
Nov. 16, 1965	93.07
Mar. 8, 1966	92.60
Mar. 2, 1967	92.44
Mar. 5, 1968	95.29
Mar. 12, 1969	97.8
Well JY-65-17-201	
Owner: Richard Woods	
Mar. 19, 1958	84.65
Dec. 2, 1958	88.32
Mar. 11, 1959	85.80
Nov. 16, 1959	87.93
Mar. 8, 1960	85.98
Nov. 28, 1960	86.89
Mar. 15, 1961	85.24
Nov. 20, 1961	86.96
Mar. 19, 1962	84.84
Nov. 29, 1962	87.72
Mar. 19, 1963	85.59
Feb. 26, 1964	87.78
Nov. 17, 1964	91.09
Mar. 10, 1965	88.53
Nov. 16, 1965	91.61
Mar. 14, 1966	89.77
Mar. 7, 1967	90.79
Mar. 7, 1968	92.66
Dec. 17, 1968	94.84
Mar. 14, 1969	93.71
Well JY-65-17-205	
Owner: Richard Woods	
Oct. 2, 1940	69.07
Jan. 23, 1941	67.22
Mar. 15, 1941	66.70
Oct. 27, 1941	66.53
Jan. 19, 1942	65.51
Mar. 17, 1942	65.11
Sept. 23, 1942	66.05
Apr. 13, 1943	64.52
Nov. 9, 1943	66.56
Mar. 29, 1944	64.95
Oct. 6, 1944	67.00
Mar. 16, 1945	65.45
Nov. 5, 1945	66.48
Well JY-65-17-205—Continued	
Mar. 21, 1946	64.80
Mar. 24, 1947	64.23
Mar. 19, 1948	65.31
Nov. 19, 1948	70.36
Mar. 8, 1949	68.38
Dec. 1, 1949	71.61
Mar. 13, 1950	70.66
Nov. 22, 1950	73.63
Mar. 21, 1951	72.40
Mar. 13, 1952	73.82
July 29, 1952	83.88
Nov. 21, 1952	78.01
Mar. 31, 1953	76.48
Nov. 24, 1953	78.00
Mar. 16, 1954	77.76
Dec. 3, 1954	80.42
Mar. 16, 1955	79.49
Nov. 17, 1955	83.67
Mar. 9, 1956	81.61
Mar. 15, 1957	82.91
Dec. 2, 1957	86.48
Measurement discontinued	
Well JY-65-17-304	
Owner: P. V. Cook	
Mar. 15, 1939	63.12
Sept. 19, 1939	63.00
Dec. 21, 1939	61.01
Apr. 26, 1940	60.80
Oct. 1, 1940	64.84
Jan. 23, 1941	61.81
Mar. 11, 1941	61.45
May 15, 1941	60.66
Oct. 24, 1941	61.40
Jan. 15, 1942	60.01
Mar. 17, 1942	59.50
Apr. 12, 1943	59.35

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-17-304—Continued	
Apr. 15, 1947	64.09
Dec. 17, 1968	88.12
Measurement discontinued	
Well JY-65-17-306	
Owner: C. C. Cardiff	
Oct. 1, 1940	66.20
Mar. 11, 1941	63.56
May 15, 1941	63.08
Oct. 24, 1941	64.50
Apr. 14, 1947	64.99
Feb. 2, 1960	85.67
Well JY-65-17-404	
Owner: Southern Pacific R. R.	
May 14, 1947	18.50
Mar. 4, 1948	22.68
Sept. 7, 1949	30.61
Jan. 31, 1950	29.11
Sept. 5, 1950	31.11
Jan. 19, 1951	32.23
Aug. 29, 1951	34.97
Aug. 6, 1952	33.53
Jan. 20, 1953	36.55
July 20, 1953	35.10
Aug. 2, 1954	39.06
Aug. 17, 1955	40.58
Jan. 23, 1956	39.99
Aug. 10, 1956	41.58
Jan. 21, 1957	43.41
Aug. 1, 1957	39.83
Feb. 3, 1958	38.96
Aug. 5, 1958	39.31
Aug. 11, 1959	39.26
Jan. 17, 1961	38.11
Aug. 28, 1961	39.51
Jan. 18, 1962	36.15
Feb. 4, 1963	38.60
Well JY-65-17-404—Continued	
Aug. 26, 1963	41.54
Jan. 27, 1964	42.71
Jan. 18, 1965	48.69
Dec. 16, 1968	60.65
Well JY-65-17-406	
Owner: Pecan Acres, Inc.	
Sept. 11, 1931	27.40
Mar. 15, 1939	27.06
Dec. 21, 1939	28.57
Mar. 12, 1940	29.56
Apr. 26, 1940	28.74
Oct. 1, 1940	29.41
Measurement discontinued	
Well JY-65-18-101	
Owner: C. C. Cardiff	
Nov. 16, 1950	73.84
Mar. 21, 1951	68.21
Nov. 13, 1951	75.68
Mar. 11, 1952	71.48
July 22, 1952	81.62
Nov. 21, 1952	78.28
Mar. 25, 1953	72.20
Nov. 19, 1953	77.81
Mar. 15, 1954	74.50
Nov. 30, 1954	80.49
Mar. 11, 1955	77.67
Nov. 15, 1955	81.73
Mar. 9, 1956	78.76
Nov. 16, 1956	85.63
Mar. 13, 1957	81.15
Dec. 2, 1957	86.03
Mar. 17, 1958	81.84
Dec. 1, 1958	86.94
Mar. 11, 1959	83.08
Nov. 13, 1959	87.04
Mar. 7, 1960	83.78
Well JY-65-18-101—Continued	
Nov. 29, 1960	86.87
Mar. 15, 1961	84.05
Nov. 20, 1961	88.01
Mar. 19, 1962	84.59
Nov. 28, 1962	90.05
Mar. 18, 1963	86.38
Mar. 11, 1964	89.44
Mar. 8, 1965	90.90
Nov. 16, 1965	95.66
Mar. 8, 1966	93.90
Nov. 18, 1966	97.06
Mar. 2, 1967	93.18
Nov. 27, 1967	99.61
Mar. 5, 1968	96.16
Nov. 20, 1968	101.38
Mar. 12, 1969	97.47
Well JY-65-18-103	
Owner: C. C. Cardiff	
Mar. 24, 1931	53.21
Mar. 18, 1933	53.34
Jan. 6, 1939	57.44
Mar. 10, 1939	56.46
Sept. 19, 1939	64.84
Dec. 21, 1939	60.04
Mar. 12, 1940	58.44
Oct. 1, 1940	64.40
Jan. 23, 1941	60.60
Mar. 11, 1941	59.97
Oct. 24, 1941	60.94
Jan. 19, 1942	58.84
Mar. 17, 1942	58.37
Sept. 21, 1942	62.94
Apr. 12, 1943	60.60
Nov. 8, 1943	64.00
Mar. 29, 1944	59.70
Oct. 5, 1944	68.30

Table 6.—Water Levels in Wells—Continued

Well JY-65-18-103—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 16, 1945	60.45
Nov. 1, 1945	65.53
Mar. 21, 1946	61.55
Mar. 28, 1947	61.48
Apr. 14, 1947	61.11
Mar. 19, 1948	63.62
Nov. 16, 1948	71.47
Jan. 25, 1949	68.42
Mar. 7, 1949	67.14
Nov. 23, 1949	72.35
Mar. 13, 1950	66.93
Nov. 16, 1950	74.34
Mar. 21, 1951	68.76
Nov. 13, 1951	77.56
Mar. 11, 1952	72.58
July 22, 1952	79.77
Nov. 21, 1952	79.42
Mar. 25, 1953	73.86
Nov. 19, 1953	79.46
Mar. 15, 1954	75.17
Nov. 30, 1954	84.93
Mar. 11, 1955	79.02
Nov. 15, 1955	83.17
Mar. 9, 1956	79.39
Nov. 16, 1956	86.70
Mar. 13, 1957	82.75
Dec. 2, 1957	86.18
Mar. 17, 1958	83.48
Dec. 1, 1958	87.44
Mar. 11, 1959	84.54
Nov. 13, 1959	88.89
Mar. 7, 1960	85.23
Nov. 29, 1960	87.95
Mar. 15, 1961	85.39
Nov. 20, 1961	88.84
Mar. 19, 1962	86.15
Nov. 28, 1968	91.22
Mar. 18, 1963	88.14
Mar. 11, 1964	91.87
Nov. 23, 1964	100.46
Mar. 8, 1965	94.14
Nov. 16, 1965	96.03
Mar. 8, 1966	92.42
Nov. 18, 1966	96.73
Mar. 2, 1967	93.91
Nov. 27, 1967	96.44
Mar. 5, 1968	97.67
Nov. 20, 1968	99.66
Mar. 12, 1969	97.34

Well JY-65-18-105

Owner: P. V. Cook

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 24, 1931	51.79
May 15, 1931	50.80
Sept. 29, 1932	57.55
Mar. 18, 1933	53.57
Jan. 6, 1939	58.15
Mar. 10, 1939	57.17
Sept. 19, 1939	63.40
Dec. 21, 1939	60.52
Mar. 12, 1940	59.40
Apr. 26, 1940	59.74
Mar. 11, 1941	61.55
May 15, 1941	60.45
Oct. 24, 1941	61.88
Jan. 15, 1942	60.36
Mar. 17, 1942	59.54
Sept. 21, 1942	63.30
Apr. 12, 1943	59.05
Nov. 8, 1943	63.61
Mar. 29, 1944	62.19
Oct. 5, 1944	66.10
Mar. 10, 1945	64.80

Well JY-65-18-105—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 1, 1945	65.64
Mar. 21, 1946	68.94
Mar. 29, 1946	68.91
Mar. 28, 1947	69.38
Mar. 19, 1948	64.56
Nov. 16, 1948	70.16
Mar. 7, 1949	68.05
Nov. 23, 1949	70.65
Mar. 13, 1950	70.44
Nov. 16, 1950	73.38
Mar. 21, 1951	71.46
Mar. 11, 1952	74.55
Nov. 19, 1953	78.22
Mar. 15, 1954	77.56

Measurement discontinued

Well JY-65-18-106

Owner: C. C. Cardiff

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 25, 1931	62.82
Sept. 19, 1939	61.35
Dec. 21, 1939	60.87
Mar. 12, 1940	62.07
Apr. 26, 1940	61.17
Oct. 1, 1940	65.07
Mar. 11, 1941	62.05
Oct. 24, 1941	62.60
Jan. 19, 1942	61.16
Mar. 17, 1942	60.69
Apr. 14, 1947	62.27

Measurement discontinued

Well JY-65-18-110

Owner: J. L. Rose

DATE	WATER LEVEL BELOW LSD (FEET)
June 2, 1941	62.73
July 3, 1941	63.47
Aug. 16, 1941	65.63
Oct. 22, 1941	62.82
Jan. 19, 1942	61.50

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-110—Continued	
Mar. 17, 1942	60.91
Sept. 22, 1942	63.40
Measurement discontinued	
Well JY-65-18-202	
Owner: Cinco Ranch	
May 30, 1945	62.00
Jan. 22, 1960	79.51
Mar. 7, 1960	78.46
Nov. 22, 1960	81.28
Mar. 15, 1961	78.37
Nov. 20, 1961	82.46
Mar. 19, 1962	78.96
Mar. 18, 1963	81.59
Mar. 13, 1964	84.77
Mar. 8, 1965	86.03
Mar. 8, 1966	87.90
Mar. 2, 1967	88.53
Mar. 5, 1968	91.57
Mar. 12, 1969	93.24
Well JY-65-18-203	
Owner: R. Robertson	
Mar. 24, 1931	34.47
Mar. 18, 1933	41.75
Jan. 6, 1939	40.76
Mar. 10, 1939	39.94
Sept. 19, 1939	52.94
Dec. 21, 1939	44.08
Mar. 12, 1940	41.95
Apr. 26, 1940	42.06
Oct. 1, 1940	50.38
Jan. 23, 1941	43.55
Mar. 11, 1941	42.56
May 16, 1941	41.57
Apr. 14, 1947	43.83
Measurement discontinued	

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-204	
Owner: Cardiff Bros.	
Oct. 1, 1940	60.65
Mar. 11, 1941	53.93
May 16, 1941	53.08
Oct. 24, 1941	54.59
Jan. 19, 1942	52.48
Mar. 17, 1942	51.88
Sept. 21, 1942	56.52
Nov. 8, 1943	56.94
Mar. 15, 1944	53.38
Oct. 5, 1944	62.90
Mar. 16, 1945	54.03
Nov. 1, 1945	60.72
Mar. 29, 1946	54.91
Mar. 28, 1947	54.58
Mar. 19, 1948	57.27
Nov. 19, 1948	65.81
Mar. 7, 1949	61.59
Nov. 23, 1949	66.63
Mar. 13, 1950	62.74
Nov. 16, 1950	68.73
Mar. 21, 1951	65.08
Nov. 13, 1951	73.61
Mar. 11, 1952	68.48
Well JY-65-18-501	
Owner: L. Pauli	
Mar. 24, 1931	39.40
Aug. 19, 1932	49.45
Mar. 18, 1933	40.66
Jan. 6, 1939	43.16
Mar. 10, 1939	42.48
Sept. 19, 1939	52.35
Dec. 21, 1939	45.28
Mar. 12, 1940	44.43
Apr. 26, 1940	44.58

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-501—Continued	
Oct. 1, 1940	51.65
Jan. 23, 1941	45.41
Mar. 11, 1941	44.99
May 16, 1941	43.65
Oct. 24, 1941	44.95
Jan. 15, 1942	42.99
Mar. 17, 1942	42.47
Sept. 21, 1942	47.36
Apr. 12, 1943	42.96
Nov. 8, 1943	48.00
Mar. 15, 1944	44.10
Oct. 4, 1944	54.30
Mar. 16, 1945	44.82
Nov. 1, 1945	49.90
Mar. 29, 1946	44.81
Mar. 28, 1947	44.87
Mar. 19, 1948	48.03
Nov. 16, 1948	57.47
Jan. 25, 1949	53.41
Mar. 7, 1949	52.32
Nov. 23, 1949	57.77
Mar. 13, 1950	53.29
Nov. 16, 1950	60.37
Mar. 21, 1951	57.60
Nov. 13, 1951	66.03
Mar. 11, 1952	59.67
Nov. 21, 1952	69.18
Mar. 25, 1953	61.38
Nov. 19, 1953	67.81
Mar. 15, 1954	61.98
Mar. 11, 1955	65.60
Mar. 9, 1956	59.90
Measurement discontinued	

Table 6.–Water Levels in Wells–Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-503	
Owner: L. Pauli	
June 11, 1931	45.25
Mar. 18, 1933	35.50
Jan. 6, 1939	38.53
Mar. 10, 1939	37.75
Sept. 19, 1939	46.80
Dec. 21, 1939	41.07
Mar. 12, 1940	40.12
Apr. 26, 1940	40.20
Oct. 1, 1940	48.70
Jan. 23, 1941	41.35
Mar. 11, 1941	40.54
May 16, 1941	39.54
Oct. 22, 1941	41.16
Jan. 19, 1942	38.91
Mar. 17, 1942	38.46
Sept. 22, 1942	43.62
Apr. 12, 1943	40.45
Nov. 8, 1943	42.34
Mar. 15, 1944	38.15
Mar. 16, 1945	39.25
Nov. 1, 1945	46.53
Mar. 29, 1946	41.02
Mar. 28, 1947	38.18
Mar. 19, 1948	46.76
Nov. 23, 1949	55.40
Mar. 13, 1950	50.35
Nov. 16, 1950	58.44
Mar. 21, 1951	53.36
Nov. 13, 1951	64.65
Mar. 11, 1952	57.25
Mar. 25, 1953	59.42
Measurement discontinued	
Well JY-65-18-504	
Owner: M. A. McDonald	
Apr. 18, 1947	47.05
Mar. 4, 1948	50.24

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-504–Continued	
Sept. 7, 1949	75.80
Jan. 27, 1950	56.36
Sept. 5, 1950	76.77
Jan. 19, 1951	59.08
Aug. 29, 1951	93.74
Jan. 16, 1952	63.28
Aug. 6, 1952	85.25
Jan. 20, 1953	65.66
July 20, 1953	91.05
Feb. 2, 1954	66.18
Aug. 3, 1954	96.72
Feb. 2, 1955	69.05
Aug. 17, 1955	91.08
Jan. 23, 1956	70.12
Aug. 10, 1956	101.80
Feb. 3, 1958	72.39
Aug. 5, 1958	88.60
Measurement discontinued	
Well JY-65-18-602	
Owner: E. W. Gless	
Apr. 29, 1952	50.12
Mar. 29, 1960	64.46
Mar. 14, 1961	66.60
Mar. 19, 1962	65.43
Mar. 18, 1963	68.41
Mar. 13, 1964	71.78
Nov. 23, 1964	76.64
Mar. 8, 1965	73.12
Nov. 16, 1965	78.97
Mar. 8, 1966	75.16
Nov. 18, 1966	80.65
Mar. 2, 1967	76.14
Nov. 27, 1967	82.40
Mar. 5, 1968	79.31
Nov. 20, 1968	83.74
Mar. 12, 1969	79.91

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-606	
Owner: Settegast	
June 2, 1941	40.40
Oct. 22, 1941	39.67
Jan. 19, 1942	37.22
Mar. 17, 1942	36.79
Sept. 22, 1942	42.45
Mar. 4, 1948	43.53
Sept. 7, 1949	75.56
Sept. 5, 1950	78.50
Jan. 19, 1951	62.84
Aug. 29, 1951	91.41
Jan. 16, 1952	58.95
Aug. 7, 1952	88.98
Jan. 20, 1953	63.80
Feb. 2, 1954	61.91
Jan. 21, 1957	81.53
Measurement discontinued	
Well JY-65-19-403	
Owner: Leon Miles	
Oct. 1, 1940	34.85
Mar. 11, 1941	27.92
Mar. 17, 1942	26.20
Apr. 12, 1943	26.65
Mar. 15, 1944	27.98
Oct. 4, 1944	39.33
Mar. 16, 1945	28.95
Nov. 1, 1945	30.82
Mar. 29, 1946	30.04
Apr. 17, 1947	29.59
Mar. 19, 1948	28.76
Nov. 23, 1949	46.89
Mar. 13, 1950	40.48
Nov. 17, 1950	51.62
Mar. 21, 1951	45.39
Nov. 13, 1951	57.49
Mar. 11, 1952	48.84

Table 6.–Water Levels in Wells–Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-19-403–Continued	
Nov. 21, 1952	62.05
Mar. 25, 1953	51.81
Mar. 15, 1954	53.75
Mar. 15, 1968	77.80
Well JY-65-19-501	
Owner: Wing & Grimes	
Apr. 29, 1952	61.40
Mar. 29, 1960	70.92
Mar. 15, 1961	71.97
Mar. 28, 1962	73.11
Mar. 18, 1963	78.42
Mar. 8, 1965	81.20
Jan. 7, 1969	92.35
Well JY-65-19-505	
Owner: C. Pillot	
Jan. 6, 1939	27.20
Mar. 10, 1939	26.57
Sept. 19, 1939	33.20
Dec. 21, 1939	29.60
Mar. 12, 1940	28.91
Apr. 26, 1940	32.24
Oct. 1, 1940	33.50
Mar. 11, 1941	30.09
May 16, 1941	31.37
Oct. 24, 1941	31.03
Jan. 19, 1942	28.69
Mar. 17, 1942	28.20
Sept. 22, 1942	33.15
Apr. 12, 1943	28.90
Nov. 8, 1943	33.24
Mar. 15, 1944	29.84
Oct. 4, 1944	39.13
Mar. 16, 1945	28.08
Nov. 1, 1945	34.92
Mar. 29, 1946	29.03
Mar. 28, 1947	31.23
Well JY-65-19-505–Continued	
Mar. 19, 1948	33.01
Jan. 25, 1949	39.18
Mar. 7, 1949	39.82
May 20, 1949	63.60
Nov. 23, 1949	47.77
Mar. 13, 1950	42.46
Nov. 16, 1950	52.26
Mar. 21, 1951	45.11
Nov. 13, 1951	51.28
Mar. 11, 1952	42.26
July 22, 1952	29.82
Nov. 21, 1952	28.35
Mar. 25, 1953	25.15
Mar. 15, 1954	42.06
Nov. 30, 1954	27.67
Mar. 11, 1955	29.32
Mar. 9, 1956	31.27
Mar. 25, 1958	33.08
Mar. 11, 1959	25.17
Measurement discontinued	
Well JY-65-19-506	
Owner: C. Pillot	
Sept. 1939	33.50
Jan. 25, 1949	44.27
Nov. 21, 1952	68.94
Mar. 25, 1953	57.95
Nov. 23, 1953	66.65
Mar. 15, 1954	58.83
Destroyed	
Well JY-65-19-701	
Owner: Walter Ludwig	
Mar. 29, 1961	60.24
Mar. 18, 1963	64.52
Mar. 8, 1965	65.75
Jan. 7, 1969	79.29
Well JY-65-25-301	
Owner: R. E. Smith Ranch	
Apr. 24, 1947	43.66
Mar. 4, 1948	46.99
Dec. 29, 1948	50.19
Aug. 31, 1949	51.13
Jan. 31, 1950	49.53
Sept. 5, 1950	51.62
Jan. 18, 1951	50.59
Aug. 29, 1951	52.86
Jan. 15, 1952	52.09
Jan. 20, 1953	52.16
July 20, 1953	53.59
Feb. 2, 1954	51.67
Aug. 2, 1954	54.26
Feb. 2, 1955	53.53
Aug. 17, 1955	53.84
Jan. 27, 1956	53.65
Aug. 10, 1956	55.20
Jan. 21, 1957	55.81
Aug. 1, 1957	50.68
Feb. 3, 1958	50.39
Aug. 5, 1958	53.37
Aug. 11, 1959	53.32
Jan. 18, 1961	46.89
Aug. 25, 1961	48.39
Jan. 29, 1962	47.95
Aug. 13, 1962	51.43
Feb. 4, 1962	49.27
Jan. 22, 1964	57.60
Jan. 18, 1965	53.85
Feb. 1, 1967	51.65
Jan. 30, 1968	51.68
Jan. 14, 1969	50.33
Aug. 11, 1969	51.83

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-25-302	
Owner: R. E. Smith Ranch	
Apr. 24, 1947	42.93
Dec. 29, 1948	49.06
Jan. 31, 1950	47.70
Jan. 18, 1951	49.18
Jan. 15, 1952	50.34
Jan. 20, 1953	50.26
Jan. 21, 1957	54.88
Aug. 1, 1957	50.33
Feb. 3, 1958	49.26
Jan. 18, 1965	53.27
Feb. 1, 1967	52.44
Jan. 30, 1968	50.97
Aug. 9, 1968	51.60
Jan. 14, 1969	51.74
Aug. 11, 1969	55.07
Well JY-65-25-404	
Owner: Gulf Oil Corp.	
May 21, 1947	32.23
Aug. 31, 1949	33.35
Jan. 31, 1950	32.45
Sept. 5, 1950	33.85
Jan. 18, 1951	33.27
Aug. 29, 1951	35.10
Jan. 15, 1952	34.11
Sept. 6, 1952	35.25
Jan. 20, 1953	33.71
July 20, 1953	36.48
Feb. 2, 1954	35.03
Aug. 2, 1954	36.52
Feb. 2, 1955	35.86
Aug. 17, 1955	36.19
Jan. 23, 1956	35.53
Aug. 10, 1956	36.93
Feb. 3, 1958	33.40
Aug. 11, 1959	34.38

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-25-404—Continued	
Aug. 25, 1961	36.47
Jan. 29, 1962	35.49
Feb. 4, 1963	36.91
Measurement discontinued	
Jan. 8, 1969	38.07
Well JY-65-26-702	
Owner: K. Dzierzanowski	
Apr. 28, 1947	36.71
Dec. 29, 1948	40.26
Aug. 31, 1949	42.33
Jan. 31, 1950	40.37
Sept. 8, 1950	43.77
Jan. 19, 1951	41.62
Aug. 29, 1951	45.88
Jan. 15, 1952	43.88
Aug. 6, 1952	46.16
Jan. 20, 1953	44.22
July 21, 1953	42.19
Feb. 2, 1954	41.30
Aug. 3, 1954	41.89
Feb. 2, 1955	43.08
Aug. 17, 1955	46.07
Jan. 27, 1956	44.31
Aug. 13, 1956	47.01
Jan. 22, 1957	46.19
Aug. 2, 1957	48.73
Destroyed	
Well JY-65-27-301	
Owner: State Prison	
Dec. 30, 1948	57.00
Aug. 30, 1949	61.40
Jan. 27, 1950	58.62
Sept. 7, 1950	67.72
Feb. 8, 1951	62.10
Aug. 29, 1951	77.33

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-301—Continued	
Jan. 16, 1952	68.30
Jan. 19, 1953	74.84
Measurement discontinued	
Well JY-65-27-302	
Owner: Fort Bend Utilities No. 8	
Jan. 1945	57.00
May 9, 1947	65.53
Mar. 19, 1948	72.00
June 11, 1948	79.00
Aug. 18, 1948	82.00
Dec. 1, 1948	82.00
Feb. 8, 1949	82.00
Apr. 4, 1949	78.00
Dec. 18, 1949	81.00
Mar. 19, 1950	70.00
Sept. 4, 1950	69.00
Jan. 21, 1951	119.00
Apr. 29, 1951	130.00
June 17, 1951	127.00
June 26, 1954	112.00
Nov. 1, 1954	112.00
Feb. 28, 1954	115.00
May 1, 1955	115.00
Nov. 14, 1955	112.00
Jan. 14, 1956	112.00
July 15, 1956	117.00
Jan. 5, 1957	122.00
Aug. 11, 1957	122.00
Oct. 1, 1957	125.00
Mar. 1, 1958	122.00
July 20, 1958	122.00
Sept. 21, 1958	127.00
Jan. 17, 1959	127.00
Nov. 27, 1959	122.00
Aug. 12, 1960	127.00
Feb. 3, 1961	132.00

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-302—Continued	
Mar. 3, 1962	130.00
July 14, 1962	130.00
Feb. 2, 1963	135.00
Nov. 22, 1963	147.00
Mar. 14, 1964	139.00
Oct. 31, 1964	149.00
Jan. 15, 1965	149.00
Aug. 8, 1965	150.00
Jan. 8, 1966	150.00
Jan. 2, 1967	157.00
Mar. 8, 1968	167.00
Dec. 14, 1968	164.00
Dec. 13, 1969	187.00
Well JY-65-27-303	
Owner: Fort Bend Utilities No. 9	
Sept. 24, 1958	108.00
Jan. 17, 1959	99.00
Nov. 27, 1959	100.00
Aug. 12, 1960	103.00
Feb. 3, 1961	103.00
Mar. 3, 1962	100.00
July 14, 1962	100.00
Feb. 2, 1963	103.00
Nov. 23, 1963	112.00
Mar. 14, 1964	118.00
Oct. 31, 1964	113.00
Jan. 15, 1965	113.00
Aug. 8, 1965	118.00
Jan. 8, 1966	114.00
Jan. 2, 1967	114.00
Mar. 8, 1968	120.00
Dec. 14, 1968	119.00
Dec. 13, 1969	123.00

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-305	
Owner: State Prison No. 3	
Mar. 10, 1964	26.82
Jan. 10, 1969	25.99
July 1, 1969	25.40
Well JY-65-27-309	
Owner: State Prison No. 2	
Apr. 1945	32.00
May 8, 1947	38.24
Dec. 30, 1948	46.85
Aug. 30, 1949	46.10
Jan. 27, 1950	43.57
Sept. 7, 1950	47.43
Feb. 8, 1951	45.37
Aug. 29, 1951	54.73
Destroyed	
Well JY-65-27-312	
Owner: Fort Bend Utilities No. 3	
1920	1.00
Sept. 4, 1931	19.0
May 26, 1940	28.72
July 21, 1940	29.69
Dec. 1, 1940	30.87
Mar. 2, 1941	29.76
May 25, 1941	25.87
July 1943	29.76
May 9, 1947	69.55
Apr. 5, 1949	86.00
Dec. 18, 1949	91.00
Mar. 19, 1950	98.00
Apr. 29, 1951	93.00
June 17, 1951	95.00
Oct. 20, 1951	101.00
Dec. 31, 1951	99.00
Apr. 21, 1952	100.00
Aug. 16, 1952	107.00

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-312—Continued	
Dec. 13, 1952	109.00
Sept. 27, 1953	114.00
Dec. 30, 1953	100.00
June 4, 1954	120.00
Nov. 1, 1954	127.00
Feb. 28, 1955	122.00
May 1, 1955	161.00
Nov. 14, 1955	157.00
Jan. 14, 1956	157.00
July 15, 1956	157.00
Nov. 12, 1956	160.00
Oct. 1, 1957	132.00
Mar. 1, 1958	117.00
July 20, 1958	132.00
Sept. 21, 1958	132.00
Jan. 7, 1959	137.00
Nov. 27, 1959	129.00
Aug. 12, 1960	132.00
Feb. 3, 1961	137.00
Mar. 3, 1962	142.00
July 14, 1962	142.00
Feb. 2, 1963	147.00
Nov. 22, 1963	154.00
Mar. 14, 1964	154.00
July 12, 1964	157.00
Oct. 31, 1964	157.00
Jan. 15, 1965	157.00
Aug. 8, 1965	165.00
Feb. 22, 1966	169.00
Well JY-65-27-313	
Owner: Fort Bend Utilities No. 7	
Nov. 25, 1941	48.50
Apr. 10, 1949	85.00
Dec. 18, 1949	76.00
Mar. 19, 1950	70.00

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-313—Continued	
Sept. 5, 1950	83.00
Apr. 29, 1951	72.00
June 17, 1951	77.00
Oct. 20, 1951	74.00
Dec. 31, 1951	81.00
Sept. 27, 1953	91.00
June 24, 1954	94.00
Nov. 1, 1954	94.00
Feb. 28, 1955	89.00
May 1, 1955	94.00
Nov. 14, 1955	89.00
Jan. 14, 1956	89.00
July 15, 1956	99.00
Jan. 5, 1957	99.00
Oct. 1, 1957	119.00
Mar. 1, 1958	114.00
July 20, 1958	129.00
Sept. 21, 1958	124.00
Jan. 17, 1959	121.00
Aug. 12, 1960	107.00
Well JY-65-27-314	
Owner: State Prison	
Oct. 23, 1930	19.00
May 8, 1947	31.74
Dec. 30, 1948	42.06
Aug. 30, 1949	43.72
Jan. 27, 1950	41.30
Destroyed	
Well JY-65-27-315	
Owner: Fort Bend Utilities No. 6	
Nov. 1938	30.00
May 26, 1940	38.50
July 21, 1940	42.96
Mar. 2, 1941	42.75
May 25, 1941	41.20
Jan. 3, 1942	45.00
May 9, 1947	61.55
Well JY-65-27-315—Continued	
Apr. 10, 1949	82.00
Dec. 18, 1949	80.00
Mar. 19, 1950	86.00
Sept. 5, 1950	80.00
Apr. 29, 1951	79.00
June 17, 1951	84.00
Oct. 20, 1951	74.00
Apr. 21, 1952	124.00
Aug. 16, 1952	139.00
Sept. 27, 1953	96.00
Feb. 28, 1955	94.00
Jan. 14, 1956	96.00
July 15, 1956	104.00
Jan. 5, 1957	104.00
Aug. 11, 1957	109.00
July 20, 1958	99.00
Nov. 27, 1959	94.00
Destroyed	
Well JY-65-27-316	
Owner: Fort Bend Utilities	
May 26, 1940	36.85
July 21, 1940	41.77
Dec. 1, 1940	40.70
Mar. 2, 1941	40.39
Destroyed	
Well JY-65-27-901	
Owner: A. E. Myers	
Dec. 4, 1944	30.00
Apr. 30, 1947	37.05
Dec. 30, 1948	47.76
Sept. 6, 1949	49.35
Jan. 27, 1950	49.19
Sept. 6, 1950	52.34
Feb. 8, 1951	52.94
Aug. 28, 1951	58.08
Jan. 16, 1952	57.56
Well JY-65-27-901—Continued	
Aug. 5, 1952	59.14
Jan. 21, 1953	60.89
July 20, 1953	62.95
Jan. 20, 1954	62.92
Aug. 16, 1955	72.69
Jan. 23, 1956	69.70
July 1956	72.00
Jan. 23, 1957	75.60
Jan. 27, 1958	73.87
Aug. 6, 1958	79.00
Jan. 16, 1961	76.33
Aug. 28, 1961	78.90
Jan. 18, 1962	77.19
Aug. 14, 1962	80.78
Jan. 21, 1963	80.28
Jan. 22, 1964	85.35
Jan. 20, 1965	87.96
Aug. 10, 1965	92.20
Jan. 27, 1966	90.65
Aug. 9, 1966	92.52
Feb. 1, 1967	92.32
Aug. 9, 1967	99.02
Jan. 30, 1968	97.68
Aug. 7, 1968	98.25
Jan. 9, 1969	99.62
Well JY-65-28-402	
Owner: Humble Oil & Ref. Co.	
May 1, 1947	33.67
Dec. 30, 1948	47.95
Sept. 1, 1949	48.30
Jan 25, 1950	47.72
Sept. 7, 1950	52.14
Jan. 18, 1951	52.39
Aug. 24, 1951	58.94
Jan. 15, 1952	57.48
Jan. 19, 1953	61.29

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-402—Continued	
July 20, 1953	64.06
Jan. 20, 1954	63.09
Aug. 2, 1954	69.02
Feb. 1, 1955	68.14
Aug. 16, 1955	72.33
Jan. 27, 1956	72.58
Aug. 10, 1956	75.05
Jan. 21, 1957	75.93
Aug. 1, 1957	74.30
Aug. 21, 1961	77.18
Aug. 13, 1962	79.77
Aug. 26, 1963	85.66
Jan. 27, 1964	84.90
Measurement discontinued	
Well JY-65-27-902	
Owner: A. E. Myers	
Apr. 30, 1947	27.61
Dec. 30, 1948	34.47
Sept. 6, 1949	34.63
Jan. 27, 1950	34.58
Sept. 6, 1950	35.75
Feb. 8, 1951	36.00
Aug. 28, 1951	39.60
Jan. 16, 1952	40.20
Aug. 5, 1952	40.60
Jan. 21, 1953	42.12
Jan. 20, 1954	42.05
Aug. 3, 1954	45.70
Feb. 1, 1955	46.45
Aug. 16, 1955	48.02
Jan. 23, 1956	48.76
Measurement discontinued	
Well JY-65-28-403	
Owner: Humble Oil & Ref. Co.	
May 1, 1947	38.30
Dec. 30, 1948	51.32

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-403—Continued	
Sept. 1, 1949	53.34
Jan. 25, 1950	52.17
Sept. 7, 1950	57.40
Jan. 18, 1951	57.23
Aug. 24, 1951	64.22
Jan. 15, 1952	62.28
Aug. 5, 1952	65.86
Jan. 19, 1953	66.18
July 20, 1953	69.63
Jan. 20, 1954	68.23
Aug. 2, 1954	76.36
Feb. 1, 1955	73.83
Aug. 16, 1955	78.51
Jan. 27, 1956	75.40
Aug. 10, 1956	81.35
Jan. 21, 1957	82.13
Aug. 1, 1957	80.68
Aug. 21, 1961	81.53
Aug. 13, 1962	83.24
Aug. 26, 1963	88.58
Jan. 27, 1964	88.08
Jan. 18, 1965	88.71
Measurement discontinued	
Well JY-65-28-404	
Owner: Humble Oil & Ref. Co.	
May 1, 1947	40.36
Dec. 30, 1948	53.33
Aug. 30, 1949	55.28
Jan. 25, 1950	54.50
Sept. 7, 1950	59.50
Jan. 18, 1951	60.68
Aug. 24, 1951	66.63
Jan. 15, 1952	65.65
Aug. 5, 1952	67.96
Jan. 19, 1953	69.89
July 20, 1953	72.04

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-404—Continued	
Jan. 20, 1954	71.86
Aug. 2, 1954	78.48
Feb. 1, 1955	77.54
Aug. 16, 1955	81.43
Jan. 23, 1956	79.07
Aug. 10, 1956	84.18
Jan. 21, 1957	86.56
Aug. 1, 1957	84.70
Feb. 3, 1958	84.79
Aug. 5, 1958	88.95
Aug. 11, 1959	88.37
Jan. 16, 1961	88.47
Aug. 21, 1961	90.17
Jan. 18, 1962	90.03
Aug. 13, 1962	93.09
Jan. 21, 1963	93.45
Aug. 26, 1963	99.65
Jan. 27, 1964	99.52
Aug. 11, 1964	102.95
Jan. 18, 1965	103.15
Aug. 10, 1965	107.40
Jan. 27, 1966	106.77
Aug. 9, 1966	108.53
Jan. 31, 1967	108.81
Aug. 9, 1967	115.50
Jan. 29, 1968	114.94
Aug. 7, 1968	116.27
Jan. 23, 1969	118.69
Aug. 12, 1969	120.61
Well JY-65-28-501	
Owner: Humble Oil & Ref. Co.	
May 1, 1947	40.93
Dec. 30, 1948	53.45
Aug. 30, 1949	55.05
Jan. 25, 1950	55.33
Sept. 7, 1950	59.20

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-501—Continued	
Aug. 24, 1951	65.65
Jan. 15, 1952	66.00
Aug. 5, 1952	67.91
Jan. 19, 1953	70.28
July 20, 1953	72.09
Jan. 20, 1954	72.80
Aug. 2, 1954	78.72
Feb. 1, 1955	78.60
Aug. 16, 1955	81.78
Jan. 23, 1956	79.25
Aug. 10, 1956	79.45
Jan. 21, 1957	87.48
Aug. 1, 1957	82.54
Feb. 3, 1958	81.01
Aug. 5, 1958	90.24
Aug. 11, 1959	89.23
Jan. 16, 1961	90.08
Aug. 21, 1961	91.31
Jan. 18, 1962	91.23
Aug. 13, 1962	94.00
Jan. 21, 1963	95.54
Aug. 26, 1963	100.81
Jan. 27, 1964	101.52
Aug. 11, 1964	104.30
Jan. 18, 1965	105.23
Aug. 10, 1965	108.76
Jan. 27, 1966	109.10
Aug. 9, 1966	109.91
Jan. 31, 1967	111.23
Aug. 9, 1967	117.20
Jan. 29, 1968	117.71
Aug. 7, 1968	118.16
Jan. 23, 1969	120.40
Aug. 12, 1969	122.17

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-601	
Owner: Phillips Petr. Co.	
Dec. 6, 1938	30.60
Mar. 13, 1939	30.77
May 22, 1939	31.03
Aug. 1, 1939	31.22
Sept. 28, 1939	31.92
Jan. 16, 1940	32.61
Feb. 21, 1940	32.70
May 3, 1940	32.97
June 28, 1940	33.24
Aug. 5, 1940	33.58
Sept. 30, 1940	34.24
Nov. 27, 1940	34.37
Feb. 19, 1941	34.00
Apr. 5, 1941	33.79
June 3, 1941	33.51
July 16, 1941	33.35
Nov. 24, 1941	33.37
Jan. 3, 1942	33.17
Jan. 27, 1942	33.19
July 16, 1942	32.99
Jan. 22, 1943	33.40
June 22, 1943	33.56
Sept. 13, 1943	34.38
Sept. 14, 1943	34.40
Jan. 27, 1944	34.74
Sept. 19, 1944	35.83
Dec. 11, 1944	36.46
Jan. 26, 1945	36.52
Mar. 21, 1945	36.63
June 27, 1945	40.56
Jan. 18, 1946	39.38
May 1, 1946	39.37
Sept. 16, 1946	45.13
Dec. 13, 1946	41.24

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-601—Continued	
Feb. 3, 1947	40.93
Mar. 11, 1947	40.85
Measurement discontinued	
Well JY-65-28-803	
Owner: Christianson & Mathews	
May 6, 1947	20.93
Aug. 30, 1949	27.53
Jan. 25, 1950	27.79
Sept. 7, 1950	29.09
Jan. 16, 1951	30.56
Aug. 24, 1951	32.41
Jan. 19, 1953	35.86
Jan. 20, 1954	37.72
Aug. 10, 1956	47.80
Jan. 21, 1957	49.03
Aug. 1, 1957	46.51
Feb. 3, 1958	46.94
Aug. 5, 1958	48.65
Aug. 11, 1959	47.61
Aug. 21, 1961	47.83
Aug. 13, 1962	50.07
Jan. 27, 1964	53.42
Jan. 20, 1965	55.38
Jan. 27, 1966	56.91
Feb. 1, 1967	58.27
Jan. 30, 1968	60.96
Jan. 27, 1969	62.89
Well JY-65-29-101	
Owner: D. W. Black	
Apr. 9, 1945	47.00
Jan. 18, 1946	55.01
Feb. 3, 1947	59.82
Mar. 11, 1947	59.88
Dec. 15, 1947	67.33
Mar. 23, 1948	66.26

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-29-101—Continued	
Dec. 14, 1948	76.74
Feb. 8, 1949	74.91
Dec. 22, 1949	79.02
Feb. 17, 1950	77.18
Dec. 15, 1950	85.42
Feb. 21, 1951	83.60
June 13, 1951	91.93
Dec. 13, 1951	89.36
Feb. 5, 1952	87.55
Feb. 5, 1953	92.24
Dec. 23, 1953	98.12
Feb. 18, 1954	96.31
Dec. 17, 1954	106.09
Feb. 9, 1955	102.03
Sept. 21, 1955	114.21
Dec. 9, 1955	105.06
Feb. 16, 1956	102.95
Feb. 20, 1957	108.64
Dec. 11, 1957	107.14
Feb. 26, 1958	104.69
Dec. 9, 1958	106.58
Feb. 18, 1959	104.79
Dec. 21, 1959	103.82
Feb. 14, 1960	102.78
Feb. 14, 1961	102.67
Feb. 19, 1962	104.37
Feb. 21, 1963	106.84
Mar. 11, 1964	111.10
Feb. 23, 1965	114.03
Feb. 18, 1966	116.84
Feb. 12, 1968	122.11
Mar. 7, 1969	124.18
Well JY-65-29-103	
Owner: D. W. Black	
Feb. 3, 1947	3.33
Mar. 11, 1947	4.82
Well JY-65-29-103—Continued	
Dec. 15, 1947	10.80
Mar. 23, 1948	5.91
Dec. 22, 1949	8.86
Feb. 17, 1950	7.70
Sept. 27, 1950	8.32
Dec. 13, 1951	12.78
Feb. 5, 1952	12.55
Feb. 5, 1953	12.39
Dec. 22, 1953	10.11
Dec. 17, 1954	5.90
Feb. 9, 1955	4.19
Sept. 21, 1955	7.14
Dec. 9, 1955	9.07
Feb. 16, 1956	5.08
Feb. 20, 1957	10.21
Dec. 11, 1957	6.85
Feb. 26, 1958	4.33
Dec. 9, 1958	9.20
Feb. 18, 1959	6.69
Dec. 21, 1959	5.85
Feb. 14, 1960	3.96
Feb. 14, 1961	3.07
Feb. 19, 1962	7.16
Feb. 21, 1963	9.29
Mar. 11, 1964	11.15
Feb. 23, 1965	13.12
Feb. 18, 1966	8.48
Destroyed	
Well JY-65-29-403	
Owner: Gulf Pipeline Co.	
Dec. 6, 1938	45.29
Mar. 13, 1939	44.89
May 22, 1939	45.38
Aug. 1, 1939	46.34
Sept. 28, 1939	47.72
Dec. 2, 1939	48.43
Well JY-65-29-403—Continued	
Jan. 16, 1940	48.60
Feb. 21, 1940	48.60
Aug. 5, 1940	50.26
Nov. 27, 1940	52.30
Feb. 19, 1941	52.04
Apr. 5, 1941	51.83
July 16, 1941	51.95
Nov. 25, 1941	53.52
Jan. 3, 1942	53.42
Jan. 27, 1942	53.58
July 16, 1942	53.96
Jan. 22, 1943	55.76
June 22, 1943	56.80
Jan. 27, 1944	60.04
Sept. 19, 1944	63.38
Dec. 11, 1944	64.29
Jan. 26, 1945	64.34
Mar. 21, 1945	64.53
June 27, 1945	66.92
Jan. 18, 1946	68.55
July 16, 1946	71.49
Sept. 16, 1946	75.09
Dec. 13, 1946	74.36
Feb. 3, 1947	74.50
May 7, 1947	77.08
Sept. 15, 1947	82.11
Dec. 15, 1947	82.35
Feb. 5, 1948	81.90
Sept. 21, 1948	91.73
Dec. 14, 1948	91.40
June 30, 1949	91.91
Sept. 20, 1949	96.51
Dec. 22, 1949	94.72
Feb. 17, 1950	93.51
June 12, 1950	93.90
Sept. 27, 1950	102.64

Tabel 6.—Water Levels in Wells—Continued

Well JY-65-29-403—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 15, 1950	101.52
June 13, 1951	103.43
Sept. 18, 1951	109.08
Dec. 13, 1951	108.70
Feb. 5, 1952	107.70
June 17, 1952	109.25
Sept. 17, 1952	114.94
Dec. 30, 1952	114.52
June 12, 1953	115.33
Sept. 28, 1953	120.54
Dec. 21, 1953	118.44
Feb. 18, 1954	117.67
June 25, 1954	123.15
Dec. 17, 1954	127.83
Feb. 9, 1955	124.24
June 17, 1955	124.44

Measurement discontinued

Well JY-65-29-701

Owner: Julia Tague

DATE	WATER LEVEL BELOW LSD (FEET)
May 5, 1947	35.19
Dec. 31, 1948	40.42
Aug. 30, 1949	41.47
Jan. 25, 1950	42.34
Sept. 7, 1950	43.71
Feb. 5, 1951	44.98
Jan. 15, 1952	48.40
Jan. 16, 1953	50.71
July 20, 1953	51.54
Feb. 24, 1954	53.92
Aug. 11, 1954	54.52
Aug. 22, 1955	62.20
Jan. 30, 1956	65.02
Feb. 5, 1958	63.56
Aug. 5, 1958	62.88
Mar. 24, 1961	63.36
Aug. 21, 1961	63.68

Well JY-65-29-701—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 19, 1962	63.59
Jan. 21, 1964	68.61
Jan. 18, 1965	70.92
Jan. 26, 1966	70.92
Jan. 26, 1966	72.68
Jan. 27, 1967	74.01
Jan. 30, 1968	76.94
Jan. 27, 1969	78.87

Well JY-65-29-702

Owner: Humble Oil & Refining Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 15, 1947	54.83
Dec. 31, 1948	63.95
Aug. 30, 1949	67.23
Jan. 25, 1950	64.82
Sept. 7, 1950	69.14
Jan. 18, 1951	71.63
Jan. 15, 1952	76.50
Jan. 16, 1953	78.20

Measurement discontinued

Well JY-65-33-502

Owner: Jack Wendt

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 29, 1948	24.25
Jan. 31, 1950	24.50
Sept. 8, 1950	27.81
Jan. 19, 1951	25.92
Jan. 15, 1952	27.15
July 28, 1955	40.90
Jan. 27, 1956	31.09

Measurement discontinued

Well JY-65-33-503

Owner: Jack Wendt No. 2

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 4, 1948	23.50
Dec. 29, 1948	25.33
Jan. 31, 1950	25.86
Jan. 19, 1951	28.14
Jan. 15, 1952	28.76

Well JY-65-33-503—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 20, 1953	29.66
Feb. 2, 1954	29.71
Feb. 2, 1955	31.40
Jan. 27, 1956	31.38
Jan. 22, 1957	32.90
Jan. 27, 1958	33.45
Jan. 17, 1961	34.89
Jan. 30, 1962	34.89
Feb. 4, 1963	35.95
Jan. 22, 1964	37.21
Jan. 19, 1965	37.37
Jan. 28, 1966	37.39
Jan. 31, 1967	35.96
Jan. 29, 1968	39.08
Jan. 23, 1969	40.98

Well JY-65-33-504

Owner: Jack Wendt No. 1

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 24, 1947	22.26
Mar. 4, 1948	23.52
Dec. 29, 1948	25.75
Aug. 31, 1949	31.15
Jan. 31, 1950	26.21
Sept. 8, 1950	30.89
Jan. 19, 1951	26.77
Jan. 15, 1952	29.40
Aug. 6, 1952	36.11
Jan. 20, 1953	30.59
Feb. 2, 1954	30.33
Feb. 2, 1955	32.19
Jan. 27, 1956	33.18
Jan. 22, 1957	35.07
Jan. 17, 1961	35.29
Jan. 30, 1962	34.59
Feb. 4, 1963	35.66
Jan. 22, 1964	37.37
Jan. 19, 1965	37.59

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-33-504—Continued	
Jan. 28, 1966	37.91
Jan. 31, 1967	37.80
Jan. 29, 1968	40.36
Jan. 23, 1969	40.70
Well JY-65-33-506	
Owner: Jack Wendt	
Mar. 4, 1948	23.75
Dec. 29, 1948	26.18
Jan. 31, 1950	26.78
Jan. 15, 1952	29.64
Jan. 23, 1969	41.81
Well JY-65-33-801	
Owner: Jack Wendt	
Jan. 20, 1953	31.19
Feb. 2, 1954	31.39
Feb. 2, 1955	33.42
Jan. 27, 1956	34.06
Jan. 22, 1957	35.84
Jan. 30, 1962	36.23
Feb. 4, 1963	37.35
Jan. 22, 1964	38.81
Jan. 19, 1965	39.27
Jan. 28, 1966	39.62
Jan. 31, 1967	39.65
Jan. 29, 1968	41.23
Jan. 23, 1969	41.63
Well JY-65-34-901	
Owner: Walter Gless	
Apr. 24, 1947	11.67
Mar. 4, 1948	19.71
Dec. 29, 1948	24.12
Jan. 30, 1950	24.75
Feb. 7, 1951	26.81
Aug. 28, 1951	42.03
Jan. 16, 1952	29.48
Jan. 21, 1953	30.57

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-34-901—Continued	
Feb. 2, 1954	32.21
Feb. 2, 1955	36.24
Jan. 27, 1956	37.96
Jan. 22, 1957	41.31
Jan. 28, 1958	37.59
Jan. 17, 1961	40.98
Jan. 29, 1962	41.84
Jan. 4, 1963	42.27
Jan. 22, 1964	46.44
Jan. 19, 1965	46.70
Jan. 28, 1966	46.72
Jan. 31, 1967	47.75
Jan. 29, 1968	51.02
Oct. 1, 1968	56.50
Jan. 23, 1969	49.00
Well JY-65-35-101	
Owner: Gulf Oil Corp.	
Apr. 30, 1947	9.24
Dec. 29, 1948	12.45
Sept. 2, 1949	13.35
Jan. 30, 1950	13.10
Sept. 8, 1950	13.59
Feb. 7, 1951	13.30
Aug. 28, 1951	13.22
Jan. 16, 1952	14.57
Aug. 6, 1952	16.85
Jan. 21, 1953	17.44
July 21, 1953	18.86
Jan. 20, 1954	18.09
Aug. 3, 1954	19.71
Feb. 1, 1955	19.73
Aug. 16, 1955	22.29
Jan. 27, 1956	20.60
Aug. 13, 1956	19.92
Jan. 22, 1957	19.86
Aug. 2, 1957	19.53

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-35-101—Continued	
Jan. 28, 1958	20.86
Aug. 6, 1958	23.36
Aug. 12, 1959	23.52
Jan. 29, 1962	25.65
Aug. 14, 1962	23.98
Jan. 21, 1963	23.07
Jan. 18, 1965	24.41
Aug. 10, 1965	25.21
Jan. 28, 1966	25.60
Aug. 9, 1966	27.67
Jan. 31, 1967	25.16
Aug. 9, 1967	26.73
Jan. 29, 1968	27.15
Aug. 7, 1968	28.45
Jan. 23, 1969	27.75
Aug. 12, 1969	28.63
Well JY-65-35-102	
Owner: Gulf Oil Corporation	
Apr. 30, 1947	13.95
Dec. 29, 1948	16.80
Sept. 2, 1949	16.78
Jan. 30, 1950	15.51
Sept. 8, 1950	15.60
Aug. 28, 1951	17.73
Jan. 16, 1952	18.06
Aug. 6, 1952	18.23
Jan. 21, 1953	18.80
July 21, 1953	19.03
Jan. 20, 1954	18.84
Aug. 3, 1954	19.60
Feb. 1, 1955	20.22
Aug. 16, 1955	20.69
Jan. 27, 1956	21.13
Aug. 13, 1956	21.62
Jan. 22, 1957	22.10
Aug. 2, 1957	22.46

Table 6.—Water Levels in Wells—Continued

Well JY-65-35-102—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 28, 1958	22.91
Aug. 6, 1958	23.49
Aug. 12, 1959	24.16
Jan. 29, 1962	26.27
Aug. 14, 1962	24.19
Jan. 21, 1963	24.10
Jan. 18, 1965	25.11
Aug. 10, 1965	25.62
Jan. 28, 1966	25.64
Aug. 9, 1966	26.97
Jan. 31, 1967	26.30
Jan. 29, 1968	28.27
Jan. 23, 1969	26.11
Aug. 12, 1969	26.49

Well JY-65-35-301

Owner: Humble Oil & Ref.

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 30, 1947	12.09
Oct. 30, 1948	18.12
Sept. 6, 1949	18.24

Measurement discontinued

Well JY-65-36-101

Owner: Cecil Hagen

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 29, 1947	12.55
Dec. 30, 1948	18.62
Sept. 6, 1949	18.42
Jan. 27, 1950	18.54
Sept. 6, 1950	19.26
Feb. 8, 1951	20.75
Aug. 28, 1951	22.31
Jan. 16, 1952	23.57
Aug. 5, 1952	23.77
Jan. 21, 1953	25.12
July 20, 1953	26.25
Jan. 20, 1954	26.82
Aug. 3, 1954	28.94
Feb. 1, 1955	30.56

Well JY-65-36-101—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 16, 1955	31.96
Jan. 23, 1956	32.83
Aug. 13, 1956	34.72
Jan. 23, 1957	36.39
Aug. 2, 1957	32.98
Jan. 27, 1958	34.96
Aug. 6, 1958	36.11
Aug. 12, 1959	35.33
Jan. 16, 1961	35.29
Aug. 28, 1961	35.09
Jan. 18, 1962	34.93
Aug. 14, 1962	35.97
Jan. 21, 1963	36.47
Jan. 22, 1964	37.87
Aug. 11, 1964	40.01
Jan. 20, 1965	40.18
Aug. 10, 1965	40.97
Jan. 27, 1966	40.37
Aug. 9, 1966	36.18
Feb. 1, 1967	42.89
Aug. 9, 1967	45.15
Jan. 30, 1968	45.26
Aug. 7, 1968	43.58
Jan. 9, 1969	43.86

Well JY-65-36-201

Owner: Chicago Corp.

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 30, 1948	21.29
Sept. 6, 1949	21.88
Jan. 27, 1950	21.95
Sept. 6, 1950	22.13
Feb. 8, 1951	24.60
Aug. 28, 1951	26.44
Jan. 16, 1952	27.69
Aug. 5, 1952	28.09
Jan. 21, 1953	29.70
July 20, 1953	30.33

Well JY-65-36-201—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 20, 1954	31.25
Aug. 3, 1954	33.31
Feb. 1, 1955	35.11
Aug. 16, 1955	36.43
Jan. 23, 1956	37.75
Aug. 13, 1956	41.38
Jan. 23, 1957	42.16
Aug. 2, 1957	39.30
Aug. 6, 1958	41.79

Measurement discontinued

Well JY-65-36-203

Owner: The Texas Co.

DATE	WATER LEVEL BELOW LSD (FEET)
1940	9.00
Apr. 29, 1947	20.51
Dec. 30, 1948	29.05
Sept. 6, 1949	30.26
Jan. 27, 1950	31.28
Sept. 6, 1950	33.10
Feb. 8, 1951	34.86
Aug. 28, 1951	37.65
Jan. 21, 1953	42.22
Jan. 20, 1954	45.27
Feb. 1, 1955	51.00
Jan. 23, 1956	53.12
Jan. 23, 1957	59.15
Aug. 2, 1957	57.98
Jan. 27, 1958	58.38
Aug. 6, 1958	61.75
Aug. 12, 1959	60.86
Jan. 16, 1961	61.31
Aug. 28, 1961	63.40
Jan. 18, 1962	61.84
Aug. 14, 1962	64.49
Jan. 21, 1963	64.77
Jan. 22, 1964	69.84
Aug. 11, 1964	71.91

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-203—Continued		
Jan.	20, 1965	72.89
Aug.	10, 1965	76.45
Jan.	27, 1966	75.71
Aug.	9, 1966	77.14
Feb.	1, 1967	77.29
Measurement discontinued		
Well JY-65-36-204		
Owner: Houston Oilfield Equipment		
Apr.	29, 1947	16.20
Dec.	30, 1948	21.36
Sept.	6, 1949	21.97
Jan.	27, 1950	21.87
Sept.	6, 1950	22.86
Feb.	8, 1951	24.73
Aug.	28, 1951	26.50
Jan.	16, 1952	27.73
Aug.	5, 1952	28.17
Jan.	21, 1953	29.69
July	20, 1953	30.52
Jan.	20, 1954	31.54
Aug.	3, 1954	33.70
Feb.	1, 1955	35.50
Aug.	16, 1955	36.87
Jan.	23, 1956	38.20
Aug.	13, 1956	41.51
Jan.	23, 1957	42.69
Aug.	2, 1957	39.62
Jan.	27, 1958	26.48
Aug.	6, 1958	40.24
Aug.	12, 1959	40.86
Jan.	16, 1961	41.37
Aug.	28, 1961	39.81
Jan.	18, 1962	38.56
Aug.	14, 1962	40.16
Jan.	21, 1963	40.74
Jan.	22, 1964	46.26

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-204—Continued		
Aug.	11, 1964	49.27
Jan.	20, 1965	49.01
Aug.	10, 1965	50.73
Jan.	27, 1966	47.02
Measurement discontinued		
Well JY-65-42-204		
Owner: W. Goldston Oil Co.		
May	20, 1947	26.58
Dec.	29, 1948	29.20
Sept.	2, 1949	31.97
Feb.	7, 1951	31.65
Measurement discontinued		
Well JY-65-42-301		
Owner: C. A. Danklefs No. 1		
Mar.	4, 1948	21.14
Dec.	29, 1948	24.44
Sept.	2, 1949	43.53
Jan.	30, 1950	23.86
Feb.	7, 1951	25.33
Jan.	16, 1952	27.84
Jan.	21, 1953	28.47
Feb.	2, 1954	29.17
Feb.	2, 1955	31.70
Jan.	27, 1956	33.90
Jan.	22, 1957	28.35
Jan.	28, 1958	26.77
Jan.	17, 1961	27.87
Jan.	30, 1962	24.43
Feb.	4, 1963	25.23
Jan.	22, 1964	25.93
Jan.	19, 1965	26.81
Jan.	28, 1966	25.45
Jan.	3, 1967	24.37
Jan.	28, 1968	24.82
Jan.	23, 1969	24.37

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-42-302		
Owner: C. A. Danklefs No. 2		
May	27, 1944	54.00
Mar.	4, 1948	21.19
Dec.	29, 1948	25.07
Sept.	2, 1949	43.72
Jan.	30, 1950	23.16
Sept.	8, 1950	46.34
Feb.	7, 1951	24.53
Aug.	28, 1951	60.01
Jan.	16, 1952	25.94
Jan.	21, 1953	26.28
Feb.	2, 1954	26.78
Feb.	2, 1955	28.85
Jan.	27, 1956	29.52
Jan.	22, 1957	29.32
Jan.	28, 1958	27.34
Jan.	17, 1961	29.63
Jan.	30, 1962	24.58
Oct.	9, 1968	25.43
Measurement discontinued		
Well JY-65-43-201		
Owner: W. Gless & Beard		
July	27, 1955	79.52
Jan.	27, 1956	54.40
Jan.	22, 1957	57.02
Jan.	27, 1958	55.58
Jan.	17, 1961	56.41
Jan.	30, 1962	56.18
Jan.	10, 1969	76.64
Well JY-65-43-602		
Owner: Unknown		
May	21, 1947	16.06
Sept.	2, 1949	22.64
Jan.	30, 1950	22.45
Sept.	6, 1950	24.75
Feb.	7, 1951	24.97

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-43-602—Continued	
Aug. 28, 1951	31.95
Jan. 16, 1952	27.80
Aug. 6, 1952	36.26
Jan. 21, 1953	30.19
July 21, 1953	43.10
Feb. 2, 1954	34.45
Aug. 3, 1954	56.48
Feb. 2, 1955	42.84
Aug. 17, 1955	57.74
Jan. 27, 1956	43.76

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-43-602—Continued	
Aug. 13, 1956	63.40
Jan. 22, 1957	46.99
Aug. 2, 1957	59.89
Jan. 27, 1958	47.04
Aug. 6, 1958	62.48
Aug. 12, 1959	59.06
Jan. 17, 1961	47.75
Jan. 30, 1962	47.22
Feb. 4, 1963	49.36

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-43-602—Continued	
Jan. 22, 1964	50.81
Jan. 19, 1965	56.14
Jan. 28, 1966	60.14
Aug. 10, 1966	73.28
Jan. 31, 1967	62.27
Aug. 9, 1967	75.31
Jan. 29, 1968	69.22
Jan. 23, 1969	73.10
Aug. 12, 1969	74.03

Table 7.--Chemical Analyses of Water From Wells

(Analyses given are in milligrams per liter, except percent sodium, sodium-adsorption ratio, residual sodium carbonate, specific conductance, pH, and temperature.)

Water-bearing units: C, Chicot; Cu, upper Chicot; Cl, lower Chicot; E, Evangeline.
Analyses made by U.S. Geological Survey unless indicated otherwise.

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-09-906	575	C,E	July 12, 1968	26	--	72	6.0	37	1.1	227	2.4	66	0.1	0.2	0.04	323	204	28	1.1	0.00	555	7.5	22
10-701	421	C	do.	27	--	78	6.2	41	.8	264	3.6	62	.1	.1	.05	349	220	29	1.2	.00	595	7.4	22
703	170	C	Aug. 12, 1940	--	--	--	--	50		272	3	70	--	--	--	343	216	33	--	--	--	--	--
703	170	C	July 15, 1947	--	--	--	--	--		282	2	72	--	.5	--	--	192	--	--	--	641	--	22
709	174	C	Aug. 8, 1933	--	0.04	74	8.7	39		262	3.8	62	--	.2	--	317	221	--	--	--	--	--	22
709	174	C	July 15, 1947	--	--	--	--	--		274	2	68	--	.5	--	--	222	--	--	--	583	--	22
809	206	C	Feb. 15, 1947	--	--	--	--	--		310	2	58	--	--	--	--	216	--	--	--	596	--	22
17-103	601	C,E	July 11, 1968	25	--	50	2.8	22	1.7	167	6.4	31	.1	.3	.03	221	136	26	.8	.01	369	7.3	--
106	569	C,E	do.	20	--	61	8.0	33	2.0	228	12	42	.2	--	.06	290	185	28	1.1	.04	496	7.4	--
112	175	C	Apr. 16, 1947	--	--	--	--	--		494	8	56	--	--	--	--	150	--	--	--	831	--	--
203	840	C,E	Aug. 14, 1947	--	--	--	--	--		244	13	66	--	--	--	--	135	--	--	--	592	--	23
204	330	C	Aug. 3, 1946	--	--	110	13	27		296	5	98	--	.5	--	452	328	15	--	--	--	--	--
204	330	C	July 15, 1947	--	--	--	--	--		270	2	84	--	--	--	--	240	--	--	--	636	--	23
205	334	C	do.	--	--	--	--	--		274	2	92	--	--	--	--	258	--	--	--	691	--	22
301	400	C	July 11, 1968	26	--	88	6.6	49	1.1	270	5.6	85	.1	2.3	.04	397	246	30	1.4	.00	695	7.5	--
304	596	C,E?	July 15, 1947	--	--	--	--	--		232	2	50	--	--	--	--	207	--	--	--	501	--	23
305	590	C,E?	do.	--	--	--	---	--		268	6	72	--	--	--	--	198	--	--	--	600	--	23
306	496	C	Aug. 12, 1940	--	--	--	--	38		214	4	63	--	--	--	285	186	31	--	--	--	--	--
306	496	C	July 15, 1947	--	--	--	--	--		254	2	66	--	--	--	--	216	--	--	--	584	--	--
b/ 404	1,100	E	May 14, 1931	14	2.6	47	4.9	--		222	--	38	--	.2	--	--	138	--	--	--	--	--	--
c/ 405	785	E	Oct. 16, 1963	15	< .05	44	4	53		224	2	41	--	--	--	273	128	--	--	--	495	7.7	--
408	213	C	May 14, 1947	--	--	77	17	50		248	60	74	--	--	--	400	262	29	--	--	670	--	--
409	225	C	Apr. 16, 1947	--	--	55	9.5	72		292	20	52	--	.2	--	352	176	47	--	--	625	--	--
702	376	C	Apr. 15, 1964	29	--	48	4.0	23		178	8.0	22	.4	1.2	--	224	136	27	.9	.19	370	7.3	--
703	67	C	do.	19	.48	78	66	109		698	80	24	.7	15	--	734	466	34	2.2	2.12	1,190	7.4	21
d/ 704	76	C	Mar. 18, 1936	--	--	--	--	--		380	8	72	--	--	--	434	--	--	--	--	--	--	--
d/ 805	371	C	Mar. 19, 1936	--	--	29	18	109		262	8	114	--	--	--	407	146	--	--	--	--	--	--
18-101	818	C,E	June 2, 1965	--	--	79	7.5	46		268	2	75	.2	--	.05	372	228	30	1.3	--	633	7.4	23
102	670	C,E	Apr. 15, 1947	--	--	--	--	--		214	21	58	--	--	--	--	132	--	--	--	518	--	24
103	628	C	July 15, 1947	--	--	--	--	--		294	2	78	--	--	--	--	210	--	--	--	680	--	23
104	--	--	May 27, 1965	28	--	64	6.4	34		238	6	41	.2	--	.04	297	186	28	1.1	.18	498	7.4	23

See footnotes at end of table.

Table 5.—Drillers' Logs of Wells and Test Holes—Continued

Well JY-66-32-902

Owner: Simon Kucera
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	15	15
Clay	15	30
Clay	45	75
Sand	43	118
Shale	12	130
Sand	42	172
Shale	33	205
Sand	45	250
Shale	13	263
Sand	41	304

Well JY-66-32-903

Owner: A. Vacek
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	10	10
Clay	55	65
Sand	50	115
Shale	30	145
Sand and gravel	165	310

Well JY-66-32-904

Owner: Leroy Stade
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	10	10
Sand	25	35
Clay	35	70
Sand	46	116
Clay	34	150
Sand	26	176
Shale	32	208
Sand	113	321

Well JY-66-32-905

Owner: W. Duncan
Driller: American Water Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface	5	5
Clay	15	20
Sand	55	75

Well JY-66-32-905—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay	15	90
Sand	40	130
Shale	26	156
Sand	24	180
Shale	28	208
Sand	62	270

Well JY-66-40-301

Owner: R. Sablatura
Driller: Crawell Bros.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	38	38
Sand	34	72
Gravel	10	82
Clay	6	88
Gravel	5	93
Clay	17	110
Sand, fine	8	118
Shale	36	154
Sand, fine	10	164
Shale	7	171
Sand, fine	10	181
Shale	10	191
Sand	13	204
Gravel	21	225
Shale	20	245
Gravel	40	285
Shale	3	288
Sand streaks	2	290

Well JY-66-40-603

Owner: G. Collins
Driller: Industrial Drillers

	THICKNESS (FEET)	DEPTH (FEET)
Clay, brown	12	12
Sand, brown	10	22
Shale, clay, gray	26	48
Sand and gravel, red	28	76
Clay, red	2	78

Table 6.—Water Levels in Wells

Well JY-65-09-906

Owner: Don McMillian Farms

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 13, 1959	86.84
Mar. 15, 1961	85.20
Mar. 19, 1962	85.44
Mar. 18, 1963	86.64
Nov. 23, 1964	94.75
Mar. 8, 1965	91.26
Nov. 16, 1965	95.85
Mar. 8, 1966	98.14
Nov. 18, 1966	103.01
Mar. 2, 1967	92.42
Mar. 5, 1968	96.77
Mar. 13, 1969	97.61

Well JY-65-10-702

Owner: Earl MacMillian

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 15, 1939	57.77
Sept. 19, 1939	62.90
Dec. 21, 1939	60.25
Mar. 12, 1940	59.50
Apr. 26, 1940	59.40
Oct. 4, 1940	65.82
Jan. 23, 1941	61.57
Mar. 11, 1941	61.32
May 15, 1941	60.62
Oct. 24, 1941	62.35
Jan. 19, 1942	60.95
Mar. 17, 1942	60.30
Sept. 22, 1942	64.22
Apr. 12, 1943	60.05
Nov. 8, 1943	64.18
Mar. 29, 1944	63.10
Oct. 5, 1944	68.70
Mar. 16, 1945	62.86
Nov. 1, 1945	64.57
Mar. 28, 1946	63.24
Mar. 28, 1947	63.66

Well JY-65-10-702—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 19, 1948	64.85
Nov. 19, 1948	69.66
Mar. 7, 1949	67.56
Nov. 23, 1949	70.28
Mar. 15, 1950	68.43
Nov. 16, 1950	72.17
Mar. 21, 1951	70.31
Nov. 13, 1951	74.10
Mar. 11, 1952	72.85
July 22, 1952	76.76
Nov. 21, 1952	76.59
Mar. 25, 1953	74.62
Nov. 23, 1953	77.04
Mar. 15, 1954	76.26
Nov. 30, 1954	78.85
Mar. 11, 1955	77.64
Nov. 15, 1955	80.70
Mar. 9, 1956	79.46
Nov. 16, 1956	83.67
Mar. 18, 1957	81.37
Dec. 2, 1957	84.26
Mar. 19, 1958	83.08
Dec. 1, 1958	85.41
Mar. 11, 1959	85.60
Nov. 13, 1959	87.15
Mar. 7, 1960	85.78
Nov. 29, 1960	87.59
Mar. 15, 1961	87.82
Nov. 20, 1961	89.20
Mar. 19, 1962	86.32
Mar. 18, 1963	87.77
Mar. 11, 1964	90.68
Nov. 23, 1964	95.52
Mar. 8, 1965	91.96
Nov. 16, 1965	95.79
Mar. 8, 1966	93.90

Well JY-65-10-702—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 2, 1967	94.16
Mar. 5, 1968	96.97
Mar. 13, 1969	101.28

Well JY-65-10-703

Owner: P. V. Cook, Well No. 3

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 11, 1932	55.76
Sept. 29, 1932	55.49
Mar. 18, 1933	46.66
Jan. 6, 1939	46.32
Mar. 10, 1939	49.01
Sept. 19, 1939	56.84
Dec. 21, 1939	52.64
Mar. 12, 1940	51.30
Apr. 26, 1940	53.19
Oct. 4, 1940	57.86
Jan. 23, 1941	54.04
Mar. 11, 1941	53.53
May 15, 1941	52.67
Oct. 24, 1941	54.52
Jan. 15, 1942	52.66
Mar. 17, 1942	51.57
Sept. 21, 1942	56.25
Apr. 12, 1943	51.45
Nov. 8, 1943	56.74
Mar. 29, 1944	53.23
Oct. 4, 1944	59.95
Mar. 16, 1945	55.67
Nov. 1, 1945	58.97
Mar. 21, 1946	55.29
Mar. 28, 1947	55.43
Mar. 19, 1948	57.45
Nov. 16, 1948	65.57
Jan. 25, 1949	63.34
Mar. 7, 1949	62.50
Nov. 23, 1949	66.72
Mar. 13, 1950	65.14

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-10-703—Continued	
Nov. 16, 1950	68.89
Mar. 21, 1951	65.92
Nov. 13, 1951	71.22
Mar. 11, 1952	68.85
July 22, 1952	72.64
Nov. 21, 1952	72.51
Mar. 25, 1953	69.87
Nov. 23, 1953	73.19
Mar. 15, 1954	72.11
Nov. 30, 1954	75.53
Mar. 11, 1955	73.83
Nov. 15, 1955	76.91
Mar. 9, 1956	75.45
Nov. 16, 1956	80.01
Mar. 13, 1957	77.39
Dec. 2, 1957	79.76
Mar. 19, 1958	79.19
Dec. 1, 1958	82.49
Mar. 11, 1959	80.50
Nov. 13, 1959	82.97
Mar. 7, 1960	81.94
Nov. 29, 1960	83.95
Mar. 15, 1961	82.09
Nov. 20, 1961	84.88
Mar. 19, 1962	83.21
Nov. 28, 1962	86.95
Mar. 18, 1963	84.98
Mar. 11, 1964	88.11
Nov. 23, 1964	100.42
Mar. 8, 1965	89.61
Nov. 16, 1965	93.07
Mar. 8, 1966	92.60
Mar. 2, 1967	92.44
Mar. 5, 1968	95.29
Mar. 12, 1969	97.8

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-17-201	
Owner: Richard Woods	
Mar. 19, 1958	84.65
Dec. 2, 1958	88.32
Mar. 11, 1959	85.80
Nov. 16, 1959	87.93
Mar. 8, 1960	85.98
Nov. 28, 1960	86.89
Mar. 15, 1961	85.24
Nov. 20, 1961	86.96
Mar. 19, 1962	84.84
Nov. 29, 1962	87.72
Mar. 19, 1963	85.59
Feb. 26, 1964	87.78
Nov. 17, 1964	91.09
Mar. 10, 1965	88.53
Nov. 16, 1965	91.61
Mar. 14, 1966	89.77
Mar. 7, 1967	90.79
Mar. 7, 1968	92.66
Dec. 17, 1968	94.84
Mar. 14, 1969	93.71
Well JY-65-17-205	
Owner: Richard Woods	
Oct. 2, 1940	69.07
Jan. 23, 1941	67.22
Mar. 15, 1941	66.70
Oct. 27, 1941	66.53
Jan. 19, 1942	65.51
Mar. 17, 1942	65.11
Sept. 23, 1942	66.05
Apr. 13, 1943	64.52
Nov. 9, 1943	66.56
Mar. 29, 1944	64.95
Oct. 6, 1944	67.00
Mar. 16, 1945	65.45
Nov. 5, 1945	66.48

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-17-205—Continued	
Mar. 21, 1946	64.80
Mar. 24, 1947	64.23
Mar. 19, 1948	65.31
Nov. 19, 1948	70.36
Mar. 8, 1949	68.38
Dec. 1, 1949	71.61
Mar. 13, 1950	70.66
Nov. 22, 1950	73.63
Mar. 21, 1951	72.40
Mar. 13, 1952	73.82
July 29, 1952	83.88
Nov. 21, 1952	78.01
Mar. 31, 1953	76.48
Nov. 24, 1953	78.00
Mar. 16, 1954	77.76
Dec. 3, 1954	80.42
Mar. 16, 1955	79.49
Nov. 17, 1955	83.67
Mar. 9, 1956	81.61
Mar. 15, 1957	82.91
Dec. 2, 1957	86.48
Measurement discontinued	
Well JY-65-17-304	
Owner: P. V. Cook	
Mar. 15, 1939	63.12
Sept. 19, 1939	63.00
Dec. 21, 1939	61.01
Apr. 26, 1940	60.80
Oct. 1, 1940	64.84
Jan. 23, 1941	61.81
Mar. 11, 1941	61.45
May 15, 1941	60.66
Oct. 24, 1941	61.40
Jan. 15, 1942	60.01
Mar. 17, 1942	59.50
Apr. 12, 1943	59.35

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-17-304—Continued	
Apr. 15, 1947	64.09
Dec. 17, 1968	88.12
Measurement discontinued	
Well JY-65-17-306	
Owner: C. C. Cardiff	
Oct. 1, 1940	66.20
Mar. 11, 1941	63.56
May 15, 1941	63.08
Oct. 24, 1941	64.50
Apr. 14, 1947	64.99
Feb. 2, 1960	85.67
Well JY-65-17-404	
Owner: Southern Pacific R. R.	
May 14, 1947	18.50
Mar. 4, 1948	22.68
Sept. 7, 1949	30.61
Jan. 31, 1950	29.11
Sept. 5, 1950	31.11
Jan. 19, 1951	32.23
Aug. 29, 1951	34.97
Aug. 6, 1952	33.53
Jan. 20, 1953	36.55
July 20, 1953	35.10
Aug. 2, 1954	39.06
Aug. 17, 1955	40.58
Jan. 23, 1956	39.99
Aug. 10, 1956	41.58
Jan. 21, 1957	43.41
Aug. 1, 1957	39.83
Feb. 3, 1958	38.96
Aug. 5, 1958	39.31
Aug. 11, 1959	39.26
Jan. 17, 1961	38.11
Aug. 28, 1961	39.51
Jan. 18, 1962	36.15
Feb. 4, 1963	38.60

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-17-404—Continued	
Aug. 26, 1963	41.54
Jan. 27, 1964	42.71
Jan. 18, 1965	48.69
Dec. 16, 1968	60.65
Well JY-65-17-406	
Owner: Pecan Acres, Inc.	
Sept. 11, 1931	27.40
Mar. 15, 1939	27.06
Dec. 21, 1939	28.57
Mar. 12, 1940	29.56
Apr. 26, 1940	28.74
Oct. 1, 1940	29.41
Measurement discontinued	
Well JY-65-18-101	
Owner: C. C. Cardiff	
Nov. 16, 1950	73.84
Mar. 21, 1951	68.21
Nov. 13, 1951	75.68
Mar. 11, 1952	71.48
July 22, 1952	81.62
Nov. 21, 1952	78.28
Mar. 25, 1953	72.20
Nov. 19, 1953	77.81
Mar. 15, 1954	74.50
Nov. 30, 1954	80.49
Mar. 11, 1955	77.67
Nov. 15, 1955	81.73
Mar. 9, 1956	78.76
Nov. 16, 1956	85.63
Mar. 13, 1957	81.15
Dec. 2, 1957	86.03
Mar. 17, 1958	81.84
Dec. 1, 1958	86.94
Mar. 11, 1959	83.08
Nov. 13, 1959	87.04
Mar. 7, 1960	83.78

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-101—Continued	
Nov. 29, 1960	86.87
Mar. 15, 1961	84.05
Nov. 20, 1961	88.01
Mar. 19, 1962	84.59
Nov. 28, 1962	90.05
Mar. 18, 1963	86.38
Mar. 11, 1964	89.44
Mar. 8, 1965	90.90
Nov. 16, 1965	95.66
Mar. 8, 1966	93.90
Nov. 18, 1966	97.06
Mar. 2, 1967	93.18
Nov. 27, 1967	99.61
Mar. 5, 1968	96.16
Nov. 20, 1968	101.38
Mar. 12, 1969	97.47
Well JY-65-18-103	
Owner: C. C. Cardiff	
Mar. 24, 1931	53.21
Mar. 18, 1933	53.34
Jan. 6, 1939	57.44
Mar. 10, 1939	56.46
Sept. 19, 1939	64.84
Dec. 21, 1939	60.04
Mar. 12, 1940	58.44
Oct. 1, 1940	64.40
Jan. 23, 1941	60.60
Mar. 11, 1941	59.97
Oct. 24, 1941	60.94
Jan. 19, 1942	58.84
Mar. 17, 1942	58.37
Sept. 21, 1942	62.94
Apr. 12, 1943	60.60
Nov. 8, 1943	64.00
Mar. 29, 1944	59.70
Oct. 5, 1944	68.30

Table 6.—Water Levels in Wells—Continued

Well JY-65-18-103—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 16, 1945	60.45
Nov. 1, 1945	65.53
Mar. 21, 1946	61.55
Mar. 28, 1947	61.48
Apr. 14, 1947	61.11
Mar. 19, 1948	63.62
Nov. 16, 1948	71.47
Jan. 25, 1949	68.42
Mar. 7, 1949	67.14
Nov. 23, 1949	72.35
Mar. 13, 1950	66.93
Nov. 16, 1950	74.34
Mar. 21, 1951	68.76
Nov. 13, 1951	77.56
Mar. 11, 1952	72.58
July 22, 1952	79.77
Nov. 21, 1952	79.42
Mar. 25, 1953	73.86
Nov. 19, 1953	79.46
Mar. 15, 1954	75.17
Nov. 30, 1954	84.93
Mar. 11, 1955	79.02
Nov. 15, 1955	83.17
Mar. 9, 1956	79.39
Nov. 16, 1956	86.70
Mar. 13, 1957	82.75
Dec. 2, 1957	86.18
Mar. 17, 1958	83.48
Dec. 1, 1958	87.44
Mar. 11, 1959	84.54
Nov. 13, 1959	88.89
Mar. 7, 1960	85.23
Nov. 29, 1960	87.95
Mar. 15, 1961	85.39
Nov. 20, 1961	88.84
Mar. 19, 1962	86.15

Well JY-65-18-103—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 28, 1968	91.22
Mar. 18, 1963	88.14
Mar. 11, 1964	91.87
Nov. 23, 1964	100.46
Mar. 8, 1965	94.14
Nov. 16, 1965	96.03
Mar. 8, 1966	92.42
Nov. 18, 1966	96.73
Mar. 2, 1967	93.91
Nov. 27, 1967	96.44
Mar. 5, 1968	97.67
Nov. 20, 1968	99.66
Mar. 12, 1969	97.34

Well JY-65-18-105

Owner: P. V. Cook

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 24, 1931	51.79
May 15, 1931	50.80
Sept. 29, 1932	57.55
Mar. 18, 1933	53.57
Jan. 6, 1939	58.15
Mar. 10, 1939	57.17
Sept. 19, 1939	63.40
Dec. 21, 1939	60.52
Mar. 12, 1940	59.40
Apr. 26, 1940	59.74
Mar. 11, 1941	61.55
May 15, 1941	60.45
Oct. 24, 1941	61.88
Jan. 15, 1942	60.36
Mar. 17, 1942	59.54
Sept. 21, 1942	63.30
Apr. 12, 1943	59.05
Nov. 8, 1943	63.61
Mar. 29, 1944	62.19
Oct. 5, 1944	66.10
Mar. 10, 1945	64.80

Well JY-65-18-105—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 1, 1945	65.64
Mar. 21, 1946	68.94
Mar. 29, 1946	68.91
Mar. 28, 1947	69.38
Mar. 19, 1948	64.56
Nov. 16, 1948	70.16
Mar. 7, 1949	68.05
Nov. 23, 1949	70.65
Mar. 13, 1950	70.44
Nov. 16, 1950	73.38
Mar. 21, 1951	71.46
Mar. 11, 1952	74.55
Nov. 19, 1953	78.22
Mar. 15, 1954	77.56

Measurement discontinued

Well JY-65-18-106

Owner: C. C. Cardiff

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 25, 1931	62.82
Sept. 19, 1939	61.35
Dec. 21, 1939	60.87
Mar. 12, 1940	62.07
Apr. 26, 1940	61.17
Oct. 1, 1940	65.07
Mar. 11, 1941	62.05
Oct. 24, 1941	62.60
Jan. 19, 1942	61.16
Mar. 17, 1942	60.69
Apr. 14, 1947	62.27

Measurement discontinued

Well JY-65-18-110

Owner: J. L. Rose

DATE	WATER LEVEL BELOW LSD (FEET)
June 2, 1941	62.73
July 3, 1941	63.47
Aug. 16, 1941	65.63
Oct. 22, 1941	62.82
Jan. 19, 1942	61.50

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-110—Continued	
Mar. 17, 1942	60.91
Sept. 22, 1942	63.40
Measurement discontinued	
Well JY-65-18-202	
Owner: Cinco Ranch	
May 30, 1945	62.00
Jan. 22, 1960	79.51
Mar. 7, 1960	78.46
Nov. 22, 1960	81.28
Mar. 15, 1961	78.37
Nov. 20, 1961	82.46
Mar. 19, 1962	78.96
Mar. 18, 1963	81.59
Mar. 13, 1964	84.77
Mar. 8, 1965	86.03
Mar. 8, 1966	87.90
Mar. 2, 1967	88.53
Mar. 5, 1968	91.57
Mar. 12, 1969	93.24
Well JY-65-18-203	
Owner: R. Robertson	
Mar. 24, 1931	34.47
Mar. 18, 1933	41.75
Jan. 6, 1939	40.76
Mar. 10, 1939	39.94
Sept. 19, 1939	52.94
Dec. 21, 1939	44.08
Mar. 12, 1940	41.95
Apr. 26, 1940	42.06
Oct. 1, 1940	50.38
Jan. 23, 1941	43.55
Mar. 11, 1941	42.56
May 16, 1941	41.57
Apr. 14, 1947	43.83
Measurement discontinued	

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-204	
Owner: Cardiff Bros.	
Oct. 1, 1940	60.65
Mar. 11, 1941	53.93
May 16, 1941	53.08
Oct. 24, 1941	54.59
Jan. 19, 1942	52.48
Mar. 17, 1942	51.88
Sept. 21, 1942	56.52
Nov. 8, 1943	56.94
Mar. 15, 1944	53.38
Oct. 5, 1944	62.90
Mar. 16, 1945	54.03
Nov. 1, 1945	60.72
Mar. 29, 1946	54.91
Mar. 28, 1947	54.58
Mar. 19, 1948	57.27
Nov. 19, 1948	65.81
Mar. 7, 1949	61.59
Nov. 23, 1949	66.63
Mar. 13, 1950	62.74
Nov. 16, 1950	68.73
Mar. 21, 1951	65.08
Nov. 13, 1951	73.61
Mar. 11, 1952	68.48
Well JY-65-18-501	
Owner: L. Pauli	
Mar. 24, 1931	39.40
Aug. 19, 1932	49.45
Mar. 18, 1933	40.66
Jan. 6, 1939	43.16
Mar. 10, 1939	42.48
Sept. 19, 1939	52.35
Dec. 21, 1939	45.28
Mar. 12, 1940	44.43
Apr. 26, 1940	44.58

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-18-501—Continued	
Oct. 1, 1940	51.65
Jan. 23, 1941	45.41
Mar. 11, 1941	44.99
May 16, 1941	43.65
Oct. 24, 1941	44.95
Jan. 15, 1942	42.99
Mar. 17, 1942	42.47
Sept. 21, 1942	47.36
Apr. 12, 1943	42.96
Nov. 8, 1943	48.00
Mar. 15, 1944	44.10
Oct. 4, 1944	54.30
Mar. 16, 1945	44.82
Nov. 1, 1945	49.90
Mar. 29, 1946	44.81
Mar. 28, 1947	44.87
Mar. 19, 1948	48.03
Nov. 16, 1948	57.47
Jan. 25, 1949	53.41
Mar. 7, 1949	52.32
Nov. 23, 1949	57.77
Mar. 13, 1950	53.29
Nov. 16, 1950	60.37
Mar. 21, 1951	57.60
Nov. 13, 1951	66.03
Mar. 11, 1952	59.67
Nov. 21, 1952	69.18
Mar. 25, 1953	61.38
Nov. 19, 1953	67.81
Mar. 15, 1954	61.98
Mar. 11, 1955	65.60
Mar. 9, 1956	59.90
Measurement discontinued	

Table 6.—Water Levels in Wells—Continued

Well JY-65-18-503

Owner: L. Pauli

DATE	WATER LEVEL BELOW LSD (FEET)
June 11, 1931	45.25
Mar. 18, 1933	35.50
Jan. 6, 1939	38.53
Mar. 10, 1939	37.75
Sept. 19, 1939	46.80
Dec. 21, 1939	41.07
Mar. 12, 1940	40.12
Apr. 26, 1940	40.20
Oct. 1, 1940	48.70
Jan. 23, 1941	41.35
Mar. 11, 1941	40.54
May 16, 1941	39.54
Oct. 22, 1941	41.16
Jan. 19, 1942	38.91
Mar. 17, 1942	38.46
Sept. 22, 1942	43.62
Apr. 12, 1943	40.45
Nov. 8, 1943	42.34
Mar. 15, 1944	38.15
Mar. 16, 1945	39.25
Nov. 1, 1945	46.53
Mar. 29, 1946	41.02
Mar. 28, 1947	38.18
Mar. 19, 1948	46.76
Nov. 23, 1949	55.40
Mar. 13, 1950	50.35
Nov. 16, 1950	58.44
Mar. 21, 1951	53.36
Nov. 13, 1951	64.65
Mar. 11, 1952	57.25
Mar. 25, 1953	59.42

Measurement discontinued

Well JY-65-18-504

Owner: M. A. McDonald

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 18, 1947	47.05
Mar. 4, 1948	50.24

Well JY-65-18-504—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Sept. 7, 1949	75.80
Jan. 27, 1950	56.36
Sept. 5, 1950	76.77
Jan. 19, 1951	59.08
Aug. 29, 1951	93.74
Jan. 16, 1952	63.28
Aug. 6, 1952	85.25
Jan. 20, 1953	65.66
July 20, 1953	91.05
Feb. 2, 1954	66.18
Aug. 3, 1954	96.72
Feb. 2, 1955	69.05
Aug. 17, 1955	91.08
Jan. 23, 1956	70.12
Aug. 10, 1956	101.80
Feb. 3, 1958	72.39
Aug. 5, 1958	88.60

Measurement discontinued

Well JY-65-18-602

Owner: E. W. Gless

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 29, 1952	50.12
Mar. 29, 1960	64.46
Mar. 14, 1961	66.60
Mar. 19, 1962	65.43
Mar. 18, 1963	68.41
Mar. 13, 1964	71.78
Nov. 23, 1964	76.64
Mar. 8, 1965	73.12
Nov. 16, 1965	78.97
Mar. 8, 1966	75.16
Nov. 18, 1966	80.65
Mar. 2, 1967	76.14
Nov. 27, 1967	82.40
Mar. 5, 1968	79.31
Nov. 20, 1968	83.74
Mar. 12, 1969	79.91

Well JY-65-18-606

Owner: Settegast

DATE	WATER LEVEL BELOW LSD (FEET)
June 2, 1941	40.40
Oct. 22, 1941	39.67
Jan. 19, 1942	37.22
Mar. 17, 1942	36.79
Sept. 22, 1942	42.45
Mar. 4, 1948	43.53
Sept. 7, 1949	75.56
Sept. 5, 1950	78.50
Jan. 19, 1951	62.84
Aug. 29, 1951	91.41
Jan. 16, 1952	58.95
Aug. 7, 1952	88.98
Jan. 20, 1953	63.80
Feb. 2, 1954	61.91
Jan. 21, 1957	81.53

Measurement discontinued

Well JY-65-19-403

Owner: Leon Miles

DATE	WATER LEVEL BELOW LSD (FEET)
Oct. 1, 1940	34.85
Mar. 11, 1941	27.92
Mar. 17, 1942	26.20
Apr. 12, 1943	26.65
Mar. 15, 1944	27.98
Oct. 4, 1944	39.33
Mar. 16, 1945	28.95
Nov. 1, 1945	30.82
Mar. 29, 1946	30.04
Apr. 17, 1947	29.59
Mar. 19, 1948	28.76
Nov. 23, 1949	46.89
Mar. 13, 1950	40.48
Nov. 17, 1950	51.62
Mar. 21, 1951	45.39
Nov. 13, 1951	57.49
Mar. 11, 1952	48.84

Table 6.—Water Levels in Wells—Continued

Well JY-65-19-403—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 21, 1952	62.05
Mar. 25, 1953	51.81
Mar. 15, 1954	53.75
Mar. 15, 1968	77.80

Well JY-65-19-501

Owner: Wing & Grimes

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 29, 1952	61.40
Mar. 29, 1960	70.92
Mar. 15, 1961	71.97
Mar. 28, 1962	73.11
Mar. 18, 1963	78.42
Mar. 8, 1965	81.20
Jan. 7, 1969	92.35

Well JY-65-19-505

Owner: C. Pillot

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 6, 1939	27.20
Mar. 10, 1939	26.57
Sept. 19, 1939	33.20
Dec. 21, 1939	29.60
Mar. 12, 1940	28.91
Apr. 26, 1940	32.24
Oct. 1, 1940	33.50
Mar. 11, 1941	30.09
May 16, 1941	31.37
Oct. 24, 1941	31.03
Jan. 19, 1942	28.69
Mar. 17, 1942	28.20
Sept. 22, 1942	33.15
Apr. 12, 1943	28.90
Nov. 8, 1943	33.24
Mar. 15, 1944	29.84
Oct. 4, 1944	39.13
Mar. 16, 1945	28.08
Nov. 1, 1945	34.92
Mar. 29, 1946	29.03
Mar. 28, 1947	31.23

Well JY-65-19-505—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 19, 1948	33.01
Jan. 25, 1949	39.18
Mar. 7, 1949	39.82
May 20, 1949	63.60
Nov. 23, 1949	47.77
Mar. 13, 1950	42.46
Nov. 16, 1950	52.26
Mar. 21, 1951	45.11
Nov. 13, 1951	51.28
Mar. 11, 1952	42.26
July 22, 1952	29.82
Nov. 21, 1952	28.35
Mar. 25, 1953	25.15
Mar. 15, 1954	42.06
Nov. 30, 1954	27.67
Mar. 11, 1955	29.32
Mar. 9, 1956	31.27
Mar. 25, 1958	33.08
Mar. 11, 1959	25.17

Measurement discontinued

Well JY-65-19-506

Owner: C. Pillot

DATE	WATER LEVEL BELOW LSD (FEET)
Sept. 1939	33.50
Jan. 25, 1949	44.27
Nov. 21, 1952	68.94
Mar. 25, 1953	57.95
Nov. 23, 1953	66.65
Mar. 15, 1954	58.83

Destroyed

Well JY-65-19-701

Owner: Walter Ludwig

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 29, 1961	60.24
Mar. 18, 1963	64.52
Mar. 8, 1965	65.75
Jan. 7, 1969	79.29

Well JY-65-25-301

Owner: R. E. Smith Ranch

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 24, 1947	43.66
Mar. 4, 1948	46.99
Dec. 29, 1948	50.19
Aug. 31, 1949	51.13
Jan. 31, 1950	49.53
Sept. 5, 1950	51.62
Jan. 18, 1951	50.59
Aug. 29, 1951	52.86
Jan. 15, 1952	52.09
Jan. 20, 1953	52.16
July 20, 1953	53.59
Feb. 2, 1954	51.67
Aug. 2, 1954	54.26
Feb. 2, 1955	53.53
Aug. 17, 1955	53.84
Jan. 27, 1956	53.65
Aug. 10, 1956	55.20
Jan. 21, 1957	55.81
Aug. 1, 1957	50.68
Feb. 3, 1958	50.39
Aug. 5, 1958	53.37
Aug. 11, 1959	53.32
Jan. 18, 1961	46.89
Aug. 25, 1961	48.39
Jan. 29, 1962	47.95
Aug. 13, 1962	51.43
Feb. 4, 1962	49.27
Jan. 22, 1964	57.60
Jan. 18, 1965	53.85
Feb. 1, 1967	51.65
Jan. 30, 1968	51.68
Jan. 14, 1969	50.33
Aug. 11, 1969	51.83

Table 6.—Water Levels in Wells—Continued

Well JY-65-25-302

Owner: R. E. Smith Ranch

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 24, 1947	42.93
Dec. 29, 1948	49.06
Jan. 31, 1950	47.70
Jan. 18, 1951	49.18
Jan. 15, 1952	50.34
Jan. 20, 1953	50.26
Jan. 21, 1957	54.88
Aug. 1, 1957	50.33
Feb. 3, 1958	49.26
Jan. 18, 1965	53.27
Feb. 1, 1967	52.44
Jan. 30, 1968	50.97
Aug. 9, 1968	51.60
Jan. 14, 1969	51.74
Aug. 11, 1969	55.07

Well JY-65-25-404

Owner: Gulf Oil Corp.

DATE	WATER LEVEL BELOW LSD (FEET)
May 21, 1947	32.23
Aug. 31, 1949	33.35
Jan. 31, 1950	32.45
Sept. 5, 1950	33.85
Jan. 18, 1951	33.27
Aug. 29, 1951	35.10
Jan. 15, 1952	34.11
Sept. 6, 1952	35.25
Jan. 20, 1953	33.71
July 20, 1953	36.48
Feb. 2, 1954	35.03
Aug. 2, 1954	36.52
Feb. 2, 1955	35.86
Aug. 17, 1955	36.19
Jan. 23, 1956	35.53
Aug. 10, 1956	36.93
Feb. 3, 1958	33.40
Aug. 11, 1959	34.38

Well JY-65-25-404—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 25, 1961	36.47
Jan. 29, 1962	35.49
Feb. 4, 1963	36.91
Measurement discontinued	
Jan. 8, 1969	38.07

Well JY-65-26-702

Owner: K. Dzierzanowski

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 28, 1947	36.71
Dec. 29, 1948	40.26
Aug. 31, 1949	42.33
Jan. 31, 1950	40.37
Sept. 8, 1950	43.77
Jan. 19, 1951	41.62
Aug. 29, 1951	45.88
Jan. 15, 1952	43.88
Aug. 6, 1952	46.16
Jan. 20, 1953	44.22
July 21, 1953	42.19
Feb. 2, 1954	41.30
Aug. 3, 1954	41.89
Feb. 2, 1955	43.08
Aug. 17, 1955	46.07
Jan. 27, 1956	44.31
Aug. 13, 1956	47.01
Jan. 22, 1957	46.19
Aug. 2, 1957	48.73
Destroyed	

Well JY-65-27-301

Owner: State Prison

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 30, 1948	57.00
Aug. 30, 1949	61.40
Jan. 27, 1950	58.62
Sept. 7, 1950	67.72
Feb. 8, 1951	62.10
Aug. 29, 1951	77.33

Well JY-65-27-301—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 16, 1952	68.30
Jan. 19, 1953	74.84
Measurement discontinued	

Well JY-65-27-302

Owner: Fort Bend Utilities No. 8

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 1945	57.00
May 9, 1947	65.53
Mar. 19, 1948	72.00
June 11, 1948	79.00
Aug. 18, 1948	82.00
Dec. 1, 1948	82.00
Feb. 8, 1949	82.00
Apr. 4, 1949	78.00
Dec. 18, 1949	81.00
Mar. 19, 1950	70.00
Sept. 4, 1950	69.00
Jan. 21, 1951	119.00
Apr. 29, 1951	130.00
June 17, 1951	127.00
June 26, 1954	112.00
Nov. 1, 1954	112.00
Feb. 28, 1954	115.00
May 1, 1955	115.00
Nov. 14, 1955	112.00
Jan. 14, 1956	112.00
July 15, 1956	117.00
Jan. 5, 1957	122.00
Aug. 11, 1957	122.00
Oct. 1, 1957	125.00
Mar. 1, 1958	122.00
July 20, 1958	122.00
Sept. 21, 1958	127.00
Jan. 17, 1959	127.00
Nov. 27, 1959	122.00
Aug. 12, 1960	127.00
Feb. 3, 1961	132.00

Table 6.—Water Levels in Wells—Continued

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-302—Continued		
Mar.	3, 1962	130.00
July	14, 1962	130.00
Feb.	2, 1963	135.00
Nov.	22, 1963	147.00
Mar.	14, 1964	139.00
Oct.	31, 1964	149.00
Jan.	15, 1965	149.00
Aug.	8, 1965	150.00
Jan.	8, 1966	150.00
Jan.	2, 1967	157.00
Mar.	8, 1968	167.00
Dec.	14, 1968	164.00
Dec.	13, 1969	187.00
Well JY-65-27-303		
Owner: Fort Bend Utilities No. 9		
Sept.	24, 1958	108.00
Jan.	17, 1959	99.00
Nov.	27, 1959	100.00
Aug.	12, 1960	103.00
Feb.	3, 1961	103.00
Mar.	3, 1962	100.00
July	14, 1962	100.00
Feb.	2, 1963	103.00
Nov.	23, 1963	112.00
Mar.	14, 1964	118.00
Oct.	31, 1964	113.00
Jan.	15, 1965	113.00
Aug.	8, 1965	118.00
Jan.	8, 1966	114.00
Jan.	2, 1967	114.00
Mar.	8, 1968	120.00
Dec.	14, 1968	119.00
Dec.	13, 1969	123.00

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-305		
Owner: State Prison No. 3		
Mar.	10, 1964	26.82
Jan.	10, 1969	25.99
July	1, 1969	25.40
Well JY-65-27-309		
Owner: State Prison No. 2		
Apr.	1945	32.00
May	8, 1947	38.24
Dec.	30, 1948	46.85
Aug.	30, 1949	46.10
Jan.	27, 1950	43.57
Sept.	7, 1950	47.43
Feb.	8, 1951	45.37
Aug.	29, 1951	54.73
Destroyed		
Well JY-65-27-312		
Owner: Fort Bend Utilities No. 3		
	1920	1.00
Sept.	4, 1931	19.0
May	26, 1940	28.72
July	21, 1940	29.69
Dec.	1, 1940	30.87
Mar.	2, 1941	29.76
May	25, 1941	25.87
July	1943	29.76
May	9, 1947	69.55
Apr.	5, 1949	86.00
Dec.	18, 1949	91.00
Mar.	19, 1950	98.00
Apr.	29, 1951	93.00
June	17, 1951	95.00
Oct.	20, 1951	101.00
Dec.	31, 1951	99.00
Apr.	21, 1952	100.00
Aug.	16, 1952	107.00

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-27-312—Continued		
Dec.	13, 1952	109.00
Sept.	27, 1953	114.00
Dec.	30, 1953	100.00
June	4, 1954	120.00
Nov.	1, 1954	127.00
Feb.	28, 1955	122.00
May	1, 1955	161.00
Nov.	14, 1955	157.00
Jan.	14, 1956	157.00
July	15, 1956	157.00
Nov.	12, 1956	160.00
Oct.	1, 1957	132.00
Mar.	1, 1958	117.00
July	20, 1958	132.00
Sept.	21, 1958	132.00
Jan.	7, 1959	137.00
Nov.	27, 1959	129.00
Aug.	12, 1960	132.00
Feb.	3, 1961	137.00
Mar.	3, 1962	142.00
July	14, 1962	142.00
Feb.	2, 1963	147.00
Nov.	22, 1963	154.00
Mar.	14, 1964	154.00
July	12, 1964	157.00
Oct.	31, 1964	157.00
Jan.	15, 1965	157.00
Aug.	8, 1965	165.00
Feb.	22, 1966	169.00
Well JY-65-27-313		
Owner: Fort Bend Utilities No. 7		
Nov.	25, 1941	48.50
Apr.	10, 1949	85.00
Dec.	18, 1949	76.00
Mar.	19, 1950	70.00

Table 6.—Water Levels in Wells—Continued

Well JY-65-27-313—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Sept. 5, 1950	83.00
Apr. 29, 1951	72.00
June 17, 1951	77.00
Oct. 20, 1951	74.00
Dec. 31, 1951	81.00
Sept. 27, 1953	91.00
June 24, 1954	94.00
Nov. 1, 1954	94.00
Feb. 28, 1955	89.00
May 1, 1955	94.00
Nov. 14, 1955	89.00
Jan. 14, 1956	89.00
July 15, 1956	99.00
Jan. 5, 1957	99.00
Oct. 1, 1957	119.00
Mar. 1, 1958	114.00
July 20, 1958	129.00
Sept. 21, 1958	124.00
Jan. 17, 1959	121.00
Aug. 12, 1960	107.00

Well JY-65-27-314

Owner: State Prison

DATE	WATER LEVEL BELOW LSD (FEET)
Oct. 23, 1930	19.00
May 8, 1947	31.74
Dec. 30, 1948	42.06
Aug. 30, 1949	43.72
Jan. 27, 1950	41.30

Destroyed

Well JY-65-27-315

Owner: Fort Bend Utilities No. 6

DATE	WATER LEVEL BELOW LSD (FEET)
Nov. 1938	30.00
May 26, 1940	38.50
July 21, 1940	42.96
Mar. 2, 1941	42.75
May 25, 1941	41.20
Jan. 3, 1942	45.00
May 9, 1947	61.55

Well JY-65-27-315—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 10, 1949	82.00
Dec. 18, 1949	80.00
Mar. 19, 1950	86.00
Sept. 5, 1950	80.00
Apr. 29, 1951	79.00
June 17, 1951	84.00
Oct. 20, 1951	74.00
Apr. 21, 1952	124.00
Aug. 16, 1952	139.00
Sept. 27, 1953	96.00
Feb. 28, 1955	94.00
Jan. 14, 1956	96.00
July 15, 1956	104.00
Jan. 5, 1957	104.00
Aug. 11, 1957	109.00
July 20, 1958	99.00
Nov. 27, 1959	94.00

Destroyed

Well JY-65-27-316

Owner: Fort Bend Utilities

DATE	WATER LEVEL BELOW LSD (FEET)
May 26, 1940	36.85
July 21, 1940	41.77
Dec. 1, 1940	40.70
Mar. 2, 1941	40.39

Destroyed

Well JY-65-27-901

Owner: A. E. Myers

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 4, 1944	30.00
Apr. 30, 1947	37.05
Dec. 30, 1948	47.76
Sept. 6, 1949	49.35
Jan. 27, 1950	49.19
Sept. 6, 1950	52.34
Feb. 8, 1951	52.94
Aug. 28, 1951	58.08
Jan. 16, 1952	57.56

Well JY-65-27-901—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Aug. 5, 1952	59.14
Jan. 21, 1953	60.89
July 20, 1953	62.95
Jan. 20, 1954	62.92
Aug. 16, 1955	72.69
Jan. 23, 1956	69.70
July 1956	72.00
Jan. 23, 1957	75.60
Jan. 27, 1958	73.87
Aug. 6, 1958	79.00
Jan. 16, 1961	76.33
Aug. 28, 1961	78.90
Jan. 18, 1962	77.19
Aug. 14, 1962	80.78
Jan. 21, 1963	80.28
Jan. 22, 1964	85.35
Jan. 20, 1965	87.96
Aug. 10, 1965	92.20
Jan. 27, 1966	90.65
Aug. 9, 1966	92.52
Feb. 1, 1967	92.32
Aug. 9, 1967	99.02
Jan. 30, 1968	97.68
Aug. 7, 1968	98.25
Jan. 9, 1969	99.62

Well JY-65-28-402

Owner: Humble Oil & Ref. Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 1, 1947	33.67
Dec. 30, 1948	47.95
Sept. 1, 1949	48.30
Jan 25, 1950	47.72
Sept. 7, 1950	52.14
Jan. 18, 1951	52.39
Aug. 24, 1951	58.94
Jan. 15, 1952	57.48
Jan. 19, 1953	61.29

Table 6.—Water Levels in Wells—Continued

Well JY-65-28-402—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
July 20, 1953	64.06
Jan. 20, 1954	63.09
Aug. 2, 1954	69.02
Feb. 1, 1955	68.14
Aug. 16, 1955	72.33
Jan. 27, 1956	72.58
Aug. 10, 1956	75.05
Jan. 21, 1957	75.93
Aug. 1, 1957	74.30
Aug. 21, 1961	77.18
Aug. 13, 1962	79.77
Aug. 26, 1963	85.66
Jan. 27, 1964	84.90

Measurement discontinued

Well JY-65-27-902

Owner: A. E. Myers

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 30, 1947	27.61
Dec. 30, 1948	34.47
Sept. 6, 1949	34.63
Jan. 27, 1950	34.58
Sept. 6, 1950	35.75
Feb. 8, 1951	36.00
Aug. 28, 1951	39.60
Jan. 16, 1952	40.20
Aug. 5, 1952	40.60
Jan. 21, 1953	42.12
Jan. 20, 1954	42.05
Aug. 3, 1954	45.70
Feb. 1, 1955	46.45
Aug. 16, 1955	48.02
Jan. 23, 1956	48.76

Measurement discontinued

Well JY-65-28-403

Owner: Humble Oil & Ref. Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 1, 1947	38.30
Dec. 30, 1948	51.32

Well JY-65-28-403—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Sept. 1, 1949	53.34
Jan. 25, 1950	52.17
Sept. 7, 1950	57.40
Jan. 18, 1951	57.23
Aug. 24, 1951	64.22
Jan. 15, 1952	62.28
Aug. 5, 1952	65.86
Jan. 19, 1953	66.18
July 20, 1953	69.63
Jan. 20, 1954	68.23
Aug. 2, 1954	76.36
Feb. 1, 1955	73.83
Aug. 16, 1955	78.51
Jan. 27, 1956	75.40
Aug. 10, 1956	81.35
Jan. 21, 1957	82.13
Aug. 1, 1957	80.68
Aug. 21, 1961	81.53
Aug. 13, 1962	83.24
Aug. 26, 1963	88.58
Jan. 27, 1964	88.08
Jan. 18, 1965	88.71

Measurement discontinued

Well JY-65-28-404

Owner: Humble Oil & Ref. Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 1, 1947	40.36
Dec. 30, 1948	53.33
Aug. 30, 1949	55.28
Jan. 25, 1950	54.50
Sept. 7, 1950	59.50
Jan. 18, 1951	60.68
Aug. 24, 1951	66.63
Jan. 15, 1952	65.65
Aug. 5, 1952	67.96
Jan. 19, 1953	69.89
July 20, 1953	72.04

Well JY-65-28-404—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 20, 1954	71.86
Aug. 2, 1954	78.48
Feb. 1, 1955	77.54
Aug. 16, 1955	81.43
Jan. 23, 1956	79.07
Aug. 10, 1956	84.18
Jan. 21, 1957	86.56
Aug. 1, 1957	84.70
Feb. 3, 1958	84.79
Aug. 5, 1958	88.95
Aug. 11, 1959	88.37
Jan. 16, 1961	88.47
Aug. 21, 1961	90.17
Jan. 18, 1962	90.03
Aug. 13, 1962	93.09
Jan. 21, 1963	93.45
Aug. 26, 1963	99.65
Jan. 27, 1964	99.52
Aug. 11, 1964	102.95
Jan. 18, 1965	103.15
Aug. 10, 1965	107.40
Jan. 27, 1966	106.77
Aug. 9, 1966	108.53
Jan. 31, 1967	108.81
Aug. 9, 1967	115.50
Jan. 29, 1968	114.94
Aug. 7, 1968	116.27
Jan. 23, 1969	118.69
Aug. 12, 1969	120.61

Well JY-65-28-501

Owner: Humble Oil & Ref. Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 1, 1947	40.93
Dec. 30, 1948	53.45
Aug. 30, 1949	55.05
Jan. 25, 1950	55.33
Sept. 7, 1950	59.20

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-501—Continued	
Aug. 24, 1951	65.65
Jan. 15, 1952	66.00
Aug. 5, 1952	67.91
Jan. 19, 1953	70.28
July 20, 1953	72.09
Jan. 20, 1954	72.80
Aug. 2, 1954	78.72
Feb. 1, 1955	78.60
Aug. 16, 1955	81.78
Jan. 23, 1956	79.25
Aug. 10, 1956	79.45
Jan. 21, 1957	87.48
Aug. 1, 1957	82.54
Feb. 3, 1958	81.01
Aug. 5, 1958	90.24
Aug. 11, 1959	89.23
Jan. 16, 1961	90.08
Aug. 21, 1961	91.31
Jan. 18, 1962	91.23
Aug. 13, 1962	94.00
Jan. 21, 1963	95.54
Aug. 26, 1963	100.81
Jan. 27, 1964	101.52
Aug. 11, 1964	104.30
Jan. 18, 1965	105.23
Aug. 10, 1965	108.76
Jan. 27, 1966	109.10
Aug. 9, 1966	109.91
Jan. 31, 1967	111.23
Aug. 9, 1967	117.20
Jan. 29, 1968	117.71
Aug. 7, 1968	118.16
Jan. 23, 1969	120.40
Aug. 12, 1969	122.17

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-601	
Owner: Phillips Petr. Co.	
Dec. 6, 1938	30.60
Mar. 13, 1939	30.77
May 22, 1939	31.03
Aug. 1, 1939	31.22
Sept. 28, 1939	31.92
Jan. 16, 1940	32.61
Feb. 21, 1940	32.70
May 3, 1940	32.97
June 28, 1940	33.24
Aug. 5, 1940	33.58
Sept. 30, 1940	34.24
Nov. 27, 1940	34.37
Feb. 19, 1941	34.00
Apr. 5, 1941	33.79
June 3, 1941	33.51
July 16, 1941	33.35
Nov. 24, 1941	33.37
Jan. 3, 1942	33.17
Jan. 27, 1942	33.19
July 16, 1942	32.99
Jan. 22, 1943	33.40
June 22, 1943	33.56
Sept. 13, 1943	34.38
Sept. 14, 1943	34.40
Jan. 27, 1944	34.74
Sept. 19, 1944	35.83
Dec. 11, 1944	36.46
Jan. 26, 1945	36.52
Mar. 21, 1945	36.63
June 27, 1945	40.56
Jan. 18, 1946	39.38
May 1, 1946	39.37
Sept. 16, 1946	45.13
Dec. 13, 1946	41.24

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-28-601—Continued	
Feb. 3, 1947	40.93
Mar. 11, 1947	40.85
Measurement discontinued	
Well JY-65-28-803	
Owner: Christianson & Mathews	
May 6, 1947	20.93
Aug. 30, 1949	27.53
Jan. 25, 1950	27.79
Sept. 7, 1950	29.09
Jan. 16, 1951	30.56
Aug. 24, 1951	32.41
Jan. 19, 1953	35.86
Jan. 20, 1954	37.72
Aug. 10, 1956	47.80
Jan. 21, 1957	49.03
Aug. 1, 1957	46.51
Feb. 3, 1958	46.94
Aug. 5, 1958	48.65
Aug. 11, 1959	47.61
Aug. 21, 1961	47.83
Aug. 13, 1962	50.07
Jan. 27, 1964	53.42
Jan. 20, 1965	55.38
Jan. 27, 1966	56.91
Feb. 1, 1967	58.27
Jan. 30, 1968	60.96
Jan. 27, 1969	62.89
Well JY-65-29-101	
Owner: D. W. Black	
Apr. 9, 1945	47.00
Jan. 18, 1946	55.01
Feb. 3, 1947	59.82
Mar. 11, 1947	59.88
Dec. 15, 1947	67.33
Mar. 23, 1948	66.26

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-29-101—Continued	
Dec. 14, 1948	76.74
Feb. 8, 1949	74.91
Dec. 22, 1949	79.02
Feb. 17, 1950	77.18
Dec. 15, 1950	85.42
Feb. 21, 1951	83.60
June 13, 1951	91.93
Dec. 13, 1951	89.36
Feb. 5, 1952	87.55
Feb. 5, 1953	92.24
Dec. 23, 1953	98.12
Feb. 18, 1954	96.31
Dec. 17, 1954	106.09
Feb. 9, 1955	102.03
Sept. 21, 1955	114.21
Dec. 9, 1955	105.06
Feb. 16, 1956	102.95
Feb. 20, 1957	108.64
Dec. 11, 1957	107.14
Feb. 26, 1958	104.69
Dec. 9, 1958	106.58
Feb. 18, 1959	104.79
Dec. 21, 1959	103.82
Feb. 14, 1960	102.78
Feb. 14, 1961	102.67
Feb. 19, 1962	104.37
Feb. 21, 1963	106.84
Mar. 11, 1964	111.10
Feb. 23, 1965	114.03
Feb. 18, 1966	116.84
Feb. 12, 1968	122.11
Mar. 7, 1969	124.18
Well JY-65-29-103	
Owner: D. W. Black	
Feb. 3, 1947	3.33
Mar. 11, 1947	4.82
Well JY-65-29-103—Continued	
Dec. 15, 1947	10.80
Mar. 23, 1948	5.91
Dec. 22, 1949	8.86
Feb. 17, 1950	7.70
Sept. 27, 1950	8.32
Dec. 13, 1951	12.78
Feb. 5, 1952	12.55
Feb. 5, 1953	12.39
Dec. 22, 1953	10.11
Dec. 17, 1954	5.90
Feb. 9, 1955	4.19
Sept. 21, 1955	7.14
Dec. 9, 1955	9.07
Feb. 16, 1956	5.08
Feb. 20, 1957	10.21
Dec. 11, 1957	6.85
Feb. 26, 1958	4.33
Dec. 9, 1958	9.20
Feb. 18, 1959	6.69
Dec. 21, 1959	5.85
Feb. 14, 1960	3.96
Feb. 14, 1961	3.07
Feb. 19, 1962	7.16
Feb. 21, 1963	9.29
Mar. 11, 1964	11.15
Feb. 23, 1965	13.12
Feb. 18, 1966	8.48
Destroyed	
Well JY-65-29-403	
Owner: Gulf Pipeline Co.	
Dec. 6, 1938	45.29
Mar. 13, 1939	44.89
May 22, 1939	45.38
Aug. 1, 1939	46.34
Sept. 28, 1939	47.72
Dec. 2, 1939	48.43
Well JY-65-29-403—Continued	
Jan. 16, 1940	48.60
Feb. 21, 1940	48.60
Aug. 5, 1940	50.26
Nov. 27, 1940	52.30
Feb. 19, 1941	52.04
Apr. 5, 1941	51.83
July 16, 1941	51.95
Nov. 25, 1941	53.52
Jan. 3, 1942	53.42
Jan. 27, 1942	53.58
July 16, 1942	53.96
Jan. 22, 1943	55.76
June 22, 1943	56.80
Jan. 27, 1944	60.04
Sept. 19, 1944	63.38
Dec. 11, 1944	64.29
Jan. 26, 1945	64.34
Mar. 21, 1945	64.53
June 27, 1945	66.92
Jan. 18, 1946	68.55
July 16, 1946	71.49
Sept. 16, 1946	75.09
Dec. 13, 1946	74.36
Feb. 3, 1947	74.50
May 7, 1947	77.08
Sept. 15, 1947	82.11
Dec. 15, 1947	82.35
Feb. 5, 1948	81.90
Sept. 21, 1948	91.73
Dec. 14, 1948	91.40
June 30, 1949	91.91
Sept. 20, 1949	96.51
Dec. 22, 1949	94.72
Feb. 17, 1950	93.51
June 12, 1950	93.90
Sept. 27, 1950	102.64

Tabel 6.—Water Levels in Wells—Continued

Well JY-65-29-403—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 15, 1950	101.52
June 13, 1951	103.43
Sept. 18, 1951	109.08
Dec. 13, 1951	108.70
Feb. 5, 1952	107.70
June 17, 1952	109.25
Sept. 17, 1952	114.94
Dec. 30, 1952	114.52
June 12, 1953	115.33
Sept. 28, 1953	120.54
Dec. 21, 1953	118.44
Feb. 18, 1954	117.67
June 25, 1954	123.15
Dec. 17, 1954	127.83
Feb. 9, 1955	124.24
June 17, 1955	124.44

Measurement discontinued

Well JY-65-29-701

Owner: Julia Tague

DATE	WATER LEVEL BELOW LSD (FEET)
May 5, 1947	35.19
Dec. 31, 1948	40.42
Aug. 30, 1949	41.47
Jan. 25, 1950	42.34
Sept. 7, 1950	43.71
Feb. 5, 1951	44.98
Jan. 15, 1952	48.40
Jan. 16, 1953	50.71
July 20, 1953	51.54
Feb. 24, 1954	53.92
Aug. 11, 1954	54.52
Aug. 22, 1955	62.20
Jan. 30, 1956	65.02
Feb. 5, 1958	63.56
Aug. 5, 1958	62.88
Mar. 24, 1961	63.36
Aug. 21, 1961	63.68

Well JY-65-29-701—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 19, 1962	63.59
Jan. 21, 1964	68.61
Jan. 18, 1965	70.92
Jan. 26, 1966	70.92
Jan. 26, 1966	72.68
Jan. 27, 1967	74.01
Jan. 30, 1968	76.94
Jan. 27, 1969	78.87

Well JY-65-29-702

Owner: Humble Oil & Refining Co.

DATE	WATER LEVEL BELOW LSD (FEET)
May 15, 1947	54.83
Dec. 31, 1948	63.95
Aug. 30, 1949	67.23
Jan. 25, 1950	64.82
Sept. 7, 1950	69.14
Jan. 18, 1951	71.63
Jan. 15, 1952	76.50
Jan. 16, 1953	78.20

Measurement discontinued

Well JY-65-33-502

Owner: Jack Wendt

DATE	WATER LEVEL BELOW LSD (FEET)
Dec. 29, 1948	24.25
Jan. 31, 1950	24.50
Sept. 8, 1950	27.81
Jan. 19, 1951	25.92
Jan. 15, 1952	27.15
July 28, 1955	40.90
Jan. 27, 1956	31.09

Measurement discontinued

Well JY-65-33-503

Owner: Jack Wendt No. 2

DATE	WATER LEVEL BELOW LSD (FEET)
Mar. 4, 1948	23.50
Dec. 29, 1948	25.33
Jan. 31, 1950	25.86
Jan. 19, 1951	28.14
Jan. 15, 1952	28.76

Well JY-65-33-503—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Jan. 20, 1953	29.66
Feb. 2, 1954	29.71
Feb. 2, 1955	31.40
Jan. 27, 1956	31.38
Jan. 22, 1957	32.90
Jan. 27, 1958	33.45
Jan. 17, 1961	34.89
Jan. 30, 1962	34.89
Feb. 4, 1963	35.95
Jan. 22, 1964	37.21
Jan. 19, 1965	37.37
Jan. 28, 1966	37.39
Jan. 31, 1967	35.96
Jan. 29, 1968	39.08
Jan. 23, 1969	40.98

Well JY-65-33-504

Owner: Jack Wendt No. 1

DATE	WATER LEVEL BELOW LSD (FEET)
Apr. 24, 1947	22.26
Mar. 4, 1948	23.52
Dec. 29, 1948	25.75
Aug. 31, 1949	31.15
Jan. 31, 1950	26.21
Sept. 8, 1950	30.89
Jan. 19, 1951	26.77
Jan. 15, 1952	29.40
Aug. 6, 1952	36.11
Jan. 20, 1953	30.59
Feb. 2, 1954	30.33
Feb. 2, 1955	32.19
Jan. 27, 1956	33.18
Jan. 22, 1957	35.07
Jan. 17, 1961	35.29
Jan. 30, 1962	34.59
Feb. 4, 1963	35.66
Jan. 22, 1964	37.37
Jan. 19, 1965	37.59

Table 6.—Water Levels in Wells—Continued

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-33-504—Continued		
Jan.	28, 1966	37.91
Jan.	31, 1967	37.80
Jan.	29, 1968	40.36
Jan.	23, 1969	40.70
Well JY-65-33-506		
Owner: Jack Wendt		
Mar.	4, 1948	23.75
Dec.	29, 1948	26.18
Jan.	31, 1950	26.78
Jan.	15, 1952	29.64
Jan.	23, 1969	41.81
Well JY-65-33-801		
Owner: Jack Wendt		
Jan.	20, 1953	31.19
Feb.	2, 1954	31.39
Feb.	2, 1955	33.42
Jan.	27, 1956	34.06
Jan.	22, 1957	35.84
Jan.	30, 1962	36.23
Feb.	4, 1963	37.35
Jan.	22, 1964	38.81
Jan.	19, 1965	39.27
Jan.	28, 1966	39.62
Jan.	31, 1967	39.65
Jan.	29, 1968	41.23
Jan.	23, 1969	41.63
Well JY-65-34-901		
Owner: Walter Gless		
Apr.	24, 1947	11.67
Mar.	4, 1948	19.71
Dec.	29, 1948	24.12
Jan.	30, 1950	24.75
Feb.	7, 1951	26.81
Aug.	28, 1951	42.03
Jan.	16, 1952	29.48
Jan.	21, 1953	30.57

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-34-901—Continued		
Feb.	2, 1954	32.21
Feb.	2, 1955	36.24
Jan.	27, 1956	37.96
Jan.	22, 1957	41.31
Jan.	28, 1958	37.59
Jan.	17, 1961	40.98
Jan.	29, 1962	41.84
Jan.	4, 1963	42.27
Jan.	22, 1964	46.44
Jan.	19, 1965	46.70
Jan.	28, 1966	46.72
Jan.	31, 1967	47.75
Jan.	29, 1968	51.02
Oct.	1, 1968	56.50
Jan.	23, 1969	49.00
Well JY-65-35-101		
Owner: Gulf Oil Corp.		
Apr.	30, 1947	9.24
Dec.	29, 1948	12.45
Sept.	2, 1949	13.35
Jan.	30, 1950	13.10
Sept.	8, 1950	13.59
Feb.	7, 1951	13.30
Aug.	28, 1951	13.22
Jan.	16, 1952	14.57
Aug.	6, 1952	16.85
Jan.	21, 1953	17.44
July	21, 1953	18.86
Jan.	20, 1954	18.09
Aug.	3, 1954	19.71
Feb.	1, 1955	19.73
Aug.	16, 1955	22.29
Jan.	27, 1956	20.60
Aug.	13, 1956	19.92
Jan.	22, 1957	19.86
Aug.	2, 1957	19.53

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-35-101—Continued		
Jan.	28, 1958	20.86
Aug.	6, 1958	23.36
Aug.	12, 1959	23.52
Jan.	29, 1962	25.65
Aug.	14, 1962	23.98
Jan.	21, 1963	23.07
Jan.	18, 1965	24.41
Aug.	10, 1965	25.21
Jan.	28, 1966	25.60
Aug.	9, 1966	27.67
Jan.	31, 1967	25.16
Aug.	9, 1967	26.73
Jan.	29, 1968	27.15
Aug.	7, 1968	28.45
Jan.	23, 1969	27.75
Aug.	12, 1969	28.63
Well JY-65-35-102		
Owner: Gulf Oil Corporation		
Apr.	30, 1947	13.95
Dec.	29, 1948	16.80
Sept.	2, 1949	16.78
Jan.	30, 1950	15.51
Sept.	8, 1950	15.60
Aug.	28, 1951	17.73
Jan.	16, 1952	18.06
Aug.	6, 1952	18.23
Jan.	21, 1953	18.80
July	21, 1953	19.03
Jan.	20, 1954	18.84
Aug.	3, 1954	19.60
Feb.	1, 1955	20.22
Aug.	16, 1955	20.69
Jan.	27, 1956	21.13
Aug.	13, 1956	21.62
Jan.	22, 1957	22.10
Aug.	2, 1957	22.46

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-35-102—Continued	
Jan. 28, 1958	22.91
Aug. 6, 1958	23.49
Aug. 12, 1959	24.16
Jan. 29, 1962	26.27
Aug. 14, 1962	24.19
Jan. 21, 1963	24.10
Jan. 18, 1965	25.11
Aug. 10, 1965	25.62
Jan. 28, 1966	25.64
Aug. 9, 1966	26.97
Jan. 31, 1967	26.30
Jan. 29, 1968	28.27
Jan. 23, 1969	26.11
Aug. 12, 1969	26.49
Well JY-65-35-301	
Owner: Humble Oil & Ref.	
Apr. 30, 1947	12.09
Oct. 30, 1948	18.12
Sept. 6, 1949	18.24
Measurement discontinued	
Well JY-65-36-101	
Owner: Cecil Hagen	
Apr. 29, 1947	12.55
Dec. 30, 1948	18.62
Sept. 6, 1949	18.42
Jan. 27, 1950	18.54
Sept. 6, 1950	19.26
Feb. 8, 1951	20.75
Aug. 28, 1951	22.31
Jan. 16, 1952	23.57
Aug. 5, 1952	23.77
Jan. 21, 1953	25.12
July 20, 1953	26.25
Jan. 20, 1954	26.82
Aug. 3, 1954	28.94
Feb. 1, 1955	30.56

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-101—Continued	
Aug. 16, 1955	31.96
Jan. 23, 1956	32.83
Aug. 13, 1956	34.72
Jan. 23, 1957	36.39
Aug. 2, 1957	32.98
Jan. 27, 1958	34.96
Aug. 6, 1958	36.11
Aug. 12, 1959	35.33
Jan. 16, 1961	35.29
Aug. 28, 1961	35.09
Jan. 18, 1962	34.93
Aug. 14, 1962	35.97
Jan. 21, 1963	36.47
Jan. 22, 1964	37.87
Aug. 11, 1964	40.01
Jan. 20, 1965	40.18
Aug. 10, 1965	40.97
Jan. 27, 1966	40.37
Aug. 9, 1966	36.18
Feb. 1, 1967	42.89
Aug. 9, 1967	45.15
Jan. 30, 1968	45.26
Aug. 7, 1968	43.58
Jan. 9, 1969	43.86
Well JY-65-36-201	
Owner: Chicago Corp.	
Dec. 30, 1948	21.29
Sept. 6, 1949	21.88
Jan. 27, 1950	21.95
Sept. 6, 1950	22.13
Feb. 8, 1951	24.60
Aug. 28, 1951	26.44
Jan. 16, 1952	27.69
Aug. 5, 1952	28.09
Jan. 21, 1953	29.70
July 20, 1953	30.33

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-201—Continued	
Jan. 20, 1954	31.25
Aug. 3, 1954	33.31
Feb. 1, 1955	35.11
Aug. 16, 1955	36.43
Jan. 23, 1956	37.75
Aug. 13, 1956	41.38
Jan. 23, 1957	42.16
Aug. 2, 1957	39.30
Aug. 6, 1958	41.79
Measurement discontinued	
Well JY-65-36-203	
Owner: The Texas Co.	
1940	9.00
Apr. 29, 1947	20.51
Dec. 30, 1948	29.05
Sept. 6, 1949	30.26
Jan. 27, 1950	31.28
Sept. 6, 1950	33.10
Feb. 8, 1951	34.86
Aug. 28, 1951	37.65
Jan. 21, 1953	42.22
Jan. 20, 1954	45.27
Feb. 1, 1955	51.00
Jan. 23, 1956	53.12
Jan. 23, 1957	59.15
Aug. 2, 1957	57.98
Jan. 27, 1958	58.38
Aug. 6, 1958	61.75
Aug. 12, 1959	60.86
Jan. 16, 1961	61.31
Aug. 28, 1961	63.40
Jan. 18, 1962	61.84
Aug. 14, 1962	64.49
Jan. 21, 1963	64.77
Jan. 22, 1964	69.84
Aug. 11, 1964	71.91

Table 6.—Water Levels in Wells—Continued

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-203—Continued	
Jan. 20, 1965	72.89
Aug. 10, 1965	76.45
Jan. 27, 1966	75.71
Aug. 9, 1966	77.14
Feb. 1, 1967	77.29
Measurement discontinued	
Well JY-65-36-204	
Owner: Houston Oilfield Equipment	
Apr. 29, 1947	16.20
Dec. 30, 1948	21.36
Sept. 6, 1949	21.97
Jan. 27, 1950	21.87
Sept. 6, 1950	22.86
Feb. 8, 1951	24.73
Aug. 28, 1951	26.50
Jan. 16, 1952	27.73
Aug. 5, 1952	28.17
Jan. 21, 1953	29.69
July 20, 1953	30.52
Jan. 20, 1954	31.54
Aug. 3, 1954	33.70
Feb. 1, 1955	35.50
Aug. 16, 1955	36.87
Jan. 23, 1956	38.20
Aug. 13, 1956	41.51
Jan. 23, 1957	42.69
Aug. 2, 1957	39.62
Jan. 27, 1958	26.48
Aug. 6, 1958	40.24
Aug. 12, 1959	40.86
Jan. 16, 1961	41.37
Aug. 28, 1961	39.81
Jan. 18, 1962	38.56
Aug. 14, 1962	40.16
Jan. 21, 1963	40.74
Jan. 22, 1964	46.26

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-36-204—Continued	
Aug. 11, 1964	49.27
Jan. 20, 1965	49.01
Aug. 10, 1965	50.73
Jan. 27, 1966	47.02
Measurement discontinued	
Well JY-65-42-204	
Owner: W. Goldston Oil Co.	
May 20, 1947	26.58
Dec. 29, 1948	29.20
Sept. 2, 1949	31.97
Feb. 7, 1951	31.65
Measurement discontinued	
Well JY-65-42-301	
Owner: C. A. Danklefs No. 1	
Mar. 4, 1948	21.14
Dec. 29, 1948	24.44
Sept. 2, 1949	43.53
Jan. 30, 1950	23.86
Feb. 7, 1951	25.33
Jan. 16, 1952	27.84
Jan. 21, 1953	28.47
Feb. 2, 1954	29.17
Feb. 2, 1955	31.70
Jan. 27, 1956	33.90
Jan. 22, 1957	28.35
Jan. 28, 1958	26.77
Jan. 17, 1961	27.87
Jan. 30, 1962	24.43
Feb. 4, 1963	25.23
Jan. 22, 1964	25.93
Jan. 19, 1965	26.81
Jan. 28, 1966	25.45
Jan. 3, 1967	24.37
Jan. 28, 1968	24.82
Jan. 23, 1969	24.37

DATE	WATER LEVEL BELOW LSD (FEET)
Well JY-65-42-302	
Owner: C. A. Danklefs No. 2	
May 27, 1944	54.00
Mar. 4, 1948	21.19
Dec. 29, 1948	25.07
Sept. 2, 1949	43.72
Jan. 30, 1950	23.16
Sept. 8, 1950	46.34
Feb. 7, 1951	24.53
Aug. 28, 1951	60.01
Jan. 16, 1952	25.94
Jan. 21, 1953	26.28
Feb. 2, 1954	26.78
Feb. 2, 1955	28.85
Jan. 27, 1956	29.52
Jan. 22, 1957	29.32
Jan. 28, 1958	27.34
Jan. 17, 1961	29.63
Jan. 30, 1962	24.58
Oct. 9, 1968	25.43
Measurement discontinued	
Well JY-65-43-201	
Owner: W. Gless & Beard	
July 27, 1955	79.52
Jan. 27, 1956	54.40
Jan. 22, 1957	57.02
Jan. 27, 1958	55.58
Jan. 17, 1961	56.41
Jan. 30, 1962	56.18
Jan. 10, 1969	76.64
Well JY-65-43-602	
Owner: Unknown	
May 21, 1947	16.06
Sept. 2, 1949	22.64
Jan. 30, 1950	22.45
Sept. 6, 1950	24.75
Feb. 7, 1951	24.97

Table 6.—Water Levels in Wells—Continued

DATE		WATER LEVEL BELOW LSD (FEET)
Well JY-65-43-602—Continued		
Aug.	28, 1951	31.95
Jan.	16, 1952	27.80
Aug.	6, 1952	36.26
Jan.	21, 1953	30.19
July	21, 1953	43.10
Feb.	2, 1954	34.45
Aug.	3, 1954	56.48
Feb.	2, 1955	42.84
Aug.	17, 1955	57.74
Jan.	27, 1956	43.76
Aug.	13, 1956	63.40
Jan.	22, 1957	46.99
Aug.	2, 1957	59.89
Jan.	27, 1958	47.04
Aug.	6, 1958	62.48
Aug.	12, 1959	59.06
Jan.	17, 1961	47.75
Jan.	30, 1962	47.22
Feb.	4, 1963	49.36
Jan.	22, 1964	50.81
Jan.	19, 1965	56.14
Jan.	28, 1966	60.14
Aug.	10, 1966	73.28
Jan.	31, 1967	62.27
Aug.	9, 1967	75.31
Jan.	29, 1968	69.22
Jan.	23, 1969	73.10
Aug.	12, 1969	74.03

Table 7.--Chemical Analyses of Water From Wells

(Analyses given are in milligrams per liter, except percent sodium, sodium-adsorption ratio, residual sodium carbonate, specific conductance, pH, and temperature.)

Water-bearing units: C, Chicot; Cu, upper Chicot; Cl, lower Chicot; E, Evangeline.
Analyses made by U.S. Geological Survey unless indicated otherwise.

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CAL-CIUM (Ca)	MAGNE-SIUM (Mg)	SODIUM * AND POTASSIUM		BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NITRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORP-TION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPER-ATURE °C
								Na	K														
JY-65-09-906	575	C,E	July 12, 1968	26	--	72	6.0	37	1.1	227	2.4	66	0.1	0.2	0.04	323	204	28	1.1	0.00	555	7.5	22
10-701	421	C	do.	27	--	78	6.2	41	.8	264	3.6	62	.1	.1	.05	349	220	29	1.2	.00	595	7.4	22
703	170	C	Aug. 12, 1940	--	--	--	--	50		272	3	70	--	--	--	343	216	33	--	--	--	--	--
703	170	C	July 15, 1947	--	--	--	--	--		282	2	72	--	.5	--	--	192	--	--	--	641	--	22
709	174	C	Aug. 8, 1933	--	0.04	74	8.7	39		262	3.8	62	--	.2	--	317	221	--	--	--	--	--	22
709	174	C	July 15, 1947	--	--	--	--	--		274	2	68	--	.5	--	--	222	--	--	--	583	--	22
809	206	C	Feb. 15, 1947	--	--	--	--	--		310	2	58	--	--	--	--	216	--	--	--	596	--	22
17-103	601	C,E	July 11, 1968	25	--	50	2.8	22	1.7	167	6.4	31	.1	.3	.03	221	136	26	.8	.01	369	7.3	--
106	569	C,E	do.	20	--	61	8.0	33	2.0	228	12	42	.2	--	.06	290	185	28	1.1	.04	496	7.4	--
112	175	C	Apr. 16, 1947	--	--	--	--	--		494	8	56	--	--	--	--	150	--	--	--	831	--	--
203	840	C,E	Aug. 14, 1947	--	--	--	--	--		244	13	66	--	--	--	--	135	--	--	--	592	--	23
204	330	C	Aug. 3, 1946	--	--	110	13	27		296	5	98	--	.5	--	452	328	15	--	--	--	--	--
204	330	C	July 15, 1947	--	--	--	--	--		270	2	84	--	--	--	--	240	--	--	--	636	--	23
205	334	C	do.	--	--	--	--	--		274	2	92	--	--	--	--	258	--	--	--	691	--	22
301	400	C	July 11, 1968	26	--	88	6.6	49	1.1	270	5.6	85	.1	2.3	.04	397	246	30	1.4	.00	695	7.5	--
304	596	C,E?	July 15, 1947	--	--	--	--	--		232	2	50	--	--	--	--	207	--	--	--	501	--	23
305	590	C,E?	do.	--	--	--	---	--		268	6	72	--	--	--	--	198	--	--	--	600	--	23
306	496	C	Aug. 12, 1940	--	--	--	--	38		214	4	63	--	--	--	285	186	31	--	--	--	--	--
306	496	C	July 15, 1947	--	--	--	--	--		254	2	66	--	--	--	--	216	--	--	--	584	--	--
b/ 404	1,100	E	May 14, 1931	14	2.6	47	4.9	--		222	--	38	--	.2	--	--	138	--	--	--	--	--	--
c/ 405	785	E	Oct. 16, 1963	15	< .05	44	4	53		224	2	41	--	--	--	273	128	--	--	--	495	7.7	--
408	213	C	May 14, 1947	--	--	77	17	50		248	60	74	--	--	--	400	262	29	--	--	670	--	--
409	225	C	Apr. 16, 1947	--	--	55	9.5	72		292	20	52	--	.2	--	352	176	47	--	--	625	--	--
702	376	C	Apr. 15, 1964	29	--	48	4.0	23		178	8.0	22	.4	1.2	--	224	136	27	.9	.19	370	7.3	--
703	67	C	do.	19	.48	78	66	109		698	80	24	.7	15	--	734	466	34	2.2	2.12	1,190	7.4	21
d/ 704	76	C	Mar. 18, 1936	--	--	--	--	--		380	8	72	--	--	--	434	--	--	--	--	--	--	--
d/ 805	371	C	Mar. 19, 1936	--	--	29	18	109		262	8	114	--	--	--	407	146	--	--	--	--	--	--
18-101	818	C,E	June 2, 1965	--	--	79	7.5	46		268	2	75	.2	--	.05	372	228	30	1.3	--	633	7.4	23
102	670	C,E	Apr. 15, 1947	--	--	--	--	--		214	21	58	--	--	--	--	132	--	--	--	518	--	24
103	628	C	July 15, 1947	--	--	--	--	--		294	2	78	--	--	--	--	210	--	--	--	680	--	23
104	--	--	May 27, 1965	28	--	64	6.4	34		238	6	41	.2	--	.04	297	186	28	1.1	.18	498	7.4	23

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CAL-CIUM (Ca)	MAGNE-SIUM (Mg)	SODIUM * AND POTASSIUM		BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NITRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORP-TION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPER-ATURE °C
								Na	K														
JY-65-18-105	172	C	Aug. 3, 1946	--	--	100	10	28		290	4	78	--	0.5	--	407	290	17	0.7	--	--	--	22
b/ 106	337	C	Mar. 3, 1931	--	--	--	--	--		--	5	85	--	--	--	--	190	--	--	--	--	--	23
107	315	C	July 15, 1947	--	--	--	--	--		294	2	62	--	.5	--	--	210	--	--	--	630	--	22
109	118	C	Apr. 16, 1947	--	--	--	--	--		314	2	178	--	5.5	--	--	162	--	--	--	960	--	--
111	1,000	C,E	June 10, 1969	25	--	65	6.5	35	1.3	224	7.4	49	0.2	.2	0.03	300	--	29	1.1	0.00	517	7.6	24
b/ 202	536	C	July 15, 1947	--	--	--	--	--		280	2	41	--	--	--	--	192	--	--	--	535	--	23
202	536	C	July 12, 1968	27	--	73	7.4	34	.9	274	4.4	39	.2	.1	.04	321	212	26	1.0	.24	533	7.9	23
203	545	C	Mar. 24, 1931	--	--	60	--	--		--	10	--	--	--	--	190	--	--	--	--	--	--	23
204	586	C,E?	July 15, 1947	--	--	60	8.1	90		228	2	134	--	--	--	406	183	52	--	--	679	--	22
301	600	C,E?	July 11, 1968	28	--	74	6	46	.7	291	5.6	46	.1	.1	.06	350	209	32	1.4	.59	580	7.7	--
401	723	C,E	Aug. 12, 1940	--	--	--	--	56		270	7	71	.2	--	--	349	207	37	--	--	--	--	23
501	250	C	July 15, 1947	--	--	--	--	--		322	3	46	--	1.5	--	--	204	--	--	--	573	--	22
502	670	C,E	May 24, 1965	30	--	85	7.5	68		290	5.2	104	.1	--	.13	443	243	38	1.9	.00	760	7.2	23
504	131	C	July 15, 1947	--	--	--	--	--		352	3	42	--	.5	--	--	210	--	--	--	637	--	23
601	561	C	Apr. 17, 1964	30	0.34	72	7.9	44	.9	296	5.6	43	.3	.5	.06	350	212	31	1.3	.61	600	7.1	23
604	620	C	July 12, 1968	26	--	66	7.2	39	1.2	244	11	48	.2	.0	.04	319	194	30	1.2	.12	561	7.4	23
606	156	C	Apr. 18, 1947	--	--	--	--	--		314	5	46	--	.2	--	72	--	--	--	--	545	--	--
607	517	C	July 15, 1947	--	--	--	--	--		292	6	52	--	--	--	--	198	--	--	--	592	--	23
608	80	C	Apr. 15, 1947	--	--	--	--	--		298	5	52	--	.8	--	--	144	--	--	--	593	--	--
703	400	C	Apr. 18, 1947	--	--	--	--	--		304	5	66	--	--	--	--	198	--	--	--	603	--	--
704	70	C	Aug. 7, 1933	--	--	120	--	--		360	11	242	--	6	--	711	402	--	--	--	--	--	--
704	70	C	--	--	--	--	--	--		364	7	220	--	2	--	--	210	--	--	--	1,210	--	--
801	70	Cu	Mar. 18, 1964	19	.08	96	31	34		478	24	12	.5	8.2	--	460	367	17	.8	.49	782	7.0	--
802	206	C	Mar. 19, 1964	30	.04	79	7.5	40		308	4.8	41	.2	.2	--	354	228	28	1.2	.49	605	7.1	--
803	150 ±	C	June 13, 1947	--	--	--	--	--		302	3	70	--	.2	--	--	120	--	--	--	650	--	--
902	16	Cu	May 14, 1947	--	--	--	--	--		160	30	56	--	1.0	--	--	150	--	--	--	842	--	--
19-101	400 ±	C	Feb. 13, 1939	--	--	--	--	--		232	4	46	--	--	--	--	--	--	--	--	--	--	--
403	500	C	Aug. 12, 1940	--	--	--	--	51		232	8	52	.3	--	--	288	162	41	--	--	--	--	--
403	500	C	July 15, 1947	--	--	--	--	--		320	7	60	--	--	--	--	222	--	--	--	655	--	23
403	500	C	July 11, 1968	28	--	78	9.6	51	.9	308	6.8	60	.2	.0	.06	386	234	32	1.4	.37	669	7.4	--
404	445	C	July 12, 1968	26	--	80	6.4	35	.7	276	4.8	47	.2	.0	.05	336	226	25	1.0	.00	590	7.4	--
506	500	C	July 15, 1947	--	--	--	--	--		240	10	78	--	--	--	--	204	--	--	--	685	--	22
b/ 507	260	C	May 14, 1931	20	3.4	77	6.5	--		294	--	50	--	.2	--	--	219	--	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-19-507	260	C	Feb. 13, 1939	--	--	--	--	--		217	4	46	--	0.1	--	--	--	--	--	--	--	--	--
e/ 801	256	C	July 17, 1958	--	0.3	84	23	45		271	14	100	--	< .4	--	447	305	--	1.0	--	745	7.2	--
e/ 802	91	Cu	do.	--	.2	130	36	38		532	17	56	--	< .4	--	573	475	--	.8	--	955	6.9	--
e/ 803	233	C	do.	--	.25	82	14	36		278	10	62	--	< .4	--	378	265	--	.9	--	630	7.2	--
e/ 804	231	C	do.	--	.55	84	24	89		390	--	84	--	< .4	--	543	310	--	2.1	--	905	7.1	--
e/ 805	320	Cl	Oct. 8, 1946	--	--	--	--	--		278	7	84	--	--	--	--	246	--	--	--	--	--	--
806	--	--	May 8, 1947	--	--	--	--	--		122	7	70	--	.8	--	--	126	--	--	--	517	--	--
c/ 20-702	925- 935	E	Jan. 26, 1957	12	.22	47	11	37		231	10	31	--	--	--	275	164	--	--	--	460	8.4	--
d/ 702	823-1,006	E	Feb. 11, 1957	15	.2	45	10	44		231	13	33	--	--	--	283	154	--	--	--	473	7.9	--
d/ 702	823-1,006	E	July 11, 1968	29	--	46	8.9	38	2.3	216	14	29	0.3	--	0.04	274	151	35	1.3	0.51	461	7.7	--
801	1,030	C?,E	Jan. 31, 1968	26	.22	57	11	36	2.2	242	12	42	.3	.8	.05	306	187	29	1.1	.23	519	7.9	24
d/ 25-102	85	C	Mar. 18, 1936	--	--	77	14	71		397	8	50	--	--	--	415	249	--	--	--	--	--	--
d/ 103	139	C	do.	--	--	112	21	100		372	17	186	--	--	--	619	368	--	--	--	--	--	--
203	280	C	Aug. 11, 1969	20	1.2	86	14	41		304	12	79	.2	.1	--	407	174	27	1.2	.00	721	7.3	23
213	244	C	Apr. 23, 1947	--	--	--	--	--		356	2	121	--	--	--	--	144	--	--	--	829	--	--
216	233	C	do.	--	--	--	--	--		384	2	20	--	--	--	--	138	--	--	--	523	--	--
217	248	C	do.	--	--	--	--	--		418	2	83	--	--	--	--	150	--	--	--	721	--	--
218	238	C	do.	--	--	--	--	--		352	5	43	--	--	--	--	108	--	--	--	588	--	--
219	250	C	do.	--	--	--	--	--		346	4	32	--	--	--	--	96	--	--	--	564	--	--
220	256	C	do.	--	--	--	--	--		336	4	40	--	--	--	--	90	--	--	--	582	--	--
221	242	C	do.	--	--	--	--	--		378	2	42	--	--	--	--	102	--	--	---	644	--	--
301	438	C	July 14, 1947	--	--	--	--	--		124	15	210	--	--	--	--	240	--	--	--	918	--	--
302	435	C	do.	--	--	--	--	--		338	2	60	--	--	--	--	204	--	--	--	918	--	--
304	75 ±	C	Apr. 17, 1947	--	--	--	--	--		288	15	74	--	--	--	--	141	--	--	--	674	--	--
402	245	C	July 26, 1960	20	--	67	20	99		475	14	41	.8	--	--	496	249	46	2.7	--	826	7.0	22
d/ 502	85	C	Apr. 21, 1936	--	--	--	--	--		457	15	102	--	--	--	591	--	--	--	--	--	--	--
d/ 601	64	Cu	Apr. 7, 1936	--	--	58	19	43		344	8	20	--	--	--	316	222	--	--	--	--	--	--
d/ 602	110	Cu	do.	--	--	82	19	16		421	< 10	52	--	--	--	376	282	--	--	--	--	--	--
d/ 603	112	Cu	do.	--	--	--	--	--		366	8	32	--	--	--	361	--	--	--	--	--	--	--
d/ 705	95	C	Apr. 21, 1936	--	--	14	14	117		275	21	72	--	--	--	373	94	--	--	--	--	--	--
d/ 706	32	C	May 4, 1936	--	--	--	--	--		463	6	26	--	--	--	429	--	--	--	--	--	--	--
d/ 707	105	C	Apr. 21, 1936	--	--	84	20	60		439	< 10	46	--	--	--	426	293	--	--	--	--	--	--
d/ 708	82	C	do.	--	--	73	26	64		456	8	34	--	--	--	430	291	--	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-25-901	--	--	July 25, 1960	22	--	76	18	65		314	9.6	96	0.3	--	--	441	264	35	1.7	--	771	7.2	23
d/ 902	84	Cu	Apr. 8, 1936	--	--	60	29	55		390	< 10	48	--	--	--	384	268	--	--	--	--	--	--
d/ 904	110	Cu	do.	--	--	87	27	71		475	< 10	64	--	--	--	483	326	--	-	--	--	--	--
d/ 905	96	Cu	do.	--	--	--	--	--		366	< 10	58	--	--	--	391	--	--	--	--	--	--	--
d/ 906	22	Cu	do.	--	--	--	--	--		451	8	72	--	--	--	494	--	--	--	--	--	--	--
d/ 907	70	Cu	May 11, 1936	--	--	--	--	--		464	6	82	--	---	--	517	--	--	--	--	--	--	--
26-201	575	Cu?,Cl	Mar. 18, 1964	23	0.12	60	8.4	68	1.8	258	21	71	.4	--	0.07	380	184	44	2.2	0.55	672	7.1	--
301	90	Cu	May 19, 1936	--	--	46	19	97		244	27	124	--	--	--	433	192	--	--	--	--	--	--
301	90	Cu	Jan. 15, 1969	--	--	--	--	--		264	--	85	--	--	--	--	190	--	--	--	714	7.5	--
d/ 302	170	Cu	May 29, 1936	--	--	67	9	53		256	29	58	--	--	--	342	206	--	--	--	--	--	--
304	72	Cu	Apr. 17, 1964	26	1.5	83	15	33		294	8.8	63	.2	--	--	374	268	21	.9	--	665	7.2	22
f/ g/ 403	830- 856	Cl,E	Sept. 15, 1956	13.4	.07	34	7	99		259	11	74	--	--	--	386	113	--	--	--	--	7.9	--
f/ g/ 403	690- 860	Cl,E	Sept. 28, 1956	15.9	.2	47	6.4	222		212	15.2	308	--	--	--	744	143	--	--	--	--	7.6	--
403	692- 875	Cl,E	July 16, 1968	22	.44	50	7	211	2.4	200	17	315	.2	0.9	.05	724	154	75	7.4	.20	1,330	7.6	25
c/ g/ 406	975- 993	E	Oct. 27, 1967	17	.44	29	5	67		--	3	37	--	--	--	262	93	--	--	--	459	8.0	26
c/ g/ 406	968-1,160	E	Nov. 22, 1967	19	.18	30	4	74		231	--	46	--	--	--	276	93	--	--	--	484	7.8	--
406	968-1,160	E	July 16, 1968	18	--	30	5.3	65	2.0	222	.4	42	.3	.1	.60	272	97	59	2.9	1.71	465	7.8	27
g/ 501	582	Cl	Aug. 7, 1947	--	--	28	7.4	74		208	15	39	--	--	--	285	100	61	--	--	472	--	--
g/ 501	625	Cl	Aug. 9, 1947	--	--	32	7	69		228	17	38	--	--	--	294	109	58	--	--	480	--	--
g/ 501	755	E	Aug. 10, 1947	--	--	28	5.8	92		248	10	56	--	--	--	332	94	68	--	--	540	--	--
g/ 501	834	E	Aug. 1947	21	.05	25	6.3	88	7.0	244	10	52	.2	--	--	330	88	66	--	--	532	7.6	--
501	545- 837	Cl,E	July 16, 1968	21	--	34	6.3	78	1.7	236	10	55	.3	.0	.06	322	111	60	3.2	1.65	573	7.7	25
501	--	Cl,E	Aug. 16, 1947	18	--	24	6.5	81	7.2	236	6.2	50	.4	--	--	310	86	65	--	--	504	7.8	--
502	979	Cl,E	July 16, 1968	24	--	35	6	69	1.7	236	14	37	.4	.0	.06	303	112	57	2.8	1.63	527	7.5	23
g/ h/ 503	1,090-1,143	E	June 3, 1957	61	--	24	5	112		280	3	50	--	--	--	--	--	--	--	--	--	8.8	--
g/ h/ 503	1,307-1,352	E	June 6, 1957	41	.04	15	4	183		380	4	96	--	--	--	400	52	--	--	--	--	--	--
g/ h/ 503	1,508-1,596	E	do.	26	1.6	10	3	214		362	4	122	--	--	--	708	40	--	--	--	--	--	--
g/ h/ 503	1,779-1,840	E	do.	5	.1	114	22	731		178	85	1,580	--	--	--	3,186	375	--	--	--	--	--	--
503	970-1,590	E	July 13, 1960	15	.13	22	6.1	87	2.1	253	.2	43	.4	--	--	300	80	70	4.2	--	516	7.5	27
503	970-1,590	E	July 16, 1968	17	--	24	5.5	80	1.9	240	.2	39	.4	.0	.08	287	82	67	3.8	2.28	512	7.5	27
505	65	Cu	Mar. 18, 1964	23	3.5	122	23	95		362	47	184	.3	--	--	672	399	34	2.1	--	1,180	7.0	--
506	140	Cu	do.	24	5.0	119	21	89		344	37	182	.3	--	--	641	384	34	2.0	--	1,150	7.1	--
d/ 507	92	Cu	Apr. 27, 1936	--	--	75	25	91		463	8	70	--	--	--	497	290	--	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM Na	K	BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
d/ JY-65-26-508	97	Cu	Apr. 5, 1936	--	--	60	22	77		384	< 10	64	--	--	--	412	238	--	--	--	--	--	--
d/ 509	82	Cu	Apr. 8, 1936	--	--	53	19	58		348	< 10	38	--	--	--	339	212	--	--	--	--	--	--
510	351	Cl	May 5, 1931	15	--	85	11	103		292	19	160	--	--	--	541	258	--	--	--	--	--	--
510	351	Cl	May 22, 1947	--	--	--	--	--		126	16	150	--	--	--	--	150	--	--	--	929	--	--
d/ 511	490	Cl	May 19, 1936	--	--	40	13	129		268	17	158	--	--	--	489	153	--	--	--	--	--	24
511	490	Cl	Apr. 5, 1944	16	0.56	72	11	124	11	284	19	180	0.8	0.2	--	586	224	53	--	--	107	7.3	24
513	300 ±	Cl	May 25, 1947	--	--	--	--	--		166	13	104	--	--	--	--	150	--	--	--	831	--	--
516	515	Cl	Apr. 5, 1944	20	.05	57	9.1	129	5.4	294	19	145	.8	--	--	530	180	60	--	--	974	7.5	23
601	448	Cl	July 16, 1968	23	--	68	9.5	63	2.0	246	23	87	.3	.0	0.04	397	208	39	1.9	0.00	681	7.7	23
602	400	Cu,Cl	July 28, 1955	27	--	106	16	95	2.2	331	32	174	--	--	.25	650	330	38	--	--	1,120	7.3	23
603	518	Cl	July 16, 1968	24	--	66	9.9	32	1.2	228	18	47	.3	.0	.05	310	205	25	1.0	.00	552	7.4	23
d/ 604	331	Cl	Mar. 25, 1936	--	--	31	9	44		147	17	52	--	--	--	225	116	--	--	--	--	--	--
604	331	Cl	Apr. 4, 1944	21	.02	62	9.5	40	4.9	234	20	52	.6	--	--	331	198	31	--	--	587	7.3	23
604	331	Cl	July 16, 1968	22	--	61	8.3	47	1.4	240	20	54	.3	.0	.06	332	186	35	1.5	.21	583	7.5	23
605	433	Cl	do.	24	--	62	9.1	32	1.5	226	18	43	.3	.0	.03	301	192	26	1.0	.00	505	7.9	23
d/ 606	86	Cu	Apr. 11, 1936	--	--	63	22	13		256	7	42	--	--	--	273	249	--	--	--	--	--	--
d/ 607	50	Cu	Apr. 13, 1936	--	--	61	39	336		976	8	168	--	--	--	1,092	314	--	--	--	--	--	--
d/ 608	82	Cu	May 27, 1936	--	--	74	19	83		397	15	72	--	--	--	458	262	--	--	--	--	--	--
d/ 609	82	Cu	Apr. 27, 1936	--	--	--	--	--		305	12	96	--	--	--	417	--	--	--	--	--	--	--
d/ 703	82	Cu	do.	--	--	--	--	--		439	10	84	--	--	--	505	--	--	--	--	--	--	--
d/ 704	90	Cu	May 11, 1936	--	--	--	--	--		463	12	60	--	--	--	491	--	--	--	--	--	--	--
d/ 705	86	Cu	Apr. 8, 1936	--	--	--	--	--		403	8	28	--	--	--	385	--	--	--	--	--	--	--
d/ 706	76	Cu	do.	--	--	33	19	46		256	8	32	--	--	--	264	162	--	--	--	--	--	--
d/ 802	80	Cu	Apr. 23, 1936	--	--	--	--	--		384	8	48	--	--	--	401	--	--	--	--	--	--	--
d/ 803	85	Cu	Feb. 23, 1936	--	--	92	20	61		463	6	42	--	--	--	449	312	--	--	--	--	--	--
d/ 804	132	Cu	Apr. 27, 1936	--	--	98	20	73		463	10	68	--	--	--	497	327	--	--	--	--	--	--
f/ 812	750- 770	E	June 8, 1967	17	.25	33	8	142		215	20	162	--	--	--	509	117	--	--	--	960	7.5	--
f/ 812	1,160-1,170	E	June 7, 1967	--	.10	--	--	--		320	--	76	--	--	--	--	52	--	--	--	876	8.4	--
f/ 812	1,180-1,190	E	June 6, 1967	--	.05	--	--	--		259	--	72	--	--	--	--	40	--	--	--	767	8.2	--
f/ 812	1,255-1,295	E	June 4, 1967	20	--	14	3.2	150		268	6.8	103	--	--	--	455	48	--	--	--	783	8.2	--
f/ 812	1,525-1,565	E	June 5, 1967	22	--	15	3.6	284		323	26	266	--	--	--	805	52	--	--	--	1,490	7.9	--
f/ 812	1,615-1,650	E	June 2, 1967	16	.05	16	3.8	283		317	27	270	--	--	--	805	55	--	--	--	1,543	8.0	--
f/ 812	810-1,310	E	Aug. 9, 1967	7	.07	24	5.2	114		256	2.1	82	.45	.08	--	377	80	--	--	--	685	7.6	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-26-812	810-1,310	E	Jan. 16, 1969	17	0.23	30	6.3	122	1.8	238	5.8	117	0.6	0.3	0.13	418	101	72	5.3	1.88	742	7.5	27
d/ 901	82	Cu	Apr. 23, 1936	--	--	84	23	76		451	< 10	70	--	--	--	475	304	--	--	--	--	--	--
d/ 902	106	Cu	do.	--	--	--	--	--		464	6	54	--	--	--	473	--	--	--	--	--	--	--
d/ 903	140	Cu	May 7, 1936	--	--	--	--	--		439	13	106	--	--	--	545	--	--	--	--	--	--	--
d/ 904	85	Cu	Apr. 23, 1936	--	--	54	19	74		384	8	36	--	--	--	380	212	--	--	--	--	--	--
e/ 27-202	90	Cu	July 15, 1958	--	.1	122	44	54		551	53	58	--	< .4	--	720	490	--	1.2	--	1,200	7.0	--
e/ 203	73	Cu	do.	--	.25	120	40	65		539	53	52	--	< .4	--	720	465	--	1.5	--	1,200	6.9	--
e/ 204	91	Cu	do.	--	.25	148	50	67		622	49	92	--	< .4	--	864	580	--	1.7	--	1,400	6.8	--
e/ 205	86	Cu	do.	--	.35	134	40	49		588	17	68	--	< .4	--	720	500	--	.5	--	1,200	7.0	--
e/ 206	62	Cu	do.	--	.63	156	43	72		522	36	156	--	< .4	--	876	570	--	1.7	--	1,460	7.2	--
206	62	Cu	Aug. 12, 1969	--	7.9	--	--	--		606	--	81	--	--	--	--	538	--	--	.00	1,100	6.8	22
e/ 207	62	Cu	July 15, 1958	--	.25	136	37	40		588	19	48	--	< .4	--	600	495	--	.9	--	1,000	7.2	--
207	62	Cu	Aug. 12, 1969	20	3.40	145	38	52		586	8.6	101	.3	.1	--	653	520	18	1.0	.00	1,120	6.8	22
302	1,565	E	Feb. 25, 1966	--	--	--	--	--		264	--	59	--	--	--	--	52	--	--	3.29	624	7.7	--
302	1,565	E	Apr. 2, 1968	13	.08	15	3.8	110	1.6	252	20	48	.6	10	.16	336	53	81	6.6	3.07	566	8.0	28
f/ 303	503- 865	Cl,E	Sept. 24, 1958	10.6	.05	73.4	10.4	36		249	10.8	62	--	--	--	340	226	--	--	--	583	7.4	24
303	503- 865	Cl,E	Feb. 19, 1960	--	--	--	--	--		225	--	66	--	--	--	--	201	--	--	--	573	7.4	--
303	503- 865	Cl,E	Mar. 1, 1961	--	--	--	--	--		--	--	60	--	--	--	--	--	--	--	--	456	7.7	--
303	503- 865	Cl,E	Apr. 8, 1963	--	--	--	--	--		84	--	80	--	--	--	--	106	--	--	--	391	7.4	--
303	503- 865	Cl,E	Mar. 11, 1964	--	--	--	--	--		142	--	57	--	--	--	--	132	--	--	--	437	7.7	--
303	503- 865	Cl,E	Feb. 25, 1966	--	--	--	--	--		240	--	58	--	--	--	--	212	--	--	.00	579	7.1	--
303	503- 865	Cl,E	Apr. 2, 1968	20	.10	68	11	33	1.8	238	11	60	.1	.2	.06	322	214	25	1.0	.00	567	7.4	23
303	503- 865	Cl,E	Jan. 28, 1969	--	--	--	--	--		244	--	62	--	--	--	--	218	--	--	--	579	7.4	--
e/ 304	103	Cu	July 15, 1958	--	.10	116	40	80		527	64	65	--	< .4	--	750	455	--	1.6	--	1,250	6.8	--
e/ 305	72	Cu	do.	--	.05	116	40	63		534	50	56	--	< .4	--	720	455	--	1.5	--	1,200	6.9	--
e/ 306	100	Cu	do.	--	.2	110	42	78		571	47	44	--	< .05	--	720	450	--	1.7	--	1,200	7.1	--
e/ 307	83	Cu	do.	--	.10	112	36	50		522	45	36	--	< .4	--	546	430	--	1.4	--	910	7.2	--
e/ 308	104	Cu	do.	--	.25	140	46	79		536	60	106	--	< .4	--	882	540	--	1.4	--	1,470	7.7	--
309	700	Cl	May 8, 1947	--	--	37	19	33		112	14	79	--	.8	--	302	170	29	--	--	481	--	--
312	1,515-1,575	E	June 2, 1936	--	--	14	5.9	115		257	18	57	--	.3	--	337	59	--	--	--	--	--	--
312	do.	E	Mar. 13, 1939	--	--	--	--	120		221	12	59	--	--	--	326	46	85	--	--	--	--	--
312	do.	E	May 24, 1940	--	--	--	--	106		264	20	58	--	.2	--	341	90	72	--	--	--	--	--
312	do.	E	Feb. 9, 1941	--	--	--	--	126		244	17	59	--	--	--	349	52	84	--	--	--	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM Na	K	BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
JY-65-27-312	1,515-1,575	E	Jan. 27, 1942	--	--	13	4.4	121		262	17	58	--	--	--	342	50	84	--	--	--	--	--
312	do.	E	Apr. 4, 1944	14	0.03	14	3.6	119	6.6	259	16	61	1.0	0.2	--	363	50	82	7.3	--	661	7.6	29
312	do.	E	Sept. 19, 1944	15	--	12	4	121		256	17	61	--	--	--	356	50	--	--	--	--	7.8	--
312	do.	E	Jan. 21, 1947	--	--	--	--	--		--	--	62	--	--	--	--	--	--	--	--	--	--	--
312	do.	E	Mar. 24, 1948	--	--	--	--	--		220	--	62	--	--	--	--	44	--	--	--	612	--	--
312	do.	E	Feb. 8, 1949	--	--	--	--	--		212	--	62	--	--	--	--	39	--	--	--	620	--	--
312	do.	E	Feb. 17, 1950	--	--	--	--	--		262	--	62	--	--	--	--	52	--	--	--	616	8.2	--
312	do.	E	Feb. 21, 1951	--	--	--	--	--		258	--	61	--	--	--	--	50	--	--	--	612	7.9	--
312	do.	E	Feb. 5, 1952	--	--	--	--	--		252	--	61	--	--	--	--	47	--	--	--	632	8.5	--
312	do.	E	Feb. 5, 1953	--	--	--	--	--		250	--	60	--	--	--	--	44	--	--	--	604	8.6	--
312	do.	E	Feb. 18, 1954	--	--	--	--	--		263	--	65	--	--	--	--	38	--	--	--	616	8.4	--
312	do.	E	Mar. 1, 1955	--	--	--	--	--		--	--	62	--	--	--	--	--	--	--	--	625	--	--
312	do.	E	Feb. 16, 1956	--	--	--	--	--		261	--	62	--	--	--	--	45	--	--	--	619	8.3	--
312	do.	E	Feb. 6, 1957	--	--	--	--	--		261	--	69	--	--	--	--	46	--	--	--	631	7.6	--
312	do.	E	Mar. 12, 1958	--	--	--	--	--		--	--	62	--	--	--	--	--	--	--	--	621	--	--
312	do.	E	Feb. 18, 1959	--	--	--	--	--		232	--	64	--	--	--	--	44	--	--	--	620	8.7	--
312	do.	E	Feb. 19, 1960	--	--	--	--	--		257	--	63	--	--	--	--	45	--	--	--	616	7.6	--
312	do.	E	Mar. 1, 1961	--	--	--	--	--		260	--	64	--	--	--	--	45	--	--	--	620	8.2	--
312	do.	E	Apr. 26, 1962	--	--	--	--	--		258	--	66	--	--	--	--	44	--	--	--	625	7.7	--
312	do.	E	Apr. 8, 1963	--	--	--	--	--		254	--	66	--	--	--	--	46	--	--	3.24	617	7.9	--
312	do.	E	Mar. 11, 1964	--	--	--	--	--		258	--	65	--	--	--	--	48	--	--	3.27	635	8.1	--
312	do.	E	Mar. 4, 1965	--	--	--	--	--		226	--	65	--	--	--	--	43	--	--	3.51	619	8.5	--
312	do.	E	Feb. 28, 1967	--	--	--	--	--		260	--	62	--	--	--	--	46	--	--	3.34	616	8.0	--
312	do.	E	Apr. 2, 1968	12	.04	13	3.5	124	1.7	264	14	64	.7	.0	0.21	363	47	85	7.9	3.39	628	7.9	--
312	do.	E	Jan. 28, 1969	--	--	--	--	--		268	--	64	--	--	--	--	47	--	--	3.45	635	7.9	--
313	726	C1	Sept. 19, 1944	21	--	71	12	29		236	9	61	--	--	--	319	225	--	--	--	--	7.4	--
313	do.	C1	May 9, 1947	--	--	17	13	20		218	13	68	--	.8	--	299	246	15	--	--	503	--	--
313	do.	C1	Mar. 24, 1948	--	--	--	--	--		112	--	64	--	--	--	--	123	--	--	--	603	--	--
313	do.	C1	Feb. 8, 1949	--	--	--	--	--		236	--	67	--	--	--	--	204	--	--	--	599	--	--
313	do.	C1	Feb. 17, 1950	--	--	--	--	--		238	--	69	--	--	--	--	222	--	--	--	597	8.1	--
313	do.	C1	Feb. 21, 1951	--	--	--	--	--		206	--	68	--	--	--	--	224	--	--	--	595	7.9	--
313	do.	C1	Feb. 5, 1952	--	--	--	--	--		135	--	71	--	--	--	--	142	--	--	--	486	8.1	--
313	do.	C1	Feb. 5, 1953	--	--	--	--	--		148	--	70	--	--	--	--	150	--	--	--	567	8.1	--

See footnotes at end of table.

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CAL-CIUM (Ca)	MAGNE-SIUM (Mg)	SODIUM * AND POTASSIUM		BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NITRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORP-TION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPER-ATURE °C
								Na	K														
JY-65-27-313	726	Cl	Feb. 18, 1954	--	--	--	--	--		230	--	70	--	--	--	--	215	--	--	--	596	8.3	--
313	do.	Cl	Apr. 26, 1962	--	--	--	--	--		196	--	73	--	--	--	--	194	--	--	--	549	7.3	--
313	do.	Cl	Mar. 4, 1965	--	--	--	--	--		--	--	68	--	--	--	--	--	--	--	--	422	--	--
313	do.	Cl	Feb. 28, 1967	--	--	--	--	--		124	--	67	--	--	--	--	138	--	--	--	433	7.7	--
315	733	Cl	June 2, 1936	--	--	--	--	--		232	12	61	--	--	--	--	237	--	--	--	--	--	--
315	do.	Cl	Mar. 13, 1939	--	--	--	--	--		214	10	61	--	--	--	310	232	20	--	--	--	--	--
315	do.	Cl	May 24, 1940	--	--	53	11	36		192	10	62	--	0.5	--	267	178	31	--	--	--	--	--
315	do.	Cl	Feb. 19, 1941	--	--	--	--	41		240	8	61	--	--	--	309	201	31	--	--	---	--	--
315	do.	Cl	Jan. 27, 1942	--	--	68	12	35		238	10	63	--	--	--	305	219	26	1.0	--	--	--	--
i/ 315	do.	Cl	Sept. 28, 1944	22	--	79	14	36		263	8	75	--	--	--	362	251	--	--	--	--	7.4	--
315	do.	Cl	Jan. 21, 1947	--	--	--	--	--		--	--	64	--	--	--	--	--	--	--	--	--	--	--
315	do.	Cl	Feb. 8, 1949	--	--	--	--	--		280	--	63	--	--	--	--	204	--	--	--	594	--	--
315	do.	Cl	Mar. 1, 1955	--	--	--	--	--		--	--	61	--	--	--	--	--	--	--	--	464	--	--
315	do.	Cl	Feb. 16, 1956	--	--	--	--	--		218	--	60	--	--	--	--	210	--	--	--	572	8.4	--
315	do.	Cl	Feb. 6, 1957	--	--	--	--	--		233	--	64	--	--	--	--	208	--	--	--	567	8.0	--
315	do.	Cl	Mar. 12, 1958	--	--	--	--	--		--	--	62	--	--	--	--	--	--	--	--	573	--	--
318	750 ±	Cl?	May 8, 1947	--	--	--	--	--		140	12	82	--	--	--	--	213	--	--	--	592	--	--
d/ 403	100	Cu	Mar. 5, 1936	--	--	25	24	109		342	8	78	--	--	--	412	160	--	--	--	--	--	--
503	95	Cu	Apr. 30, 1947	--	--	--	--	--		212	42	70	--	.8	--	--	144	--	--	--	929	--	--
e/ 601	86	Cu	July 15, 1958	--	0.20	130	37	70		544	55	66	--	< .4	--	762	480	--	1.3	--	1,270	6.8	--
601	86	Cu	Aug. 12, 1969	17	.07	113	41	54		526	68	45	0.3	.4	--	598	452	21	1.1	0.00	976	7.0	22
e/ 602	83	Cu	July 15, 1958	--	.05	112	35	52		544	40	40	--	< .4	--	564	425	--	1.6	--	940	7.2	--
e/ 603	78	Cu	do.	--	1.00	120	42	62		510	60	68	--	< .4	--	738	475	--	1.4	--	1,230	6.8	--
603	78	Cu	Aug. 12, 1969	--	1.80	--	--	--		520	--	73	--	--	--	--	460	--	--	.00	--	--	--
e/ 604	79	Cu	July 15, 1958	--	.30	120	42	52		573	44	52	--	< .4	--	708	475	--	1.6	--	1,180	7.5	--
605	160	Cu	May 16, 1947	--	--	--	--	--		186	10	44	--	.8	--	--	162	--	--	--	584	--	--
606	353	Cl	do.	--	--	--	--	--		162	12	72	--	--	--	--	168	--	--	--	642	--	--
d/ 801	79	Cu	Apr. 1, 1936	--	--	--	--	--		451	12	94	--	--	--	534	--	--	--	--	--	--	--
f/ 803	310- 330	Cl	Nov. 19, 1955	10	.45	52	8	52		256	15	36	--	--	--	334	163	--	--	--	--	7.5	23
f/ 803	573- 593	Cl	Nov. 22, 1955	12	.1	51	9	46		256	14	28	--	--	--	326	165	--	--	--	--	7.6	24
f/ 803	575- 595	Cl	Dec. 2, 1955	10	.1	55	10	45		262	14	32	--	--	--	327	179	--	--	--	--	8.0	--
803	do.	Cl	Jan. 17, 1969	23	2.8	49	8.8	42	1.8	242	12	28	.4	.4	0.05	284	158	36	1.5	.8	475	7.7	--
901	720	Cl	Apr. 30, 1947	--	--	--	--	--		156	15	30	--	--	--	--	108	--	--	--	472	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM + AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
d/ JY-65-27-902	300	Cl	Mar. 10, 1936	--	--	41	10	70		287	17	32	--	--	--	311	146	--	--	--	--	--	--
903	674	Cl	Jan. 9, 1969	21	3.0	46	8.6	46	1.7	242	8.6	29	0.3	0.4	0.09	281	150	40	1.6	0.96	469	7.8	--
d/ 904	179	Cu	Apr. 2, 1936	--	--	49	18	41		268	15	34	--	--	--	289	196	--	--	--	--	--	--
28-101	465	Cl	Apr. 9, 1969	22	.0	0	.1	149	1.1	268	9.2	72	.2	.0	--	386	--	99	.0	4.38	643	7.6	--
202	1,690	E	Mar. 15, 1968	20	--	26	5.4	81	1.9	238	17	34	.6	.1	.12	303	87	66	3.8	2.16	506	7.6	--
205	275	Cl	May 16, 1947	--	--	--	--	--		132	17	68	--	--	--	--	144	--	--	--	623	--	--
c/ 206	643	Cl	May 16, 1957	17	.13	69	13	31		259	4	53	--	--	--	328	224	--	--	--	570	7.7	--
301	298	Cl	May 16, 1947	--	--	--	--	--		160	11	68	--	--	--	--	105	--	--	--	643	--	--
303	300	Cl	do.	--	--	--	--	--		218	15	74	--	--	--	--	168	--	--	--	639	--	--
304	300	Cl	do.	--	--	--	--	--		154	10	74	--	--	--	--	156	--	--	--	643	--	--
306	420	Cl	Dec. 4, 1968	20	--	54	12	40	1.6	256	11	34	.4	.2	--	299	184	32	1.3	.52	511	7.7	--
405	710	Cl	May 1, 1947	--	--	--	--	--		172	14	32	--	--	--	--	78	--	--	--	416	--	26
602	420 ±	Cl	Nov. 20, 1968	19	--	32	10	89		308	18	30	.6	.0	--	350	122	62	--	2.61	592	7.6	--
803	420 ±	Cl	May 6, 1947	--	--	--	--	--		182	6	34	--	--	--	--	108	--	--	--	539	--	--
805	505	Cl	do.	--	--	--	--	--		226	2	110	--	--	--	--	102	--	--	--	760	--	--
806	498	Cl	do.	--	--	--	--	--		294	2	44	--	--	--	--	102	--	--	--	590	--	--
29-101	820	Cl,E	May 7, 1947	--	--	--	--	--		166	12	60	--	1.5	--	--	142	--	--	--	625	--	--
104	910	E	Jan. 12, 1969	24	--	50	8.4	61	2.0	250	16	50	.9	.3	.06	336	160	45	2.1	.91	557	7.6	--
b/ 403	665	Cl	Aug. 15, 1933	--	--	--	--	--		366	24	248	--	.3	--	--	81	--	--	--	--	--	--
403	665	Cl	Sept. 13, 1943	25	.25	30	5.9	318		336	19	330	1.8	--	--	924	100	87	--	--	606	8.2	--
403	665	Cl	Nov. 20, 1968	13	--	32	8.5	435		374	8	525	1.5	1.2	--	1,210	115	89	--	3.83	2,100	7.8	26
404	600	Cl	May 7, 1947	--	--	--	--	--		358	15	334	--	--	--	--	60	--	--	--	1,650	--	--
c/ 405	565	Cl	Aug. 28, 1968	16	1.4	22	5	110		314	12	32	--	--	--	357	76	--	--	--	601	8.0	--
405	565	Cl	Nov. 20, 1968	17	--	25	6	101		300	19	30	.5	.0	--	344	87	72	--	3.17	587	7.8	--
503	180	Cu?	Jan. 31, 1968	21	.07	44	11	59	1.6	292	15	24	.5	.0	.08	320	155	45	2.1	1.69	534	7.8	--
504	235	Cl	May 7, 1947	--	--	--	--	--		188	24	444	--	.5	--	--	258	--	--	--	2,140	--	--
505	110	Cu	Nov. 14, 1968	--	--	--	--	--		410	--	23	--	--	--	--	258	--	--	1.56	660	7.8	--
511	160	Cu	Nov. 19, 1968	17	--	--	--	--		428	42	372	.4	--	--	--	420	--	--	.00	1,800	7.2	--
512	475	Cl	do.	19	--	--	--	--		276	16	25	.6	--	--	--	146	--	--	1.60	536	7.4	--
704	500 ±	Cl	May 15, 1947	--	--	--	--	--		326	21	100	--	.5	--	--	165	--	--	--	831	--	--
808	497	Cl	Nov. 14, 1968	15	--	19	5.2	194		422	22	84	1.6	.0	--	549	69	86	--	5.54	938	7.8	--
811	450 ±	Cl	May 10, 1939	--	--	--	--	177		396	30	42	1.5	--	--	459	50	89	--	--	--	--	--
811	450 ±	Cl	May 5, 1947	--	--	--	--	--		414	19	46	--	--	--	--	78	--	--	--	788	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
d/ JY-65-33-106	85	C	May 4, 1936	--	--	16	13	170		451	29	44	--	--	--	494	93	--	--	--	--	--	--
107	90	C	Apr. 8, 1936	--	--	--	--	--		305	< 10	24	--	--	--	288	--	--	--	--	--	--	--
d/ 202	100	C	May 22, 1936	--	--	--	--	--		--	6	68	--	--	--	425	378	--	--	--	--	--	--
d/ 203	90	Cu	Apr. 8, 1936	--	--	24	31	100		378	< 10	68	--	--	--	409	189	--	--	--	--	--	--
d/ 204	86	C	do.	--	--	60	22	121		396	25	106	--	--	--	529	238	--	--	--	--	--	--
d/ 205	100	Cu	May 4, 1936	--	--	62	29	86		506	6	28	--	--	--	460	273	--	--	--	--	--	--
d/ 206	96	Cu	Apr. 27, 1936	--	--	31	24	104		427	6	32	--	--	--	407	175	--	--	--	--	--	--
307	265	C	Oct. 2, 1968	--	--	74	22	--		274	14	120	--	--	--	--	275	--	--	0.00	804	7.8	--
d/ 302	84	Cu	May 21, 1936	--	--	--	--	--		488	8	84	--	--	--	543	--	--	--	--	--	--	--
d/ 402	60	C	Apr. 8, 1936	--	--	--	--	--		397	240	260	--	--	--	1,071	--	--	--	--	--	--	--
d/ 403	60	C	May 22, 1936	--	--	--	--	--		488	15	78	--	--	--	543	--	--	--	--	--	--	--
d/ 404	19	C	do.	--	--	34	24	126		378	17	92	--	--	--	479	184	--	--	--	--	--	--
502	590	C	July 28, 1955	28	--	81	16	40		280	14	82	--	0.2	0.14	416	268	25	--	--	717	7.5	23
502	590	C	July 16, 1968	24	--	92	16	45	2.7	310	17	88	0.3	.0	.06	437	296	25	1.1	.00	753	7.6	23
503	240	C	do.	26	--	98	19	77	2.6	440	14	87	.3	.0	.10	540	322	34	1.9	.76	915	7.6	22
504	403	C	July 14, 1947	--	--	--	--	--		436	8	78	--	--	--	--	240	--	--	--	847	--	--
504	403	C	July 16, 1968	24	--	99	19	70	2.4	414	13	92	.3	.0	.08	524	325	32	1.7	.29	898	7.4	22
d/ 507	105	C	Apr. 27, 1936	--	--	27	17	107		183	8	150	--	--	--	399	136	--	--	--	--	--	--
508	523	C	Oct. 2, 1968	23	--	93	19	70	2.5	414	12	81	.4	.0	--	505	310	33	1.7	.59	882	7.5	23
d/ 605	108	Cu	May 5, 1936	--	--	75	17	95		415	8	80	--	--	--	479	255	--	--	--	--	--	--
d/ 606	160	Cu	May 4, 1936	--	--	68	31	103		476	8	88	--	--	--	532	299	--	--	--	--	--	--
801	564	C	Oct. 3, 1968	24	--	66	19	79	2.5	340	13	91	.4	.0	--	462	240	41	2.2	.72	811	7.7	23
c/ 804	150	Cu	Apr. 26, 1963	23	--	94	17	48		298	16	106	--	--	--	457	306	--	--	--	825	7.8	24
804	150	Cu	Oct. 24, 1967	24	0.84	95	18	53	2.3	326	14	100	.3	.2	--	467	311	27	1.3	.00	810	7.4	24
d/ 903	80	Cu	May 18, 1936	--	--	--	--	--		488	< 10	54	--	--	--	484	--	--	--	--	--	--	--
d/ 904	100	Cu	May 5, 1936	--	--	--	--	--		494	17	116	--	--	--	611	--	--	--	--	--	--	--
d/ 34-102	116	Cu	Apr. 27, 1936	--	--	60	28	120		451	10	102	--	--	--	542	262	--	--	--	--	--	--
d/ 103	80	Cu?	May 21, 1936	--	--	33	17	73		170	< 10	120	--	--	--	327	150	--	--	--	--	--	--
d/ 104	125	Cu	Apr. 27, 1936	--	--	75	24	86		415	6	88	--	--	--	483	285	--	--	--	--	--	--
d/ 202	192	Cu	Apr. 24, 1936	--	--	78	23	113		427	29	110	--	--	--	563	289	--	--	--	--	--	--
d/ 203	30	Cu	Apr. 23, 1936	--	--	--	--	--		403	8	36	--	--	--	397	--	--	--	--	--	--	--
d/ 204	110	Cu	Apr. 24, 1936	--	--	93	23	80		476	8	72	--	--	--	510	325	--	--	--	--	--	--
402	107	Cu	Oct. 19, 1967	21	.57	86	14	81	1.8	358	12	98	.3	.0	--	490	272	39	2.1	.43	837	7.5	26

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CAL-CIUM (Ca)	MAGNE-SIUM (Mg)	SODIUM + AND POTASSIUM Na	K	BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NITRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORP-TION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPER-ATURE °C
d/ JY-65-34-404	52	Cu	May 6, 1936	--	--	75	17	105		451	6	76	--	--	--	501	255	--	--	--	--	--	--
d/ 405	116	Cu	Apr. 24, 1936	--	--	51	26	80		384	10	60	--	--	--	416	236	--	--	--	--	--	--
604	660	Cl	Aug. 12, 1969	18	1.0	153	23	169		256	18	435	0.2	0.0	0.12	942	476	0.44	3.4	0.00	1,670	7.0	24
d/ 605	30	Cu	May 7, 1936	--	--	--	--	--		439	52	294	--	--	--	894	--	--	--	--	--	--	--
d/ 606	100	Cu	do.	--	--	78	21	103		427	6	106	--	--	--	524	283	--	--	--	--	--	--
d/ 607	67	Cu	do.	--	--	47	26	99		378	6	88	--	--	--	452	226	--	--	--	--	--	--
d/ 608	26	Cu	do.	--	--	--	--	--		427	13	150	--	--	--	603	--	--	--	--	--	--	--
701	435	Cl	June 27, 1960	20	.04	60	11	54	2.4	256	17	65	.3	--	.13	356	194	37	1.7	--	631	7.2	23
703	160	Cu	Oct. 2, 1968	16	--	60	23	96	1.6	348	9.6	115	.5	.0	--	493	244	46	2.7	.82	897	7.6	22
d/ 704	103	Cu	Apr. 22, 1936	--	--	57	17	85		336	8	80	--	--	--	412	210	--	--	--	--	--	--
d/ 705	110	Cu	May 5, 1936	--	--	--	--	--		403	13	78	--	--	--	471	--	--	--	--	--	--	--
708	140	Cu	Oct. 2, 1968	--	--	46	19	--		268	9.2	108	--	--	--	--	193	--	--	.53	746	7.8	--
709	110	Cu	do.	24	--	71	21	79	2.1	376	5.4	90	.3	.0	--	478	264	39	2.1	.89	827	8.2	23
c/ 710	430	Cl	Nov. 2, 1962	17	--	94	19	49		283	13	113	--	--	--	462	312	--	--	--	795	7.8	--
d/ 802	24	Cu	Apr. 22, 1936	--	--	--	--	--		396	< 10	74	--	--	--	441	--	--	--	--	--	--	--
809	92	Cu	Nov. 19, 1968	21	.21	80	23	60	1.5	448	5.4	42	.5	.5	--	454	294	31	1.5	1.46	776	7.7	21
810	81	Cu	Nov. 20, 1968	23	.68	78	27	99	1.6	480	11	88	.6	.0	--	564	306	41	2.5	1.76	974	7.6	19
d/ 811	38	Cu	Apr. 22, 1936	--	--	--	--	--		549	12	338	--	--	--	995	--	--	--	--	--	--	--
901	636	Cl,Cu	July 27, 1955	22	--	80	22	112		450	16	113	--	--	.72	594	290	46	--	--	1,040	7.5	23
901	636	Cl,Cu	July 14, 1947	--	--	--	--	--		356	19	201	--	--	--	--	354	--	--	--	1,160	--	--
903	93	Cu	Nov. 20, 1968	22	2.8	88	33	116	1.7	484	16	145	.6	.0	--	660	355	41	2.7	.83	1,150	8.2	19
35-101	86	Cu	Apr. 30, 1947	--	--	--	--	--		168	28	172	--	2.0	--	--	213	--	--	--	1,040	--	--
102	180	Cu?	do.	--	--	--	--	--		236	15	112	--	.5	--	--	153	--	--	--	753	--	--
f/ 201	884	E	Aug. 21, 1956	6.3	.15	43	6.4	58		256	14.6	24	--	--	--	305	133	--	--	--	--	7.5	--
201	884	E	Jan. 23, 1969	23	--	43	7.6	51	1.7	246	15	24	.4	.2	.05	287	139	44	1.9	1.25	473	7.6	--
d/ 202	85	Cu	May 1, 1936	--	--	--	--	--		329	8	166	--	--	--	541	--	--	--	--	--	--	--
f/ 302	649	Cl	Mar. 22, 1956	10	.10	45	7	52		244	17	26	--	--	--	202	141	--	--	--	--	7.6	--
f/ 302	1,108	Cl	Mar. 23, 1956	16	.10	21	4	141		220	49	101	--	--	--	462	69	--	--	--	--	8.1	--
f/ 302	1,208	Cl	Mar. 24, 1956	18	.10	18	4	189		244	24	176	--	--	--	573	61	--	--	--	--	8.3	--
f/ 302	540- 690	Cl	Apr. 7, 1956	17	.20	44	6.3	58		256	12.9	27	--	--	--	312	136	--	--	--	--	7.5	--
304	853	Cl,E	Jan. 20, 1969	19	--	42	7.0	55	1.4	246	17	26	.4	.3	.05	289	134	47	2.1	1.35	482	7.4	--
d/ 501	95	Cu	May 1, 1936	--	--	82	13	68		329	17	84	--	--	--	426	258	--	--	--	--	--	--
703	434	Cl	Apr. 25, 1947	--	--	--	--	--		280	2	170	--	--	--	--	108	--	--	--	868	--	--

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-35-705	487	Cl	Apr. 25, 1947	--	--	--	--	--		278	3	230	--	--	--	--	138	--	--	--	1,110	--	26
d/ 706	40	Cu	May 7, 1936	--	--	--	--	--		439	242	128	--	--	--	903	--	--	--	--	--	--	--
710	508	Cl	Jan. 21, 1969	18	--	90	21	106	1.8	262	4.8	226	0.3	1.6	0.08	599	311	42	2.6	0.00	1,100	7.5	--
d/ 712	262	Cl	May 6, 1936	--	--	52	20	87		317	25	82	--	--	--	422	212	--	--	--	--	--	--
d/ 901	105	Cu	do.	--	--	--	--	--		348	15	70	--	--	--	416	--	--	--	--	--	--	--
d/ 902	130	Cu	do.	--	--	107	24	100		403	12	170	--	--	--	611	365	--	--	--	--	--	--
d/ 36-102	420	Cl	May 28, 1936	--	--	47	10	57		293	< 10	32	--	--	--	290	161	--	--	--	--	--	--
d/ 102	420	Cl	do.	--	--	47	10	57		293	< 10	32	--	--	--	290	161	--	--	--	--	--	--
d/ 103	209	Cu	Apr. 4, 1936	--	--	56	12	41		275	13	26	--	--	--	283	187	--	--	--	--	--	--
d/ 104	185	Cu	May 12, 1936	--	--	50	12	55		305	< 10	30	--	--	--	297	172	--	--	--	--	--	--
202	400 ±	Cl	Apr. 29, 1947	--	--	--	--	--		226	2	32	--	--	--	--	102	--	--	--	534	--	--
206	420	Cl	May 6, 1947	--	--	--	--	--		186	2	36	--	--	--	--	78	--	--	--	577	--	--
206	410	Cl	Oct. 10, 1968	18	--	42	12	57		282	8.8	27	.4	--	--	304	156	45	2	1.5	510	7.4	--
207	400 ±	Cl	Apr. 29, 1947	--	--	--	--	--		176	7	38	--	--	--	--	84	--	--	--	490	--	--
301	455	Cl	May 5, 1947	--	--	--	--	--		268	60	164	--	--	--	--	234	--	--	--	1,360	--	--
d/ 501	534	Cl	May 12, 1936	--	--	39	10	67		287	< 10	36	--	--	--	293	141	--	--	--	--	--	--
504	300 ±	Cl	Apr. 19, 1947	--	--	--	--	--		202	2	32	--	--	--	--	84	--	--	--	460	--	--
508	380	Cl	Jan. 29, 1969	--	--	--	--	--		278	--	25	--	--	--	--	138	--	--	1.8	497	7.5	--
37-101	522	Cl	May 24, 1940	--	--	92	26	174		250	16	350	--	--	--	--	337	53	--	--	--	--	--
d/ 41-301	90	Cu	May 30, 1936	--	--	80	15	88		476	8	40	--	--	--	465	264	--	--	--	--	--	--
d/ 302	48	Cu	May 5, 1936	--	--	52	23	92		421	8	50	--	--	--	432	224	--	--	--	--	--	--
d/ 303	48	Cu	do.	--	--	53	17	224		671	38	70	--	--	--	732	201	--	--	--	--	--	--
602	325	Cl	Nov. 13, 1968	19	--	44	11	72	1.7	296	19	39	.4	--	--	352	155	50	2.5	1.75	594	7.9	--
901	84	Cu	May 20, 1947	--	--	--	--	--		242	11	66	--	1.8	--	--	66	--	--	--	672	--	--
d/ 42-102	22	Cu	May 18, 1936	--	--	--	--	--		451	6	50	--	--	--	457	--	--	--	--	--	--	--
d/ 103	58	Cu	May 5, 1936	--	--	--	--	--		427	15	170	--	--	--	637	--	--	--	--	--	--	--
d/ 104	108	Cu	May 18, 1936	--	--	118	31	115		439	12	214	--	--	--	706	424	--	--	--	--	--	--
202	1,099	Cl,E	July 11, 1960	17	--	23	6.1	130	1.4	280	14	87	--	--	--	416	82	77	6.2	--	721	7.5	26
205	149	Cu	Feb. 20, 1947	--	--	--	--	--		220	10	114	--	.2	--	--	150	--	--	--	1,030	--	--
206	1,082	Cl,Cu,E	Oct. 3, 1968	16	--	17	6.8	123	1.2	256	16	83	.8	.0	--	390	70	79	6.4	2.79	681	8.0	25
209	73	Cu	Nov. 13, 1968	25	0.19	71	19	100	1.5	464	8.4	66	.6	.0	--	520	255	46	2.7	2.5	877	7.6	22
301	545	Cl,Cu	Apr. 24, 1947	--	--	--	--	--		374	7	94	--	--	--	--	123	--	--	--	764	--	22
302	556	Cl,Cu	do.	--	--	--	--	--		392	7	92	--	--	--	--	192	--	--	--	754	--	23

See footnotes at end of table.

Table 7.--Chemical Analyses of Water From Wells--Continued

WELL	PRODUCING INTERVAL OR WELL DEPTH (FT)	WATER-BEARING UNIT	DATE OF COLLECTION	SILICA (SiO_2)	IRON (Fe)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM * AND POTASSIUM		BICARBONATE (HCO_3)	SULFATE (SO_4)	CHLORIDE (Cl)	FLUORIDE (F)	NITRATE (NO_3)	BORON (B)	DISSOLVED SOLIDS	HARDNESS AS $CaCO_3$	PERCENT SODIUM	SODIUM ADSORPTION RATIO (SAR)	RESIDUAL SODIUM CARBONATE (RSC)	SPECIFIC CONDUCTANCE (MICROMHOS AT 25° C)	pH	TEMPERATURE °C
								Na	K														
JY-65-42-303	1,090	Cl,E	July 28, 1955	19	--	74	18	185	2.6	278	14	305	--	2.5	0.21	792	258	61	5.0	--	1,430	7.5	24
d/ 304	110	Cu	May 5, 1936	--	--	44	23	197		580	19	98	--	--	--	666	204	--	--	--	--	--	--
d/ 305	100	Cu	Apr. 22, 1936	--	--	74	15	53		366	< 10	46	--	--	--	368	249	--	--	--	--	--	--
d/ 306	60	Cu	Nov. 13, 1968	23	0.01	78	8.9	71	1.3	396	4.4	43	0.3	1.7	--	427	231	40	2.0	1.87	720	7.8	22
601	130	Cu	Nov. 19, 1968	31	.25	106	48	94	1.4	384	22	248	.6	3.7	--	744	462	31	1.9	.00	1,360	7.3	--
43-201	1,158	Cl,E	July 27, 1955	20	--	38	8.6	86	2.0	300	10	48	--	--	.21	367	130	58	--	--	627	7.9	26
d/ 203	80	Cu	May 6, 1936	--	--	51	17	62		317	< 10	50	--	--	--	336	195	--	--	--	--	--	24
301	1,155	Cl,E	June 15, 1967	19	--	37	8.4	85	1.4	290	8	46	.5	.0	.08	348	127	59	3.3	2.21	594	7.9	--
d/ 302	86	Cu	May 13, 1936	--	--	--	--	--		348	8	42	--	--	--	362	--	--	--	--	--	--	--
601	482	Cl,Cu	June 20, 1967	--	--	44	9.7	--		296	18	74	--	--	--	--	150	--	--	1.85	719	7.8	26
602	482	Cl,Cu	May 21, 1947	--	--	--	--	--		254	2	98	--	1.0	--	--	72	--	--	--	769	--	--
606	504	Cl	Jan. 14, 1969	--	--	--	--	--		314	.0	89	--	--	--	--	130	--	--	2.55	743	7.9	--
607	800	Cl?	do.	--	--	--	--	--		320	.0	274	--	--	--	--	184	--	--	1.56	1,300	7.8	--
608	116	Cu	Jan. 15, 1969	--	--	--	--	--		428	30	572	--	--	--	--	680	--	--	.00	2,330	7.5	--
44-101	874	Cl,E	Mar. 13, 1967	17	--	40	11	110	1.4	364	1.2	58	.4	.0	.20	418	145	62	4.0	3.07	713	7.5	25
66-24-607	293	C	July 11, 1968	24	--	54	4.6	23	1.7	177	14	32	.2	.1	.02	241	154	24	.8	.00	401	7.6	--
32-805	85	C	Apr. 22, 1947	--	--	--	--	--		404	46	73	--	--	--	--	126	--	--	--	827	--	--
904	321	C	July 14, 1960	29	--	86	15	82		376	20	88	.3	--	--	505	276	39	2.1	--	850	7.0	22
907	30	C	Oct. 26, 1967	21	--	190	39	85	1.7	384	101	190	.4	157	--	974	634	23	1.5	.00	1,560	7.0	--
d/ 908	110	C	May 4, 1936	--	--	38	20	126		403	17	74	--	--	--	475	178	--	--	--	--	--	--
909	180	C	May 1, 1947	--	--	--	--	--		232	16	70	--	--	--	--	108	--	--	--	672	--	22
40-304	115	C	Oct. 17, 1967	28	--	81	8.5	36	1.6	278	98	53	.2	.2	--	355	237	25	1.0	.00	586	7.6	--
d/ 309	33	C	May 4, 1936	--	--	--	--	--		378	8	26	--	--	--	362	--	--	--	--	--	--	--
d/ 310	115	C	do.	--	--	--	--	--		537	8	54	--	--	--	536	--	--	--	--	--	--	--
d/ 311	60	C	May 21, 1936	--	--	--	--	--		390	42	106	--	--	--	546	--	--	--	--	--	--	--
d/ 601	100	C	do.	--	--	50	20	118		275	63	122	--	--	--	508	207	--	--	--	--	--	--

* Where no potassium (K) is reported, sodium and potassium are calculated as sodium (Na).
a/ Dissolved solids for analyses other than those of the U.S. Geological Survey are computed as residue by evaporation at 105°C.
b/ Field test made by USGS, Houston, Texas; analysis made in USGS Laboratory, Washington, D. C.
c/ Analysis made by Microbiology Service Laboratories.
d/ Analysis made by Works Progress Administration (WPA).
e/ Analysis made by State Health Department.
f/ Analysis made by Curtis Laboratories.
g/ Analysis made from zone sampled in test hole.
h/ Analysis made by Houston Laboratories.
i/ Analysis made by Allis-Chalmers Manufacturing Company.

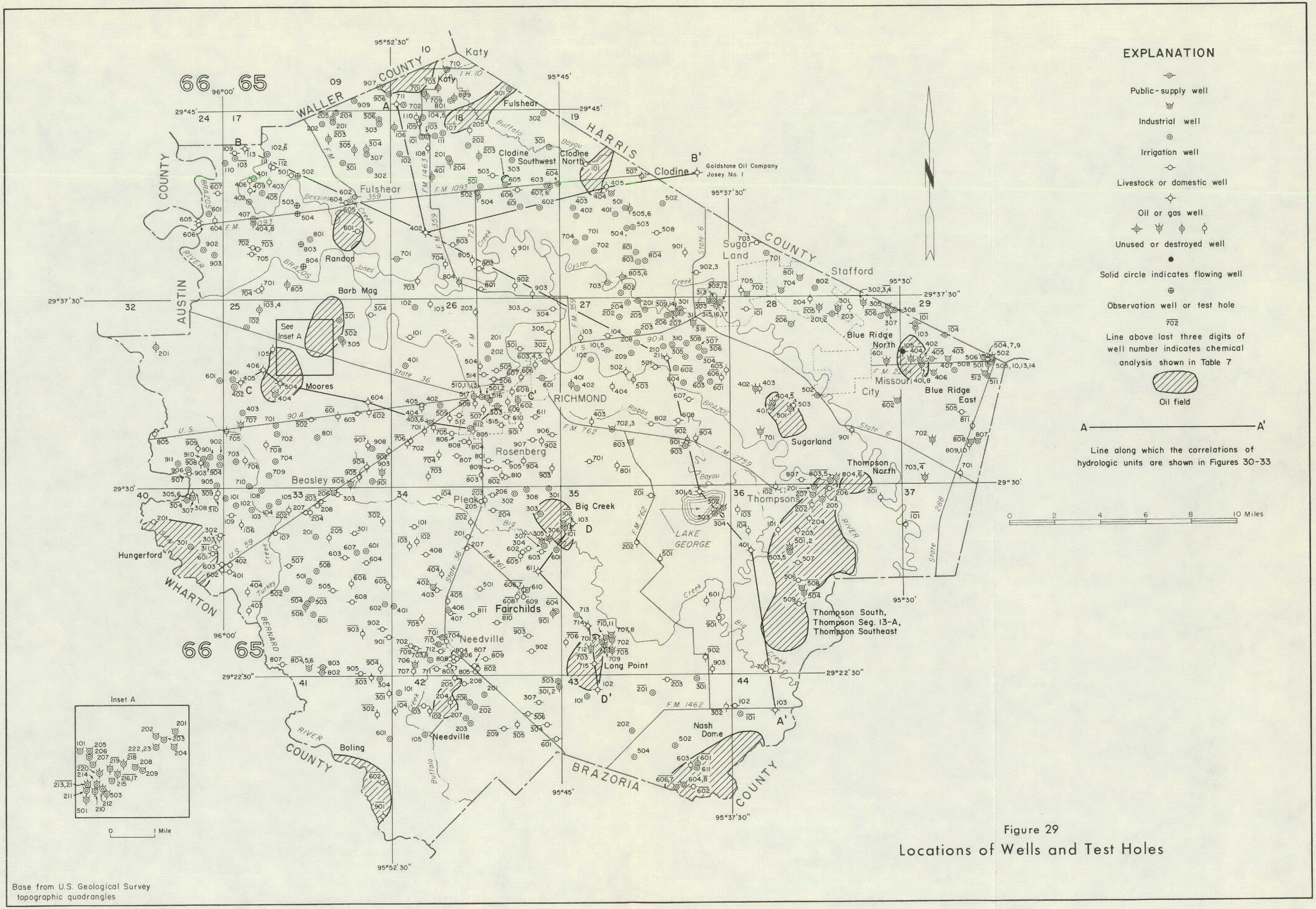

Figure 29

Locations of Wells and Test Holes

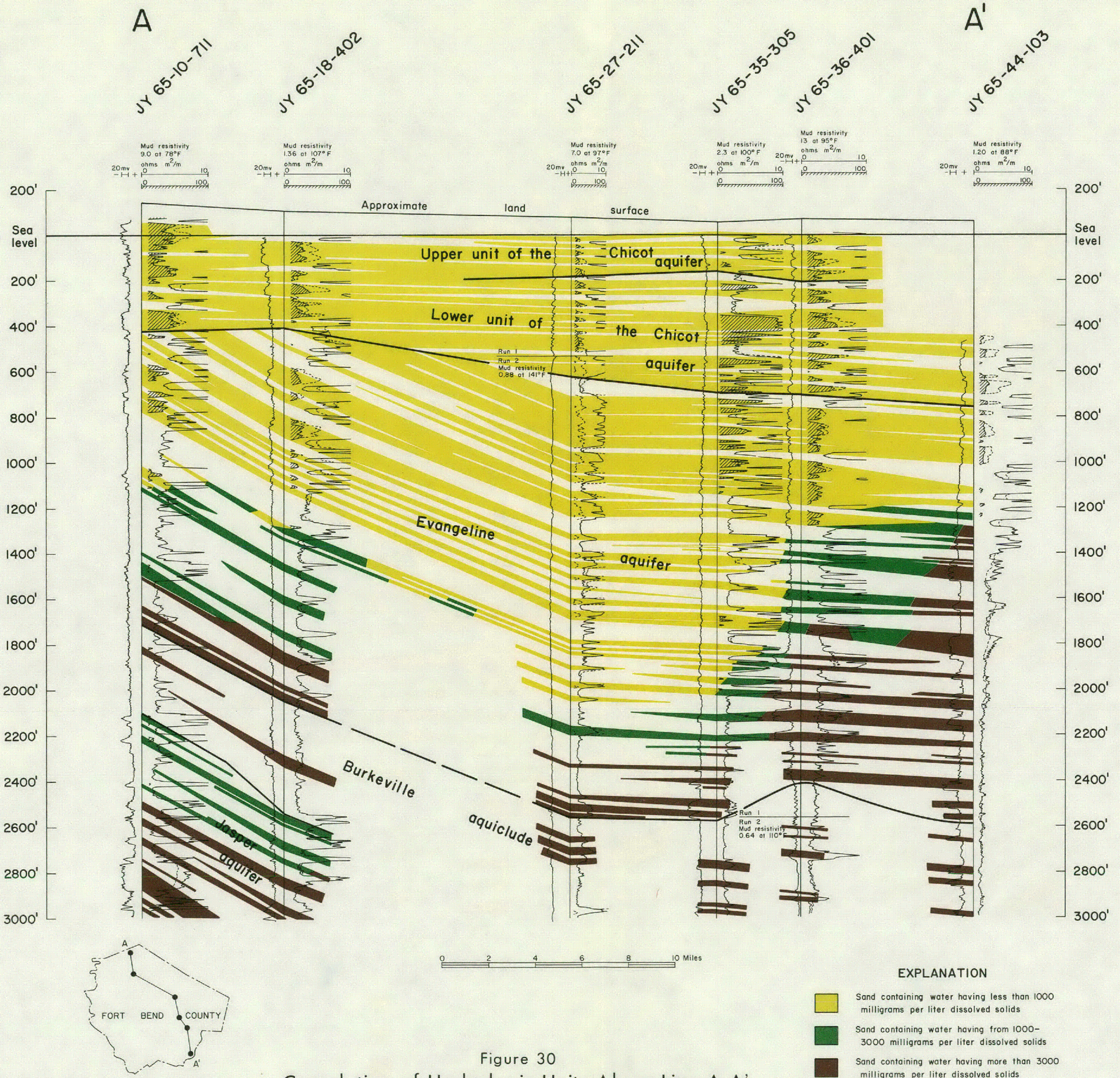

Figure 30
Correlation of Hydrologic Units Along Line A-A'

EXPLANATION

- Sand containing water having less than 1000 milligrams per liter dissolved solids
- Sand containing water having from 1000–3000 milligrams per liter dissolved solids
- Sand containing water having more than 3000 milligrams per liter dissolved solids
- Clay and sandy clay

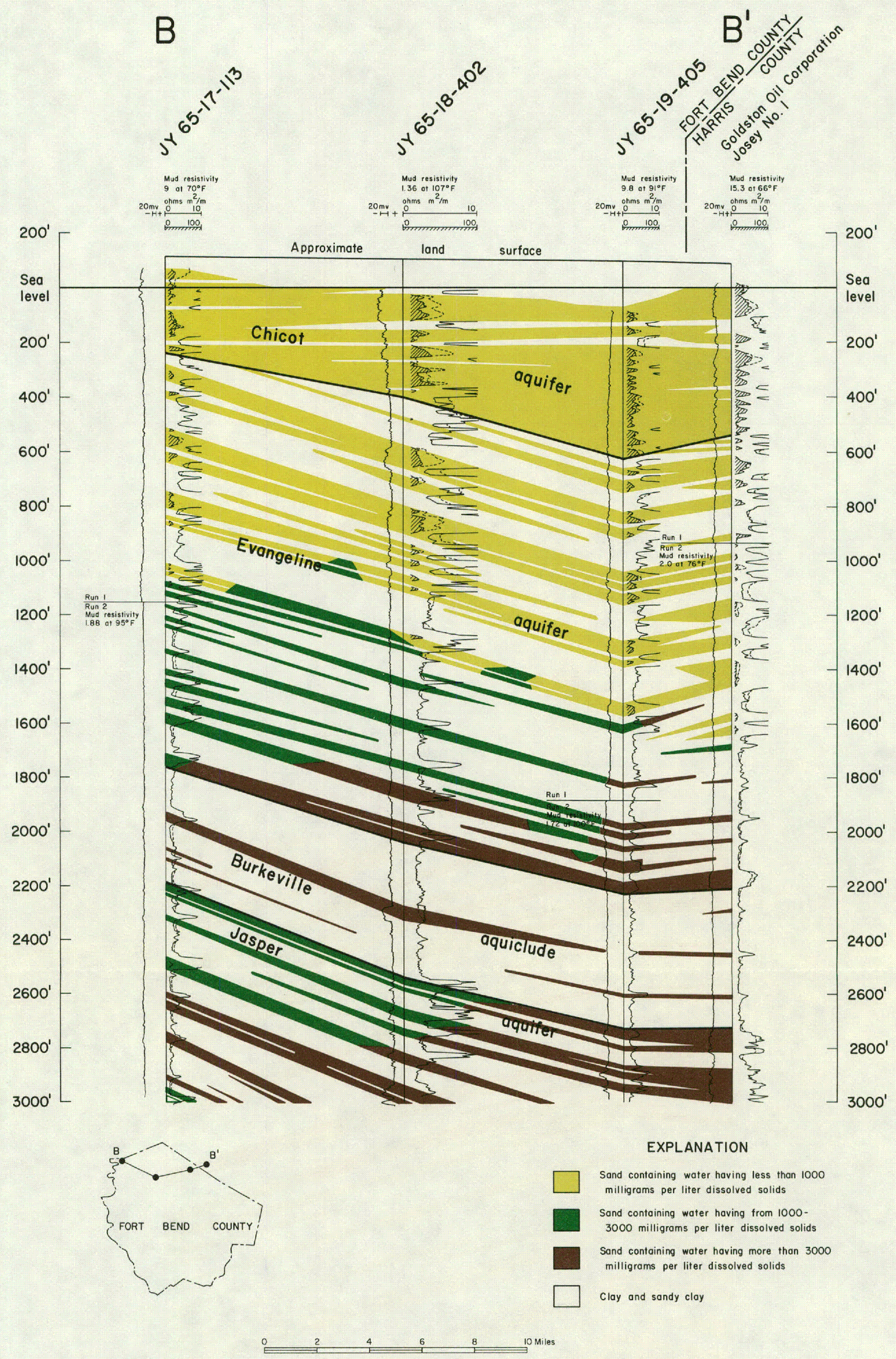

Figure 31
Correlation of Hydrologic Units Along Line B-B'

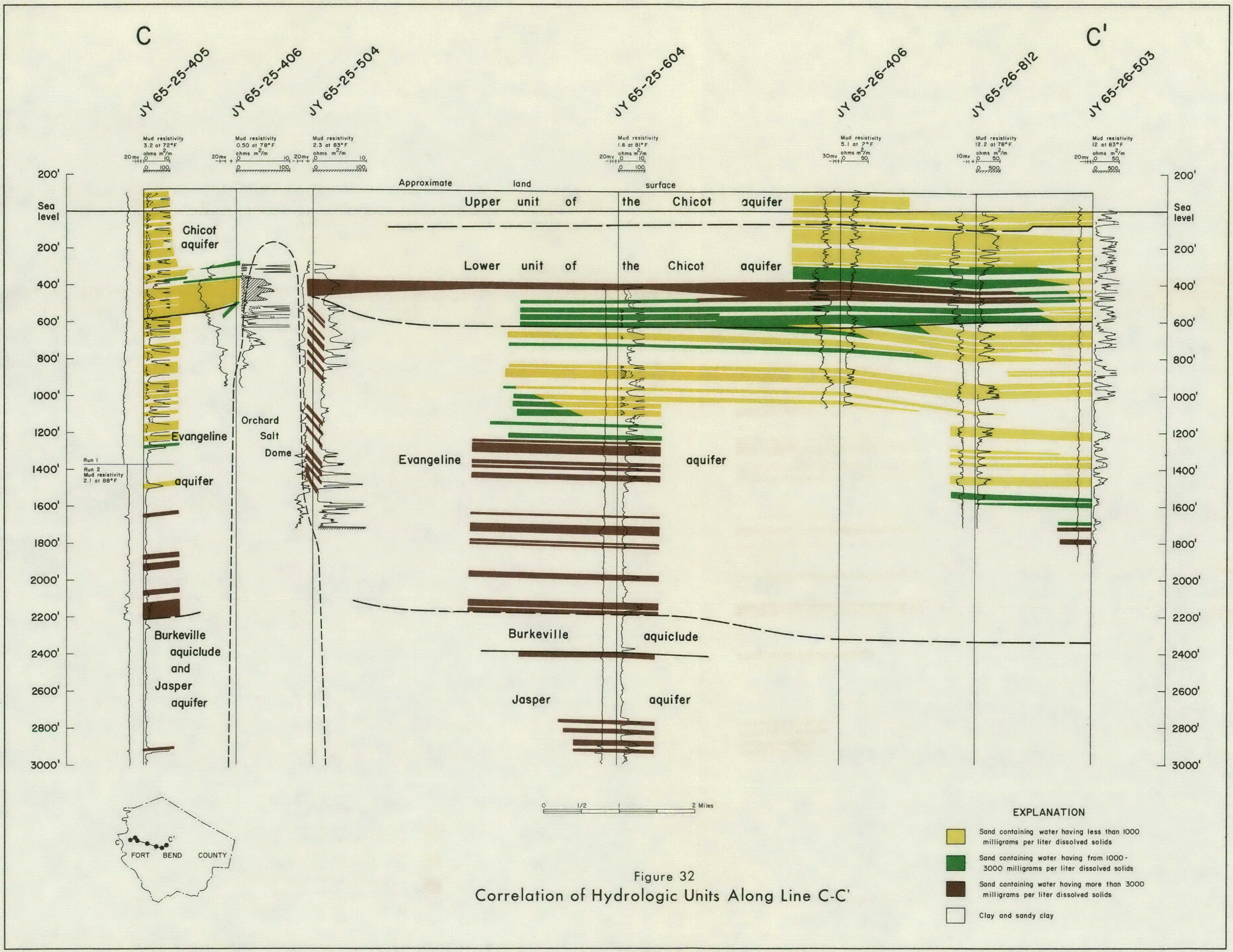

Figure 32
Correlation of Hydrologic Units Along Line C-C'

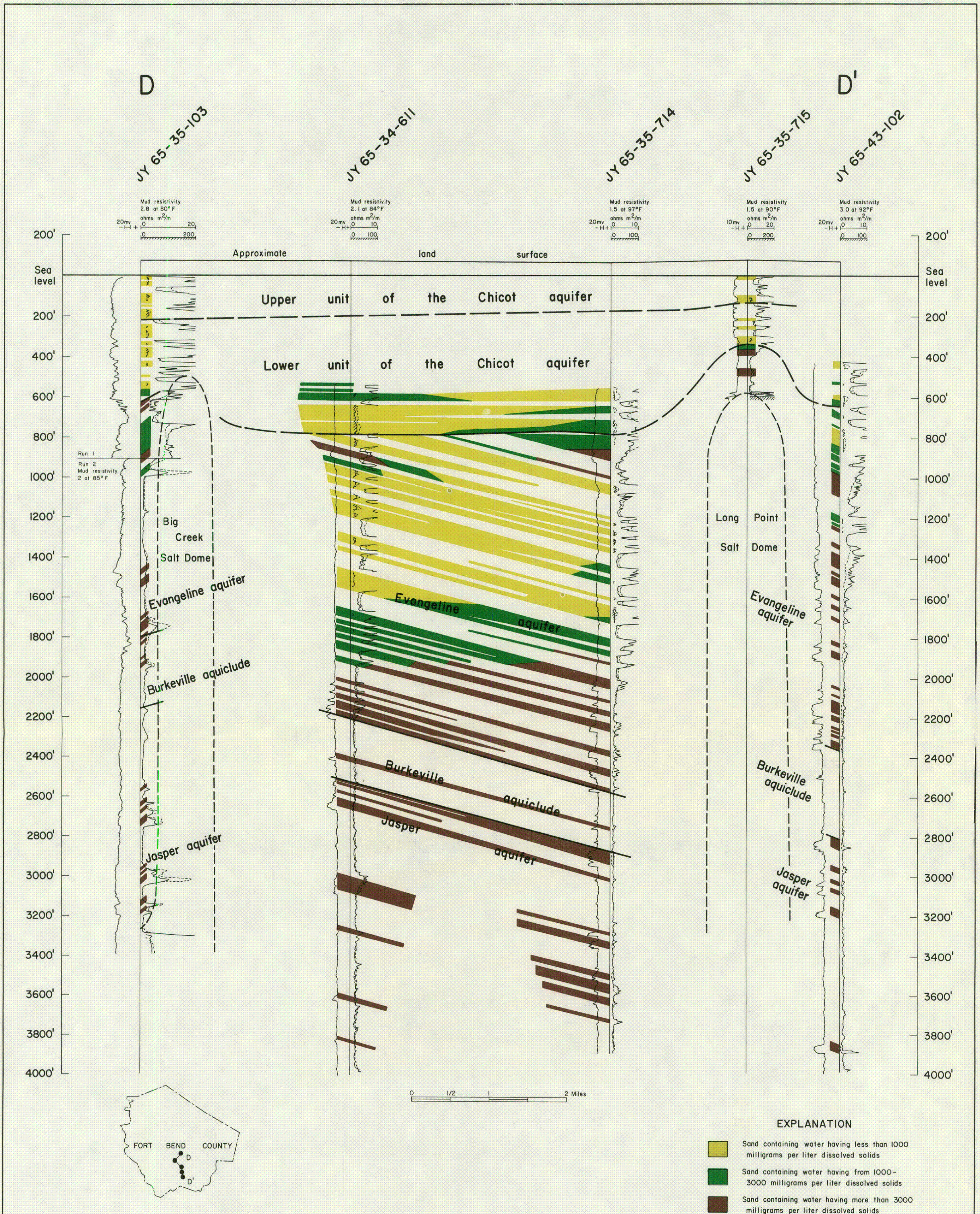

Figure 33
Correlation of Hydrologic Units Along Line D-D'