TEXAS WATER DEVELOPMENT BOARD

REPORT 185

GROUND-WATER RESOURCES OF BRAZOS AND BURLESON COUNTIES, TEXAS

By

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United States Geological Survey

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GROUND-WATER RESOURCES OF BRAZOS AND BURLESON COUNTIES, TEXAS

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ABSTRACT

The geologic formations that yield large quantities of water to wells in Brazos and Burleson Counties are, from oldest to youngest, the Wilcox Group, Carrizo Sand, Queen City Sand, Sparta Sand, terrace deposits, and flood-plain alluvium. The Weches, Cook Mountain, and Yegua Formations, Jackson Group, and Catahoula Sandstone are less prolific aquifers, and yield only small or moderate quantities of water. The Carrizo Sand and the underlying Wilcox Group are in hydraulic continuity and function as a single aquifer.

About 34 mgd (million gallons per day) or 38,000 acre-feet of ground water was used for all purposes in 1969. Of this amount, 66 percent was used for irrigation, 32 percent for public supply, and 2 percent for industrial, rural-domestic, and livestock needs. Use of ground water for public supply increased from a total of 1.3 mgd in 1940 to 11 mgd in 1969.

Bryan and Texas A&M University, which are the principal users of ground water for public supply, pumped 10.19 mgd from the Wilcox Group and Sparta Sand in 1969. Use of water from the flood-plain alluvium of the Brazos River for irrigation began in 1948 or 1949. By 1969, about 24,000 acres were being irrigated with about 25,000 acre-feet of ground water.

Large quantities of ground water are available for development. About 290 million acre-feet of fresh to slightly saline water is in transient storage in the principal upland aquifers and flood-plain alluvium. About 220 million acre-feet is stored in the Carrizo-Wilcox aquifer, 40 million acre-feet in the Queen City Sand, and 28 million acre-feet in the Sparta Sand; however, only about half of this water is recoverable by wells. The quantity of water in storage in the flood-plain alluvium varies annually, but in 1969 about 450,000 acre-feet of fresh to slightly saline water was recoverable from storage.

The total quantity of fresh to slightly saline water available from the principal aquifers on a long-term basis without depleting the supply is about 64,000 acre-feet per year or 57 mgd. Of this quantity, 25,000 acre-feet per year or 22 mgd is available from the Carrizo-Wilcox aquifer, 4,400 acre-feet per year or 3.9 mgd from the Queen City Sand, 5,000 acre-feet per year or 4.5 mgd from the Sparta Sand, and 30,000 acre-feet per year or 27 mgd from the flood-plain alluvium.

The yields of wells in Brazos and Burleson Counties ranged from a few gallons per minute to about 2,500 gpm (gallons per minute). From properly constructed wells in areas of thick water-bearing sands, yields of at least 4,500 gpm are possible from the Carrizo-Wilcox aquifer, 300 gpm from the Queen City Sand, 500 gpm from the Sparta Sand, and about 1,500 gpm from the flood-plain alluvium.

Ground water of good chemical quality is available in many of the principal aquifers. The Carrizo-Wilcox aquifer, Queen City Sand, and Sparta Sand contain water that is generally suitable for public supply, many industrial uses, and supplemental irrigation. The flood-plain alluvium contains water that is suitable for irrigation and some industrial uses, but because of the hardness and high iron content, the water is not generally acceptable for public supply. The Weches, Cook Mountain, and Yegua Formations, Jackson Group, Catahoula Sandstone, and terrace deposits generally contain water of poorer quality.

GROUND-WATER RESOURCES OF BRAZOS AND BURLESON COUNTIES, TEXAS

INTRODUCTION

Location and Extent of the Area

Brazos and Burleson Counties are in the West Gulf Coastal Plain of south-central Texas (Figure 1). The report area is bounded on the north by Robertson and Milam Counties, on the east by Madison and Grimes Counties, on the south by Washington County, and on the west by Lee County. The Brazos River divides the report area. Bryan is the county seat of Brazos County, and Caldwell is the county seat of Burleson County. Brazos and Burleson Counties have areas of 583 and 679 square miles, respectively.

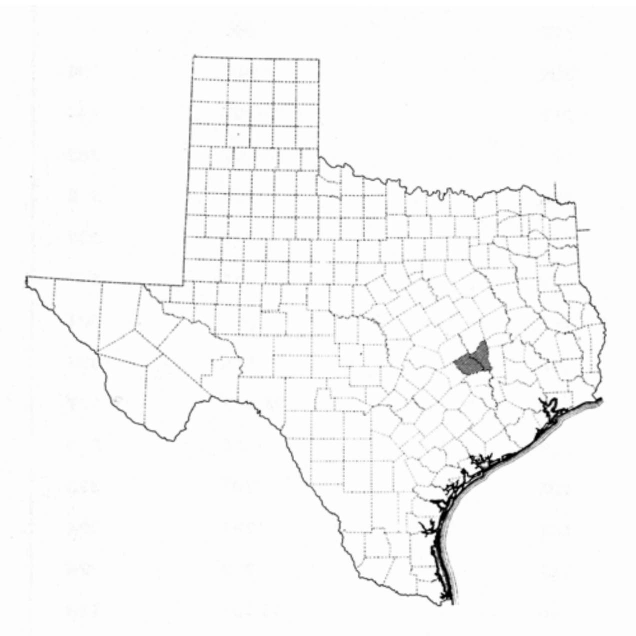


Figure 1.—Location of Brazos and Burleson Counties

Purpose and Scope of the Investigation

The purpose of the investigation, which was made by the U.S. Geological Survey in cooperation with the Texas Water Development Board, was to evaluate the ground-water resources of Brazos and Burleson Counties and to make the results of the study available to the public. Emphasis was placed on determination of the source, occurrence, quantity, and quality of the ground water. This report is based on the records of 1,254 water wells, 11 springs, 64 oil wells, numerous electrical logs of wells, 172 drillers' logs, 549 chemical analyses of water samples, 26 aquifer tests in 16 wells, other hydrologic data, climatological data, and geologic mapping. During the course of the investigation, an inventory was made of all municipal, industrial, and irrigation wells, and of selected livestock wells, domestic wells, springs, and oil tests to provide ground-water data throughout the report area.

Electrical logs of water wells and oil tests and drillers' logs of water wells and test holes were used in conjunction with other data to determine: (1) the sand thickness of many of the principal aquifers containing fresh to slightly saline water; (2) the approximate altitude of the base of the fresh to slightly saline water at places in the county; and (3) the approximate altitude of the top of many of the principal aquifers. An inventory of the municipal, industrial, and irrigation pumpage was used to determine the quantities of water being used, and water samples were collected to provide representative data on the quality of the available water.

Previous Investigations

Previous investigations of the ground-water resources of the area have resulted in reports on: Well inventory of Burleson County (Clark, 1937); ground water in the vicinity of Bryan and College Station (Turner, 1938); a series of aquifer tests in the Bryan city wells (Barnes, Follett, and Sundstrom, 1944); the public water supplies in eastern Texas, which included Bryan, Caldwell, and Somerville (Sundstrom, Hastings, and Broadhurst, 1948); a reconnaissance of the Brazos River basin (Cronin and others, 1963); a reconnaissance of the flood-plain alluvium of the Brazos River (Cronin and Wilson, 1967); and several other reports covering large areas that included all or parts of the report area.

Table 1 lists the well numbers used in this report and the corresponding numbers used in Brazos County

Table 1.—Well Numbers Used in This Report and Corresponding Numbers Used in Burleson County by Clark (1937) and Brazos County by Turner (1938)

NEW NUMBER	OLD NUMBER	NEW NUMBER	OLD NUMBER	NEW NUMBER	OLD NUMBER
		BRAZOS COUNTY			
BJ-59-06-301	9	BJ-59-20-703	27	BJ-59-30-101	121
701	7	22-401	84	102	122
20-564	21	402	85	103	136
565	22	403	89	104	137
		BURLESON COUNTY			
BS-59-18-901	71	BS-59-27-601	37	BS-59-35-303	179
19-401	35	602	38	304	176
601	18	702	114	401	167
603	15	708	113	502	159
701	26	801	42	604	174
802	27	802	43	803	156
803	24	806	115	902	303
806	28	807	211	36-301	347
20-120	2	28-210	210	706	304
122	5	617	207	902	309
401	9	618	208	903	308
402	10	620	200	37-101	344
26-203	81	801	191	102	343
302	75	903	198	108	345
303	74	904	197	110	337
304	78	905	195	111	341
305	76	906	194	608	331
306	70	908	196	610	333
501	98	29-730	348	38-413	327
502	105	34-103	135	414	330
604	99	104	136	707	323
605	102	403	137	711	324
606	100	501	147	713	326
701	89	505	146	43-101	153
801	90	506	143	202	301
902	111	510	148	204	302
27-202	65	511	141	44-101	311
203	66	602	161	104	312
205	67	603	162	201	313
305	30	606	163	301	316
401	48	35-104	168	303	315
501	56	207	126	601	317
504	60	302	178	45-204	321

by Turner (1938) and in Burleson County by Clark (1937).

Economic Development

The first permanent settlements by English-speaking settlers in Brazos and Burleson Counties were made in the 1820's under the leadership of Stephen F. Austin. The 1850 census (the first in Texas by the U.S. Census Bureau) listed county populations of 614 and 1,713 in Brazos and Burleson Counties, respectively; the populations increased to recorded maximums of 57,978 in 1970 for Brazos County and 19,848 in 1930 for Burleson County. The population of Burleson County decreased from the maximum in 1930 to 9,999 in 1970. Populations of the four incorporated towns in Brazos and Burleson Counties in 1970 were: Bryan, 33,719; College Station, 17,676; Caldwell, 2,308; and Somerville, 1,250. There are several unincorporated communities in each of the counties.

Diversified livestock- and irrigated-crop production are the principal sources of income in the report area. In Brazos County, Texas A&M University and its associated enterprises are very important to the economy of the area. Other sources of income in Brazos County are sand and gravel production, feed and oil mills, and oil and gas production. The Texas International Speedway—car racing—also brings in much outside revenue to the area. In Burleson County, oil and gas production, manufacturing (aluminum products and creosoted railroad ties and poles), and tourism are important additional sources of income.

Oil was discovered in Brazos County in 1942 and in Burleson County in 1938. According to the Railroad Commission of Texas (1968), Brazos County produced 44,799,000 cubic feet of gas and 1,755 barrels of oil and Burleson County produced 521,000 cubic feet of gas and 6,028 barrels of oil in 1967. Additional discoveries of oil, which have increased the annual production, have been made in each county since 1967.

Topography and Drainage

Altitudes in Brazos County range from a maximum of slightly more than 440 feet above mean sea level about 12 miles northeast of Bryan (about 1 mile northwest of well BJ-59-14-604) to slightly less than 180 feet where the Brazos River leaves the county. Altitudes in Burleson County range from about 557 feet about 12 miles west of Caldwell (about 1 mile north of oil test BS-59-25-601) to slightly less than 180 feet where the Brazos River leaves the county. Regionally, the land surface in the report area rises from southeast to northwest.

Both Brazos and Burleson Counties are drained by the Brazos River and its tributaries. Some of the larger tributaries are the Little Brazos River, Old River, Navasota River, Yegua Creek, and Davidson Creek. A series of dams on the Brazos River upstream from the report area help to maintain the flow of the river during droughts; they also help to prevent or reduce damaging floods which were common prior to the construction of the major dams—Morris Sheppard and Whitney.

Climate

Brazos and Burleson Counties have a warm and humid climate. The summers are long, hot, and dry; temperatures of 100°F (49°C), or more, are common. The winters are short and mild; occasional cold spells may last as long as a week, but these are usually followed by periods of pleasant cool weather. Only 2 months, January and February, have much freezing weather. The average of the January minimum temperatures from 1894-1970 was 42°F (5.5°C), and the average of the July maximum temperatures was 95.5°F (35.2°C). The average frost free period is 274-275 days.

Average annual precipitation at College Station for the period 1912-70 was 39.00 inches and ranged from 16.66 inches in 1917 to 61.04 inches in 1968 (Figure 2). The average monthly precipitation for the same period ranged from 2.37 inches in August to 4.55 inches in May and averaged 3.25 inches (Figure 3). Actual monthly precipitation ranged from zero or a trace on two occasions to 14.70 inches in May 1929.

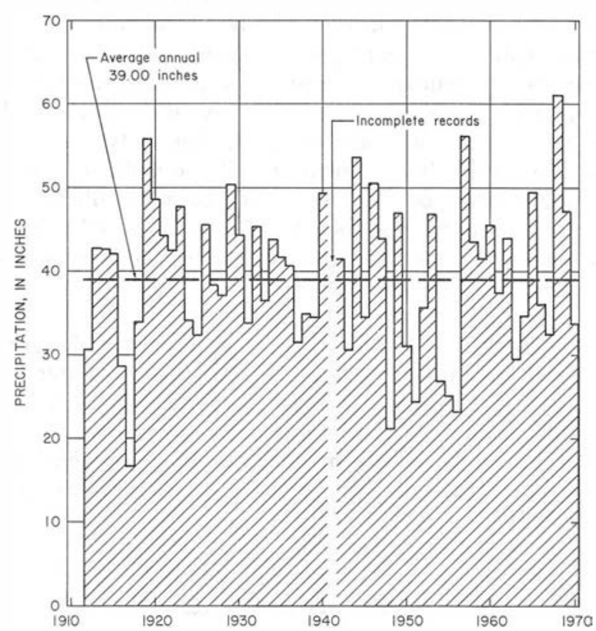


Figure 2.—Annual Precipitation at College Station, 1912-70

The average monthly gross lake-surface evaporation in Brazos and Burleson Counties for 1940-65 (Kane, 1967, p. 87) ranged from 2.3 inches in February to 7.5 inches in August (Figure 3). Average monthly evaporation was 4.6 inches and the average annual was 54.6 inches. Actual monthly evaporation ranged from 1.3 inches in February 1948 to a maximum of 10.6 inches in July 1956.

The average monthly temperature at College Station ranged from 50.6°F (10.3°C) in January to 84.2°F (29.1°C) in August during 1894-1970; the average annual temperature was 68.2°F (20.1°C) (Figure 3). As the temperature increases, gross lake-surface evaporation also increases as indicated by Figure 3. Humidity and wind velocity are other factors affecting evaporation.

Well-Numbering System

The well-numbering system used in this report is the one adopted by the Texas Water Development Board for use throughout the State (Figure 4). Under this system, each 1-degree quadrangle is given a number consisting of two digits from 01 to 89. These are the first two digits appearing in the well number. Each 1-degree quadrangle is divided into 7½-minute quadrangles which are given two-digit numbers from 01 to 64. These are the third and fourth digits of the well number. Each 7½-minute quadrangle is subdivided into 2½-minute quadrangles which are given a single digit number from 1 to 9. This is the fifth digit of the well number. Finally, each well within a 2½-minute quadrangle is given a two-digit number in the order in which it is inventoried, starting with 01. These are the last two digits of the well number. In addition to the seven-digit well number, a two-letter prefix is used to identify the county. The prefix for Brazos County is BJ and for Burleson County it is BS. Thus, well BJ-59-21-604 is in Brazos County, (BJ), in the 1-degree quadrangle 59 (the numbers of all the wells in Brazos and Burleson Counties begin with BJ-59 or BS-59), in the 7½-minute quadrangle 21, in the 2½-minute quadrangle 6, and was the fourth well (04) inventoried in the 2½-minute quadrangle.

On the well-location maps in this report (Figures 26 and 27), the numbers of the 7½-minute quadrangles are shown in their northwest corners where possible. The three-digit number shown with the well symbol contains the number of the 2½-minute quadrangle in which the well is located and the number of the well within that quadrangle.

Acknowledgments

The writer expresses his appreciation for the information and assistance furnished by various city officials, Texas A&M University, farmers, ranchers, and personnel of the U.S. Department of Agriculture. Special acknowledgment is made to water well drillers, particularly Layne Texas Co., Inc.

GEOLOGY AS RELATED TO THE OCCURRENCE OF GROUND WATER

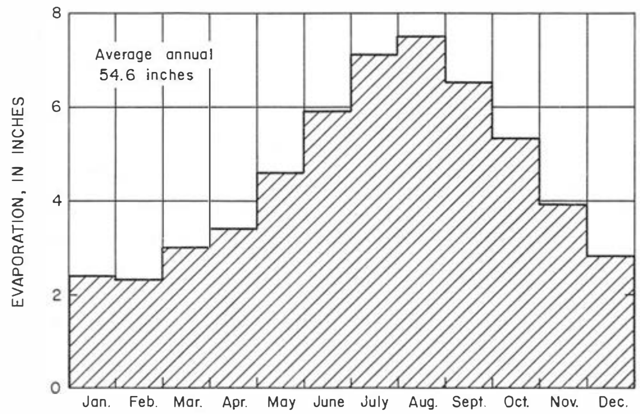
General Stratigraphy and Structure

The geologic formations tapped by water wells in Brazos and Burleson Counties range in age from Tertiary to Quaternary. The units, from oldest to youngest, are: Wilcox Group, Carrizo Sand, Reklaw Formation, Queen City Sand, Weches Formation, Sparta Sand, Cook Mountain Formation, Yegua Formation, Jackson Group, and Catahoula Sandstone of Tertiary age and terrace deposits and flood-plain alluvium of Quaternary age. The principal water-bearing units or aquifers are the Wilcox Group; Carrizo, Queen City, and Sparta Sands; and flood-plain alluvium. The others are less prolific, but are important because some of them provide water for rural water systems and for domestic and livestock use on many farms and ranches. Table 2 shows the lithology and water-bearing characteristics of the geologic units in Brazos and Burleson Counties.

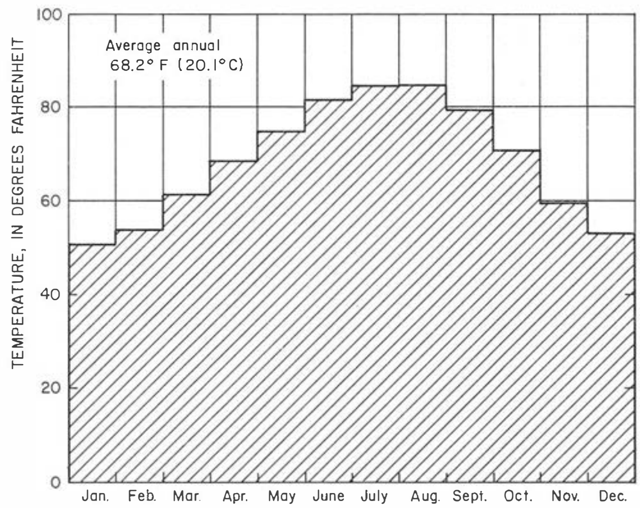
Except for the flood-plain alluvium and terrace deposits, the outcrops of the geologic formations in Brazos and Burleson Counties lie in more or less parallel bands that trend roughly northeastward (Figure 5). Part of the oldest exposed unit, the Queen City Sand, crops out along the northwest Burleson County line. Except where disturbed by faulting, the Tertiary formations dip southeastward toward the Gulf Coast at a maximum rate of about 110 feet per mile. The formations generally thicken southeastward, causing the dip of each younger formation to be slightly less steep.

The Tertiary formations are displaced by several faults or fault systems that trend northeast across Brazos and Burleson Counties. The faults shown on Figure 5 are in northwestern Burleson County and in the Millican area. Other faults are known to exist but have not been mapped. Formations on the south side of the faults are upthrown relative to those on the north side. The faults in the report area probably do not significantly affect the occurrence of ground water except in small areas, although the electrical log of well BJ-59-39-109 indicates that about 630 feet of the section above the Wilcox Group is missing due to two faults having throws of 380 and 250 feet.

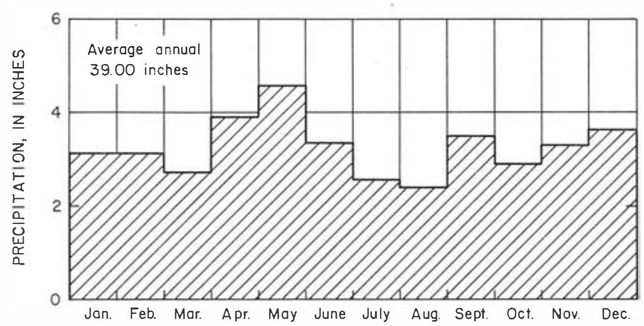
Figures 6 and 7, which are charts based on electrical logs of oil tests and water wells, show correlations of the geologic units. These charts indicate the top, base, and thickness of the various units and the approximate base of fresh to slightly saline water.



Average monthly gross lake-surface evaporation in Brazos and Burleson Counties, 1940-65 (From Kane, 1967)



Average monthly temperature at College Station, 1894-1970 (From U.S. Weather Bureau records)



Average monthly precipitation at College Station, 1912-70 (From U.S. Weather Bureau records)

Figure 3

Average Monthly Precipitation and Temperature at College Station and Average Monthly Gross Lake-Surface Evaporation in Brazos and Burleson Counties

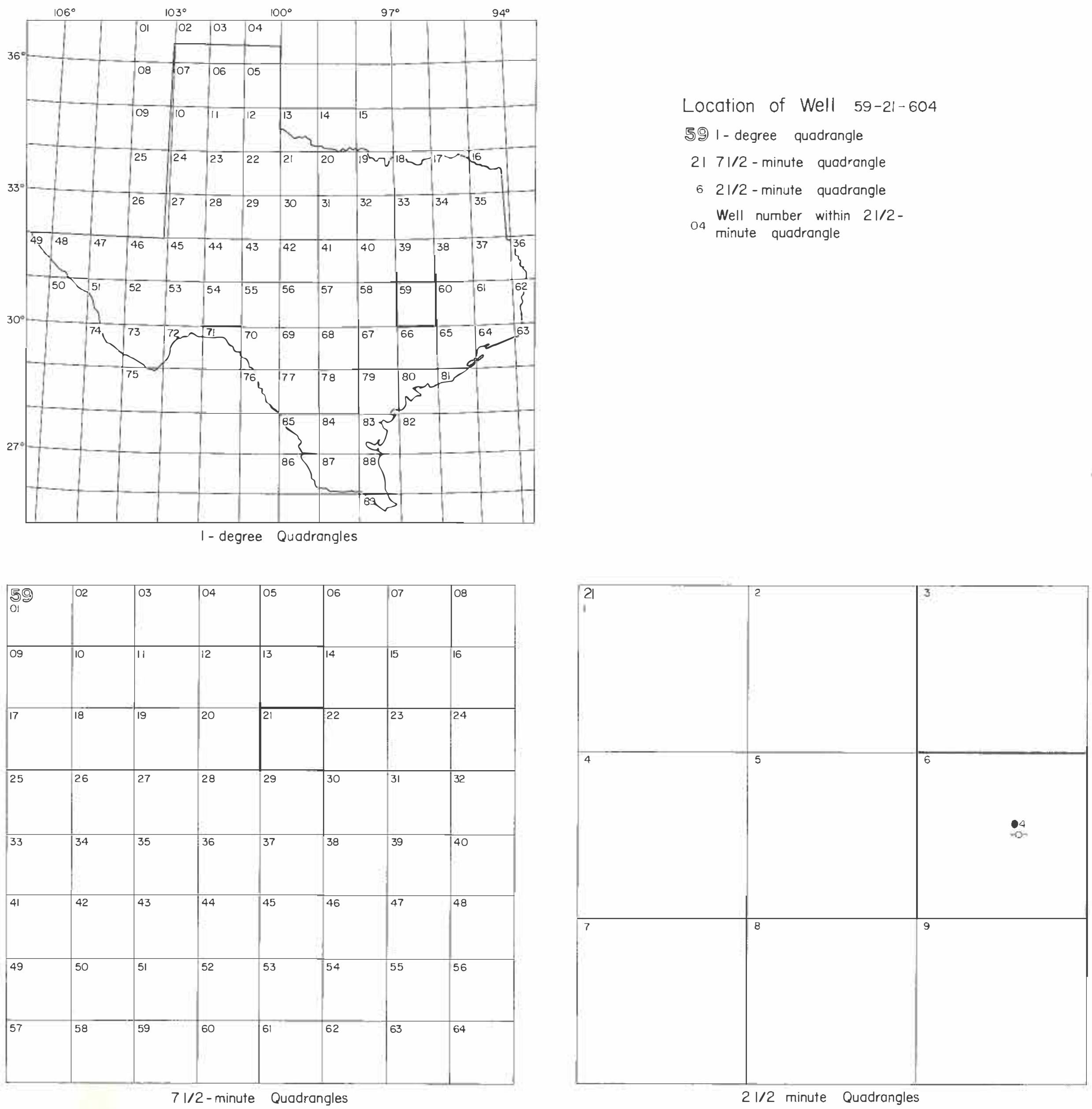


Figure 4
Well-Numbering System

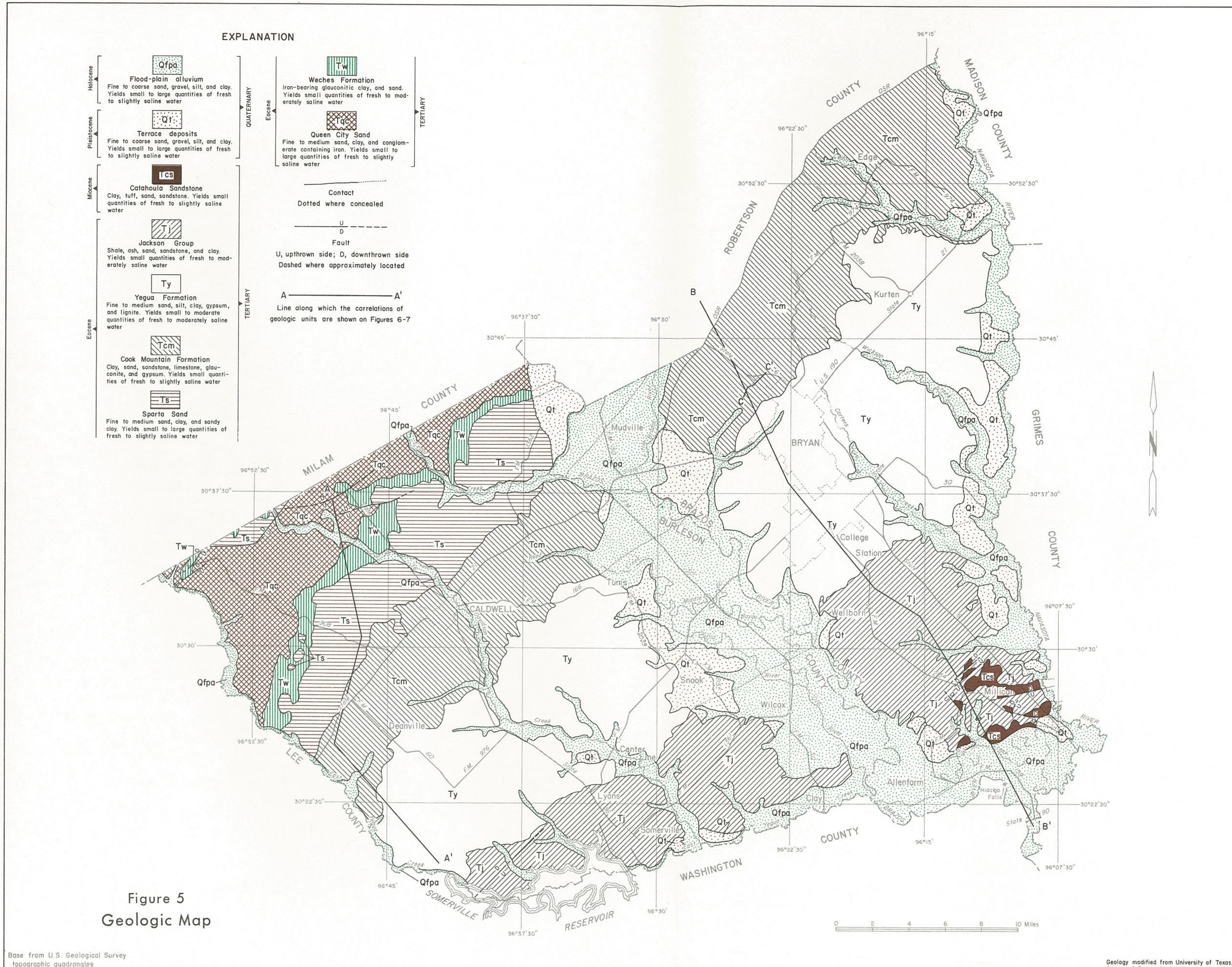


Figure 5
Geologic Map

Base from U.S. Geological Survey topographic quadrangles

Geology modified from University of Texas, Bureau of Economic Geology Atlas, 1971

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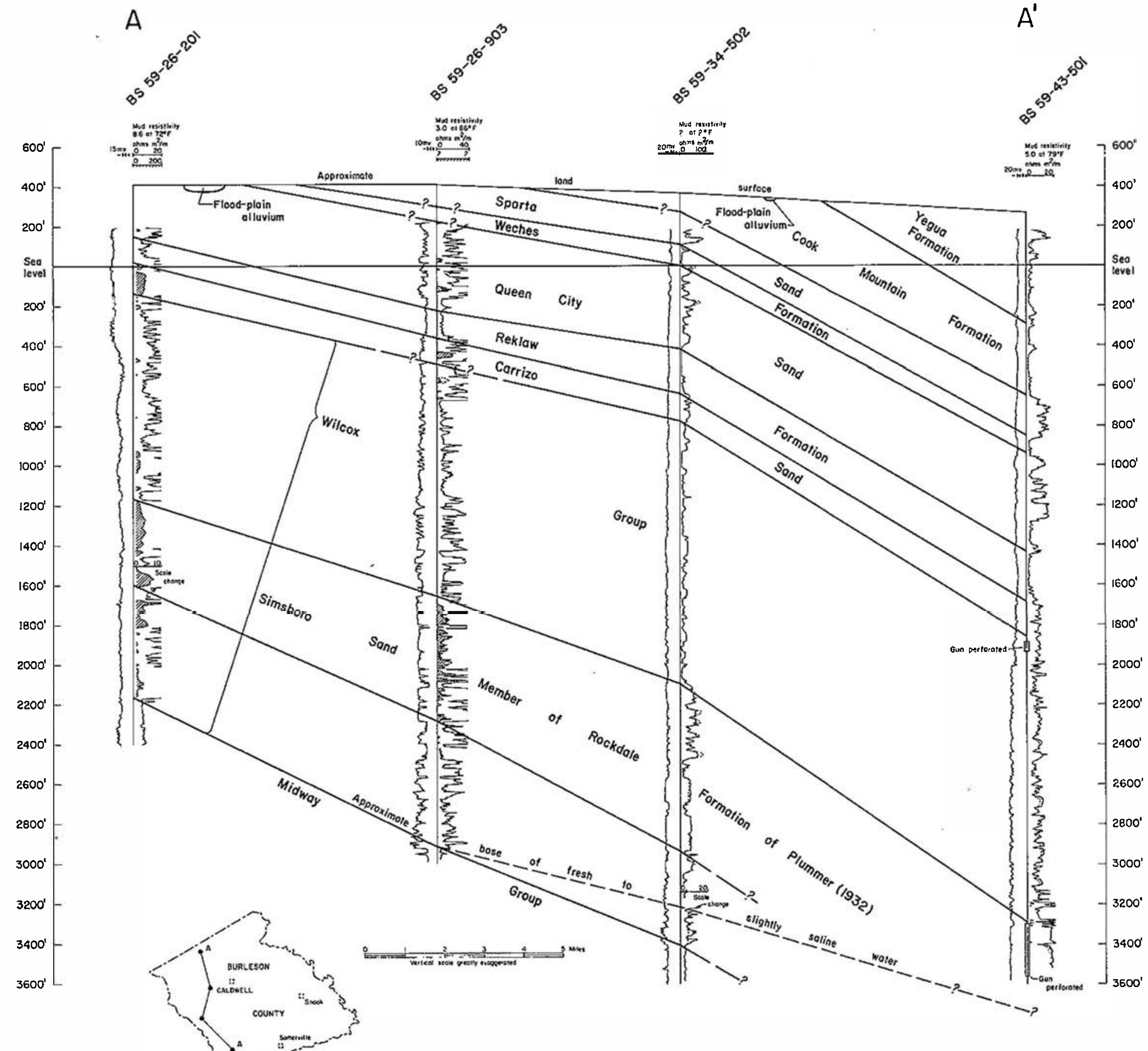


Figure 6
Correlation of Geologic Units Along Line A-A', Burleson County

Table 2.—Lithology and Water-Bearing Characteristics of the Geologic Units

SYSTEM	SERIES	GEOLOGIC FORMATIONS	MAXIMUM THICKNESS (FT)	LITHOLOGY	WATER-BEARING PROPERTIES
Quaternary	Holocene	Flood-plain alluvium	82	Fine to coarse sand, gravel, silt, and clay.	Yields small to large quantities of fresh to slightly saline water, mostly to irrigation wells along the Brazos River.
	Pleistocene	Terrace deposits	70	Fine to coarse sand, gravel, silt, and clay.	Yields small to large quantities of fresh to slightly saline water to wells for rural-domestic and livestock use and to a few irrigation.
Tertiary	Miocene	Catahoula Sandstone	460	Clay, tuff, sand, and sandstone.	Yields small quantities of fresh to slightly saline water to a few wells in southern Brazos County.
	Eocene	Jackson Group	1,480	Lignitic shale, volcanic ash, sand, sandstone, and clay.	Yields small quantities of fresh to moderately saline water to wells in the outcrop for rural-domestic and livestock use.
		Yegua Formation	1,150	Fine to medium sand, silt, clay, gypsum, fossilized wood, and lignite.	Yields small to moderate quantities of fresh to moderately saline water to many wells for public-supply, rural-domestic, livestock, and irrigation use.
		Cook Mountain Formation	550	Carbonaceous clay and a small amount of sand, sandstone, limestone, glauconite, and gypsum. The Spiller Sand Member of Stenzel (1940)1/ is near the middle of the formation.	Yields small quantities of fresh to slightly saline water to wells that tap the Spiller Sand Member.
		Sparta Sand	290	Fine to medium sand with some clay, and sandy clay.	Yields small to large quantities of fresh to slightly saline water to wells in and downdip from the outcrop.
		Weches Formation	130	Iron-bearing glauconitic clay and sand.	Yields small quantities of fresh to moderately saline water to a few wells in or near the outcrop.
		Queen City Sand	540	Massive to thin-bedded, fine to medium sand, clay, and some lenses of conglomerate containing iron.	Yields small to large quantities of fresh to slightly saline water to wells in and several miles downdip from the outcrop.
		Reklaw Formation	430	Glauconitic sand and silt in the lower part of formation; clay and thin beds of sandstone in the upper part.	Capable of yielding small quantities of fresh to slightly saline water to wells in some places. Not known to yield water to wells in the report area.
		Carrizo Sand	250	Fine to coarse, crossbedded sand and some thin beds of sandstone and clay.	Yields small to large quantities of fresh to slightly saline water, mostly to public-supply wells.
		Wilcox Group	3,900	Fine to coarse sand and sandstone, sandy clay, clay, and shale, with some lenses of limestone and lignite. Simsboro Sand member2/ is in the middle part of the group.	Yields small to large quantities of fresh to moderately saline water to public-supply, irrigation, rural-domestic, and livestock wells. Most water produced from the Simsboro Sand Member.

1/ Spiller Sand Member of Cook Mountain not adopted by U.S. Geological Survey.
2/ Simsboro Sand Member of Rockdale Formation of Plummer (1933) not adopted by U.S. Geological Survey.

Physical Characteristics and Water-Bearing Properties of the Geologic Units

Wilcox Group

The Wilcox Group crops out across Milam and Robertson Counties and underlies Brazos and Burleson Counties. It consists chiefly of fine to coarse sand and sandstone, sandy clay, clay, and shale, with some lenses of limestone and lignite. The sand, which constitutes about 40 percent of the Wilcox, is mostly quartz; however, some organic matter and dark-colored minerals give the sand a "salt and pepper" appearance.

In many places the Wilcox has an upper, middle, and lower sandy zone. The middle zone is equivalent to the Simsboro Sand Member of the Rockdale Formation of Plummer (1932), and is hereafter identified in this report as the "Simsboro Sand Member".[1/] This unit contains a greater percentage of sand and coarse sand than the other two zones. The Simsboro Sand Member ranges in thickness from about 415 to 850 feet and in places is almost all sand. Except for Simsboro Sand Member, individual sand beds in the Wilcox Group are not continuous over long distances, and although some beds are 100 feet or more in thickness, correlation between wells is difficult even for short distances. The lenticularity of the sand beds is due mainly to their continental and shallow marine origin as channel, deltaic, and lagoonal deposits.

The Wilcox Group dips southeastward at about 110 feet per mile. Locally, the dip may be increased or decreased by faults. The altitudes of the top and base of the Wilcox range from about 100 and 2,000 feet below sea level, respectively, in northwestern Burleson County to about 4,400 and 7,000 feet below sea level, respectively, in the southern part of Brazos County.

The Wilcox ranges in thickness from about 1,950 to 3,900 feet in unfaulted areas. The maximum thickness observed on electrical logs was in well BJ-59-23-704, about 8 miles east of Bryan. Electrical log of well BJ-59-39-109 near Millican (Figure 7) indicates that only 1,390 feet of the group is present; about 1,500 feet of Wilcox is estimated to be missing. Faulting or nondeposition associated with the Millican Salt Dome encountered at 4,880 feet below land surface accounts for the missing Wilcox section.

The Wilcox contains fresh to slightly saline water in the northwestern part of the report area. At about the southeasternmost 1,500-foot sand-thickness contour in Figure 20, the lower part of the Wilcox contains moderately saline water. Southeastward from this line, the Wilcox contains progressively more highly mineralized water. The Wilcox contains no fresh or slightly saline water southeast of a line crossing the report area about 2 to 3 miles north of Somerville and Wellborn. At well BS-59-37-403 (Figure 26), fresh to slightly saline water in the Wilcox reaches a depth below land surface of at least 4,320 feet (4,010 feet below sea level).

The Wilcox Group yields small to large quantities of fresh to moderately saline water to public supply, irrigation, rural-domestic, and livestock wells. It yields the needed small quantities of water to a few rural-domestic and livestock wells, and moderate to large quantities to several public-supply wells. The Wilcox furnishes part of the water used by Bryan and Texas A&M University; Caldwell pumps water from dual-completion wells in the upper part of the Wilcox and Carrizo Sand. The Bryan and Texas A&M University wells are pumped at 2,000 to 2,500 gpm (gallons per minute), whereas the wells at Caldwell are pumped at 300 to 1,100 gpm; however, all of these wells are capable of greater yields. Generally, much greater yields from the Wilcox could be obtained from large-diameter wells that are properly constructed, underreamed, gravel-packed, and screened in all available sands.

Carrizo Sand

The Carrizo Sand unconformably overlies the Wilcox Group and crops out in a belt 1 to 2 miles wide extending across Milam and Robertson Counties. The outcrop nearest the report area is just across the northwestern Burleson County line in Milam County. In general, the outcrop is covered by a thick growth of blackjack oak and brush, but the land is gradually being cleared for pasture improvement and grazing.

The Carrizo is almost all sand, consisting chiefly of fine to coarse crossbedded sand and some thin beds of sandstone and clay. Generally, the sand is white and consists of rounded to subangular coarse quartz grains. The strata are massive and in places slightly cemented. In many pits and roadcuts, the Carrizo is sufficiently indurated to form steep faces. Iron staining is indicated by reddish zones in places on the natural outcrop and after exposure in pits and roadcuts. Because of the lithologic similarity of the Carrizo and Wilcox, the two formations, in most places, are in hydraulic continuity. The maximum known thickness of the Carrizo is 250 feet in well BS-59-27-714.

The top of the Carrizo dips southeastward at an average rate of about 110 feet per mile (Figure 20). The altitude of the top of the Carrizo, where it contains fresh-to slightly saline water, ranges from about 260 feet above sea level to about 2,200 feet below sea level in Burleson County and from less than 625 to more than 2,130 feet below sea level in Brazos County. The southeastern extent of the fresh to slightly saline water in the Carrizo coincides with the line showing the approximate downdip limit of fresh to slightly saline

[1/] The name was first used by F. B. Plummer, 1932, Texas Univ. Bull. 3232, p. 530. The U.S. Geological Survey has not adopted the name.

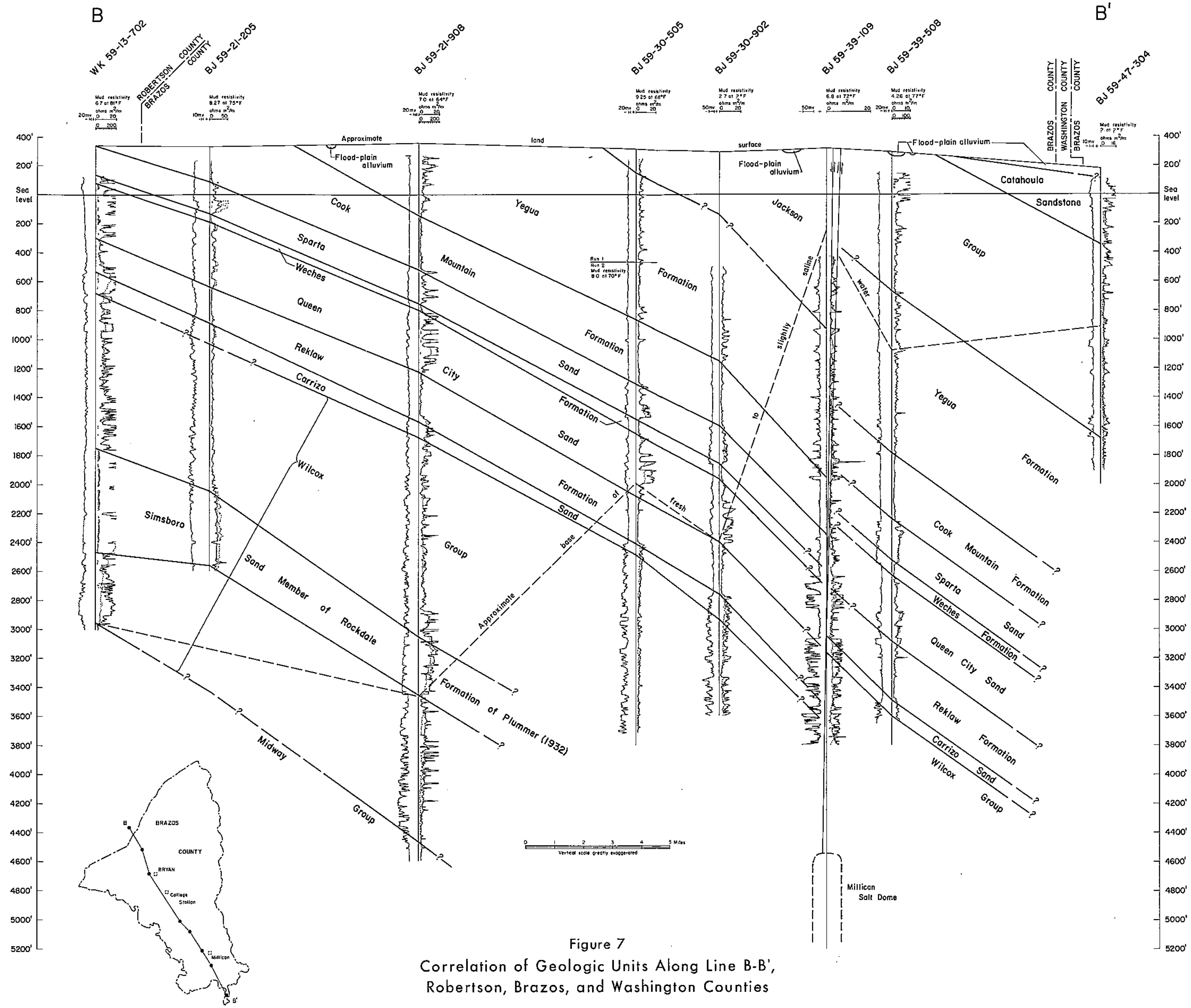


Figure 7
Correlation of Geologic Units Along Line B-B',
Robertson, Brazos, and Washington Counties

water on Figure 20. Southeast of this line the water in the Carrizo is moderately saline.

The Carrizo Sand yields small to large quantities of fresh to slightly saline water, mostly to public-supply wells. However, very few wells in the report area produce from the Carrizo. The principal factor limiting development of the Carrizo is the availability of suitable water in the overlying Queen City Sand and younger formations, which because of their shallower depth are more economical sources of water.

In some places the Carrizo Sand is a clayey sand capable of yielding only small quantities of water to wells. Well BJ-59-21-206, drilled by Bryan in 1938 as a test of the Carrizo, found little or no water-bearing sand in the Carrizo—probably a very localized condition—but did find that the Sparta Sand would produce moderate to large yields of water of excellent quality. The electrical log of nearby well BJ-59-21-205 indicates that the Carrizo Sand is 100 feet thick, almost all sand, and would be capable of yielding moderate to large quantities of water to wells. Neither Bryan nor Texas A&M University, however, utilizes the Carrizo for their water requirements.

Reklaw Formation

The Reklaw Formation conformably overlies the Carrizo Sand and crops out across Milam and Robertson Counties in a belt 1 to 3 miles wide. The lower part of the formation, which is equivalent to the Newby Glauconitic Sand Member of Stenzel (1938, p. 65-71)[2/], consists principally of glauconitic sand and silt about 100 feet thick. The sand is finer grained than the underlying Carrizo and is buff colored instead of white. In some places, the Newby may be in hydraulic continuity with the Carrizo.

The upper part of the Reklaw, equivalent to the Marquez Shale Member of Stenzel (1938, p. 71-78)[2/], consists chiefly of clay and a few thin beds of sandstone. The Reklaw has a maximum thickness of 430 feet and generally increases in thickness southeastward in the direction of the dip.

In some places in the report area, the basal sand of the Reklaw is capable of yielding small quantities of fresh to slightly saline water. Few, if any wells in the report area utilize water from the Reklaw, but in the Smithville area in Bastrop County, 35 miles southwest of Burleson County, yields of 200 to 300 gpm are possible from the Reklaw (Follett, 1970, p. 20). Available data do not indicate that similar yields from the Reklaw are likely in the report area.

2/ Not adopted by U.S. Geological Survey.

Queen City Sand

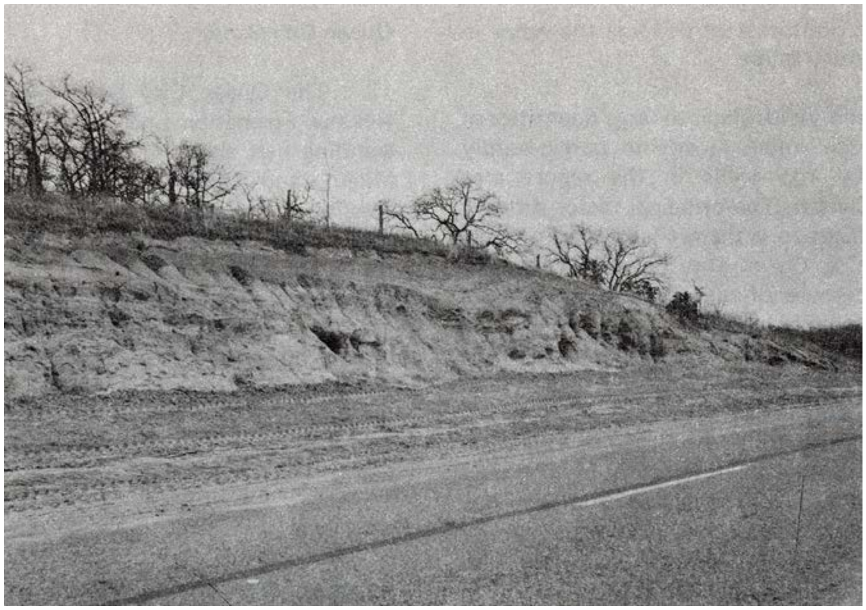
The Queen City Sand conformably overlies the Reklaw Formation and crops out in a northeastward trending belt about 4 to 8 miles wide across Burleson, Milam, and Robertson Counties. It is composed of massive to thin-bedded fine to medium sand, clay, and some lenses of conglomerate containing iron. Most of the exposures observed in northwestern Burleson County were thin bedded. At the outcrop, the formation generally weathers to various shades of red, tan, and brown; however, in some places the sand is light-colored or almost white, and might at first glance be mistaken for Carrizo. The Queen City, which is composed of about 40 percent sand, has a maximum thickness of 540 feet.

Figure 8 shows two views of the upper part of the Queen City in a roadcut 0.4 mile west of well BS-59-26-702 on State Highway 908. The upper view (Figure 8A), from across the highway, shows uneven bedding and lenses of sand and clay. The lower view (Figure 8B) is a closeup of the middle part of the upper view. The lower part of the Queen City Sand is massive crossbedded sand with almost no lenses. Correlation of individual beds is difficult or impossible even in short distances, but sand or clay zones usually can be correlated.

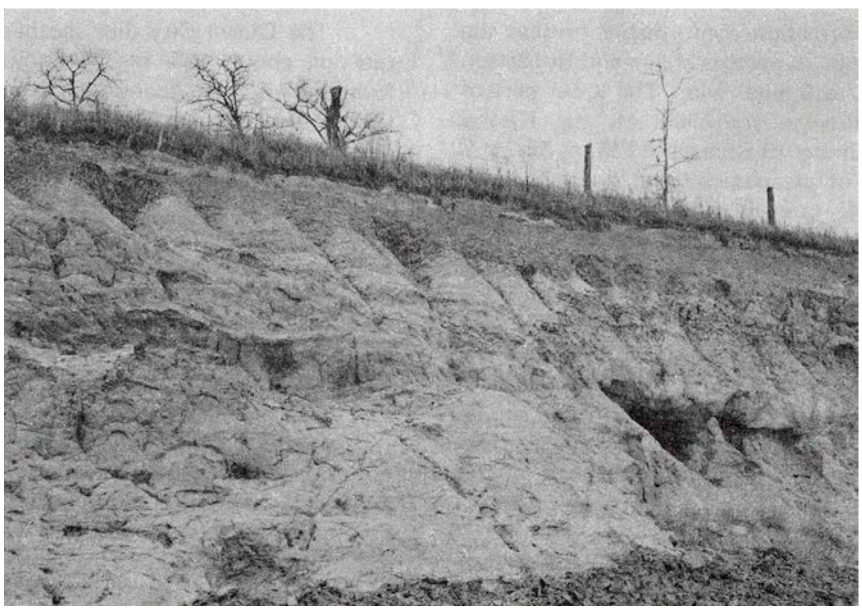
The Queen City dips southeastward at an average rate of about 105 feet per mile. The top of the formation is more than 2,400 feet below sea level near the southeastern corner of Burleson County where the deepest sand containing fresh to slightly saline water occurs (Figure 21).

The Queen City yields small to large quantities of fresh to slightly saline water to wells in and several miles downdip from the outcrop and is capable of yielding fresh to slightly saline water as far downdip as the approximate downdip limit of fresh to slightly saline water as shown in Figure 21.

In Burleson County, many wells in and near the outcrop of the Queen City produce water from the aquifer for domestic and livestock use. Deanville Water Supply Corporation obtains the water for its rural water system from a Queen City well. Well BS-59-27-701, formerly used for irrigation, pumped an estimated 400 gpm from the Queen City. A factor limiting development of the Queen City downdip from the outcrop is the availability of suitable water in the overlying Sparta Sand and younger formations, which are more economical sources of water.



A. Roadcut 0.4 Mile West of Well BS-59-26-702 on F. M. Road 908.



B. Roadcut 0.4 Mile West of Well BS-59-26-702 on F. M. Road 908.
Shows Close-Up View of Part of Cut in A.

Figure 8.—Outcrops of the Queen City Sand.

Weches Formation

The Weches Formation crops out in a band 1 to 2.5 miles wide across the northwestern part of Burleson County (Figure 5) and across Robertson County. The Weches is composed of a maximum of 130 feet of brown, iron-bearing, glauconitic clay and sand.

The Weches yields only small quantities of fresh to moderately saline water to wells in or near the outcrop. Only a few wells tap the formation because the water generally is of poor quality, mainly being high in the content of iron. Water from some of the Weches wells is called "alum water" by the local people.

Sparta Sand

The Sparta Sand overlies the Weches Formation and crops out in a belt 2 to 5 miles wide extending across Burleson County and into Robertson County (Figure 5); it is not exposed in Brazos County. Most of the Sparta consists of fine to medium, stratified, unconsolidated to lightly cemented sand that is crossbedded and interbedded with thin layers of mostly clay and sandy clay.

Figure 9 shows two views of the Sparta Sand in a sand pit about 3 miles northwest of Caldwell. Figure 9A shows the strata over a large area; Figure 9B is a closeup view of part of Figure 9A. The views show the bedding characteristics of the Sparta and the dip (which is to the left, or southeast). In the foreground is the railroad spur used when cars were being loaded with sand. On the surface the Sparta weathers to a deep, unconsolidated white sand that resembles the Carrizo.

Figure 10, which is a section through the original five wells in the Bryan well field, shows that the Sparta at that location consists of as many as three separate sand beds separated by 25 to 100 feet of clay and sandy clay.

The middle or principal sand bed in well BJ-59-21-501 was screened in all five wells; only well BJ-59-21-305 was screened in the uppermost sand; and only well BJ-59-21-501 was screened in the lowermost sand shown in the section. Whether this lowermost sand is present below the other wells in the section is not known because drilling was stopped just below the bottom of the second sand.

The electrical log of well BJ-59-21-205 (Figure 7), which is about 1.5 miles north of the section shown in Figure 10, shows that the Sparta at this location is mostly all sand. Even though in some places the sand beds may be separated by clay or sandy clay, all sand beds in the Sparta are in regional hydraulic continuity.

The Sparta Sand dips southeastward at an average rate of about 100 feet per mile. The top of the Sparta ranges from at least 280 and 330 feet above sea level in Brazos and Burleson Counties, respectively, to more than 2,000 feet below sea level at the approximate downdip limit of fresh to slightly saline water in the southeastern part of the report area (Figure 22).

The Sparta yields small to large quantities of fresh to slightly saline water to wells in and downdip from the outcrop. The aquifer is capable of yielding fresh to slightly saline water as far southeast as the general vicinity of Clay and Millican. Although there are only a few wells in the report area that are pumped at more than 500 gpm, several Sparta wells operated by Bryan and Texas A&M University are pumped at 200 to 400 gpm. The rural water systems of Lyons, Snook, and Tunis have wells pumping small quantities of water from the Sparta.

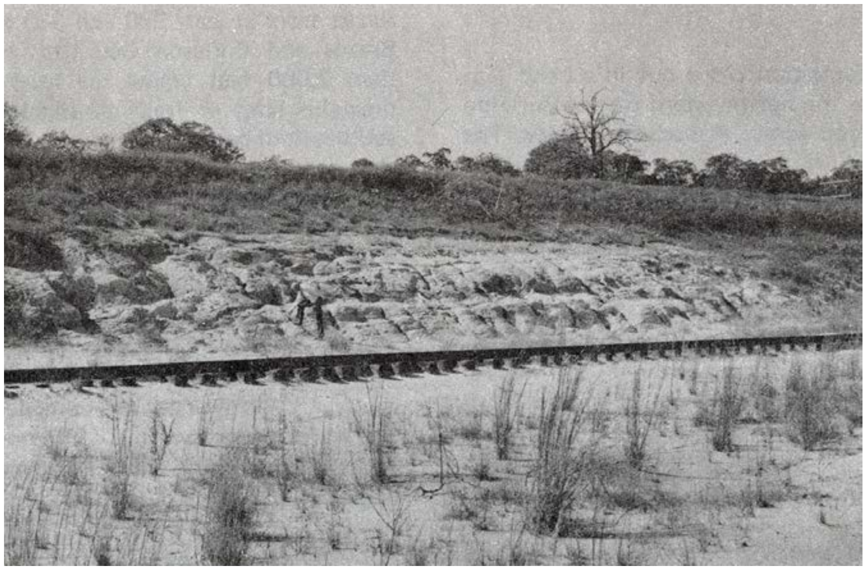
Cook Mountain Formation

The Cook Mountain Formation, which overlies the Sparta Sand, crops out in a belt 1 to 4 miles across the north-central part of Burleson County, continues across the northwestern corner of Brazos County, and then follows along the county line to the Navasota River (Figure 5).

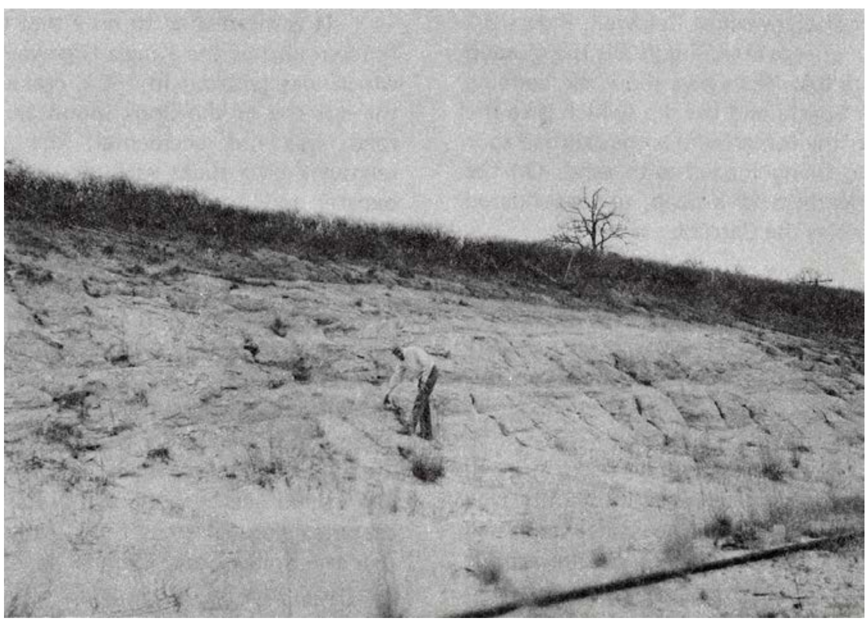
It is interesting to note that the Old Spanish Road (known also as the King's Highway or El Camino Real), which was laid out in 1691, crossed the report area on the outcrop of the Cook Mountain. This location of the road was not accidental; the outcrop provided a relatively level route with very little sand to impede the oxcarts and horses used by travelers between the San Antonio and Nacogdoches missions.

The Cook Mountain is a marine deposit consisting of a maximum of 550 feet of carbonaceous clay and a small amount of sand, sandstone, limestone, glauconite, gypsum, and fossilized wood. Generally, a 20- to 50-foot section of sand occurs near the middle of the formation. This sand is the Spiller Sand Member of Stenzel (1940). Stenzel (1938, p. 150) describes the Spiller Sand Member in nearby Leon County as being 105 feet thick. Electrical logs of some wells in the report area indicate that the Spiller Sand Member is 20 to 50 feet thick, but electrical logs of other wells indicate that the Spiller Sand Member is either absent or not distinguishable.

The Cook Mountain Formation yields small quantities of fresh to slightly saline water to several wells. All of these wells tap the Spiller Sand Member on or a short distance downdip from the outcrop. No usable supplies of water are available in the Cook Mountain above or below the Spiller Sand Member.



A. Sand Pit Near Spring BS-59-27-402.



B. Sand Pit Near Spring BS-59-27-402. Shows Close-Up View of Part of Cut in A.

Figure 9.—Outcrops of the Sparta Sand.

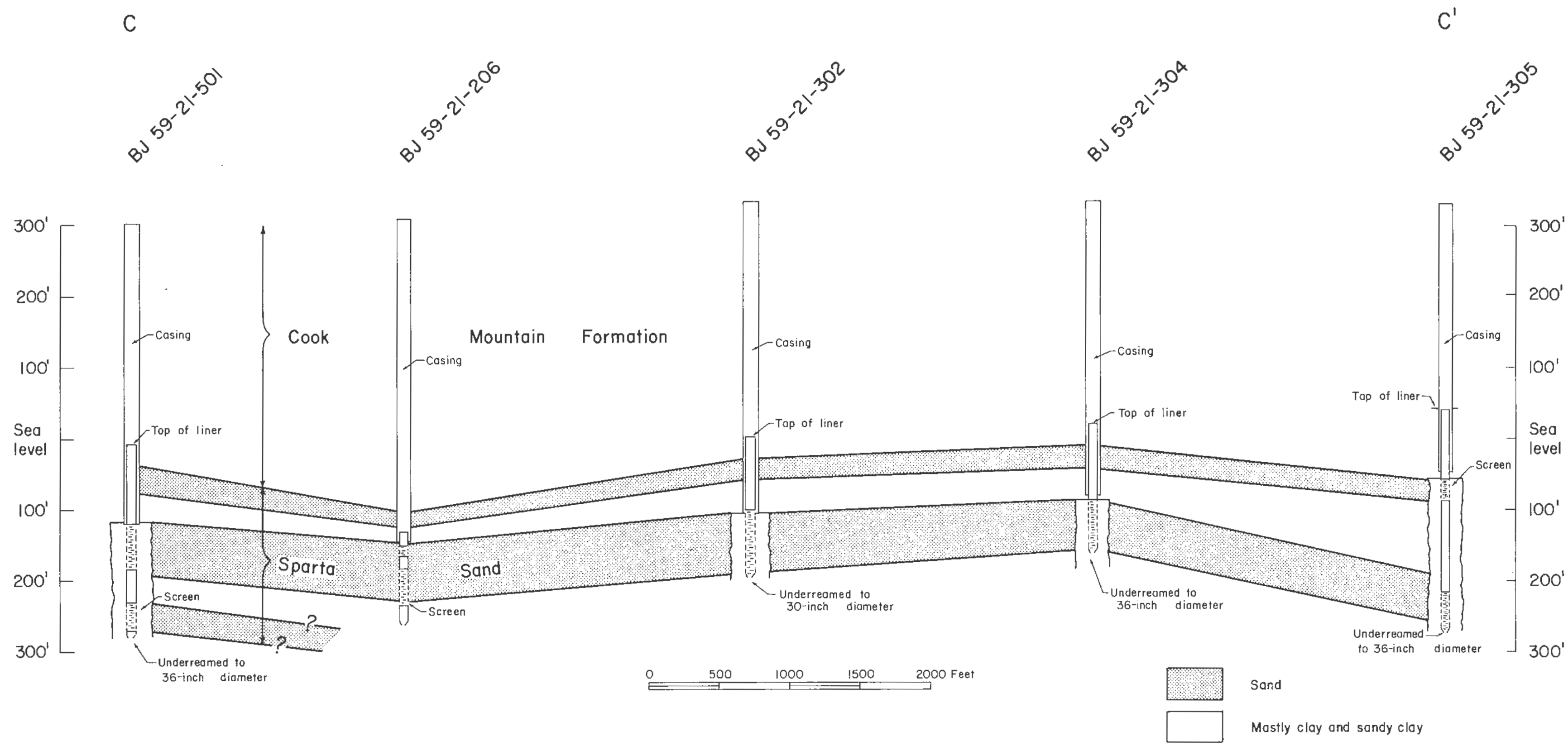


Figure 10

Section C-C' Through Bryan Well Field Showing Data on City Wells and Correlation of Geologic and Lithologic Units

Modified from Barnes, Follett, and Sundstrom (1944, pl. 2)

Yegua Formation

The Yegua Formation, which overlies the Cook Mountain Formation, crops out across the report area in a northeasterly trending belt from 6 to 12 miles wide (Figure 5). The Yegua outcrop which decreases in width from east to west across the two counties, covers about one-third of the report area.

The Yegua, which is a continental deposit, consists of layers of fine to medium sand, silt, sandy and carbonaceous clay, gypsum, fossilized wood, and lignite. These layers can be correlated for only very short distances, but they are generally in hydraulic continuity. The Yegua, which contains more sand, carbonaceous matter, and gypsum than the Cook Mountain, has a thickness, where uneroded, that ranges from 670 to 1,150 feet. The thickness decreases from east to west.

The Yegua Formation yields small to moderate quantities of fresh to moderately saline water to many wells for public-supply, rural-domestic, livestock, and irrigation use. The Clay and Wellborn Water Supply Corporations obtain water from the Yegua. Several trailer parks in the vicinity of Texas A&M University obtain water from the Yegua, and most of the farm and ranch wells drilled on the outcrop of the Yegua, and for a short distance downdip, obtain their water supply from this aquifer. Generally, the Yegua contains fresh to slightly saline water to a depth of about 1,200 feet below the land surface.

Jackson Group

The Jackson Group, which overlies the Yegua Formation, crops out in the southern part of Brazos and Burleson Counties (Figure 5). Faults in the Millican area have displaced the Jackson so that the overlying Catahoula Sandstone is exposed in places as crescent outcrops completely surrounded by the exposures of the Jackson. The Jackson consists of a maximum of about 1,480 feet of lignitic shale, volcanic ash, sand, sandstone, and clay.

The Jackson yields small quantities of fresh to moderately saline water to wells in the outcrop for rural-domestic and livestock use. In the Millican area, faults probably restrict the movement of water locally and thus contribute to the higher mineralization of the water obtained by some of the wells.

Catahoula Sandstone

The Catahoula Sandstone, which overlies the Jackson Group, crops out across northern Washington County and in the most southern part of Brazos County. The exposures in Brazos County are mostly downfaulted blocks in the Millican area. The Catahoula, which consists of clay, tuff, sand, and sandstone, reaches a maximum thickness of about 460 feet.

A series of rapids known as Hidalgo Falls (near well BJ-59-39-807) occur where the Brazos River crosses a resistant sandstone section in the middle part of the Catahoula. Figure 11 shows two views of Hidalgo Falls taken from the northeast bank of the Brazos River. The upper view (Figure 11A), looking upstream, shows the upstream end of the rapids. The lower view (Figure 11B), looking downstream, shows the downstream end of the rapids and rock ledges protruding as much as 6 feet above the water. These rocks have withstood centuries of erosion.

The Catahoula Sandstone yields small quantities of fresh to slightly saline water to a few wells in southern Brazos County. Yields of 200 gpm or more from properly constructed wells may be possible in the southern extremity of Brazos County.

Terrace Deposits

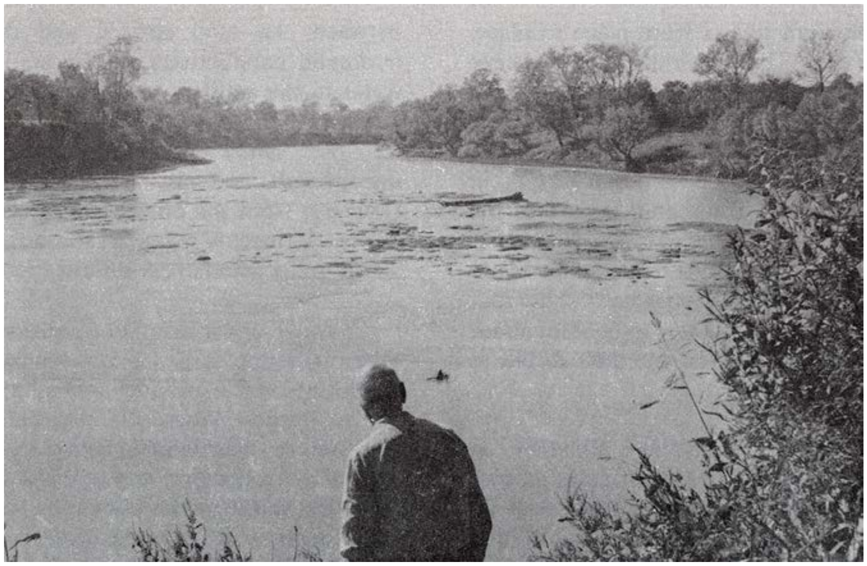
The sediments deposited by the Brazos River and its tributaries at various levels above the present flood plain are referred to as terrace deposits in this report. The terrace deposits rest unconformably on the bedrock of older formations and consist of fine to coarse sand, gravel, silt, and clay. The maximum thickness may reach 70 feet in places. The terrace deposits have been dissected more than the flood-plain alluvium, and in some areas, much of the terrace deposits have been removed by erosion.

The terrace deposits yield small to large quantities of fresh to slightly saline water to wells. Most of the wells supply water for the rural-domestic and livestock use. A total of eight wells in Brazos and Burleson Counties (four in each county) are or have been used for irrigation; their reported yields range from 200 to 600 gpm. Extensive development of the water in the terrace deposits is doubtful, as these deposits probably can support only small-scale irrigation.

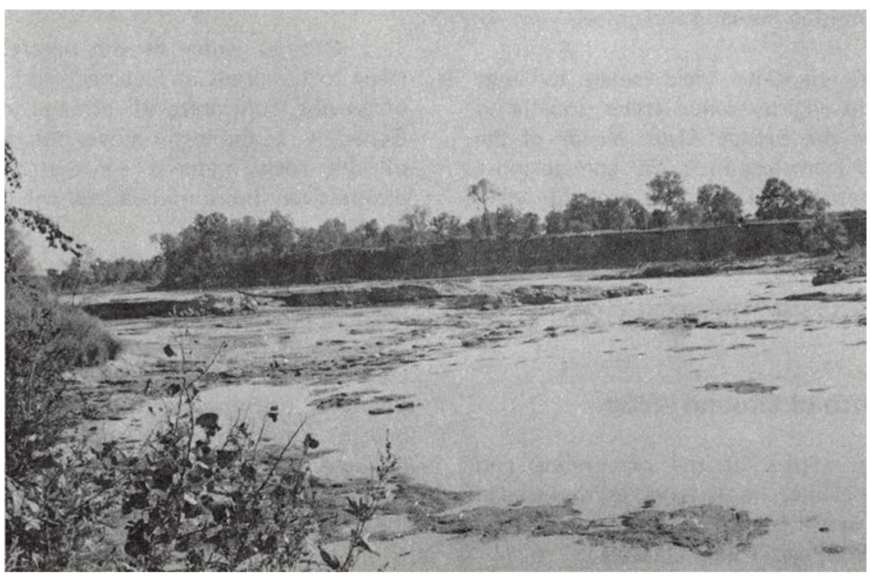
Flood-Plain Alluvium

The flood-plain alluvium rests unconformably on the eroded bedrock surfaces of older formations and represents deposits laid down by the Brazos River and its tributaries in comparatively recent geologic time. In most places in the report area, the alluvium along the Brazos River is considerably more extensive on one side of the river than on the opposite side. Only in the area between Clay and Millican do extensive deposits occur on both sides of the Brazos. Deposition of the flood-plain alluvium resulted from meandering stream channels and overbank flows. The alluvium probably was eroded and redeposited several times, with the coarser material generally being left in place.

The alluvium is composed of fine to coarse, red to tan sand, gravel, silt, and red to brown clay. Much of the clay is almost black on fresh exposure. The composition



A. Upstream End of Outcrop Creating Hidalgo Falls.



B. Downstream End of Outcrop Creating Hidalgo Falls. Bedrock Protrudes as Much as 6 Feet Above the Water.

Figure 11.—Outcrops of the Catahoula Sandstone at Hidalgo Falls on the Brazos River.

of the flood-plain alluvium differs from place to place, usually within a few feet. The individual beds or lenses of sand and gravel pinch out laterally and vertically. In general, the fine-grained material is above the coarse material. According to Cronin and Wilson (1967, p. 21), clay varying from red to reddish brown and ranging in thickness from 5 to 30 feet commonly occurs in the upper part of the flood-plain alluvium. Gravel, whether mixed with sand or clean and well sorted, occurs mostly in the lower part of the alluvium. Gravel pits show that the material ranges from pea size or less to cobbles about 5 inches in diameter and from clean and well sorted to poorly sorted.

The thickness of the flood-plain alluvium, as indicated by many test holes and irrigation wells, reaches a probable maximum of 82 feet and averages about 50 to 55 feet. The probable maximum thickness of 82 feet is based on the assumption that the 82-foot irrigation well BJ-59-38-612 was drilled to the base of the alluvium and not into bedrock.

Large quantities of sand and gravel in the flood-plain alluvium are obtained in the report area. The only observed pit in operation in 1969 was near the Little Brazos River 8 miles east-northeast of Bryan. The total thickness of the flood-plain alluvium in this pit was 40 to 55 feet. Formerly, a sand and gravel pit was operated near well BJ-59-29-536 (Figure 26), which furnished water for washing the sand and gravel.

The flood-plain deposits yield small to large quantities of fresh to slightly saline water, mostly to irrigation wells along the Brazos River. Yields of the irrigation wells range from less than 250 gpm to more than 1,000 gpm. About half of the wells probably yield between 250 and 500 gpm.

GROUND-WATER HYDROLOGY

Occurrence of Ground Water

The general principles of the occurrence and movement of ground water in all types of rocks have been described in detail by many writers including Meinzer (1923 and 1942) and Tolman (1937).

The source of ground water in Brazos and Burleson Counties is precipitation on the outcrops of the geologic formations. A large part of the precipitation runs off, is consumed by evaporation, or is stored in the soil to be evaporated or transpired later. A small part of the water infiltrates the soil and subsoil, moves downward to the water table, and becomes part of the ground water in storage.

The factors affecting ground-water recharge include the intensity and amount of rainfall, the slope of the land surface, the type of soil, the type of material between the land surface and the water table, the hydraulic conductivity of the aquifer, the quantity of water in the aquifer, and the rate of evapotranspiration.

In sandy outcrop areas, ground water is unconfined and is under water-table conditions. Downdip from the outcrop, where an aquifer is overlain by less permeable material, the water becomes confined and is under artesian conditions.

Water under artesian conditions, if not affected by heavy pumping, will rise in wells to an altitude equal to its altitude in the recharge area minus the loss in pressure due to friction. Where the elevation of the land surface at a well is considerably below the general level of the area of the outcrops, the pressure may be sufficient to cause the water to rise above the land surface. There are many wells in Brazos and Burleson Counties that flow, and flowing wells could be obtained over much larger areas by deeper drilling. Flowing wells could be drilled in the valleys of the larger streams over much of the report area.

The first wells completed in the Simsboro Sand Member by Bryan and Texas A&M University flowed more than 1,000 gpm. Well BS-59-43-501, in southwestern Burleson County, flowed 1,100 gpm on July 30, 1965; the pressure head was sufficient to raise water 87.8 feet above the land surface.

Ground water in the report area moves slowly (tens to hundreds of feet per year) under the influence of gravity from areas of recharge to areas of discharge. Generally, as the water moves downdip it dissolves some of the rock material so that the water becomes progressively more mineralized the longer and farther it travels.

The ground water is discharged naturally through seeps and springs in the outcrop area of the aquifers, by evaporation and transpiration where the water table is close enough to the surface to be reached by the roots of plants or trees, and by seepage through semiconfining beds or along faults into another aquifer having a lower pressure. Ground water is discharged artificially through wells.

Ground-Water Development and Use

The inventory of 1,254 water wells, nine springs, and 64 oil wells (Tables 12 and 13) includes only a part of the total number of wells in Brazos and Burleson Counties; however, records of all municipal, industrial, and irrigation wells are included in this report. The locations of irrigation wells in the flood-plain alluvium of the Brazos River are shown on Figure 27. The locations of all other wells and springs are shown on Figure 26. Records of the pumpage of ground water for all purposes for the years 1958, 1963-64, and 1969 are given in Table 3.

Table 3.--Pumpage of Ground Water, 1958, 1963-64, and 1969

(Figures are approximate because some of the pumpage is estimated. Public-supply pumpage is shown to the nearest 0.001 mgd and to the nearest acre-foot. Industrial, irrigation, rural-domestic, and livestock pumpage is shown to two significant figures. Totals are rounded to two significant figures.)

					IRRIGATION							
	PUBLIC SUPPLY		INDUSTRIAL		FLOOD-PLAIN ALLUVIUM		TERRACE DEPOSITS AND OLDER FORMATIONS		RURAL-DOMESTIC AND LIVESTOCK		TOTALS	
YEAR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR
1958	5.487	6,151	--	--	18	20,000	0.50	560	0.71	800	25	28,000
1963	7.998	8,996	0.063	71	14	16,000	.43	480	.75	840	23	26,000
1964	7.551	8,465	.066	75	29	32,000	.31	350	.75	840	38	42,000
1969	10.737	12,037	.057	65	22	25,000	.20	230	.78	870	34	38,000

The use of ground water increased from 25 mgd (million gallons per day) or 28,000 acre-feet per year in 1958 to 34 mgd or 38,000 acre-feet per year in 1969. During 1969, 66 percent of the total ground water used was for irrigation, 32 percent for public supply, and about 2 percent for industrial, rural-domestic, and livestock supply. Large differences in annual ground-water pumpage are common, as a large part of the ground-water pumpage for all purposes is used for supplemental irrigation, and the quantity used mainly depends upon the amount of rainfall during the crop-growing season.

The use of water from the flood-plain alluvium of the Brazos River for irrigation began in 1948 in Robertson County (Hughes and Magee, 1962, p. 1). The first irrigation well in the flood-plain alluvium in Brazos and Burleson Counties was drilled in 1948 or 1949 after the pioneer well was completed in Robertson County. Thereafter, the number of irrigation wells drilled and put into operation in the report area increased at a rapid rate, especially during the drought of 1950-57. In 1969, 99 percent of the ground water used for irrigation in Brazos and Burleson Counties was pumped from the flood-plain alluvium of the Brazos River.

Table 4 shows the pumpage of ground water from wells in the flood-plain alluvium, the pumpage of surface water from the Brazos River, and the acres irrigated in 1958, 1964, and 1969. From 1958 to 1964, pumpage of ground water and surface water increased significantly as did the irrigated acreage. A decline in the pumpage of ground water and surface water and in the irrigated acreage occurred from 1964 to 1969. Whereas Burleson County used slightly more ground water for irrigation than Brazos County during these three years, Brazos County used considerably more surface water. The rate of usage of water for irrigation, commonly called the "duty of water", was approximately 1 acre-foot per acre.

Table 5 shows the pumpage of water for public supply for 1940-70. This table includes data for commercial systems that furnish water for unincorporated communities and rural areas. From 1940 to 1970, the amount of ground water used for public supply increased slightly more than 8 times, from 1.3 to 11 mgd. The largest users of water for public supply are the city of Bryan, which in 1970 used about three-fourths of the total amount for public supply pumped that year, and Texas A&M University.

Bryan's first municipal water system used water from wells BJ-59-22-401 to -403 (and others not included in this report) until 1940 when the present well field was put into operation. At that time, the well field began using wells BJ-59-21-206, -302, -304, and -305, which produce water from the Sparta Sand. In 1954, Bryan drilled its first well into the Simsboro Sand Member. Additional Sparta and Wilcox wells were added to the well field as additional supplies were needed.

Texas A&M University at College Station obtained water from wells in the Yegua Formation from the time of the institution's establishment in 1886 until the 1940's, when the university and the city of College Station began buying their water supply from Bryan. The wells and other facilities of the old Bryan Air Force Base near College Station were acquired by the university in 1946. In 1951, Texas A&M University developed their present well field and started pumping from the Sparta Sand and Wilcox Group. Since 1951, the university has pumped all of the water for its own needs and most of the water used by the city of College Station. When necessary, College Station buys additional supplies from the city of Bryan.

Aquifer Tests

Aquifer tests have been made in 16 wells in Brazos and Burleson Counties. The results of the tests are given in Table 6, which shows the well number, aquifer, transmissivity, storage coefficient, specific capacity, and other information. The aquifers tested were the Carrizo Sand, the upper part of the Wilcox Group, Sparta Sand, Yegua Formation, and flood-plain alluvium. The test data were analyzed by the Theis nonequilibrium method (Theis, 1935) and the Theis recovery method (Wenzel, 1942, p. 95).

The transmissivities, which should be considered as representative of the intervals of sand screened in the well and not of the entire formation, ranged from 23 to 9,620 feet squared per day. The range in transmissivities, in feet squared per day, of each aquifer tested was: Carrizo Sand and upper part of the Wilcox Group, 1,100 to 2,690; Sparta Sand, 330 to 5,350; and flood-plain alluvium, 6,950 to 9,620.

One test of a well tapping the Yegua Formation indicated that the formation had a transmissivity of 23 feet squared per day. Aquifer tests of the middle zone of the Wilcox Group were not made by the Geological Survey, but the transmissivity of this unit in well BJ-59-21-303, as reported to the city of Bryan in 1954, was about 11,700 feet squared per day. The test, however, was made under difficult conditions because the recovery of the water level in the well, when pumping was stopped, was so rapid that a recovery period sufficiently long to meet the requirements of a good aquifer test was impossible. The same problem was encountered by the Geological Survey in attempting to conduct aquifer tests in wells BJ-59-21-202 and BS-59-43-501.

Storage coefficients were obtained for certain aquifers under artesian and water-table conditions. The storage coefficients, as determined from the field tests for those aquifers under artesian conditions, ranged from 0.000017 to 0.00028. The storage coefficient of the flood-plain alluvium, which is under water-table conditions, is essentially the specific yield. Cronin and Wilson (1967, p. 27) reported laboratory determinations

Table 4.--Pumpage of Ground Water From Wells in the Flood-Plain Alluvium, of Surface Water From the Brazos River, and Acres Irrigated in 1958, 1964, and 1969. 1/

(Figures are rounded to two significant figures)

	1958				1964				1969			
	GROUND WATER		SURFACE WATER		GROUND WATER		SURFACE WATER		GROUND WATER		SURFACE WATER	
	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES	ACRE-FEET	ACRES
Brazos County	10,000	12,000	4,600	5,500	16,000	16,000	10,000	9,200	10,000	12,000	7,700	8,800
Burleson County	9,800	9,800	640	640	16,000	16,000	3,300	2,500	15,000	12,000	2,200	2,100
Total	20,000	22,000	5,200	6,100	32,000	32,000	13,000	12,000	25,000	24,000	9,900	11,000

1/ 1958 and 1964 data from Gillett and Janca (1965) and 1969 data from Texas Water Development Board.

Table 5.--Pumpage of Ground Water for Public Supply, 1940-70

(Figures are approximate because some of the pumpage is estimated. Pumpage is shown to the nearest 0.001 mgd and to nearest acre-foot. Totals are rounded to two significant figures.)

	BRAZOS COUNTY										BURLESON COUNTY															
Year	BRUSHY CREEK WATER SUPPLY CORP.		CITY OF BRYAN		JONES WATER COMPANY 1/		TEXAS A&M UNIVERSITY 2/		WELLBORN WATER SUPPLY CORP.		CITY OF CALDWELL 3/		CLAY WATER SUPPLY CORP.		DEANVILLE WATER SUPPLY CORP.		LYONS WATER SUPPLY CORP.		SNOOK WATER SUPPLY CORP.		CITY OF SOMERVILLE 3/		TUNIS WATER SUPPLY CORP.		TOTALS	
	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	MGD	AC-FT/YR	mgd	AC-FT/YR	MGD	AC-FT/YR
1940	--	--	1.067	1,196	--	--	--	--	--	--	0.182	204	--	--	--	--	--	--	--	--	0.050	56	--	--	1.3	1,500
41	--	--	1.402	1,572	--	--	--	--	--	--	.186	208	--	--	--	--	--	--	--	--	.054	61	--	--	1.6	1,800
42	--	--	1.613	1,808	--	--	--	--	--	--	.190	213	--	--	--	--	--	--	--	--	.061	68	--	--	1.9	2,100
43	--	--	1.592	1,785	--	--	0.144	161	--	--	.194	217	--	--	--	--	--	--	--	--	.066	74	--	--	2.0	2,200
44	--	--	1.971	2,210	--	--	.286	321	--	--	.198	222	--	--	--	--	--	--	--	--	.071	80	--	--	2.5	2,800
45	--	--	1.615	1,810	--	--	.267	299	--	--	.202	226	--	--	--	--	--	--	--	--	.077	86	--	--	2.2	2,400
46	--	--	1.958	2,195	--	--	.072	81	--	--	.206	231	--	--	--	--	--	--	--	--	.082	92	--	--	2.3	2,600
47	--	--	2.400	2,691	--	--	.131	147	--	--	.211	236	--	--	--	--	--	--	--	--	.087	98	--	--	2.8	3,200
48	--	--	2,589	2,903	--	--	.131	147	--	--	.214	240	--	--	--	--	--	--	--	--	.093	104	--	--	3.0	3,400
49	--	--	2.396	2,686	--	--	.131	147	--	--	.219	245	--	--	--	--	--	--	--	--	.098	110	--	--	2.8	3,200
50	--	--	2.766	3,101	--	--	.054	61	--	--	.222	249	--	--	--	--	--	--	--	--	.104	117	--	--	3.1	3,500
51	--	--	2.663	2,985	--	--	.0901	1,010	--	--	.227	254	--	--	--	--	--	--	--	--	.110	123	--	--	3.9	4,400
52	--	--	2.585	2,898	--	--	1.431	1,604	--	--	.230	258	--	--	--	--	--	--	--	--	.115	129	--	--	4.4	4,900
53	--	--	2.350	2,634	--	--	1.275	1,429	--	--	.235	263	--	--	--	--	--	--	--	--	.120	135	--	--	4.0	4,500
54	--	--	2.828	3,170	--	--	1.426	1,599	--	--	.237	266	--	--	--	--	--	--	--	--	.126	141	--	--	4.6	5,200
55	--	--	3.121	3,499	--	--	1.601	1,795	--	--	.202	226	--	--	--	--	--	--	0.007	8	.128	143	--	--	5.1	5,700
56	--	--	3.814	4,276	--	--	1.606	1,800	--	--	.272	305	--	--	--	--	--	--	.007	8	.150	168	--	--	5.8	6,600
57	--	--	3.305	3,705	--	--	1.740	1,951	--	--	.226	253	--	--	--	--	--	--	.007	8	.150	168	--	--	5.4	6,100
58	--	--	3.326	3,729	--	--	1.806	2,025	--	--	.195	219	--	--	--	--	--	--	.009	10	.150	168	--	--	5.5	6,200
59	--	--	3.284	3,682	--	--	1.513	1,696	--	--	.212	238	--	--	--	--	--	--	.010	11	.128	144	--	--	5.1	5,800
60	--	--	3.669	4,113	--	--	1.598	1,791	--	--	.207	232	--	--	--	--	--	--	.009	10	.118	132	--	--	5.6	6,300
61	--	--	3.733	4,185	0.004	5	1.600	1,794	--	--	.211	236	--	--	--	--	--	--	.005	6	.054	61	--	--	5.6	6,300
62	--	--	4.533	5,082	.004	5	1.878	2,105	--	--	.227	255	--	--	--	--	--	--	.005	6	.058	65	--	--	6.7	7,500
63	--	--	5.480	6,144	.004	5	2.114	2,370	--	--	.251	281	--	--	--	--	--	--	.005	6	.143	160	--	--	8.0	9,000
64	--	--	5.249	5,884	.004	5	1.834	2,056	--	--	.255	286	0.006	7	--	--	0.003	3	.006	7	.194	217	--	--	7.6	8,500
65	--	--	5.480	6,144	.004	5	2.138	2,397	--	--	.219	245	.007	8	--	--	.009	10	.012	13	.163	183	--	--	8.0	9,000
66	0.005	6	5.655	6,340	.004	5	2.314	2,594	0.004	5	.250	280	.008	9	--	--	.009	10	.008	9	.184	206	--	--	8.4	9,500
67	.004	5	6.214	6,966	.004	5	2,478	2,778	.016	18	.283	317	.006	7	0.004	4	.015	17	.008	9	.138	155	--	--	9.2	10,000
68	.005	6	6.359	7,129	.004	5	2.267	2,542	.016	18	.268	300	.004	5	.006	7	.016	18	.013	15	.140	157	0.001	1	9.1	10,000
69	.008	9	7.842	8,791	.004	5	2.353	2,638	.016	18	.317	355	.005	6	.013	15	.015	17	.017	19	.140	157	.006	7	11	12,000
70	.014	16	7.850	8,801	.004	4	2.524	2,830	.016	18	.314	338	.005	6	.009	10	.011	12	.023	26	.140	157	.006	7	11	12,000

1/ Pumpage estimated 1961-68.
2/ Figures include pumpage from 1943 to 1946 by Bryan Air Force Base (acquired by Texas A&M in 1946) and pumpage for city of College Station. Texas A&M University pumpage from their new well field began in 1951.
3/ Pumpage estimated 1940-54.

Table 6.--Summary of Aquifer Tests

BRAZOS COUNTY

WELL	AQUIFER a/	DATE TESTED	INTERVALS SCREENED (FEET BELOW LAND SURFACE)	PUMPING RATE (GPM)	TRANSMISSIVITY (SQUARE FEET PER DAY)	STORAGE COEFFICIENT	SPECIFIC CAPACITY (GPM/FT)	SPECIFIC CAPACITY TIME PUMPED (HOURS)	SAND THICKNESS (FT)	HYDRAULIC CONDUCTIVITY (FEET PER DAY)	REMARKS
BJ-59-21-206 City of Bryan well 1	Ts	June 21-23, 1944	462-475 and 494-543	--	1,460	0.00028	3.7 b/	24 b/	69 b/	21 b/	Recovery after well BJ-59-21-501 pumping 582 gpm was shut down.
		June 23-24, 1944		--	1,930	.00022	3.6 b/	24 b/	69 b/	28 b/	Drawdown interference from pumping well BJ-59-21-302 at 350 gpm.
BJ-59-21-302 City of Bryan well 2	Ts	June 21-23, 1944	435-523 (underreamed and gravel-packed)	--	1,960	.00023	4.6 b/	24 b/	85 b/	23 b/	Recovery after well BJ-59-21-501 pumping 582 gpm was shut down.
		June 30-July 3, 1944		--	1,910	.00025	5.2 b/	24 b/	85 b/	22 b/	Drawdown interference from pumping well BJ-59-21-206 at 261 gpm.
BJ-59-21-304 City of Bryan well 3	Ts	July 2-4, 1944	442-492 (underreamed and gravel-packed)	--	1,470	.00015	4.2 b/	24 b/	72 b/	20 b/	Drawdown interference from pumping well BJ-59-21-302 at 323 gpm.
BJ-59-21-305 City of Bryan well 4	Ts	June 15-16, 1944	391-422 and 549-600 (underreamed and gravel-packed)	424	1,600	--	6.0 b/	24 b/	99 b/	26 b/	Drawdown in pumped well.
BJ-59-21-501 City of Bryan well 5	Ts	June 21-24, 1944	430-485 and 534-573 (underreamed and gravel-packed)	582	1,250	--	6.6 b/	24 b/	116 b/	11 b/	do.

See footnotes at end of table.

Table 6.--Summary of Aquifer Tests--Continued

WELL	AQUIFER a/	DATE TESTED	INTERVALS SCREENED (FEET BELOW LAND SURFACE)	PUMPING RATE (GPM)	TRANSMISSIVITY (SQUARE FEET PER DAY)	STORAGE COEFFICIENT	SPECIFIC CAPACITY (GPM/FT)	SPECIFIC CAPACITY TIME PUMPED (HOURS)	SAND THICKNESS (FT)	HYDRAULIC CONDUCTIVITY (FEET PER DAY)	REMARKS
BJ-59 21 715 Texas A&M University (formerly U.S. A.F.B. well 2)	Ts	Sept. 3-5, 1947	498-588 (un-derreamed and gravel-packed)	--	1,680	0.00022	--	--	--	--	Drawdown interference from pumping well BJ-59-21-718 at 303 gpm.
		Sept. 7-9, 1947		--	1,780	.00023	--	--	--	--	Drawdown interference from pumping well BJ-59-21-717 at 432 gpm.
		Sept. 9-11, 1947		--	1,790	.00023	--	--	--	--	Recovery after well BJ-59-21-717 pumping 432 gpm was shut down.
BJ-59-21-717 Texas A&M University (formerly U.S. A.F.B. well 4)	Ts	Sept. 3-5, 1947	401-487 (un-derreamed and gravel-packed)	--	1,450	.00015	--	--	--	--	Drawdown interference from pumping well BJ-59-21-718 at 303 gpm.
		Sept. 5-7, 1947		--	1,590	.00016	--	--	--	--	Recovery after well BJ-59-21-718 pumping 303 gpm was shut down.
		Sept. 9-11, 1947		432	1,920	--	7.0	24			Recovery in pumped well.
BJ-59-21-718 Texas A&M University (formerly U.S. A.F.B. well 5)	Ts	Sept. 9-11, 1947	411-433 and 443-482 (un-derreamed and gravel-packed)	303	1,780	--	48	24	--	--	Recovery in pumped well.
		Sept. 9-11, 1947		--	1,750	.00017	--	--	--	--	Recovery after well BJ-59-21-717 pumping 432 gpm was shut down.
BJ-59-30-807 Wellborn Water Supply Corp. well 3	Ty	June 28, 1966	1115-1155	50	23	--	.65	12	--	--	Drawdown in pumped well.
BJ-59-39-606 T. J. Moore	Qfpa	July 23, 1964	20-61 (15-in. slotted casing in 42-in. hole with annular space filled with gravel)	740	6,950	--	46	10	--	--	Recovery in pumped well.

See footnotes at end of table.

Table 6.--Summary of Aquifer Tests--Continued

BURLESON COUNTY

WELL	AQUIFER a/	DATE TESTED	INTERVALS SCREENED (FEET BELOW LAND SURFACE)	PUMPING RATE (GPM)	TRANSMISSIVITY (SQUARE FEET PER DAY)	STORAGE COEFFICIENT	SPECIFIC CAPACITY (GPM/FT)	SPECIFIC CAPACITY TIME PUMPED (HOURS)	SAND THICKNESS (FT)	HYDRAULIC CONDUCTIVITY (FEET PER DAY)	REMARKS
BS-59-27-714 City of Caldwell well 3	Twi, Tc	Feb. 19, 1971	1070-1160, 1200-1228, and 1238-1304 (under-reamed and gravel-packed)	1,105	2,590	--	9.5	3	184	14	Drawdown in pumped well.
		do.		1,105	2,690	--	--	--	--	15	Recovery in pumped well.
BS-59-27-803 City of Caldwell well 2	Twi, Tc	Feb. 18, 1971	1048-1206 (un-derreamed and gravel-packed)	391	1,100	0.000024	--	--	158	7	Drawdown interference from pumping well BS-59-27-804 at 391 gpm.
		do.		--	1,200	.000017	--	--	--	8	Recovery after well BS-59-27-804 pumping 391 gpm was shut down.
BS-59-27-804 City of Caldwell well 1	Twi, Tc	do.	1036-1134 (un-derreamed and gravel-packed)	391	1,140	--	9.4	2	98	12	Drawdown in pumped well.
		do.		391	1,300	--	--	--	--	13	Recovery in pumped well.
BS-59-28-619 Tunis Water Supply Corp.	Ts	June 28, 1967	685-700 and 719-765 (un-derreamed and gravel-packed)	82	5,350	--	1.5	12	--	--	Drawdown in pumped well.
BS-59-29-431 Marion Malazzo	Qfpa	July 6, 1964	15-19	329	9,620	--	37.6	9	--	--	do.
BS-59-36-802 Lyons Water Supply Corp.	Ts	Sept. 25-26 1963	1513-1573 (un-derreamed and gravel-packed)	150	330	--	1.4	24	--	--	do.

a/ Twi, Wilcox Group; Tc, Carrizo Sand; Ts, Sparta Sand; Ty, Yegua Formation; Qfpa, Flood-plain alluvium.
b/ Barnes, Follett, Sundstrom (1944, p. 19).

of specific yields for the flood-plain alluvium that averaged 23.6 percent. However, they indicated that this value might be too high because the method of laboratory determination (centrifuge-moisture equivalent method) tends to expel more water than would drain by gravity. Cronin and others (1963, p. 119) assumed a specific yield of 15 percent in estimating the availability of water in the flood-plain alluvium. This assumption, which probably is a reasonable, possibly conservative, estimate of the specific yield, is used in calculations in this report.

The transmissivities and storage coefficients determined from aquifer tests may be used to predict the drawdown of water levels caused by pumping a well or by a general increase in pumping in an area. Figure 12 shows the relation of drawdown to tramsmissivity and distance. The calculations of drawdown were based on a well or group of wells pumping 500 gpm continuously for one year from an extensive artesian aquifer having a storage coefficient of 0.00025 and transmissivities as shown on the different curves. For example, as a result of pumping 500 gpm continuously for 1 year, in an aquifer having assumed transmissivity of 1,340 feet squared per day, the water level would decline about 30 feet at a distance of 5,000 feet from the center of pumping; it would decline about 22 feet at 10,000 feet and about 14 feet at 20,000 feet. Because drawdown is directly proportional to the pumping rate, the drawdown for rates other than 500 gpm can be determined by multiplying the drawdown values shown on Figure 12 by the proper multiple or fraction of 500.

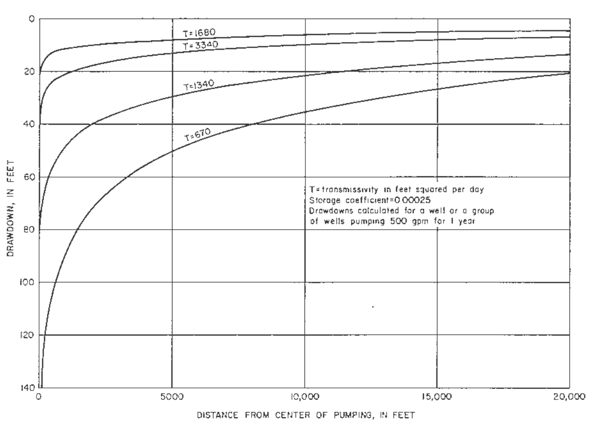


Figure 12.—Relation of Drawdown to Transmissivity and Distance in an Artesian Aquifer

Figure 13 shows the relation of drawdown to time and distance. The calculations of drawdown are based on a well or group of wells pumping 100 gpm from an infinite aquifer having a storage coefficient of 0.00025 and a transmissivity of 1,340 feet squared per day. Figure 13 shows that the rate of drawdown decreases with time, but the water level continues to decline until a source of recharge or a point of discharge is intercepted to offset the pumping and reestablish equilibrium in the aquifer. Because the drawdown is directly proportional to the pumping rate, the drawdown for rates other than 100 gpm can be determined by multiplying the drawdown shown on Figure 13 by the proper multiple or fraction of 100.

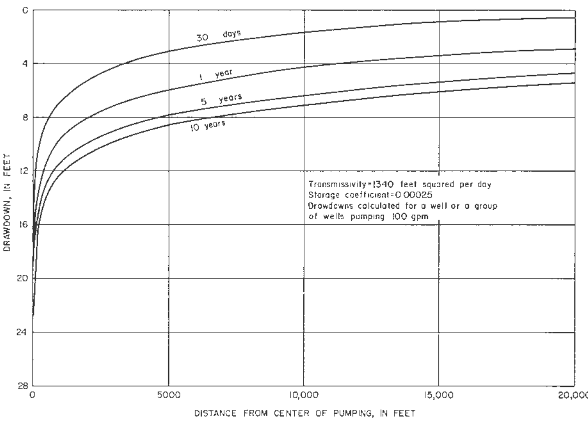


Figure 13.—Relation of Drawdown to Time and Distance in an Artesian Aquifer

Figures 12 and 13 show that the drawdown caused by a pumping well is greatest near the pumping well and that the drawdown decreases as the distance from the pumping well increases. This relationship is the practical reason for properly spacing wells to reduce their mutual interference and thus reduce the pumping cost.

Figure 14 shows the results of an aquifer test in two Caldwell city wells on Feb. 18, 1971. Both wells were shut down overnight to permit nearly full recovery of the water levels prior to the start of the test. The upper graph (well BS-59-27-804) shows the static water levels in the pumped well prior to starting the pump, the pumping levels during the 128 minutes the well was pumped at an average discharge of 391 gpm, and the recovery of the water levels after the pump was shut down. The drawdown in the pumped well was about 41 feet.

The lower graph (well BS-59-27-803) shows the static water levels, the drawdown interference, and the recovery in an observation well that is 216.5 feet south of the pumped well. The drawdown interference was about 30 feet. After the pumped well was shut down, the water level in the observation well recovered about 27 feet during the 4 hours that the recovery was observed. When both wells are pumping at the same time—and they usually are—the pumping level is at least about 30 feet lower in each well, thus increasing the cost of

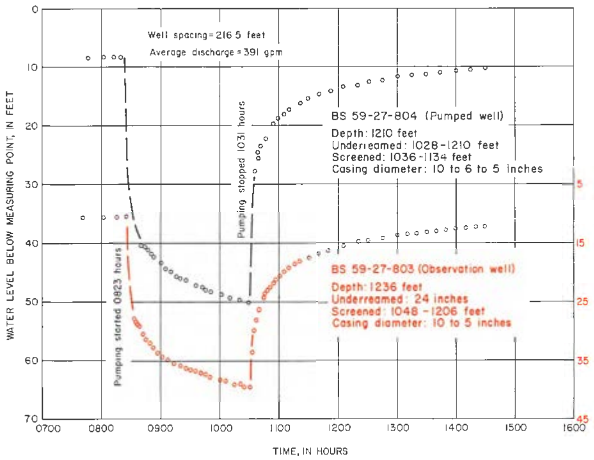


Figure 14.—Drawdown and Recovery in a Pumped Well and the Drawdown Interference and Recovery in an Observation Well During an Aquifer Test in Caldwell City Wells, February 18, 1971

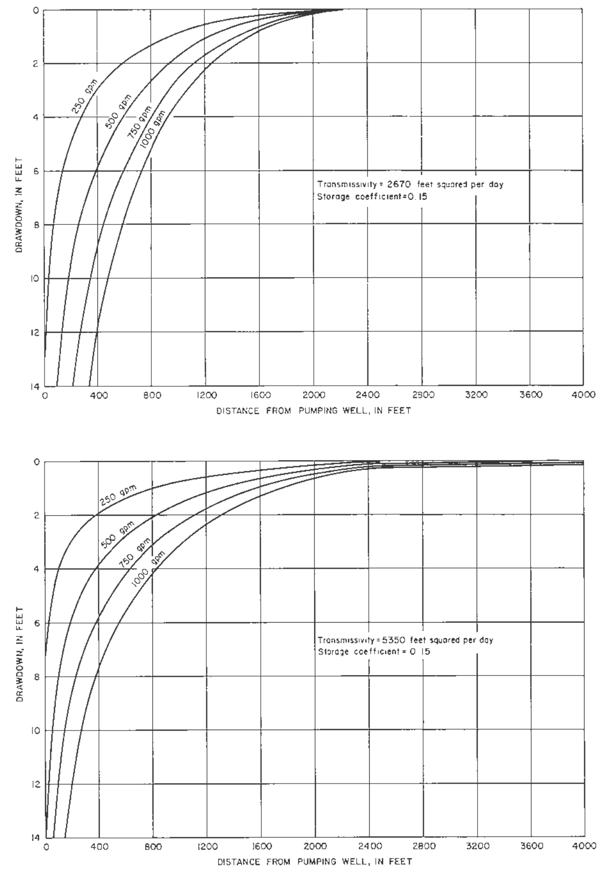


Figure 15.—Theoretical Drawdown Caused by a Well in the Flood-Plain Alluvium Pumping Continuously for 30 Days

pumping by about 60 percent. A substantially wider spacing between wells would have eliminated much of this interference and additional cost.

Where irrigation wells in the flood-plain alluvium are closely spaced, pumping lifts may be significantly increased by interference between wells. The yields of the wells thus affected may also be reduced. The magnitude of interference can be determined from Figure 15, which shows the theoretical extent of the cone of depression of a well in the flood-plain alluvium that has been pumping continuously for 30 days at rates of 250, 500, 750, and 1,000 gpm. Three assumptions are inherent in the graphs: the transmissivity is 2,670 and 5,350 feet squared per day; the storage coefficient is 15 percent; and all the water being pumped is coming from storage in the aquifer.

Where the transmissivity is 2,670 feet squared per day, a well pumping 500 gpm for 30 days would cause a drawdown of about 6 feet in another well 400 feet from the pumped well and a drawdown of about 2 feet in a well at a distance of 1,000 feet. However, if the transmissivity is 5,350 feet squared per day, the drawdown would be almost 4 feet at a distance of 400 feet from a well pumping 500 gpm for 30 days. Drawdown interferences can be determined from the graphs for other pumping rates and distances that are applicable to specific wells.

Specific capacities were determined for several wells tapping various aquifers in the report area. The specific capacities of 14 wells are listed in Table 6. The specific capacities ranged from 0.65 gpm per foot of drawdown in a well tapping the Yegua Formation to 48 gpm per foot of drawdown for a well tapping the Sparta Sand. Additional specific capacities for many wells are available from the well-performance data given in Table 12. From these data, the specific capacity can be calculated by dividing the yield in gpm by the drawdown in feet.

The largest value of specific capacity was 75 gpm per foot of drawdown in well BS-59-38-704 tapping the flood-plain alluvium of the Brazos River. Specific capacities of wells tapping the same formation may differ widely because of the differences in the amount of sand screened, the differences in well construction, the degree of well development, and the differences in pumping time.

Changes in Water Levels

Water-level measurements were made in wells during previous studies of parts of the report area in 1936-37, 1944, 1947, 1959-60, and 1963-64, and as a part of this study in 1969-71. Unfortunately, most of these measurements, except for those in wells tapping the flood-plain alluvium, were not made in the same wells during each succeeding study. However, measurements were made in a few selected observation wells in Brazos and Burleson Counties during 1937-41 as part of the statewide observation-well program of the U.S. Geological Survey and the Texas Water Development Board.

An observation-well program in the report area was reestablished in 1957 (and expanded during ensuing years) with emphasis on wells in the flood-plain alluvium of the Brazos River. Although some of the observation-well measurements have been published previously, all are included in this report in Tables 12 and 16.

Pumping for public supply by Bryan Air Force Base and Bryan since 1940 and by Texas A&M University since 1943 has affected the water levels in the Sparta Sand in some areas. As a result of the pumping, the water levels have declined within a radius of several miles of the centers of pumping. The lack of a network of observation wells in the vicinity of the well fields makes it impossible to determine accurately the rate and areal extent of the water-level decline, but one indication of the effects of the pumping is the decline of the water level in well BJ-59-23-403, which taps the Sparta Sand. Mr. Travis Weedon, the owner of this well, reports that the water level in the well was about 45 feet below land surface when drilled in 1954 and was about 80 feet below land surface in 1969. These measurements indicate a decline of about 35 feet at a distance of 12 and 15 miles east of the Bryan and Texas A&M University well fields, respectively.

Figure 16 shows the approximate altitude of water levels in wells tapping the Sparta Sand in 1969-71. Altitudes of water levels in the Bryan and Texas A&M University well fields were not determined during this investigation; but on the basis of water levels determined mostly during aquifer tests at various times prior to 1969-71, the water levels in the general areas of the fields were less than about 200 feet above mean sea level in 1969-71.

Water-level measurements in well fields are nearly always affected by the time since the well was pumped and by the drawdown interference caused by the pumping of nearby wells. Figure 16 shows, in a general way, that pumping from the Sparta in the Bryan and Texas A&M University well fields has affected a relatively large area, even including a part of the Sparta outcrop.

Table 7 shows water-level measurements at various times from 1938 to 1960 in Bryan's Sparta wells. Some of the measurements were made when the wells were drilled or during aquifer tests, and most of the wells had water-level declines of about 100 feet or more for the period of record. The measurements for any one well may not closely approximate those of another well on a particular date because the time intervals since the wells had been pumped, the number of wells being pumped, and the length of pumping time varied.

Figure 17 shows the changes in water levels in selected wells tapping the flood-plain alluvium in Brazos County from 1957 to 1971. All of the wells, except BJ-59-38-901, and BJ-59-38-904, are in a heavily pumped area northwest of Bryan; the latter two wells are a few miles southwest of Millican. In 1969, about 150 irrigation wells were in this heavily pumped area of about 20 square miles. Cronin and others (1963, pl. 3) reported that 125 wells were in this area in 1959.

Except for well BJ-59-20-603, the hydrographs indicate that by 1961 the water levels in the alluvium probably had recovered from the effects of heavy withdrawals during the drought of 1950-57. For several years in the 10-year period from 1961 to 1971, pumpage exceeded the recharge and the quantity of water in storage was greatly reduced.

Cronin and Wilson (1967, p. 34) indicated that the declining water level in the flood-plain alluvium northwest of Bryan may be attributed to the lower and declining water levels in the underlying Sparta Sand (Figure 5), which is in direct hydraulic continuity with part of the alluvium in the heavily pumped area. Under these hydrologic conditions, water is free to move downward into the Sparta, which seems to be a reasonable explanation for at least a part of the large reduction in the quantity of water in storage in the alluvium.

Pumpage from the additional wells (about 20 percent) that were drilled from 1959 to 1969 probably was not sufficient in itself to cause all of the large reduction. The declining water levels after 1961 in wells BJ-59-38-901 and BJ-59-38-904, southwest of Millican, are probably due to the large increase in well development in this area between 1960 and 1970.

Figure 18 shows the changes in water levels in 10 irrigation wells in the flood-plain alluvium and terrace deposits of the Brazos River in Burleson County. The irrigation wells in the flood-plain alluvium in the county are scattered over the Brazos River flood-plain from State Highway 21 to just north of Clay, a distance of about 19 miles. In this area the Yegua Formation, which consists of sand, silt, clay, and lignite and probably has a low hydraulic conductivity, lies beneath most of the flood-plain.

In 1959-60, approximately 210 irrigation wells tapped the flood-plain alluvium in Burleson County (Cronin and others, 1963, pl. 3), and by 1969-70 about 300 wells tapped the alluvium. The six wells (Figure 18) that have 1957 measurements, show that the water levels in 1971 were higher than in 1957, indicating a net increase in the quantity of water in storage over the 1957-71 period.

A comparison of the amount of precipitation (Figure 2) with the water levels shows that most of the

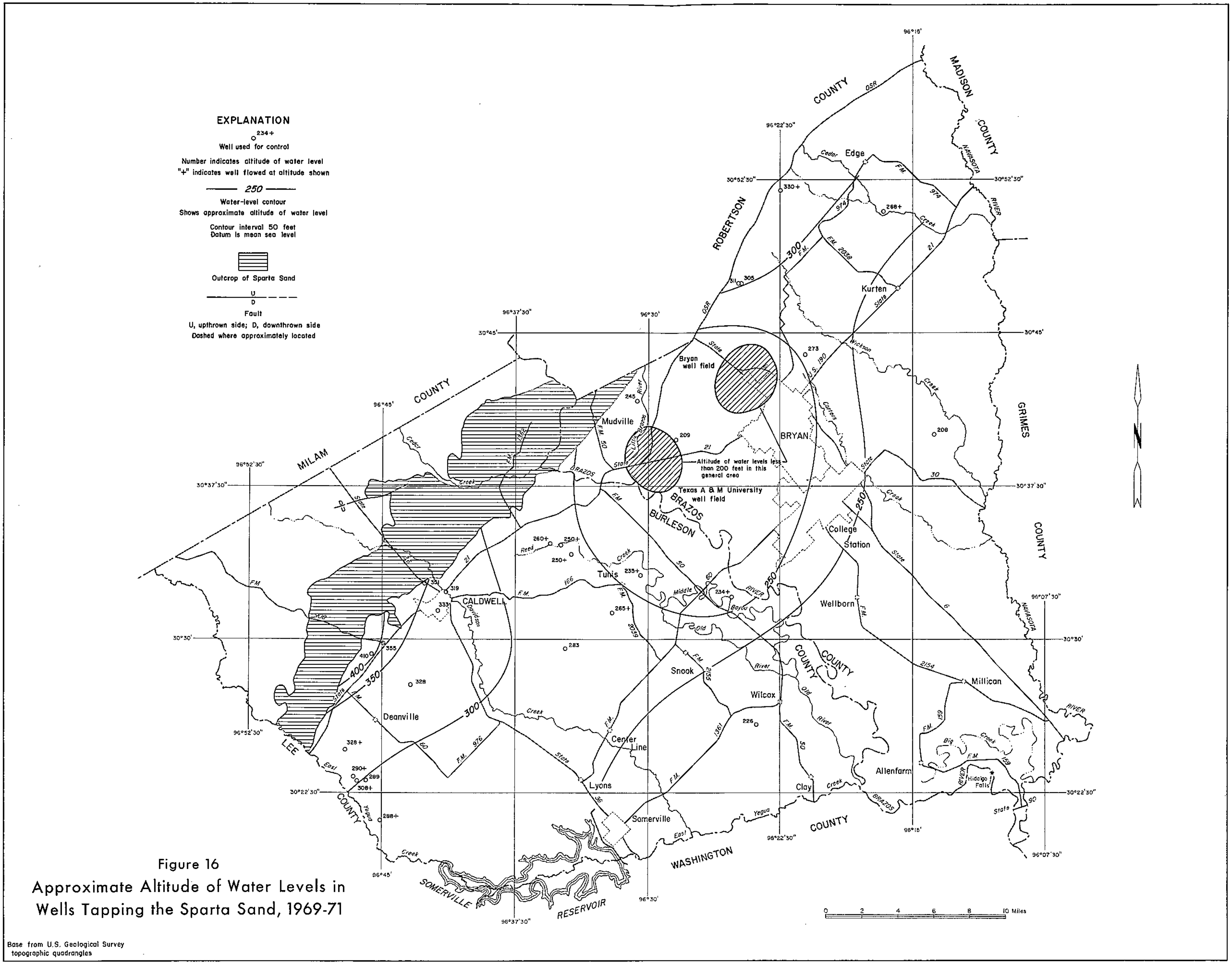


Figure 16
Approximate Altitude of Water Levels in Wells Tapping the Sparta Sand, 1969-71

Table 7.--Water Levels in Bryan City Wells Tapping the Sparta Sand, 1938-60

(Water levels given in feet as depth below land surface and as altitude above mean sea level)

DATE	BJ-59-21-206 CITY WELL 1		BJ-59-21-302 CITY WELL 2		BJ-59-21-304 CITY WELL 3		BJ-59-21-305 CITY WELL 3		BJ-59-21-501 CITY WELL 5		BJ-59-21-201 CITY WELL 6		BJ-59-21-306 CITY WELL 9		REMARKS
	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	(DEPTH)	(ALTITUDE)	
July 30, 1938	66	243	--	--	--	--	--	--	--	--	--	--	--	--	--
May 4, 1939	--	--	106	225	--	--	--	--	--	--	--	--	--	--	Well off 10 min.
May 15	--	--	--	--	94	237	--	--	--	--	--	--	--	--	--
July 14	--	--	--	--	--	--	88	241	--	--	--	--	--	--	--
Dec. 11, 1940	--	--	165	166	190	141	--	--	--	--	--	--	--	--	Well off 10 min.
Apr. 7, 1941	119	190	--	--	--	--	--	--	--	--	--	--	--	--	Well off. Wells 2, 3, and 4 on.
Oct. -- 1942	--	--	--	--	--	--	128	201	--	--	--	--	--	--	Well off 10 min.
Aug. 21, 1943	--	--	--	--	--	--	--	--	125	170	--	--	--	--	--
June 14, 1944	--	--	--	--	--	--	151.6	177	--	--	--	--	--	--	Well off 3 days. Wells 1, 2, and 3 on.
June 23	--	--	167.1	164	--	--	--	--	--	--	--	--	--	--	Well off 6 days. Wells 3 and 4 on.
June 23	133.1	176	--	--	--	--	--	--	--	--	--	--	--	--	Well off 7 days. Wells 2, 3, and 4 on.
June 23	--	--	--	--	--	--	--	--	113.1	182	--	--	--	--	Well off 5 days. Wells 2, 3, and 4 on.
June 30	141.1	168	164.0	167	--	--	--	--	--	--	--	--	--	--	Well off 3 days. Wells 4 and 5 on.
July 2	--	--	165.2	166	160.6	170	--	--	--	--	--	--	--	--	Well off 5 days. Wells 1, and 4, and 5 on.
July 8	--	--	--	--	171.5	159	--	--	--	--	--	--	--	--	Well off 19 hours. Wells 1, 2, and 4 on.
Apr. 9, 1946	--	--	--	--	--	--	--	--	121.2	174	--	--	--	--	--
Apr. 10, 1947	--	--	--	--	--	--	--	--	--	--	155	152	--	--	--
July 8	--	--	--	--	--	--	--	--	--	--	154	153	--	--	--
Sept. 11	165	144	--	--	--	--	173.2	156	--	--	149.4	158	--	--	Wells 2, 3, and 5 on.
Feb. 19, 1960	--	--	240.0	91	231.1	100	202.6	126	--	--	--	--	266.6	105	--

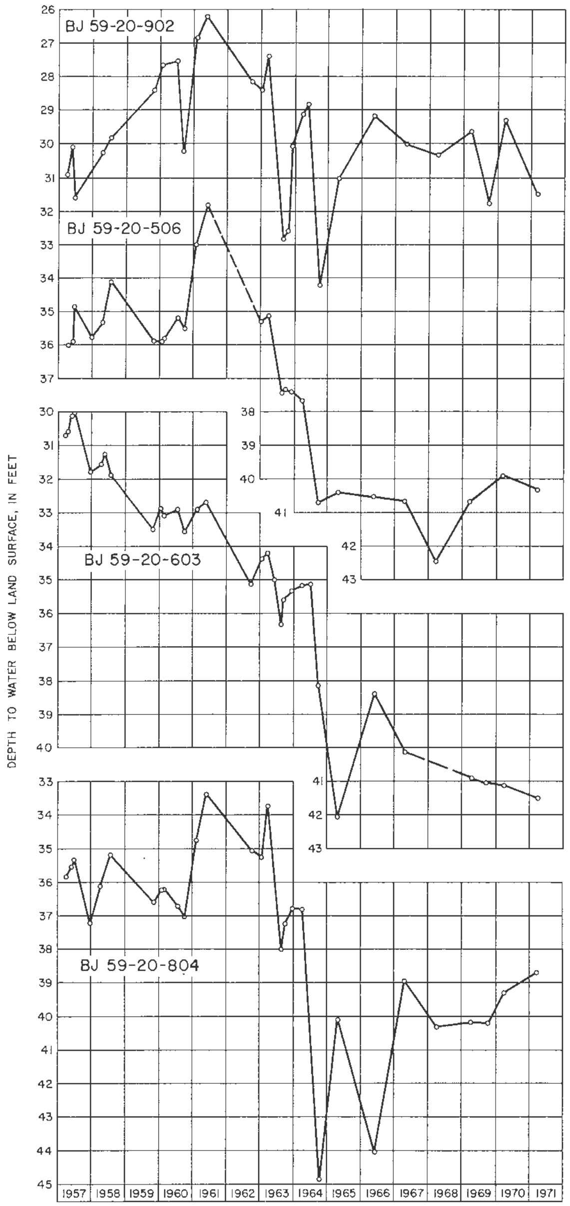


Figure 17.--Hydrographs of Wells Tapping the Flood-Plain Alluvium of the Brazos River in Brazos County, 1957-71

time the water levels vary with precipitation; that is, rising water levels follow high precipitation; and declining water levels follow low precipitation. There are some inconsistencies in this relationship, however, because of the variation in irrigation demands with regard to seasonal precipitation.

Figure 18 also shows, for 1960-71, the changes in water levels in well BS-59-37-201, an irrigation well tapping the terrace deposits that are topographically higher than and have little or no continuity with the flood-plain alluvium. This well is one of three irrigation wells that tap the terrace deposits in the vicinity of Snook. The hydrograph of well BS-59-37-201 shows that the water level in 1971 was higher than in 1960 when the well was not pumped and indicates that more water was stored in the terrace deposits in 1971 than in 1960. The water level and amount of water in storage probably were much lower in 1957 at the end of the drought.

Well Construction and Yield

During pioneer days, water used for domestic supplies was obtained mostly from dug wells or shallow hand-bored wells; only a few fortunate people had springs or streams available. The dug, hand-bored, and early drilled wells usually penetrated on a few feet of the saturated zone and yielded small quantities of water. Most of the wells completed since 1930 have been drilled wells.

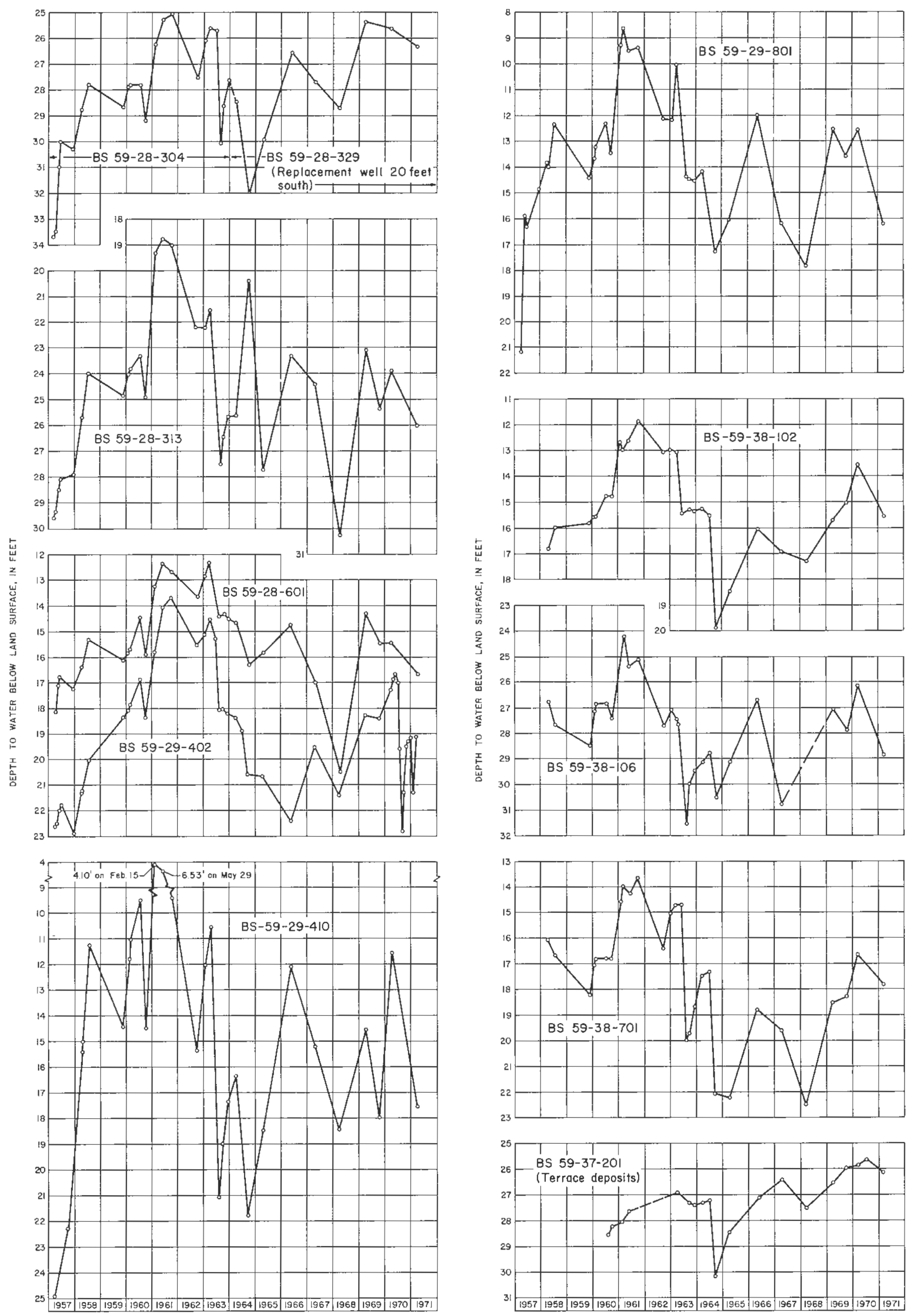


Figure 18

Hydrographs of Wells Tapping the Flood-Plain Alluvium and Terrace Deposits of the Brazos River in Burleson County, 1957-71

Figure 19 shows the three most common types of modern construction of wells in the report area: The straight-walled well, the underreamed and gravel-packed well, and the special construction used for wells in the flood-plain alluvium.

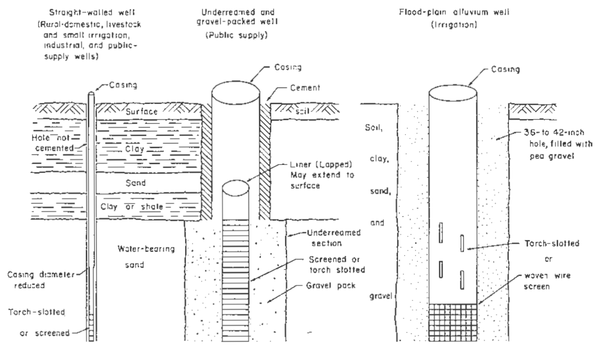


Figure 19.—Diagram Showing Typical Construction of Wells

The straight-walled type of construction generally is used for rural-domestic or livestock, and small irrigation, industrial, and public-supply wells if a relatively small yield is adequate or if a relatively low-cost well is desired. The typical straight-walled well has a 4-inch casing to a depth below the expected pumping level and 2-inch casing for the rest of the depth. The 2-inch casing is slotted in part or all of the producing sand, although a few wells use a commercial well screen instead of slotted casing. Probably more than 90 percent of the rural-domestic and livestock wells are constructed in this fashion. Most of the wells that flow are cased with 2-inch pipe from top to bottom.

The rural-domestic and livestock wells are equipped with windmills, pump jacks, jet pumps, or submersible pumps. The submersible pump was the type most frequently installed during the 1960's.

The underreamed and gravel-packed type of construction generally is used where a large yield is desired. Most of the public-supply wells used by municipalities in the area are underreamed, screened, and gravel-packed. The gravel pack in these wells increases the effective diameter of the well, thereby allowing more water to enter at a reduced velocity and with less head-loss. This reduces the drawdown (and pumping costs) and aids in retarding the entrance of sand into the well. The annular space between the borehole and the casing is filled with cement, which increases the life of the well and reduces the chance of contamination from the surface.

When an irrigation well is to be drilled in the flood-plain alluvium, the area is usually explored by several test holes to find the most favorable location. The thickness and grain size of the water-bearing material are the most important hydrologic factors to be considered in selecting the well site. A reverse-circulation rotary drilling rig commonly is used to drill the hole, which is usually 36-42 inches in diameter. The hole usually is drilled 2 to 5 feet below the base of the alluvium into the bedrock. The entire depth of the hole is cased. The casing used in many of the older wells consisted of corrugated galvanized culvert pipe 18 inches in diameter, with a ½-inch mesh, woven-wire screen emplaced in the coarser sand and gravel. Many of the old wells having this type of casing have been reworked, and torch-slotted steel liners have been placed inside the old casing.

Currently, most of the wells being drilled are cased with torch-slotted steel casing 14-18 inches in diameter. The annular space between the casing and the wall of the hole is filled with gravel, and the well is then developed with a test pump; gravel is added, if necessary, to replace sand pumped out during the well development. Following development, a short aquifer test is run to determine the capacity of the well and the size of the pump and power needed.

A typical irrigation well is equipped with a 6- or 8-inch turbine pump, set about 2 feet from the bottom of the well and operated with power supplied by an internal-combustion engine. A few wells are equipped with 4-, 5-, or 10-inch pumps, and a few are powered by electric motors.

Signs of caving around some irrigation wells were observed during the field work. Such caving is an indication that when these wells are pumped, sand is withdrawn along with the water. At some well sites, the well casing and pump have settled as much as 2 to 3 feet.

AVAILABILITY OF GROUND WATER

The geologic units containing significant quantities of fresh to slightly saline water in Brazos and Burleson Counties are the Wilcox Group, Carrizo Sand, Queen City Sand, Sparta Sand, and flood-plain alluvium. The Carrizo Sand and the Wilcox Group are in hydraulic continuity and function as a single aquifer.

The quantity of water available on a long-term basis without depleting the supply from the Carrizo-Wilcox aquifer depends chiefly on the rate of recharge and the ability of the sand to transmit water from the outcrop to the points of withdrawal. To estimate the probable rate of recharge, a calculation was made of the quantity of water that moves across a vertical section of the aquifer 50 miles long, roughly the distance across the report area along the southernmost 1,500-foot sand-thickness contour in Figure 20. The composite transmissivitiy of this vertical section of the aquifer, which was computed from the sand thickness and the hydraulic conductivity, is about 20,000 feet

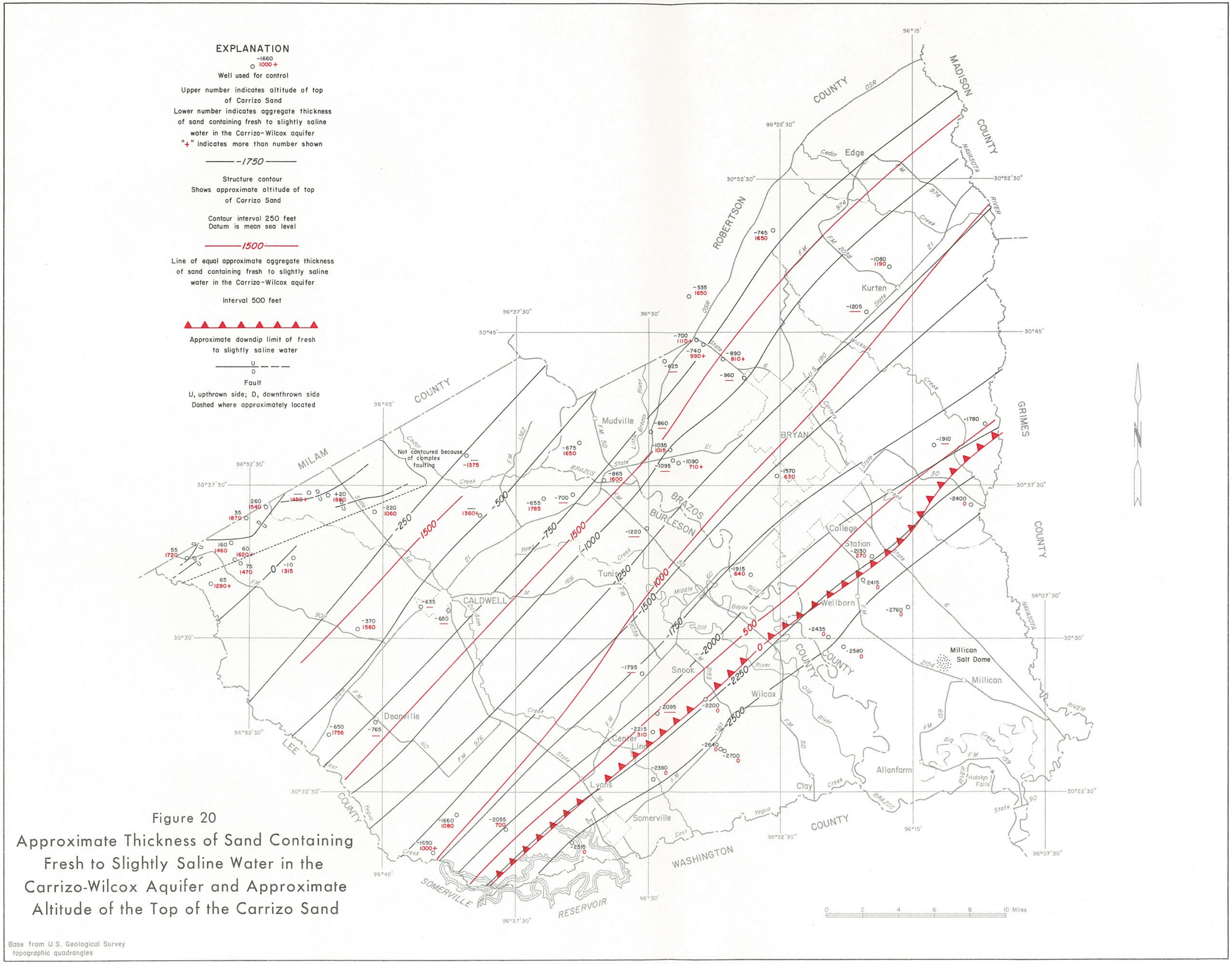


Figure 20
Approximate Thickness of Sand Containing Fresh to Slightly Saline Water in the Carrizo-Wilcox Aquifer and Approximate Altitude of the Top of the Carrizo Sand

squared per day; the average hydraulic gradient is about 3 feet per mile—a rate that probably closely approximates the original gradient prior to well development.

On the basis of the preceding assumptions, the quantity of fresh to slightly saline water that moves across this vertical section is about 25,000 acre-feet per year (22 mgd); this quantity is the present transmission rate of the aquifer and represents a part of the total rate of recharge. An additional but unknown quantity of recharge is rejected to the streams as spring flow and seepage at the outcrop, and some is consumed by evapotranspiration. Therefore, the 25,000 acre-feet per year of recharge, which is effectively replenishing the aquifer, represents a conservative quantity of fresh to slightly saline water that is available for development on a long-term basis without depleting the aquifer.

In addition to the 25,000 acre-feet per year that is available on a long-term basis, about 220 million acre-feet of fresh to slightly saline water is in transient storage in the Carrizo-Wilcox aquifer in the report area. About half of this water is not available to wells because it cannot be drained from the sand by wells. Economic factors related to drilling depths would also restrict development of these water supplies. Nevertheless, a part of this vast quantity of water in storage is available for intensive development in excess of the calculated perennial yield. Such development, however, ultimately would dewater the sand and would be equivalent to mining the water.

The most favorable areas for the development of large supplies of fresh to slightly saline water from the Carrizo-Wilcox aquifer largely depend upon the thickness of available sand. Figure 20 shows that the thickness of sand containing fresh to slightly saline water ranges from more than 1,500 feet in places across the northwestern part of the report area, where the top of the aquifer is less than 1,000 feet below mean sea level, to zero at the downdip limit of fresh to slightly saline water in the southeastern part of the report area, where the top of the aquifer is more than 2,000 feet below mean sea level.

The estimated potential yields of wells tapping the Carrizo-Wilcox decrease from about 4,500 gpm, or more, in the northwestern part of the report area to zero in the southeastern part of the area. Estimated yields in specific areas are: 4,500 gpm, or more, northwest of the southernmost 1,500-foot sand-thickness line (Figure 20); from 2,000 to 4,500 gpm between the 1,000-foot line and the southernmost 1,500-foot line; from 750 to 2,000 gpm between the 500- and 1,000-foot lines; and from zero to 750 gpm between the downdip limit of fresh to slightly saline water and the 500-foot line.

These estimated yields are based on an estimated composite transmissivity of the water-bearing section and the specific capacities and yields of wells in the report area. Furthermore, the estimates are based on the assumption that the wells would be properly constructed for maximum yield and screened in all sands containing fresh to slightly saline water.

The quantity of water available on a long-term basis without depleting the supply from the Queen City aquifer depends chiefly on the rate of recharge and the ability of the sand to transmit water from the outcrop to the points of withdrawal. To estimate the probable rate of recharge, a calculation was made of the quantity of water which moves across a vertical section of the aquifer 51 miles long, roughly along the 200-foot sand-thickness contour (Figure 21). In this vertical section the composite transmissivity of the aquifer, which was computed from the sand thickness and an assumed hydraulic conductivity of 6.7 feet per day (Follett, 1970, p. 35), is about 1,340 feet squared per day; the hydraulic gradient is 7.5 feet per mile—a rate that probably closely approximates the original gradient prior to well development.

On the basis of these assumptions, the quantity of fresh to slightly saline water that moves across this vertical section is about 4,400 acre-feet per year (3.9 mgd); this quantity is the present transmission rate of the aquifer and represents a part of the total rate of recharge. An additional but unknown quantity of recharge is rejected to the streams as spring flow and seepage on the outcrop, and some is consumed by evapotranspiration. Therefore, the 4,400 acre-feet per year of recharge, which is effectively replenishing the aquifer, represents a conservative quantity of fresh to slightly saline water that is available for development on a long-term basis without depleting the aquifer.

In addition to the 4,400 acre-feet per year of fresh to slightly saline water that is available on a long-term basis, about 40 million acre-feet of fresh to slightly saline water is in transient storage in the Queen City in the report area. Only about half of this water is available to wells, and attempts to develop it at a rate exceeding the long-term yield ultimately would cause the aquifer to be dewatered.

The most favorable areas for the development of large supplies of fresh to slightly saline water from the Queen City depend upon the thickness of available sand in the aquifer. Figure 21 shows that the thickness of sand containing fresh to slightly saline water ranges from more than 225 feet south of the Queen City outcrop in northwestern Burleson County to zero feet at the downdip limit of fresh to slightly saline water in the southeastern part of the report area, where the top of the aquifer is from about 1,600 to slightly more than 2,400 feet below mean sea level. Favorability thus decreases from northwest to southeast across the report area.

Probably 300 gpm or more could be pumped from properly constructed wells tapping all the sands in the Queen City in the areas where the total sand thickness is more than 200 feet, or in most places northwest of the 200-foot sand-thickness contour in Figure 21. Maximum yields of less than about 300 gpm would be available where the total sand thickness is less than 200 feet. The yields from place to place may be highly variable, however, due to the lenticular character of the sand in the Queen City as contrasted with the more massive sands in the Carrizo-Wilcox aquifer and Sparta Sand.

The quantity of water available for development on a long-term basis without depleting the supply from the Sparta Sand depends chiefly on the rate of recharge and on the ability of the sand to transmit water from the outcrop to the points of withdrawal. To estimate the probable rate of recharge, a calculation was made of the quantity of water which moves across a vertical section of the Sparta 52 miles long, roughly along the 200-foot (above mean sea level) structure contour on Figure 22. In this vertical section the composite transmissivity of the Sparta, which was estimated from the sand thickness and the hydraulic conductivity, is about 1,940 feet squared per day (Barnes, Follett, and Sundstrom, 1944, Fig. 2). The average hydraulic gradient prior to significant well development in the Sparta is estimated to have been about 6 feet per mile. On this basis, the quantity of water that was transmitted as recharge across this vertical section was about 5,000 acre-feet per year (4.5 mgd).

In 1960, the last year that separate pumpage from the Sparta Sand and Carrizo-Wilcox aquifer by Bryan and Texas A&M University was recorded, 4.6 mgd was pumped from the Sparta. This quantity is only slightly more than the 4.5 mgd that is estimated to be perennially available. This implies that at least by 1960, pumpage from the Sparta was slightly exceeding the rate of replenishment. Although the water level or artesian head in the Sparta has been lowered considerably for several miles surrounding the Bryan and Texas A&M University well fields, the only area where the Sparta Sand probably is being dewatered is in the outcrop of the Sparta updip from the well fields.

In addition to the 5,000 acre-feet per year of fresh to slightly saline water that is available on a long-term basis, about 28 million acre-feet of fresh to slightly saline water is in transient storage in the Sparta. About half of this water is not available to wells because it cannot be drained from the sand by wells. Nevertheless, a part of this water in storage is available for intensive development in excess of the calculated perennial yield. Such a development, however, would cause water levels to decline rapidly, and the aquifer ultimately would be dewatered.

The most favorable areas for the development of large supplies of fresh to slightly saline water from the Sparta Sand largely depend upon the thickness of the sand and the proximity to areas of heavy pumping from the aquifer. Figure 22 shows that the thickness of sand containing fresh to slightly saline water ranges from more than 200 feet in much of the northwestern part of the report area to zero feet at the downdip limit of fresh to slightly saline water in the southeastern part, where the top of the aquifer is from 1,400 to more than 2,000 feet below mean sea level.

On the basis of sand thickness alone, favorability generally decreased from northwest to southeast across the report area. However, development of additional supplies of water from the Sparta in the vicinity of the Bryan and Texas A&M University well fields (areas of relatively thick sand in the Sparta) should be avoided because of existing large cones of depression in these areas.

Yields of 500 gpm or more can be expected from wells properly constructed and screened opposite all sand in the Sparta where the sand is more than 175 feet thick or in most areas north of the 175-foot sand-thickness line in Figure 22. South of this line, where the sand containing fresh to slightly saline water decreases from 175 to 0 feet, maximum expected yields of wells are less than 500 gpm.

In any discussion of the availability of ground water in the flood-plain alluvium, one of the most important elements to consider is the recharge to the aquifer. At the end of the 1950-57 drought, in April 1957, the water table in the alluvium was at a low level. According to Cronin and Wilson (1967, p. 73), during the period 1957 to 1961 (a period of mostly above-normal precipitation), the water levels rose to levels equal to those previous to the development of ground water for irrigation. This indicates that the aquifer in the flood-plain alluvium is readily recharged by rainfall.

The quantity of water in storage in the flood-plain alluvium varies considerably from year to year because of the heavy seasonal pumping of irrigation wells and because of the rapid recharge from varying amounts of annual rainfall. The following table shows the approximate quantities of recoverable water in storage in the flood-plain alluvium of Brazos and Burleson Counties for various years:

	VOLUME OF RECOVERABLE WATER IN STORAGE (ACRE-FEET)		
COUNTY	SPRING OF 1957	SPRING OF 1963 1/	SPRING OF 1969
Brazos	173,000	199,000	153,000
Burleson	284,000	344,000	298,000
Total	457,000	543,000	451,000

1/ Cronin and Wilson, 1967, p. 73

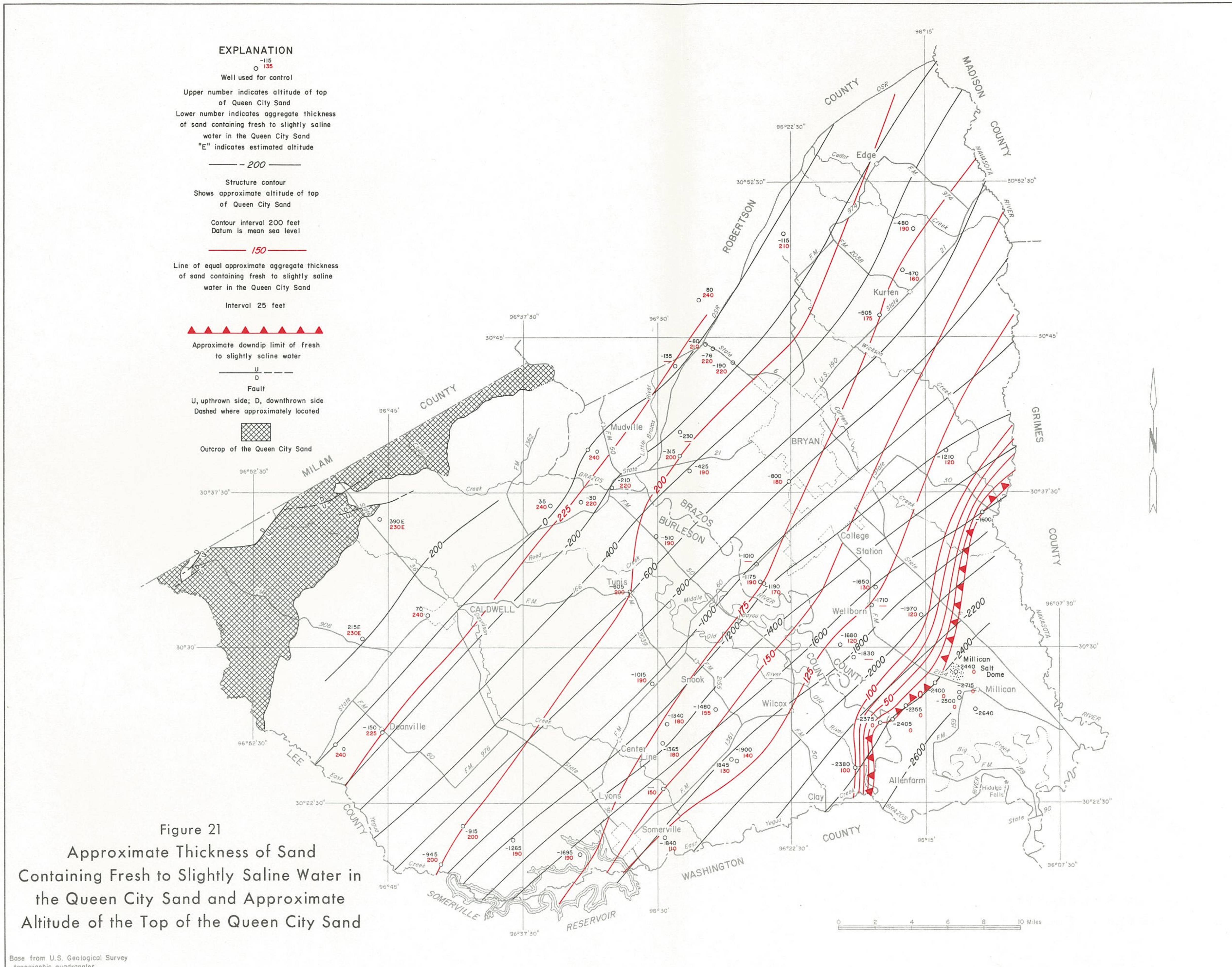


Figure 21
Approximate Thickness of Sand Containing Fresh to Slightly Saline Water in the Queen City Sand and Approximate Altitude of the Top of the Queen City Sand

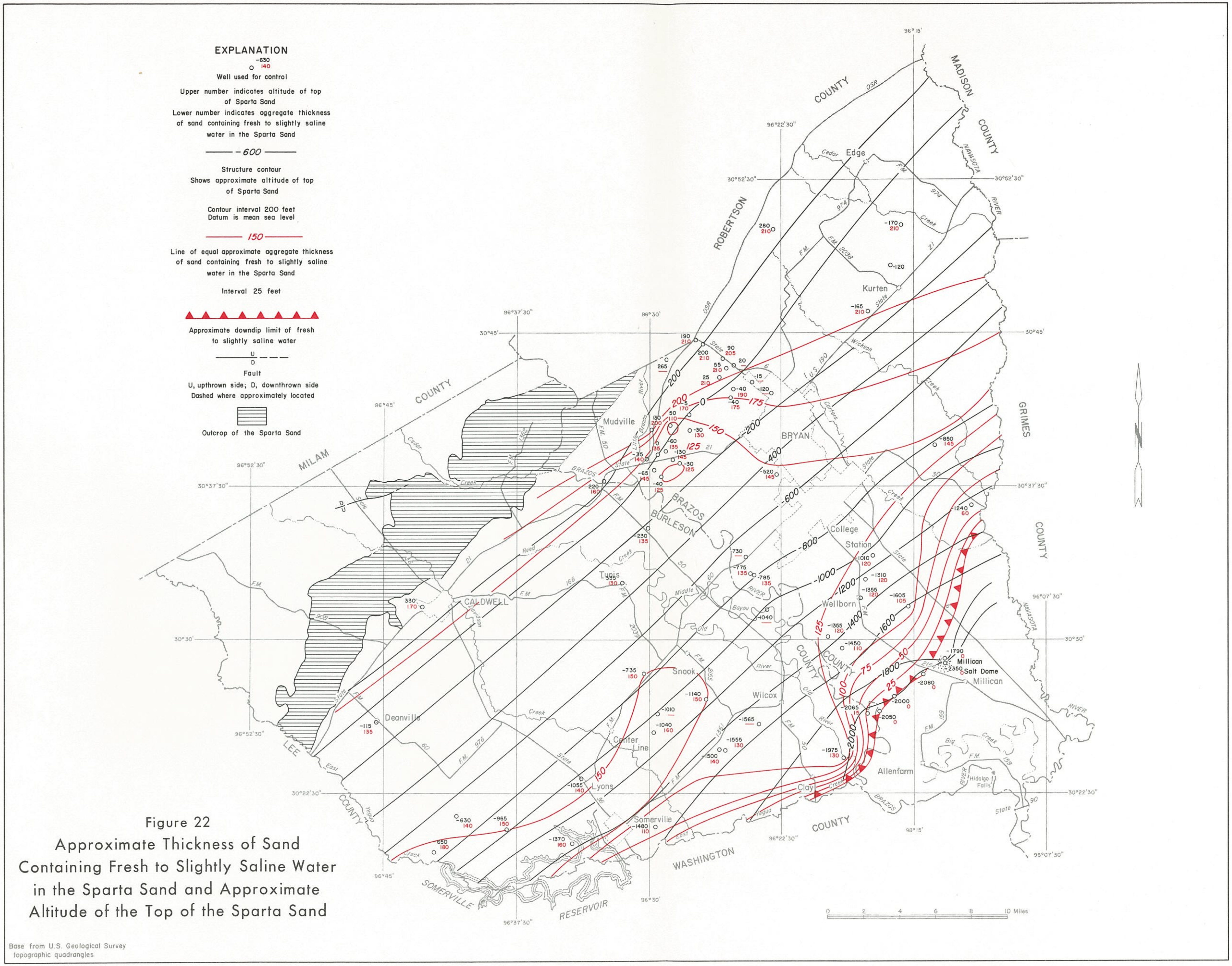


Figure 22
Approximate Thickness of Sand Containing Fresh to Slightly Saline Water in the Sparta Sand and Approximate Altitude of the Top of the Sparta Sand

The maximum quantity of recoverable water in transient storage in the flood-plain alluvium probably is slightly more than the 543,000 acre-feet that was estimated by Cronin and Wilson (1967, p. 73) to be in storage in the spring of 1963. On the basis of a comparison of hydrographs of water levels in 1961 and 1963, about 600,000 acre-feet of water was recoverable from storage in the spring of 1961. Of this vast quantity of water, for example, 30,000 acre-feet of water could be pumped annually for 10 years during a theoretical drought without exhausting the ground-water supply. The original supply in storage would be reduced by one-half (assuming no recharge or natural discharge during the dry period), but the aquifer would be readily replenished during a following wet period.

Although a larger quantity of water would be available annually under normal rainfall conditions, the 30,000 acre-feet per year represents a conservative amount of water that would be available for pumping under severe and prolonged drought conditions. For purposes of this report, the 30,000 acre-feet per year or 27 mgd may be considered to be a conservative quantity that is available on a long-term basis without depleting the supply.

The maximum yield that may be expected from a well tapping the flood-plain alluvium probably is about 1,500 gpm. This estimate is based on the largest known yield of 1,460 gpm from a well in the alluvium in the southern tip of Burleson County, where the alluvium is relatively thick. Maximum yields would be less in the northern part of the report area where the alluvium is thinner.

QUALITY OF GROUND WATER

The chemical constituents in ground water are dissolved from the soil and rock through which the water has passed; consequently, the amounts and kinds of minerals in solution depend on the composition and solubility of the rocks. Other factors that influence the mineralization of the water are the length of time the water has been in contact with the rocks and the effects of temperature and pressure. Table 8 gives the source and significance of the dissolved-mineral constituents and properties of water.

Analyses of 549 samples of water from 423 wells and eight springs are given in Table 17. The principal geologic or hydrologic sources of the water samples are indicated in the table. Most of the samples were collected during investigations made in 1936-37, 1944, 1959-60, 1963-64, and 1969-70.

Suitability of Water for Use

The suitability of a water supply depends upon the chemical quality of the water and the limitations imposed by the contemplated use of the water. Various criteria have been developed for most categories of water quality, including bacterial content, physical characteristics, and chemical constituents. Usually, water-quality problems of the first two categories can be alleviated economically, but the removal or neutralization of undesirable chemical constituents may be difficult and expensive.

For many purposes, the dissolved-solids content is a major limitation on the use of water. A general classification of water based on dissolved-solids content (Winslow and Kister, 1956, p. 5) is as follows:

DESCRIPTION	DISSOLVED-SOLIDS CONTENT (MILLIGRAMS PER LITER) 1/
Fresh	Less than 1,000
Slightly saline	1,000 to 3,000
Moderately saline	3,000 to 10,000
Very saline	10,000 to 35,000
Brine	More than 35,000

1/ Milligrams per liter (mg/l) is considered equivalent to parts per million (ppm) for water containing less than 7,000 mg/l dissolved solids.

Public and Domestic Supply

The U.S. Public Health Service has established, and periodically revises, standards to control the quality of the drinking water to be used on common carriers engaged in interstate commerce. The standards are designed to protect the traveling public and are commonly used to evaluate public supplies. According to these standards, the concentrations of chemical constituents should not exceed the listed concentrations except where other more suitable supplies are not available. Some of the standards adopted by the U.S. Public Health Service (1962, p. 7-8) are as follows:

SUBSTANCE	CONCENTRATION (MILLIGRAMS PER LITER)
Chloride (Cl)	250
Fluoride (F)	.8*
Iron (Fe)	.3
Nitrate (NO_3)	45
Sulfate (SO_4)	250
Dissolved solids	500

* Upper limit for Brazos and Burleson Counties based on 48-year annual average of maximum daily air temperature of 80.0 °F (26.5 °C) at College Station.

Table 8.—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.

Table 9 compares the chemical quality of ground water in Brazos and Burleson Counties with standards recommended by the U.S. Public Health Service and by others. The table shows the principal water-bearing units, the number of samples analyzed, and the number of samples which exceeded the recommended limits.

The concentrations of dissolved solids in 386 samples ranged from 42 to 5,090 mg/l (milligrams per liter). Dissolved solids were less than 500 mg/l in 162 samples (42 percent). Concentrations were between 500 and 1,000 mg/l in 101 samples (26 percent) and exceeded 1,000 mg/l in 123 samples (32 percent).

Although water having a chloride content exceeding 250 mg/l may have a salty taste, individuals may become conditioned to the water in a short time if the concentration is not too excessive. Of the 549 samples analyzed for chloride, 114 samples (21 percent) exceeded 250 mg/l; 435 samples (79 percent) contained less than 250 mg/l, and 303 samples (55 percent) contained less than 100 mg/l. The chloride content ranged from 4.5 to 3,100 mg/l.

Where fluoride is present in drinking water in the report area, the concentration should not average more than 0.8 mg/l. The presence of fluoride in average concentrations greater than 1.4 mg/l (twice the optimum value of 0.7 mg/l) would constitute grounds for rejection of the supply (U.S. Public Health Service, 1962, p. 8). The fluoride content of 256 samples exceeded 0.8 mg/l in 33 samples (13 percent) and 1.4 mg/l in 19 samples (7 percent). The fluoride content ranged from 0.0 to 4.4 mg/l. The high fluoride content in the small number of samples that exceeded 0.8 mg/l was not confined to any particular formation.

Iron in excess of 0.3 mg/l contributes a metallic taste to water in addition to staining fixtures and laundry. The total iron in 328 samples ranged from 0.00 to 62 mg/l and exceeded 0.3 mg/l in 142 samples (43 percent). Excessive iron in much of the ground water in Brazos and Burleson Counties is a problem of some concern. Water in the flood-plain alluvium is characteristically high in iron.

Nitrate concentrations in excess of 45 mg/l in water used for infant feeding have been related to the incidence of infant cyanosis (methemoglobinemia or "blue-baby" disease)—a reduction of oxygen content in the blood constituting a form of asphyxia (Maxcy, 1950, p. 271). The nitrate in 251 samples ranged from 0.0 to 103 mg/l and exceeded 45 mg/l in only four samples (2 percent). The concentrations of nitrate may be an indication of pollution from organic matter, commonly sewage (Lohr and Love, 1954, p. 10). The four samples containing excessive nitrate were from shallow bored or dug wells that were subject to contamination. The nitrate contamination may have been from stock excrement.

Water containing sulfate in excess of 250 mg/l may produce a laxative effect, and large concentrations of sulfate in combination with other ions impart a bitter taste to water, commonly referred to as an alum taste. The sulfate content in 548 samples ranged from 0.0 to 1,750 mg/l; only 77 samples (14 percent) contained more than 250 mg/l. The high sulfate was not confined to any particular formation or depth.

The sulfate and chloride content of water from wells in various aquifers in Brazos and Burleson Counties are shown on Figure 23. The map is useful in indicating areas and depths of wells which yield water of good or poor quality. The quality of water from the Wilcox Group, Carrizo Sand, Queen City Sand, and Sparta Sand is predictable within reasonable limits, with very little variation in short distances unless a fault is present. The quality of water from the other aquifers, especially the Yegua Formation, is not predictable and considerable changes in quality usually occur in short distances laterally and vertically. Good quality water, if not found at a particular depth, may be available at a shallower or deeper depth. Analysis should be made of a water sample from a well before the driller moves his drilling rig as the cost of drilling deeper or plugging back and testing another sand would be relatively small at this time.

Of the 495 samples of water analyzed for hardness (Table 8), about half were soft; 56 were moderately hard; 46 were hard; and 149 were very hard. Of the very hard samples, 90 were from the flood-plain alluvium. Generally, water from the Wilcox Group (including Simsboro Sand Member), Carrizo Sand, and Sparta Sand is soft. Commercial water softeners may be used if soft water is needed. If used, the softeners will have to be recharged frequently and probably will not be recommended where the hardness is more than 500 mg/l. High hardness generally is not considered detrimental to health except to the small percentage of people susceptible to kidney ailments.

To provide information on the presence and extent of pesticides in ground water, pesticide analyses were made on nine samples of ground water in the report area. The water was analyzed for 15 insecticides (aldrin, DDD, DDE, DDT, dieldrin, endrin, heptachlor, heptachlor epoxide, lindane, chlordane, methoxychlor, parathion, methyl parathion, malathion, and diazinon), and three herbicides (2, 4-D; silvex; and 2, 4, 5-T). Very small amounts of some pesticides were present in six of the nine samples collected. However, concentrations of pesticides were below the limits established by the National Technical Advisory Committee to the Secretary of the Interior (1968). Table 10 shows the wells sampled, depth of the wells, date of sample collection, and pesticides found in the samples.

Table 9.--Comparison of Quality of Ground Water in Brazos and Burleson Counties with Standards Recommended by the U.S. Public Health Service and Others

	IRON (Fe)		SULFATE (SO_4)		CHLORIDE (Cl)		FLUORIDE (F)		NITRATE (NO_3)		DISSOLVED SOLIDS				HARDNESS AS $CaCO_3$	
			Number of determinations (total and the number exceeding the recommended limits)													
WATER-BEARING UNITS	TOTAL	OVER 0.3 MG/L	TOTAL	OVER 250 MG/L	TOTAL	OVER 250 MG/L	TOTAL	OVER 0.8 MG/L	TOTAL	OVER 45 MG/L	TOTAL	LESS THAN 500 MG/L	500 TO 1,000 MG/L	OVER 1,000 MG/L	TOTAL	OVER 60 MG/L 1/
Flood-plain alluvium	64	56	96	16	96	24	58	1	66	0	74	1	38	35	94	93
Terrace deposits	5	1	12	1	11	3	4	0	3	1	6	3	2	1	10	10
Catahoula Sandstone	4	3	5	0	5	1	2	0	1	0	1	1	0	0	5	4
Jackson Group	18	6	32	9	32	17	14	3	13	0	20	4	3	13	27	19
Yegua Formation	52	11	93	23	93	43	36	10	33	0	58	13	15	30	82	40
Cook Mountain Formation	7	2	24	13	24	11	5	3	5	2	16	2	5	9	21	14
Sparta Sand	85	24	141	2	141	2	80	3	74	1	106	91	10	5	130	30
Weches Formation	0	0	5	4	5	3	0	0	1	0	5	0	3	2	4	4
Queen City Sand	48	23	88	9	89	7	27	8	29	0	60	32	11	17	72	30
Carrizo Sand	9	5	10	0	11	0	5	0	4	0	6	4	1	1	9	3
Carrizo Sand and Wilcox Group (tapped by dually-completed wells)	14	3	17	0	17	1	12	3	10	0	16	10	3	3	17	4
Simsboro Sand Member of Rockdale Fromation of Plummer (1932)	19	5	21	0	21	1	12	2	11	0	14	0	9	5	20	0
Wilcox Group (excluding Simsboro Sand)	3	3	4	0	4	1	1	0	1	0	4	1	1	2	4	0
Totals	328	142	548	77	549	114	256	33	251	4	386	162	101	123	495	251

1/ Upper limit of soft water.

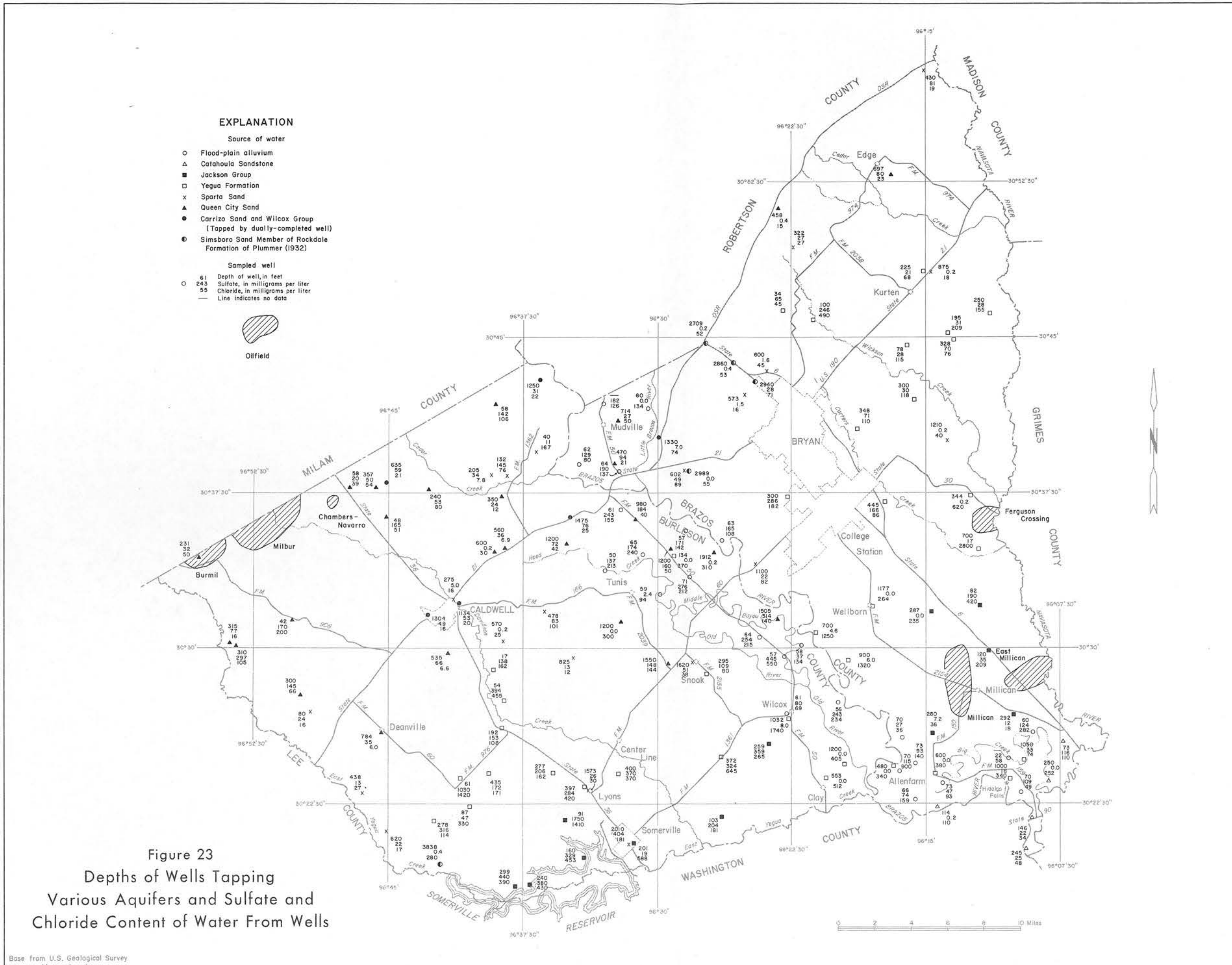


Figure 23
Depths of Wells Tapping Various Aquifers and Sulfate and Chloride Content of Water From Wells

Table 10.—Pesticidal Analyses of Water Samples From Selected Wells

WELL	DEPTH (FT)	DATE	PESTICIDE FOUND AND AMOUNT (MICROGRAMS/LITER)
BJ-59-13-903	34	July 15, 1970	DDT, 0.05; Methoxychlor, 0.64; 2,4-D, 4.3; 2,4,5-T, 1.7
BJ-59-20-530	70	July 17, 1970	Methyl Parathion, 0.02
BJ-59-20-926	70	do.	DDT, 0.02; Methyl Parathion, 0.05
BJ-59-38-903	73	July 16, 1970	None
BS-59-18-904	635	July 10, 1970	DDE, 0.01; DDT, 0.01
BS-59-26-306	17	July 13, 1970	None
BS-59-28-309	72	July 9, 1970	DDE, 0.02; DDT, 0.01
BS-59-29-509	55	do.	None
BS-59-29-803	51	do.	DDT, 0.01

Industrial Use

The quality of water for industry does not necessarily depend on its acceptability for human consumption, but varies according to the individual requirements for each process. A few of the limits for chemical constituents in water to be used for industry are given in Table 11; for more detailed information on the requirements for specific industries, the reader is referred to Nordell (1961).

Corrosion is the most widespread and probably the most costly water-related difficulty with which industry must cope. Large concentrations of dissolved solids, chloride, and sulfate, low or high pH, and small concentrations of calcium usually are conducive to corrosion. In Brazos and Burleson Counties, the pH varies considerably but generally is between 7 and 8. The concentrations of dissolved solids, chloride, sulfate, and calcium in ground water in Brazos and Burleson Counties generally are relatively low in the Wilcox Group and Carrizo, Queen City, and Sparta Sands. These constituents are quite variable in concentration in the other aquifers except for calcium, which generally has a higher concentration. The corrosive potential of ground water in the report area thus varies among some of the aquifers.

Although some calcium hardness is desirable for the prevention of corrosion, excessive hardness is objectionable for most industrial applications because it contributes to the formation of scale in boilers, pipes, water heaters, radiators, and various other equipment where water is heated or evaporated. Generally, much of the water from the Wilcox Group and Carrizo, Queen City, and Sparta Sands will require little or no softening for many industrial applications.

Boiler-feed water for the production of steam must meet rigid chemical-quality requirements because the problems of corrosion and scale are intensified. Treatment of boiler water generally is needed, and therefore its suitability for treatment must be considered because in closed systems the boiler water is reused many times. Excessive silica in boiler water is undesirable because it forms a hard scale, the scale-forming tendency increasing with pressure in the boiler. The following table shows maximum suggested concentrations of silica for water used in boilers (Moore, 1940, p. 263).

CONCENTRATION OF SILICA (MG/L)	BOILER PRESSURE (POUNDS PER SQUARE INCH)
40	Less than 150
20	150-250
5	251-400
1	More than 400

The table shows that the upper limit of silica in boiler-feed water is 20 mg/l if boiler pressures are between 150 and 250 psi (pounds per square inch). Of 262 determinations of silica, the concentration of silica ranged from 2.9 to 95 mg/l; 145 samples (39 percent) exceeded 20 mg/l. Most of the samples from the Wilcox Group and Carrizo, Queen City, and Sparta Sands were in the 20 mg/l or less group. Thus, if boiler pressure is less than 250 psi, silica is not a problem when pumping from these aquifers.

Table 11.—Water-Quality Tolerances for Industrial Applications [1]

[Allowable Limits in Milligrams Per Liter Except as Indicated]

INDUSTRY	TURBIDITY	COLOR	COLOR $+O_2$ CONSUMED	DISSOLVED OXYGEN (ml/1)	ODOR	HARDNESS	ALKALINITY (AS $CaCO_3$)	pH	TOTAL SOLIDS	Ca	Fe	Mn	Fe+ Mn	Al_2O_3	SiO_2	Cu	F	CO_3	HCO_3	OH	$CaSO_4$	Na_2SO_4 TO Na_2SO_3 RATIO	GENERAL [2]
Air Conditioning [3]	--	--	--	--	--	--	--	--	--	--	0.5	0.5	0.5	--	--	--	--	--	--	--	--	--	A,B
Baking	10	10	--	--	--	(4)	--	--	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	C
Boiler feed:																							
0-150 psi	20	80	100	2	--	75	--	8.0+	3,000-1,000	--	--	--	--	5	40	--	--	200	50	50	--	1 to 1	--
150-250 psi	10	40	50	.2	--	40	--	8.5+	2,500-500	--	--	--	--	.5	20	--	--	100	30	40	--	2 to 1	--
250 psi and up	5	5	10	0	--	8	--	9.0+	1,500-100	--	--	--	--	.05	5	--	--	40	5	30	--	3 to 1	--
Brewing: [5]																							
Light	10	--	--	--	Low	--	75	6.5-7.0	500	100-200	.1	.1	.1	--	--	--	1	--	--	--	100-200	--	C,D
Dark	10	--	--	--	Low	--	150	7.0+	1,000	200-500	.1	.1	.1	--	--	--	1	--	--	--	200-500	--	C,D
Canning:																							
Legumes	10	--	--	--	Low	25-75	--	--	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	C
General	10	--	--	--	Low	--	--	--	--	--	.2	.2	.2	--	--	--	1	--	--	--	--	--	C
Carbonated beverages [6]	2	10	10	--	0	250	50	--	850	--	.2	.2	.3	--	--	--	.2	--	--	--	--	--	C
Confectionary	--	--	--	--	Low	--	--	(7)	100	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	--
Cooling [8]	50	--	--	--	--	50	--	--	--	--	.5	.5	.5	--	--	--	--	--	--	--	--	--	A,B
Food, general	10	--	--	--	Low	--	--	--	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	C
Ice (raw water) [9]	1-5	5	--	--	--	--	30-50	--	300	--	.2	.2	.2	--	10	--	--	--	--	--	--	--	C
Laundering	--	--	--	--	--	50	--	--	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	--
Plastics, clear, undercolored	2	2	--	--	--	--	--	--	200	--	.02	.02	.02	--	--	--	--	--	--	--	--	--	--
Paper and pulp: [10]																							
Groundwood	50	20	--	--	--	180	--	--	--	--	1.0	.5	1.0	--	--	--	--	--	--	--	--	--	A
Kraft pulp	25	15	--	--	--	100	--	--	300	--	.2	.1	.2	--	--	--	--	--	--	--	--	--	--
Soda and sulfite	15	10	--	--	--	100	--	--	200	--	.1	.05	.1	--	--	--	--	--	--	--	--	--	--
Light paper, HL-Grade	5	5	--	--	--	50	--	--	200	--	.1	.05	.1	--	--	--	--	--	--	--	--	--	B
Rayon (viscose) pulp:																							
Production	5	5	--	--	--	8	50	--	100	--	.05	.03	.05	<8.0	<25	<5	--	--	--	--	--	--	--
Manufacture	.3	--	--	--	--	55	--	7.8-8.3	--	--	.0	.0	.0	--	--	--	--	--	--	--	--	--	--
Tanning [11]	20	10-100	--	--	--	50-135	135	8.0	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	--
Textiles:																							
General	5	20	--	--	--	20	--	--	--	--	.25	.25	--	--	--	--	--	--	--	--	--	--	--
Dyeing [12]	5	5-20	--	--	--	20	--	--	--	--	.25	.25	.25	--	--	--	--	--	--	--	--	--	--
Wool scouring [13]	--	70	--	--	--	20	--	--	--	--	1.0	1.0	1.0	--	--	--	--	--	--	--	--	--	--
Cotton bandage [13]	5	5	--	--	Low	20	--	--	--	--	.2	.2	.2	--	--	--	--	--	--	--	--	--	--

1/ American Water Works Association, 1950.
2/ A—No corrosiveness; B—No slime formation; C—Conformance to Federal drinking water standards necessary; D-NaCl, 275 mg/l.
3/ Waters with algae and hydrogen sulfide odors are most unsuitable for air conditioning.
4/ Some hardness desirable.
5/ Water for distilling must meet the same general requirements as for brewing (gin and spirits mashing water of light-beer quality; whiskey mashing water of dark-beer quality).
6/ Clear, odorless, sterile water for syrup and carbonization. Water consistent in character. Most high quality filtered municipal water not satisfactory for beverages.
7/ Hard candy requires pH of 7.0 or greater, as low value favors inversion of sucrose, causing sticky product.
8/ Control of corrosiveness is necessary as is also control of organisms, such as sulfur and iron bacteria, which tend to form slimes.
9/ Ca $(HCO_3)_2$ particularly troublesome. $Mg(HCO_3)_2$ tends to greenish color. CO_2 assists to prevent cracking. Sulfates and chlorides of Ca, Mg, Na should each be less than 300 mg/l (white butts).
10/ Uniformity of composition and temperature desirable. Iron objectionable as cellulose adsorbs iron from dilute solutions. Manganese very objectionable, clogs pipelines and is oxidized to permanganates by chlorine, causing reddish color.
11/ Excessive iron, manganese, or turbidity creates spots and discoloration in tanning of hides and leather goods.
12/ Constant composition; residual alumina 0.5 mg/l.
13/ Calcium, magnesium, iron, manganese, suspended matter, and soluable organic matter may be objectionable.

The temperature of water is important to industries using water for cooling purposes. Therefore, a geothermal gradient for water temperatures is useful to determine the expected temperature of water from specific depths below the land surface. Figure 24 is a graph of the geothermal gradient showing temperatures of water from wells in Brazos and Burleson Counties. The temperatures are of water from wells ranging in depth below land surface from 23 to 2,975 feet.

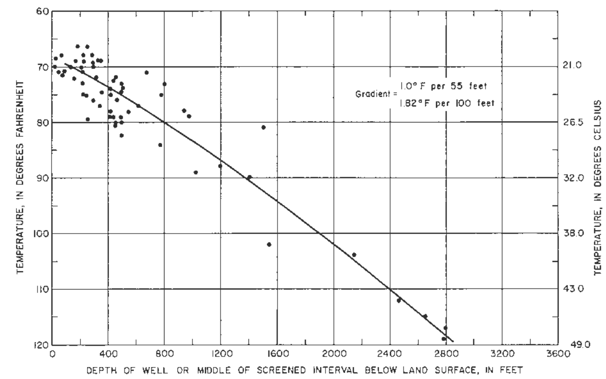


Figure 24.—Temperature Gradient of Water From Wells

The temperatures for water wells in Brazos and Burleson Counties indicate an average gradient of about 1°F increase for every 55 feet in depth, or an average of about 1.82°F increase per 100 feet.

The temperature of a water sample when collected generally is less than the temperature of the aquifer unless the water has been discharging for a sufficient length of time. Flowing or pumping wells having a small discharge lose some of the heat of the water to the rocks on its slow travel upward.

In summary, ground water in Brazos and Burleson Counties is suitable or can be made suitable for many industrial applications. Although the corrosive potential of the water varies among some of the aquifers and should be carefully considered, much of the water from the Wilcox Group, and Carrizo, Queen City, and Sparta Sands will not require softening for certain industrial uses.

Irrigation

Suitability of water for irrigation depends on the chemical quality of water and other factors such as soil texture and composition, subsoil texture, type of crop, irrigation practices, and amount of rainfall. Many classifications of irrigation water express suitability in terms of one or more variables and offer criteria for evaluating the relative overall suitability rather than placing rigid limits on certain chemical constituents. The more important characteristics pertinent to such evaluation of water for irrigation are the proportion of sodium to total ions, an index of the sodium or alkali hazard; total concentration of soluble salts, an index of the salinity hazard; amount of boron; and RSC (residual sodium carbonate).

A system of classification commonly used for judging suitability of the quality of water for irrigation was proposed by the U.S. Salinity Laboratory Staff (1954, p. 69-82). It is based primarily on the salinity hazard as measured by the electrical conductivity of the water and on the sodium hazard as measured by the SAR (sodium adsorption ratio). Wilcox (1955, p. 15) stated that this system of classification ... "is not directly applicable to supplemental waters used in areas of relatively high rainfall". Because the precipitation in the report area averages 39.00 inches, most irrigation would be supplemental; the classification therefore is not directly applicable, but nevertheless is useful as a guide.

The salinity and sodium hazards of ground water from various aquifers and at a representative number of sites in the report area, are shown in Figure 25. Figure 25 indicates that the water ranges from low to very high in sodium and salinity hazards. Most of the water samples represented on the diagram have low to very high sodium hazards and medium to high salinity hazards. The medium, high, and very high sodium and salinity hazards, however, do not necessarily preclude the use of such water for irrigation as the water-quality requirements for supplemental irrigation are not stringent.

Another factor used in assessing suitability of water for irrigation is RSC. Excessive RSC will cause the water to be alkaline, and the organic content of the soil on which it is used may become grayish black (most of the topsoil of the flood-plain alluvium is naturally grayish black). The soil thus affected is referred to as "black alkali". Wilcox (1955, p. 11) states that laboratory and field studies have resulted in the conclusion that water containing more than 2.5 me/l (milliequivalents per liter) RSC is unsuitable for irrigation; water containing from 1.25 to 2.5 me/l is marginal, and water containing less than 1.25 me/l probably is safe.

The RSC as determined in 347 samples ranged from 0.00 to 23.6 me/l. Of these 347 samples, 187 (54 percent) had less than 1.25 me/l RSC, 118 of which had 0.00 RSC; 36 samples (10 percent) were in the 1.25 to 2.5 me/l range; and 124 (36 percent) had more than 2.5 me/l. Very few of the samples containing more than 2.5 me/l were from the terrace deposits or flood-plain alluvium.

Even though RSC was more than the suggested 2.5 me/l limit in 36 percent of the samples, it should not be a problem in the report area if good irrigation practices and proper use of soil amendments are carried out. Presently very little water containing more than 1.25 me/l RSC is used for irrigation in the report area. Furthermore, the degree of leaching will modify the limit of RSC to some extent (Wilcox, Blair, and Bower, 1954, p. 265). Most of the upland soils in Brazos and Burleson Counties are classed as sandy loams, and this would be conducive to a high degree of leaching. The combination of sandy soil and leaching from considerable rainfall should tend to reduce any harmful effects of high RSC waters when used for supplemental irrigation.

An excessive concentration of boron renders water unsuitable for irrigation. Scofield (1936, p. 286) indicated that boron concentrations of as much as 1 mg/l are permissible for irrigating most boron-sensitive crops, and concentrations as much as 3 mg/l are permissible for the more boron-tolerant crops. Of 139 samples analyzed for boron, only 18 contained boron in excess of 1.0 mg/l, and half of these were from the Yegua Formation. Only two of 71 samples from the flood-plain alluvium contained boron in excess of 1.0 mg/l. Probably only a very small number of wells produce water containing boron above limits of tolerant plants. Therefore, boron is not considered to be a problem in the report area.

Because irrigation in the report area is practiced only during periods of deficient rainfall, and because the ground water sampled meets most of the various irrigation standards, use of ground water for supplemental irrigation in the report area is considered safe, especially in view of the fact that the average annual precipitation is substantial and the soils are generally sandy. Also, stock feed is the principal crop irrigated on the upland and is relatively tolerant to sodium and salinity hazards. The sprinkler system of application is used by all upland irrigators in the report area, and this method may permit the use of poor quality water because small, uniform applications are possible and prudent with the relatively small-capacity wells.

Production and Disposal of Oil-Field Brine

Oil and gas are produced in Brazos and Burleson Counties, but relatively little oil-field brine has been produced or was being produced in 1969-70, in conjunction with oil and gas production. Only four oil and gas fields were in operation in 1969-70: Millican and East Millican Fields, both near Millican in Brazos County, and Burmil and Milbur Fields in northwestern Burleson County. The Ferguson Crossing and Chambers-Navarro Fields in Brazos and Burleson Counties, respectively, were not in operation in 1969-70.

The approximate locations of the fields in the report area are shown on Figure 23. According to Texas Water Commission and Texas Water Pollution Control Board (1963, p. 14), no oil-field brine was produced in the report area in 1961. A survey by the Railroad Commission of Texas in 1967 shows oil-field brine production from only two wells that year. In 1967 one well in the Ferguson Crossing Field produced 7,020 barrels of brine which was stored in an unlined pit. On December 11, 1969, the writer observed that this well was no longer producing oil or brine.

Well BS-59-26-201 in the Chambers-Navarro Field in 1967 produced 365 barrels of brine which was stored in an unlined pit. On March 31, 1970, the writer observed that this well was no longer producing oil or brine. During field work in 1969-70, the writer observed oil-field brine production at only one location; about 5 gpm was being produced in the Burmil Field in northwestern Burleson County. Many of the oil and gas wells in the report area in 1969-70 were recently drilled and were not in existence at the time of the 1967 oil-field brine survey.

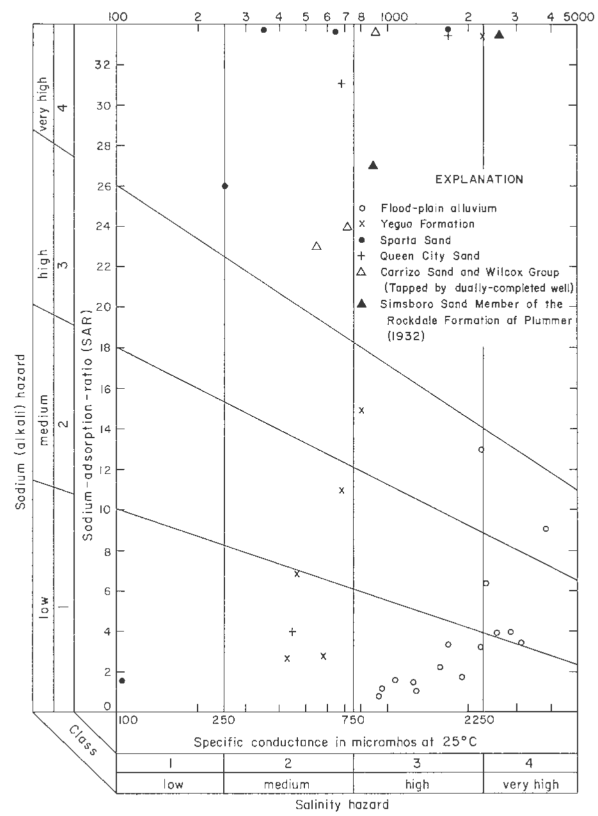


Figure 25.—Classification of Irrigation Waters

CONCLUSIONS AND NEEDS FOR FURTHER STUDIES

Large quantities of ground water are available for development in Brazos and Burleson Counties. A total of about 290 million acre-feet of fresh to slightly saline water is stored in principal aquifers—Carrizo-Wilcox aquifer, Queen City Sand, Sparta Sand, and flood-plain alluvium—but only about half of this quantity is available to wells. About 64,000 acre-feet per year or 57 mgd can be pumped from these aquifers on a long-term basis without depleting the supply. Thus the pumpage of 38,000 acre-feet or 34 mgd in 1969 could be increased about two-thirds without depleting the supply.

Available records of the pumpage of ground water for public supply for the period 1940-70 indicate an 800 percent increase in pumpage while the two-county population increased 50 percent for the same period. The quantity of water pumped for public supply in 1970 (12,000 acre-feet) from the principal upland aquifers—Carrizo-Wilcox aquifer, Queen City and Sparta Sands—is small compared with the quantity available in these aquifers (at least 34,400 acre-feet per year).

In Brazos County, the rate of withdrawal of ground water from the flood-plain alluvium for irrigation apparently has about reached the limit of available supply in the flood plain northwest of Bryan. This is the result of concentrated pumping from about 150 irrigation wells plus the probable leakage of water from the flood-plain alluvium into the underlying Sparta.

In Burleson County, the rate of withdrawal from the alluvium probably has not reached the limit of availability because the wells in the alluvium are more widely dispersed than in Brazos County and because leakage from the alluvium into the underlying Yegua is not significant.

Ground water of good chemical quality is available from many of the aquifers. The quality of the water from the Carrizo-Wilcox aquifer, Queen City Sand, and Sparta Sand generally is acceptable for public supply, many industrial uses, and supplemental irrigation. Water from the flood-plain alluvium is suitable for irrigation and some industrial uses, but mainly because of the hardness and high iron content, the water is not generally acceptable for public supply. The Weches, Cook Mountain, and Yegua Formations, Jackson Group, Catahoula Sandstone, and terrace deposits mostly contain water of poorer quality than that in the aquifers discussed above.

Although the water resources of the upland area are for the most part undeveloped except by the wells at the Bryan and Texas A&M University well fields, a program of periodic collection of hydrologic data should be established to refine the estimates of availability that have been made. This program should include expansion of the present network of observation wells (the observation-well program covering the flood-plain alluvium probably is adequate) to include the Wilcox Group and Carrizo, Queen City, and Sparta Sands, plus a generalized coverage of the Yegua Formation, Jackson Group, and Catahoula Sandstone.

Most of the observation wells in the Sparta Sand should be concentrated in the vicinity of the Bryan and Texas A&M University well fields. If existing wells are not properly located and are not sufficient in number, Bryan and Texas A&M University should consider drilling the observation wells. The wells should be distributed on the Sparta outcrop updip from the well fields, downdip from the fields, and along a line through the two fields. Also, observation wells in the Sparta outside the area of influence of the pumping from the well fields should be included to obtain data on water-level fluctuations due to variations in precipitation. The addition of observation wells in the Sparta Sand in the flood-plain area northwest of Bryan is recommended to determine the reason for the decline of the water levels in the flood-plain alluvium.

A network of observation wells in the Simsboro Sand Member should be established around the Bryan and Texas A&M University well fields. The wells would have to be drilled because privately-owned wells in the Simsboro Sand Member are not known to be available as observation wells.

The present program of an annual inventory of the ground-water pumpage from the upland aquifers, by municipalities and industries, and of the five-year inventory of irrigation pumpage, probably is adequate. Wells should be selected for resampling purposes to keep abreast of possible changes in quality of the water as a result of heavy pumpage or pollution from oil-field brine disposal.

DEFINITIONS OF TERMS

In this report, certain technical terms or terms subject to different interpretations are used. For convenience and clarification these terms are defined as follows:

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

Artesian water.—Ground water that is under sufficient pressure to rise above the level at which it is encountered in a well; it does not necessarily rise to or above the surface of the ground.

Brine.—Water containing more than 35,000 mg/l (milligrams per liter) dissolved solids (Winslow and Kister, 1956, p. 5).

Fresh water.—Water containing less than 1,000 mg/l dissolved solids (Winslow and Kister, 1956, p. 5).

Hydraulic conductivity.—The rate of flow of a unit volume of water in unit time at the prevailing kinematic viscosity through a cross section of unit area, measured at right angles to the direction of flow, under a hydraulic gradient of unit change in head over unit length of flow path. Formerly called field coefficient of permeability.

Moderately saline water.—Water containing 3,000 to 10,000 mg/l dissolved solids (Winslow and Kister, 1956, p. 5).

Potentiometric surface.—The imaginary surface to which water will rise in artesian wells or the surface formed by the water table in the outcrop areas. The terms "water table" and "potentiometric surface" are synonymous in the outcrop area, but potentiometric surface alone is applicable in artesian areas.

Resistivity.—That property of a material that characterizes its opposition to the flow of electricity. The resistivity of a water-saturated material is a function of both the texture of the material and the contained fluid and is recorded in ohms per square meter per meter (ohms m^2/m) in electrical logs of wells.

Slightly saline water.—Water containing 1,000 to 3,000 mg/l dissolved solids (Winslow and Kister, 1956, p. 5).

Specific capacity.—The discharge of a well expressed as the rate of yield per unit of drawdown, generally in gallons per minute per foot of drawdown.

Specific conductance (conductivity).—A measure of the ability of a solution to conduct electricity, expressed in micromhos per centimeter at 25°C. It is approximately proportional to the content of dissolved solids.

Storage coefficient.—The volume of water an aquifer releases from or takes into storage per unit of surface area of the aquifer per unit change in the component of head normal to that surface.

Transmission capacity.—The quantity of water that can be transmitted through a given width of an aquifer at a given hydraulic gradient.

Transmissivity.—The rate at which water of the prevailing kinematic viscosity is transmitted through a unit width of the aquifer under a unit hydraulic gradient. It is the product of the hydraulic conductivity and the saturated thickness of the aquifer. Formerly called coefficient of transmissibility.

Very saline water.—Water containing 10,000 to 35,000 mg/l dissolved solids (Winslow and Kister, 1956, p. 5).

Water level; static level; or hydrostatic level.—In an unconfined aquifer, the distance from the land surface to the water table. In a confined (artesian) aquifer, the level to which the water will rise either above or below land surface.

Water table.—The upper surface of a saturated zone except where that surface is formed by impermeable material.

Yield.—The following ratings apply for general discussion of yields of wells in Brazos and Burleson Counties.

DESCRIPTION	YIELD GALLONS PER MINUTE (GPM)
Small	Less than 50
Moderate	50 to 500
Large	More than 500

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Table 12--Records of Wells and Springs

All wells are drilled unless otherwise noted in remarks column.

Water levels : Reported water levels given in feet; measured water levels given in feet and tenths.
Method of lift and type of power : A, airlift; B, bucket; E, electric; G, gasoline, oil, butane, or diesel engine; H, hand; N, none; P, piston; S, submersible; T, turbine; W, windmill. Number indicates horsepower.
Use of water : D, domestic, Ind, industrial; Irr, irrigation; N, none; P, public supply; S, livestock.
Water-bearing unit : Twi, Wilcox Group excluding Simsboro Sand Member of Rockdale Formation of Plummer (1932) ; Twis, Simsboro Sand Member of Rockdale Formation of Plummer (1932); Tc, Carrizo Sand; Tqc, Queen City Sand; Tw, Weches Formation; Ts, Sparta Sand; Tcm, Cook Mountain Formation; Ty, Yegua Formation; Tj, Jackson Group; Tcs, Catahoula Sandstone; Qt, Terrace deposits; Qfpa, Flood-plain alluvium.

							WATER LEVEL					WELL PERFORMANCE DATA			
WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	ALTITUDE OF LAND SURFACE (FT)	ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	YIELD	DRAWDOWN	DATE	REMARKS
							BRAZOS COUNTY								
* BJ-59-06-301	Grant McDonald	1926	33	8	--	Tcm	340	21.7	Jan. 12, 1938	N	N	--	--	--	[1]
* 302	Bruce Weaver	1967	430	4,2	415-430	Ts	280	+	Nov. 11, 1969	Flows	D,S	--	--	--	Measured flow 7 gpm on Nov. 11, 1969. [2]
303	do.	--	16	30	--	Tcm	270	9.8	do.	N	N	--	--	--	Dug well, shored with concrete rings.
501	Willie Skubol	1966	113	113?	81-113	Tcm	363	20	June 2, 1966	S,E 1/2	D,S	--	--	--	[2]
* 502	--	--	350±	5	--	Ts	351	+ 5.6	July 23, 1970	Flows	S	--	--	--	Measured flow 0.4 gpm on July 23, 1970.
601	Vick Robinson	1954	220±	3	--	Tcm	305	6	1954	J,E	D,S	--	--	--	Cased to 80 ft.
* 602	do.	1954	210±	2	--	Ts	280	+	Nov. 11, 1969	Flows	S	--	--	--	Measured flow 0.5 gpm on Nov. 11, 1969.
* 603	M. T. Rainey	--	185	4	--	Ts	303	--	--	S,E	D	--	--	--	--
604	H. B. Poteet	1968	328	4,2	286-328	Ts	285	+	Aug. 19, 1968	Flows	D,S	7[3]	--	Aug. 19, 1968	[2]
* 701	W. H. Hanover	1915	34	36	--	Tcm	360	23.5	Jan. 12, 1938	N	N	--	--	--	Dug well. Abandoned. [1]
* 702	Joe R. Nash	1964	255	3,2	--	Ts	373	90	July 31, 1964	P,E 3/4	D,S	--	--	--	[2]
801	Albert Rychlik	1969	326	4	--	Ts	380	70	1969	J,E	D,S	--	--	--	--
* 901	Jack Irick	1969	697	4	--	Tqc	352	--	--	S,E	D,S	--	--	--	--
* 902	do.	1961	300±	4	--	Ts	343	--	--	J,E	D,S	--	--	--	--
07-101	Bruce Weaver	1962	500±	10	--	Ts	270	+	Nov. 11, 1969	Flows,T	Irr	--	--	--	Estimated flow 100 gpm on Nov. 11, 1969.
* 401	H. B. McCuistion	--	--	--	--	Ts	272	--	--	S,E	D,S	--	--	--	--
* 13-302	Triangle Z Dairy	1969	458	4,2	443-458	Tqc	362	82	Feb. 12, 1969	S,E 1 1/2	D,S	35[3]	--	Feb. 12, 1969	[2]
* 601	W. R. Springhall	1965	216	2	--	Ts	378	65	Feb. 1, 1965	J,E	D,S	--	--	--	--
* 602	R. C. Castenson & Sons	1969	266	--	--	Ts	400	--	--	S,E	D,S	--	--	--	--
* 603	Clyde Wilson	1955	286	4,2 1/2	256-286	Ts	373	115	1955	S,E 1 1/2	D,S	--	--	--	--
* 604	R. C. Castenson & Sons	1965	240±	--	--	Ts	398	--	--	S,E	D,S	--	--	--	--
605	A. Kapetsky	1966	307	4,2	290-307	Ts	365	--	--	S,E,3/4	D,S	--	--	--	[2]
901	Cullen Mancuso	1969	150	4,3,2	129-150	Ts	365	60	Apr. 22, 1969	S,E 1/2	D	15[3]	--	Apr. 22, 1969	[2]
902	do.	--	146	3	--	Ts	365	55.2 53.9	Nov. 12, 1969 July 15, 1970	N	N	--	--	--	--
903	--Pattrella	--	34	36	--	Ty	353	28.9 25.0	Dec. 15, 1969 July 15, 1970	J,E	S	--	--	--	Dug well, shored with brick.
14-101	James Millberger	1968	133	4,2	108-133	Ts	352	63	Nov. 12, 1968	S,E 1/2	D,S	15[3]	--	Nov. 12, 1968	[2]
102	Jim Nichols	--	37	30	--	Ty	368	32.9	Dec. 16, 1969	N	N	--	--	--	Dug well, shored with concrete rings.
* 103	W. C. Scasta, Sr.	1932	96	2	--	Ts	330	+	do.	Flows	S	--	--	--	Cased to 20 ft. Measured flow 0.6 gpm on Dec. 16, 1969.
104	Jim Nichols	1967	313	4,2	--	Ts	360	85	July 28, 1967	S,E 3/4	D,S	15[3]	--	July 28, 1967	[2]
* 201	Edd Chytil	1963	307	4,2	262-307	Ts	351	90	July 19, 1963	P,E 3/4	D,S	--	--	--	--
202	Knox Kelley	1968	287	4	191-287	Ts	328	38	Nov. 6, 1968	J,E	D,S	--	--	--	[2] --
301	--	--	400±	3	--	Ts	268	+	Nov. 14, 1969	Flows	S	--	--	--	--
* 401	Wallace Stevener	1968	322	4,2	307-322	Ts	365	158	Apr. 16, 1968	S,E 3/4	D,S	30[3]	--	Apr. 16, 1968	--
402	Bill Presnal	1966	341	4,2	--	Ts	--	90	Sept. 9, 1966	S,E 1	D,S	15[3]	--	Sept. 9, 1966	[2]
403	do.	1966	284	4,2	--	Ts	350	90	Sept. 13, 1966	S,E 3/4	D,S	15[3]	--	Sept. 13, 1966	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
* BJ-59-14-501	J. H. Harris	1968	594	4,2	579-594	Ts	360	80	Apr. 2, 1968	S,E,3/4	D,S	30[3/]	--	Apr. 2, 1968	[2/]
502	George Kristynik	--	462	4,2	447-462	Ts	364	45	--	S,E,1/2	D,S	45[3/]	--	--	--
601	Will Klintworth	1965	289	4,2	274-289	Ty	357	90	Jan. 19, 1968	S,E,1/2	D,S	30[3/]	--	Jan. 19, 1968	--
* 602	Henry Odom well 1	1965	225	--	--	Ty	335	--	--	S,E	S,Irr	--	--	--	Irrigates about 40 acres with Well BJ-59-15-402.
603	Henry Odom	1969	212	4,2	143-212	Ty	330	73.4	Nov. 13, 1969	N	N	--	--	--	Did not afford sufficient water. [2/]
604	Buddy Lindeman	1964	512	4,2	--	Ts	340	90	May 16, 1964	S,E,1	D,S	--	--	--	--
701	Roy Barnes	1958	125±	7	--	Ty	308	4.7 4.7	Dec. 15, 1969 July 15, 1970	S,E,5	Irr	75[3/]	--	--	Has irrigated 20-30 acres. Rarely used.
702	do.	1967	500±	4	--	Ts	320	--	--	S,E	D,S	--	--	--	--
703	do.	--	290	4	--	Ts	320	--	--	S,E	D,S	--	--	--	--
* 704	P. A. Linerode	1963	431	4,2	418-431	Ts	342	105	Feb. 25, 1963	P,E	D,S	3[3/]	--	--	[2/]
* 705	Marshal Peters	--	100±	2	--	Ty	295	+	Dec. 16, 1969	Flows	S	--	--	--	--
801	M. Bowman	1964	471	3,2	--	Tcm	300	2	Dec. 1964	--	D,S	--	--	--	--
802	Aubrey Norre	1968	471	4,2	456-471	Ts	330	100	Feb. 24, 1968	S,E,3/4	S	40[3/]	--	Feb. 4, 1968	[2/]
* 803	Frank Metzer	1968	512	4,2	--	Tcm	290	30	1968	S,E	D,S	--	--	--	--
901	Raymond Buchanan	1965	246	4,2	163-246	Ty	358	80	July 31, 1965	S,E,1	D,S	--	--	--	--
902	Howard Horn	1968	553	4,2	533-553	Ts	295	115	Aug. 11, 1968	S,E,1	D,S	40[3/]	--	Aug. 11, 1968	[2/]
* 903	B. J. Kehlenbrink	1968	323	4,2	308-323	Tcm	332	70	Nov. 26, 1968	S,E,3/4	D,S	50[3/]	--	Nov. 26, 1968	--
904	George Dockery	1968	246	4,2	226-246	Ty	332	+107	Nov. 25, 1968	S,E,1/2	D,S	20[3/]	--	Nov. 25, 1968	--
15-101	Raymond Murphy	1968	460±	4,2	--	Ts	320	--	--	S,E	D,S	--	--	--	--
* 201	J. Herbita	--	600±	2	--	Tcm	240	+	Nov. 19, 1969	Flows	D	--	--	--	Measured flow 2.6 gpm on Nov. 19, 1969.
202	W. J. Hargett	1964	500±	--	--	Tcm	290	--	--	S,E	D	--	--	--	--
* 401	Feather Crest Farms, Inc.	1954	875	--	835-875	Ts	338	60	1954	T,E	D,S,Irr	200[3/]	--	1954	Irrigates about 20 acres.
* 402	Henry Odom well 2	1965	141	4,2	126-141	Ty	340	80	July 26, 1965	S,E,3	D,S,Irr	--	--	--	[3/] [2/]
403	Ben Metzer	1955	260±	4,2	240-260	Ty	320	75	1955	J,E	D,S	--	--	--	--
501	Lee Huffman	--	34	6	--	Ty	280	24.8	Nov. 19, 1969	B,H	N	--	--	--	--
701	Bert Weeks	1968	328	4,2	313-328	Ty	285	50	July 1968	S,E,3/4	D,S	--	--	--	[2/]
702	Fritz Kehlenbrink	1963	411	4,2	--	Ty	303	60	Feb. 5, 1963	P,E,1/2	D,S	--	--	--	--
* 703	Kazmeier Hatchery, Inc.	1954	900±	4	--	Ts	298	--	--	S,E	D,S	--	--	--	--
* 704	Ray Sanders	1963	195	4,2	173-195	Ty	298	50	Nov. 22, 1963	S,E,3	S,Irr	--	--	--	Irrigates 7 acres.
* 705	do.	1968	461	4,2	445-461	Tcm	298	72	Apr. 29, 1965	S,E,1	D,S	45[3/]	--	Apr. 29, 1965	--
706	Earl Ryan	1965	307	4,2	--	Ty	310	80	May 5, 1965	S,E,1	P	--	--	--	Furnishes water for trailer park.
* 801	H. W. Humphries	1957	250	8	208-250	Ty	220	+ 9	May 22, 1961	Flows,S,E	Irr	300	--	1957	Reported flow 80 gpm in 1957. Estimated flow 10 gpm on Oct. 10, 1960.
* 802	do.	--	90	4	--	Ty	220	+	1960	Flows	S	--	--	--	Cased to 42 ft. Reported flow 10 gpm in 1960.
* 803	Martin Riley	1969	492	4,2	477-492	Ty	275	30	Mar. 21, 1969	S,E,1/2	D,S	50[3/]	--	Mar. 21, 1969	Water sand at 215-240 ft tested, was high in iron. [2/]
20-305	--	--	42	18	--	Qfpa	244	24.4	July 15, 1960	N	N	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
									BRAZOS COUNTY						
BJ-59-20-306	--	--	44	18	--	Qfpa	245	30.7 31.4 35.8	Aug. 3, 1960 Feb. 4, 1963 Oct. 8, 1969	N N	N N	--	--	--	--
307	-- Varisco	--	55	18	--	Qfpa	243	35.0 37.9	July 13, 1960 Jan. 13, 1963	N	N	--	--	--	Abandoned.
310	U.S. Plywood - Champion Papers	--	--	--	--	Qfpa	244	31.5 32.7	June 3, 1964 Oct. 8, 1969	T,G	Irr	613 1,192	-- 16.42	July 18, 1963 Feb. 28, 1964	--
501	do.	--	64	14	--	Qfpa	255	40.3 40.9 42.6	Aug. 2, 1960 Feb. 5, 1963 Oct. 15, 1969	T,G	Irr	--	--	--	--
502	L. Nigliazzo	1955	64	18	--	Qfpa	255	35.6 38.0 41.0	May 30, 1961 Feb. 26, 1963 June 3, 1964	N	N	546 555	-- --	1956 1957	Abandoned.
* 503	Vince Court	1952	70	18	--	Qfpa	253	38.9	July 15, 1960	T,G	Irr	520 696	21.92 21.24	July 17, 1963 June 20, 1964	1/
504	do.	--	--	18	--	Qfpa	254	33.9 36.3 40.1	May 30, 1961 Feb. 26, 1963 Oct. 14, 1969	T,G	Irr	--	--	--	--
505	Varisco Estate	1956	--	18	--	Qfpa	251	37.1	Apr. 11, 1957	T,G	Irr	384 506	14.29 14.89	July 17, 1963 July 16, 1964	1/
506	Wilson Estate	1956	80?	15	--	Qfpa	252	36.0	do.	T,G	Irr	--	--	--	1/
508	L. Nigliazzo	1955	71	18	--	Qfpa	250	36.2 36.3 39.3 44.0	July 15, 1960 Feb. 26, 1963 June 3, 1964 Oct. 9, 1969	N	N	756 545	-- --	1956 1957	--
* 509	do.	1955	67	18	--	Qfpa	249	35.6	July 15, 1960	N	N	460 422	20.01 17.20	July 17, 1963 July 8, 1964	1/
510	M. Fazzino	1957	80	18	--	Qfpa	252	--	--	N	N	526	--	1957	--
511	do.	1957	80	18	--	Qfpa	252	35.3	Feb. 4, 1963	N	N	534	--	1956	--
512	Don Angonia	1955	53	14	--	Qfpa	250	31.6 38.3	Feb. 20, 1963 Oct. 9, 1969	T,G	Irr	456 565	-- --	1956 1957	--
514	M. Morello	1955	62	16	--	Qfpa	247	31.3 34.3 38.4	Jan. 29, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	342	24.44	July 16, 1963	--
515	-- Lazarone	1955	60	20	--	Qfpa	248	31.7 38.7	Jan. 30, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
516	do.	--	57	14	--	Qfpa	245	33.5 39.2	Jan. 30, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
517	do.	--	64	14	--	Qfpa	244	32.7 38.3	Jan. 30, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
518	--	--	76	18	--	Qfpa	248	36.4 42.5	Jan. 30, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
519	--	--	70	20	--	Qfpa	253	35.9 42.6	Jan. 30, 1963 Oct. 13, 1969	T,G	Irr	--	--	--	--
* 520	J. Fazzino	1961	80	16	--	Qfpa	252	35.2 39.0 41.7	Jan. 30, 1963 June 3, 1964 Oct. 14, 1969	T,G	Irr	375 621	14.96 17.64	July 17, 1963 July 16, 1964	--
* 521	do.	--	70	18	--	Qfpa	250	36.5 39.4 42.9	Jan. 30, 1963 June 3, 1964 Oct. 14, 1969	T,G	Irr	763 442	26.98 19.18	July 17, 1963 July 16, 1964	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL			METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA			REMARKS
							ALTITUDE OF LAND SURFACE (FT)	ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			YIELD	DRAWDOWN	DATE	
								BRAZOS COUNTY							
* BJ-59-20-522	J. Fazzino	--	--	--	--	Qfpa	247	40.9 41.6 42.4	Jan. 30, 1963 June 3, 1964 Oct. 14, 1969	T,G	Irr	510	5.49	July 16, 1964	--
523	--	--	67	--	--	Qfpa	252	35.6 39.3 41.4	Jan. 31, 1963 June 3, 1964 Oct. 14, 1969	T,G	Irr	530 470	20.67 22.99	July 17, 1963 July 16, 1964	--
* 524	--	--	--	18	--	Qfpa	249	38.6 44.3	Feb. 4, 1963 Oct. 8, 1969	T,G	N	--	--	--	--
* 527	John Angonia	--	70±	16	--	Qfpa	247	37.1	Oct. 9, 1969	T,G	Irr	--	--	--	--
* 528	--	--	--	--	--	Qfpa	250	35.6 38.4	June 3, 1964 Oct. 9, 1969	T,G	Irr	416 450	-- 25.40	July 16, 1963 June 25, 1964	--
* 529	Milton Lazarone	--	68	--	--	Qfpa	251	39.2 41.2	June 3, 1964 Oct. 14, 1969	T,G	Irr	440 786	-- 21.11	July 17, 1963 June 26, 1964	--
530	John Fazzino	--	70	18	--	Qfpa	252	39.4 43.3	June 3, 1964 Oct. 10, 1969	T,G	Irr	--	--	--	--
531	--	--	--	18	--	Qfpa	249	41.1	June 3, 1964	N	N	131	--	July 16, 1963	--
532	--	--	60	--	--	Qfpa	245	36.4	do.	T,G	Irr	515	--	July 17, 1963	--
533	--	--	--	--	--	Qfpa	249	38.8 42.6	June 3, 1964 Oct. 9, 1969	T,G	Irr	370 432	-- --	July 17, 1963 June 22, 1964	--
534	--	--	--	--	--	Qfpa	249	39.3 42.8	June 3, 1964 Oct. 8, 1969	T,G	Irr	446 379	-- 15.66	July 18, 1963 July 8, 1964	--
535	U.S. Plywood-Champion Papers	--	--	--	--	Qfpa	246	40.1 43.3	June 3, 1964 Oct. 8, 1969	T,G	Irr	424	--	July 18, 1963	--
536	-- Manning	--	67	--	--	Qfpa	249	38.9 44.5	June 3, 1964 Oct. 8, 1969	T,G	Irr	420	17.56	July 8, 1964	--
541	U.S. Geological Survey	1963	80	--	--	--	250	32.0	Dec. 2, 1963	N	N	--	--	--	Test hole.[2]
542	do.	1963	67	--	--	--	248	38.0	do.	N	N	--	--	--	Do.
543	Sam Morello	--	--	16	--	Qfpa	253	38.9 42.8	June 3, 1964 Oct. 14, 1969	T,G	Irr	--	--	--	--
544	--	--	61	20	--	Qfpa	245	36.9 38.5 42.3	Jan. 31, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	464 600	14.83 12.32	July 18, 1963 June 22, 1964	--
546	U.S. Plywood-Champion Papers	--	--	16	--	Qfpa	--	--	--	T,G	Irr	--	--	--	--
547	do.	--	65	16	--	Qfpa	--	44.3	Oct. 8, 1969	T,G	Irr	--	--	--	--
548	--	--	66	18	--	Qfpa	--	42.9	do.	T,G	Irr	--	--	--	--
549	L. Nigliazzo	--	67	16	--	Qfpa	--	42.1	Oct. 9, 1969	N	N	--	--	--	--
* 550	do.	--	67	16	--	Qfpa	--	42.1	do.	T,G	Irr	--	--	--	--
551	do.	--	81	16	--	Qfpa	--	43.2	do.	N	N	--	--	--	--
552	do.	--	60	18	--	Qfpa	--	41.1	do.	T,G	Irr	--	--	--	--
553	-- Lazarone	--	58	16	--	Qfpa	--	35.8	do.	T,G	Irr	--	--	--	--
554	--	--	--	--	--	Qfpa	251	39.7	Oct. 14, 1969	T,G	Irr	--	--	--	--
555	Sam Morello	--	--	--	--	Qfpa	--	--	--	T,G	Irr	--	--	--	--
557	John Fazzino	--	61	18	--	Qfpa	--	41.7	Oct. 14, 1969	T,G	Irr	--	--	--	--

See footnotes at end of table.

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
BJ-59-20-558	John Fazzino	1964	68	16	--	Qfpa	--	40.1	Oct. 14, 1969	T,G	Irr	--	--	--	--
* 559	do.	--	900±	2	--	Tc	250	+	do.	Flows	D,S	--	--	--	--
560	--	--	--	18	--	Qfpa	252	--	--	T,G	Irr	--	--	--	--
561	-- Astin	--	71	16	--	Qfpa	--	45.0	Oct. 14, 1969	T,G	Irr	--	--	--	--
562	Brazos River Chemical Company	1968	60	4	--	Qfpa	254	40	Oct. 14, 1968	S,E,5	Ind	60[3]	--	Oct. 14, 1968	[2]
* 563	Tony Varisco	--	350	3	--	Tqc	252	+	Dec. 19, 1969	Flows	D	--	--	--	Measured flow 13.6 gpm on Dec. 19, 1969.
* 564	Steele's Store	1920?	1,500	--	1,383-1,500	Tc,Twi	250	+ 8	Apr. 3, 1956	Flows	D	--	--	--	Estimated flow 200 gpm on Nov. 13, 1937. Converted oil test drilled to 4,135 ft and plugged back to 1,500 ft. [2]
* 565	do.	--	400±	2	--	Tqc	250	+	Nov. 13, 1937	Flows	D	--	--	--	Estimated flow 5 gpm on Nov. 13, 1937. Formerly bottled and sold.
601	U.S. Plywood-Champion Papers	--	58	18	--	Qfpa	243	35.5 38.0 44.2	July 15, 1960 June 3, 1964 July 22, 1970	N	N	500	--	July 18, 1963	--
602	Don Angonia	1954	70	18	--	Qfpa	242	35.5 37.1 42.3	Feb. 26, 1963 June 3, 1964 Dec. 1, 1969	T,G	Irr	440 300	-- 7.34	1957 July 17, 1963	--
* 603	C. Porterfield	1955	60	18	--	Qfpa	241	30.7	Mar. 15, 1957	T,G	Irr	317	18.08	July 17, 1963	[1]
604	Don Angonia	1956	69	18	--	Qfpa	245	36.5	July 15, 1960	N	N	588	--	1956	Abandoned.
605	do.	--	--	18	--	Qfpa	246	41.0	June 3, 1964	T,G	Irr	240	--	July 18, 1963	--
606	do.	1955	63	18	--	Qfpa	245	35.5 36.8	July 15, 1960 Sept. 28, 1960	N	N	567	--	1956	Abandoned.
607	M. Fazzino	1954	66	18	--	Qfpa	246	32.7	Feb. 26, 1963	N	N	810	--	do.	Do. [1]
608	do.	1955	64	18	--	Qfpa	245	33.1 38.7	Feb. 26, 1963 Oct. 10, 1969	T,G	Irr	822	--	do.	--
609	--	1960	51	16	--	Qfpa	244	35.2 33.7 33.6 39.2	Sept. 28, 1960 Feb. 15, 1961 May 30, 1961 Oct. 10, 1969	N	N	--	--	--	--
610	--	--	57	18	--	Qfpa	243	32.3 33.1 34.1	Aug. 2, 1960 Feb. 26, 1963 June 3, 1964	T,G	Irr	565	19.14	July 16, 1963	--
611	--	--	71	18	--	Qfpa	244	33.2 34.4 35.0	Aug. 2, 1960 Feb. 26, 1963 June 3, 1964	T,G	Irr	470	31.94	do.	--
612	--	--	--	18	--	Qfpa	242	32.9 33.9 37.6	Feb. 4, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	520	22.20	do.	--
613	--	--	--	18	--	Qfpa	243	32.2 32.9 37.6	Aug. 2, 1960 Feb. 26, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
614	--	1956	57	18	--	Qfpa	245	35.7 36.9 38.5 41.4	July 15, 1960 Feb. 4, 1963 June 3, 1964 Oct. 8, 1969	T,G	Irr	344 303	14.64 15.32	July 18, 1963 July 28, 1964	--
615	--	--	55	18	--	Qfpa	244	39.1 40.5 44.0	Jan. 30, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	279 385	5.90 4.07	July 17, 1963 June 22, 1964	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
* BJ-59-20-616	--	--	49	18	--	Qfpa	243	37.9 39.1 43.0	Jan. 30, 1963 June 3, 1964 Oct. 8, 1969	T,G	Irr	280	8.56	July 17, 1963	--
617	--	--	54	16	--	Qfpa	244	36.5 35.9 39.1	Jan. 30, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	--	--	--	--
618	--	--	51	18	--	Qfpa	244	35.5 42.6	Jan. 30, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
619	--	--	60	15	--	Qfpa	243	33.9 37.9	Jan. 30, 1963 Oct. 10, 1969	T,G	Irr	--	--	--	--
620	--	--	47	18	--	Qfpa	241	25.2 26.7	Jan. 30, 1963 Oct. 9, 1969	N	N	--	--	--	--
* 621	--	--	75	16	--	Qfpa	241	30.9 31.4 34.2	Jan. 30, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	655 754	21.40 14.52	July 16, 1963 July 8, 1964	--
622	L. Nigliazzo	1955	64	18	--	Qfpa	247	37.0	July 15, 1960	T,G	Irr	566	--	1956	--
623	-- Jaresco	--	52	--	--	Qfpa	244	37.2	Jan. 31, 1963	T,G	Irr	--	--	--	--
624	--	--	--	--	--	Qfpa	243	33.1 36.6	June 3, 1964 Oct. 10, 1969	T,G	Irr	170	--	Aug. 7, 1963	--
625	--	--	--	--	--	Qfpa	244	34.3 37.1	June 3, 1964 Oct. 9, 1969	T,G	Irr	590	--	July 17, 1963	--
626	U.S. Plywood-Champion Papers	--	--	--	--	Qfpa	244	--	--	N	N	261	--	July 18, 1963	--
* 627	M. Fazzino	--	714	4	--	Tqc	246	+	Dec. 19, 1963	Flows	D,S	--	--	--	--
628	U.S. Geological Survey	1963	52	--	--	--	240	32.0	Nov. 27, 1963	--	--	--	--	--	Test hole.[2/]
629	do.	1963	60	--	--	--	243	38.0	do.	--	--	--	--	--	Do.
630	M. Fazzino	1963	68	16	--	Qfpa	246	34.4	Oct. 3, 1963	T,G	Irr	715	17.18	July 17, 1963	--
631	--	--	87	18	--	Qfpa	245	35.3	Oct. 8, 1969	N	N	--	--	--	--
637	U.S. Plywood - Champion Papers	--	49	18	--	Qfpa	244	41.6	do.	N	N	--	--	--	--
638	do.	--	--	16	--	Qfpa	245	--	--	T,G	Irr	--	--	--	--
639	Don Angonia	--	--	18	--	Qfpa	243	43.4	Oct. 8, 1969	T,G	Irr	--	--	--	--
640	--	--	--	--	--	Qfpa	243	--	--	T,G	Irr	--	--	--	--
641	--	--	--	18	--	Qfpa	242	41.2	Oct. 9, 1968	T,G	Irr	--	--	--	--
642	-- Angonia	--	--	18	--	Qfpa	245	44.1	do.	T,G	Irr	--	--	--	--
643	do.	--	39+	18	--	Qfpa	245	--	--	N	N	--	--	--	Hole filled to 39 ft.
644	--	--	58	18	--	Qfpa	244	37.2	Oct. 9, 1969	N	N	--	--	--	--
* 645	--	--	400±	2	--	Tqc	243	+ 8.1	July 27, 1970	Flows	D	--	--	--	Rarely used. Measured flow 10 gpm on July 22, 1970.
646	--	--	--	16	--	Qfpa	243	--	--	T,G	Irr	--	--	--	--
647	--	--	60	18	--	Qfpa	245	38.3	Oct. 10, 1969	T,G	Irr	--	--	--	--
648	--	--	--	--	--	Qfpa	244	--	--	N	N	--	--	--	--
649	Don Angonia	--	300±	2	--	Ts	241	+ 3.6 + 3.7 + 3.7	Dec. 1, 1969 July 22, 1969 Nov. 3, 1970	Flows	D	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
* BJ-59-20-702	A. J. Wallin	--	400±	4	--	Tqc	243	+	Dec. 19, 1969	Flows	D,S	--	--	--	Measured flow 3 gpm on Dec. 19, 1969. Oil test.
* 703	do.	1933	450±	10	--	Tqc	245	+	do.	Flows	D,S	--	--	--	Oil test drilled to 1,910 ft., cased to 80 ft., probably plugged back.
801	John Fazzino	--	61	18	--	Qfpa	247	37.6 38.4	Aug. 2, 1960 Feb. 4, 1963	T,G	Irr	--	--	--	--
* 802	W. Wallin	1955	62	18	--	Qfpa	242	35.3	Apr. 11, 1957	T,G	Irr	686	14.2	July 16, 1964	1/
803	Jerry Smith	--	61	18	--	Qfpa	243	33.5	Nov. 5, 1959	T,G	Irr	--	--	--	1/
804	Jack Demetary	1954	67	18	--	Qfpa	248	35.8	Apr. 11, 1957	T,G	Irr	790	24.76	July 16, 1964	1/
805	Philip Noto, Jr.	--	58	18	--	Qfpa	244	29.8	Mar. 15, 1957	T,G	Irr	--	--	--	1/
806	Lee Fazzino	1954	72	18	--	Qfpa	246	37.9 33.6 40.0	Aug. 2, 1960 Feb. 26, 1963 Oct. 10, 1969	T,G	Irr	925 995	-- --	1956 1957	--
* 807	Antonio Varisco	1942	1,035	3,2	951-1,035	Tc,Twi	248	+ 33	May 1942	Flows	D,S	--	--	--	--
808	-- Fazzino	1962	--	14	--	Qfpa	248	36.2 39.2 39.3	Jan. 24, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	496 315	-- 20.67	July 16, 1963 July 16, 1964	--
809	--	--	63	18	--	Qfpa	245	36.6 38.9 43.4	Jan. 24, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	558 423	15.70 9.47	July 16, 1963 June 25, 1964	--
* 810	--	--	--	--	--	Qfpa	248	36.7 39.2 43.9	Jan. 24, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	867 664	15.37 11.45	July 16, 1963 June 25, 1964	--
811	--	--	64	14	--	Qfpa	244	34.1 36.2 40.0	Jan. 24, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	890 600	26.96 11.50	July 16, 1963 July 16, 1964	--
812	Lee Fazzino	--	62	18	--	Qfpa	247	34.1 40.5	Jan. 24, 1963 Oct. 10, 1969	T,G	Irr	--	--	--	--
813	Jack Wallin	--	69	18	--	Qfpa	243	37.2 38.6 39.0 38.7	Aug. 2, 1960 Sept. 28, 1960 June 2, 1964 Oct. 10, 1969	T,G	Irr	267 309	21.84 23.87	July 16, 1963 July 16, 1964	--
814	--	--	69	--	--	Qfpa	250	40.1 44.0	Jan. 24, 1963 Oct. 10, 1969	T,G	Irr	--	--	--	--
* 815	--	--	63	16	--	Qfpa	248	33.8 36.7 39.7	Jan. 24, 1963 June 3, 1964 Oct. 15, 1969	T,G	Irr	500 425	26.69 24.83	July 16, 1963 Aug. 4, 1964	--
816	--	--	63	14	--	Qfpa	251	38.7 40.9 43.0	Jan. 24, 1963 June 3, 1964 Oct. 15, 1969	T,G	Irr	725 801 866	19.83 13.21 8.08	July 16, 1963 Aug. 7, 1963 June 19, 1964	--
817	Matt Morello	--	62	14	--	Qfpa	252	37.1 40.0 43.5	Jan. 25, 1963 June 3, 1964 Oct. 14, 1969	T,G	Irr	509	21.46	July 17, 1963	--
818	-- Sims	--	65	--	--	Qfpa	250	36.3 41.8	Jan. 25, 1963 Oct. 14, 1969	N	N	--	--	--	--
819	Matt Morello	--	68	--	--	Qfpa	249	32.1 35.7 38.4	Jan. 25, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	300 296 231	31.76 23.02 19.14	July 16, 1963 July 8, 1964 Aug. 6, 1964	--
820	--	--	64	--	--	Qfpa	247	30.7	Jan. 25, 1963	T,G	Irr	329 339	29.81 24.96	July 15, 1963 June 26, 1964	1/

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
BJ-59-20-821	--	--	69	14	--	Qfpa	244	35.9 37.5 39.1	Feb. 4, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	244	5.6	July 17, 1963	--
822	--	--	--	18	--	Qfpa	244	30.9 35.0	June 3, 1964 Oct. 9, 1969	T,G	Irr	204	28.21	July 15, 1963	--
823	--	--	--	18	--	Qfpa	244	39.1 39.8	June 3, 1964 Oct. 10, 1969	T,G	Irr	442	12.25	Aug. 6, 1964	--
824	--	--	63	16	--	Qfpa	245	39.5 43.8	June 3, 1964 Oct. 10, 1969	T,G	Irr	264 326	-- 23.29	July 16, 1963 July 6, 1964	--
825	--	--	--	16	--	Qfpa	248	37.0	June 3, 1964	T,G	Irr	385	--	July 16, 1963	--
826	--	--	--	14	--	Qfpa	251	40.9 43.0	June 3, 1964 Oct. 15, 1969	T,G	Irr	525 960	-- --	July 16, 1963 June 25, 1964	--
827	Sam Fazzino	--	--	14	--	Qfpa	251	39.3 42.5	June 3, 1964 Oct. 14, 1969	T,G	Irr	250 442	-- 26.05	July 17, 1963 July 16, 1964	--
828	U.S. Geological Survey	1963	67	--	--	--	243	32.0	Nov. 26, 1963	N	N	--	--	--	Test hole.[2]
829	-- Fazzino	1964	68	18	--	Qfpa	245	42.8	Oct. 10, 1969	T,G	Irr	--	--	--	--
830	-- Wallin	--	64	16	--	Qfpa	244	38.4	do.	T,G	Irr	--	--	--	--
* 831	--	--	70±	16	--	Qfpa	251	43.4	do.	T,G	Irr	--	--	--	--
832	Tony Fazzino	--	68	18	--	Qfpa	248	41.0	Oct. 14, 1969	T,G	Irr	--	--	--	--
833	--	--	--	16	--	Qfpa	--	--	--	N	N	--	--	--	Dry at 25 ft.
834	--	--	--	--	--	Qfpa	251	41.9	Oct. 15, 1969	T,G	Irr	--	--	--	--
835	--	--	68	18	--	Qfpa	245	40.7	do.	T,G	Irr	--	--	--	--
901	--	--	--	16	--	Qfpa	243	29.7 29.3 30.3 34.6	Aug. 2, 1960 Feb. 26, 1963 June 3, 1964 Oct. 9, 1969	T,G	Irr	437 409	14.07 20.82	July 15, 1963 July 8, 1964	--
* 902	Vince Court	--	56	18	--	Qfpa	242	30.9	Apr. 10, 1957	T,G	Irr	462	20.73	July 8, 1964	[1]
* 903	do.	--	61	18	--	Qfpa	242	26.3 26.9 27.5 30.8	Aug. 2, 1960 Jan. 29, 1963 June 24, 1964 Oct. 10, 1969	T,G	Irr	870 1,003	8.83 7.36	July 15, 1963 June 25, 1964	--
904	Lee Fazzino	1956	50	18	--	Qfpa	242	29.0	Aug. 2, 1960	T,G	Irr	570	--	1956	[1]
905	do.	1957	63	14	--	Qfpa	242	29.3 26.0 29.2 35.2	Aug. 2, 1960 Feb. 4, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	595 1,048	-- 10.25	1957 June 25, 1964	--
906	do.	1955	63	18	--	Qfpa	240	30.7 25.5	Aug. 2, 1960 Feb. 26, 1963	N	N	126	--	1956	--
* 907	Vince Court	--	64	18	--	Qfpa	244	33.5	Mar. 15, 1957	T,G	Irr	450	22.37	July 8, 1964	[1]
* 908	--	--	68	14	--	Qfpa	250	38.1	Jan. 21, 1960	T,G	Irr	563	14.63	July 16, 1964	[1]
909	--	--	62	18	--	Qfpa	246	34.2 37.2 38.8	Jan. 24, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	300	22.94	do.	--
910	--	--	47	18	--	Qfpa	241	25.9 27.6	Jan. 29, 1963 Oct. 10, 1969	T,G	Irr	--	--	--	--
911	--	--	46	18	--	Qfpa	241	25.5 26.3 27.6	Jan. 29, 1963 June 3, 1964 Oct. 10, 1969	T,G	Irr	500	7.90	July 15, 1963	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
BJ-59-20-912	--	--	60	18	--	Qfpa	246	30.8 37.2	Jan. 29, 1963 Oct. 9, 1969	T,G	Irr	--	--	--	--
913	--	--	--	18	--	Qfpa	243	34.0 36.1	June 3, 1964 Oct. 10, 1969	T,G	Irr	543	--	July 15, 1963	--
914	--	--	65	18	--	Qfpa	246	40.1 40.8	May 28, 1963 Oct. 15, 1969	T,G	Irr	--	--	--	--
915	--	--	--	--	--	Qfpa	246	32.6 36.7	June 3, 1964 Oct. 9, 1969	T,G	Irr	--	--	--	--
916	--	--	60±	16	--	Qfpa	244	33.5 36.7	June 3, 1964 Oct. 10, 1969	N	N	520 1,112	17.46 --	Aug. 7, 1963 June 25, 1964	--
917	U.S. Geological Survey	1963	45	--	--	--	233	19.5	Nov. 26, 1963	N	N	--	--	--	Test hole.[2]
918	do.	1963	67	--	--	--	244	32.5	do.	N	N	--	--	--	Do.
919	do.	1963	47	--	--	--	241	19.6	Nov. 27, 1963	N	N	--	--	--	Do.
* 920	Texas A&M University well 4	1950	424	424	292-412	Ts	246	154	Feb. 25, 1950	T,E	P	402	154	Feb. 23, 1950	Drilled to 438 ft, plugged back to 424 ft. Underreamed and gravel-packed from 280 to 422 ft. [2] [4]
921	--	--	57	16	--	Qfpa	243	37.3	Oct. 9, 1969	N	N	--	--	--	--
922	--	--	58	16	--	Qfpa	241	34.5	do.	T,G	Irr	--	--	--	--
923	--	--	--	--	--	Qfpa	240	--	--	T,G	Irr	--	--	--	--
924	--	--	--	--	--	Qfpa	240	--	--	T,G	Irr	--	--	--	--
925	--	--	65	18	--	Qfpa	244	33.3	Oct. 10, 1969	T,G	Irr	--	--	--	--
* 926	--	--	70±	16	--	Qfpa	244	34.4	do.	T,G	Irr	--	--	--	--
927	--	--	59	16	--	Qfpa	249	38.0	Oct. 13, 1969	T,G	Irr	--	--	--	--
928	--	--	55±	16	--	Qfpa	241	31.4	Oct. 10, 1969	T,G	Irr	--	--	--	--
929	Red Barn Chemical, Inc.	1968	72	4	--	Qfpa	245	30	Jan. 31, 1968	S,E,1	Ind	34[3]	--	Jan. 31, 1968	[2]
930	Vince Court	--	--	16	--	Qfpa	244	33.4	Oct. 10, 1969	T,G	Irr	--	--	--	--
931	Texas A&M University	1949	493	--	--	--	246	--	--	N	N	--	--	--	Test hole.[2] [4]
* 932	Anthony Salvaggio	1969	470	4,2	--	Tqc	245	+	July 22, 1970	Flows	D	--	--	--	[2]
21-101	City of Bryan	1953	1,529	--	--	--	344	--	--	N	N	--	--	--	Test hole.[4]
105	Leroy Hale	1969	450	4,2	--	Tqc	330	--	--	S,E	D,S	--	--	--	--
106	Willie Shulz	1967	800±	--	--	Tc	350	--	--	--	--	--	--	--	--
* 201	City of Bryan well 6	1947	499	16,8	389-479	Ts	307	149.4	Sept. 11, 1947	T,E,75	P	503	119	July 8, 1947	Underreamed and gravel-packed from 380 to 499 ft.[2] [4]
* 202	City of Bryan well 11	1957	2,950	20,13	2,514-2,904	Twis	315	+45	Feb. 19, 1960	T,E	P	2,500	--	Apr. 17, 1957	Flow 102 gpm on Apr. 19, 1957.[4]
* 203	City of Bryan well 8	1948	554	10	401-542	Ts	334	--	--	T,E	P	--	--	--	Underreamed and gravel-packed from 382 to 542 ft.[2] [4]
* 204	City of Bryan well 7	1948	539	10,8	423-533	Ts	298	--	--	T,E	P	--	--	--	Underreamed and gravel-packed from 423 to 533 ft.[2] [4]
* 205	City of Bryan well 12	1964	2,880	20,13,9	2,480-2,860	Twis	330	+15	June 11, 1964	T,E	P	2,500	85	1964	[2] [4]
* 206	City of Bryan well 1	1938	569	8,6	462-543	Ts	309	66 133.1	July 30, 1938 June 23, 1944	N	N	354	112	July 30, 1938	Test hole drilled to 1,755 ft and plugged back to 569 ft.[2] [4]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
* BJ-59-21-207	City of Bryan well 14	1968	2,730	20,13,9	2,225-2,709	Twis	300	+	May 1968	T,E	P	--	--	--	Test hole to 2,870 ft. Underreamed and gravel-packed from 2,220 to 2,730 ft. Estimated flow about 800 gpm on Nov. 18, 1969. 2/ 4/
* 208	City of Bryan well 13	1964	2,834	20,13,9	2,320-2,814	Twis	360	--	--	T,E	P	--	--	--	Test hole to 2,860 ft. Underreamed and gravel-packed 2,320 to 2,814 ft. 2/ 4/
* 302	City of Bryan well 2	1939	523	16,8	435-523	Ts	331	164.0 240.0 305.5	June 30, 1944 Feb. 19, 1960 Aug. 13, 1963	T,E	P	231	60.0	June 16, 1944	Underreamed and gravel-packed from 435 to 523 ft. 2/
* 303	City of Bryan well 10	1954	3,150	20,13,9	2,670-2,950	Twis	350	+	Mar. 1954	T,E	P	2,200	--	1955	Underreamed and gravel-packed from 2,655 to 2,953 ft. Test pumped at 2,513 gpm. 2/ 4/
* 304	City of Bryan well 3	1939	498	16,8	422-492	Ts	331	94 160.6 231.1	May 15, 1939 July 2, 1944 Feb. 19, 1960	T,E,50	P	500 540	107 132	May 15, 1939 May 23, 1939	Underreamed and gravel-packed. 2/
* 305	City of Bryan well 4	1939	677	16,8	391-600	Ts	329	88 128 151.6	July 14, 1939 Oct. 1942 June 14, 1944	T,E,50	P	605	117	July 14, 1939	Do.
* 306	City of Bryan well 9	1952	710	--	--	Ts	372	266.6	Feb. 19, 1960	T,E	P	--	--	--	Underreamed and gravel-packed. 2/ 4/
307	Mrs. C. W. Fisher	1966	410	4,2	--	Tcm	390	135	Sept. 20, 1966	P,E,1	D,S	--	--	--	--
309	Emil Haisler	1964	435	4,2	--	Tcm	355	80	Aug. 26, 1964	S,E,1	D,S	--	--	--	--
* 401	Texas A&M University test well 8	1952	1,335	--	--	--	258	--	--	N	N	--	--	--	Test hole prior to well BJ-59-21-402. 2/ 4/
* 402	Texas A&M University well 5	1953	1,345	16,8	1,120-1,330	Tc,Twi	258	32	Apr. 1953	T,E	P	556 2/ 654 2/	117 165	Apr. 1953 Apr. 1953	Underreamed and gravel-packed from 1,115 to 1,341 ft. 2/ 4/
403	Texas A&M University test well 1	1949	574	--	--	--	281	64	1949	N	N	--	--	--	Test hole Siegert 1. 4/
404	Texas A&M University test well 4	1949	581	--	--	--	291	--	--	N	N	--	--	--	4/
405	Texas A&M University test well	1949	595	--	--	--	290	--	--	N	N	--	--	--	4/
406	Fritz Severa	1915?	350	3	--	Ts	340	100	1962	P,W	D,S	--	--	--	--
407	--	--	39	6	--	Ty	298	21.8 17.3	May 13, 1964 Dec. 1, 1969	N	N	--	--	--	--
408	Clyde Porterfield	1965	348	4,2	--	Ts	325	170	Oct. 8, 1965	S,E,3/4	D,S	--	--	--	2/
* 501	City of Bryan well 5	1943	584	16,8	430-573	Ts	301	125 113.1 121.2	Aug. 21, 1943 June 24, 1944 Apr. 9, 1947	T,E	P	640 3/ 623	77 81.8	Aug. 21, 1943 June 18, 1944	Underreamed and gravel-packed from 423 to 573 ft. 2/ 4/
* 502	City of Bryan test well 2	1952	600	--	--	--	278	--	--	N	N	--	--	--	Test hole. 2/ 4/
503	B. Arnold	--	24	8	--	Ty	286	12.2 10.9	May 13, 1964 Dec. 1, 1969	N	N	--	--	--	--
504	do.	--	350	4	--	Tcm	287	100	--	P,E	D,S	--	--	--	--
505	Clyde Porterfield	1965	328	4,2	--	Tcm	292	100	Oct. 28, 1965	S,E,3/4	D,S	--	--	--	2/
506	H. J. Hogan	1962	226	4,2	215-226	Ty	360	70	Sept. 4, 1962	S,E,3/4	D,S	--	--	--	--
* 507	Ruble Smith	1963	471	4,2	451-471	Tcm	288	51.3	Nov. 17, 1969	S,E	D,S	--	--	--	2/
* 508	do.	1966	246	4,2	--	Ty	288	34.0	do.	S,E,3/4	D,S	--	--	--	--

See footnotes at end of table.

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
BJ-59-21-509	James Chambers	1965	339	4,2	--	Tcm	295	100	Oct. 10, 1965	S,E,3/4	D,S	--	--	--	--
601	City of Bryan test well 4	1952	700	--	--	--	350	--	--	N	N	--	--	--	[2] [4]
602	City of Bryan test well 3	1952	721	--	--	--	320	--	--	N	N	--	--	--	[2] [4]
603	Lulac Park	1966	328	4,2	--	Ty	325	90	Aug. 20, 1966	S,E,3/4	D	15[3]	--	Aug. 20, 1966	--
604	R. D. Simpson	1963	210	4,2	200-210	Ty	322	70	July 27, 1963	S,E,1/2	D,S	10[3]	--	July 27, 1963	[2]
605	Rudolph Matejka	1962	480	3,2	--	Tcm	325	100	Sept. 15, 1962	P,E,1/2	D	--	--	--	--
* 701	A. J. Wallin	1947	710	2	--	Tqc	257	+	Dec. 1, 1969	Flows	D,S	--	--	--	Measured flow 3.5 gpm on Sept. 5, 1947.
* 702	Joe Fazzino	1947	697	3	--	Tqc	258	+	Sept. 5, 1947	Flows	D,S	--	--	--	Measured flow 5 gpm on Sept. 5, 1947.
* 704	Texas A&M University well 3	1950	482	18,10	366-473	Ts	254	112	Jan. 24, 1950	T,E	P	530	54	Jan. 24, 1950	Underreamed and gravel-packed. [2] [4]
* 705	Texas A&M University well 2	1950	487	18,10	373-473	Ts	258	110	Apr. 17, 1950	T,E	P	748	54	Apr. 17, 1950	Do.
* 706	Texas A&M University well 1	1950	533	18,10	400-503	Ts	263	117	Apr. 1950	T,E	P	754	68	Apr. 1950	Do.
* 707	Joe Fazzino	1937?	700±	3	--	Tqc	255	+	Sept. 5, 1947	J,E	D,S	--	--	--	No longer flowing on Dec. 1, 1969.
708	Vince J. Luza	1956	64	18	--	Qt	273	29.3	May 30, 1961	N	N	600	--	1956	Used for irrigation 1956-57.
709	do.	1956	59	18	--	Qt	273	29.6 29.5 28.3	May 30, 1961 May 27, 1963 Dec. 1, 1969	T,G	Irr	800	--	do.	--
* 710	Jim Abbate	1955	1,040	4	840-1,040	Tqc	270	3.5 7.3	1955 May 30, 1961	S,E	D	--	--	--	--
* 711	do.	1955	190	4	--	Tcm	270	--	--	J,E	D	--	--	--	--
* 712	do.	1955	24	--	--	Qt	270	--	--	J,E	D,S	--	--	--	Dug well.
* 713	Texas A&M University	1942	612	12,6	394-602	Ts	258	45	Dec. 1942	T,E,7 1/2	P	85	53	Sept. 1947	Underreamed and gravel-packed. Formerly U.S.A.F.B. well 1. Now a standby well. [4]
* 714	do.	1954	3,060	13,8	2,741-2,989	Twis	263	+70 +83	July 31, 1956 May 13, 1964	Flows	P	--	--	--	Underreamed and gravel-packed. Formerly U.S.A.F.B.well 7. Flow 1,420 gpm on Sept. 7, 1955. [2] [4]
* 715	do.	1943	592	13,6	498-588	Ts	258	43.0 58.0	Nov. 11, 1942 Aug. 27, 1947	N	N	--	--	--	Underreamed and gravel-packed. Formerly U.S.A.F.B. well 2. Abandoned, filled. [2]
* 716	do.	1954	505	10	400-500	Ts	260	--	--	T,E	P	--	--	--	Underreamed and gravel-packed. Formerly U.S.A.F.B. well 6. Now a standby well. [2]
* 717	do.	1943	487	12,6	401-487	Ts	254	52.3	Aug. 26, 1947	T,E	P	432	64.6	Sept. 1947	Underreamed and gravel-packed. Formerly U.S.A.F.B. well 4. Now on standby. [4]
* 718	do.	1943	492	12,6	411-482	Ts	251	42 49.8 188.7	June 1942 Sept. 2, 1947 May 13, 1964	T,E	P	250	69	1943	Underreamed and gravel-packed. Formerly U.S.A.F.B. well 5. Now on standby. [2] [4]
719	U.S. Air Force Base	1951	543	--	--	--	245	--	--	N	N	--	--	--	Test hole. [2] [4]
720	do.	1951	522	--	--	--	240	--	--	N	N	--	--	--	Do.
* 721	Pat Dooley	1958	70	18	--	Qt	248	37.4	Jan. 26, 1960	T,G	Irr	650[3]	--	1958	[1]
* 722	Jim Abbate	--	30	--	--	Qt	270	--	--	N	N	--	--	--	Dug well. No longer used.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
*DJ-59-21-723	Texas A&M University well 6	1960	2,974	20,13,9	2,600-2,974	Twis	263	+ 69	Oct. 1960	Flows	P	--	--	--	Underreamed and gravel-packed. Test pumped from 1,560 to 3,160 gpm. Flow 1,336 gpm on Oct. 11, 1960. Drilled to 3,160 ft. Plugged back to 2,974 ft. [2] [4]
724	Texas A&M University test hole 5	1949	545	--	--	--	--	--	--	N	N	--	--	--	Test hole. [4]
726	U.S. Air Force Base	1942	1,504	--	--	--	270	--	--	N	N	--	--	--	Do. [4]
727	J. Luza	--	46	16	--	Qt	272	31.4	May 28, 1963	N	N	--	--	--	--
* 728	Joe Penicka	1944	47	3	--	Qt	263	38	1944	P,W	D,S	--	--	--	--
729	Willie Hicks	1968	266	4,2	--	Tcm	265	40	Nov. 29, 1968	P,E,1/2	D,S	--	--	--	--
730	W. T. McDonald	1969	375	4,2	318-375	Ts	290	81	Feb. 10, 1969	S,E,3/4	D,S	30[3]	--	Feb. 10, 1969	--
* 801	Frank Nemec	--	34	30	--	Qt	264	30.6 27.7	May 13, 1964 July 22, 1970	J,E	D,S	--	--	--	Dug well, shored with tile.
802	Fred Hall	1963	533	3,2	--	Ts	280	90	Aug. 5, 1963	P,E,3/4	D,S	--	--	--	[2]
803	Jessie Netall	1962	513	3,2	--	Ts	264	80	Nov. 30, 1962	P,E,1/2	D,S	--	--	--	--
* 901	--	--	62	4	--	Ty	304	51.3	May 13, 1964	B,H	D	--	--	--	--
902	Sanitary Farms Dairy	--	200±	--	--	Ty	310	--	--	T,E	N	--	--	--	Formerly furnished water for dairy.
903	do.	1963	143	4	--	Ty	310	37.5 36.7	Dec. 8, 1969 July 22, 1970	N	N	--	--	--	--
904	do.	--	47	8	--	Ty	309	22.0 21.1	Dec. 8, 1969 July 22, 1970	N	N	--	--	--	--
905	J. F. Konechny	1969	284	4,2	269-284	Ty	338	108	Feb. 7, 1969	S,E,3/4	D,S	--	--	--	--
* 906	Dalbert Orr	1968	322	4,2	297-322	Ty	320	100	Aug. 5, 1968	S,E,2	P	65[3]	--	Aug. 5, 1968	Furnishes water for mobile homes. [2]
907	Ervin Lenz	1969	323	4,2	308-322	Ty	335	147	Feb. 5, 1969	S,E,3/4	D,S	25[3]	--	Feb. 5, 1969	[2]
* 22-101	Marden Lab	1964	544	4	530-544	Tcm	345	70	Nov. 21, 1964	S,E,1 1/2	D,S	--	--	--	[2]
102	J. J. Huddleston	1968	263	4,2	230-263	Ty	340	80	Aug. 30, 1968	S,E,3/4	D,S	25[3]	40	Aug. 30, 1968	--
103	Luke Ponzio	1969	382	4,2	368-382	Ty	340	80	Jan. 22, 1969	S,E,3/4	D,S	25[3]	--	Jan. 22, 1969	--
104	Don Triolo	1964	408	4,2	--	Tcm	340	60	Aug. 12, 1964	S,E,1/2	D,S	10[3]	--	Aug. 12, 1964	--
105	Roy Barnes	1969	540	4,2	--	Ts	360	--	--	S,E	D,S	--	--	--	--
106	Herman Cheatham	1968	463	4,2	448-463	Ts	360	100	Mar. 23, 1968	S,E,1	D	35[3]	--	Mar. 23, 1968	--
107	J. M. Goodman	1969	140	4	130-140	Ty	322	45	Jan. 3, 1969	S,E,1/3	D,S	15[3]	60	Jan. 3, 1969	--
108	Jim LeNoir	1969	430	3,2	400-430	Ts	328	55	May 30, 1969	--	D,S	--	--	--	--
109	Marion Jones	1968	497	4,2,1/2	472-497	Ts	378	128	Aug. 21, 1968	S,E	D,S	40[3]	--	Aug. 21, 1968	--
* 110	P. C. Patranella	1965	410	4,2	--	Tcm	355	80	Apr. 27, 1965	S,E,1	D	23[3]	--	Apr. 27, 1965	--
111	Nick Phillipello	1966	427	4,2	--	Tcm	355	80	Dec. 19, 1966	S,E,1	D,S	15[3]	--	Dec. 19, 1966	--
201	R. H. Tonai	1966	223	4,2	188-223	Ty	352	75	Mar. 18, 1966	S,E,1	D,S	25[3]	--	Mar. 18, 1966	--
202	Don Triolo	1966	512	4,2	--	Ts	315	60	June 1, 1966	S,E,3/4	D,S	20[3]	--	--	--
* 301	Altus Garner	1956	78	6	70-78	Ty	300	33.3 33.6	Oct. 10, 1960 Dec. 17, 1969	S,E	Irr	96[3]	--	1956	Irrigates 25 acres feedstuff.
302	H. W. Humphries	1956	265	3,2	244-265	Ty	250	+	May 22, 1961	Flows	S	3[3]	--	1961	--
303	do.	1956	265	3,2	244-265	Ty	248	+	do.	Flows	S	1/2[3]	--	do.	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
									BRAZOS COUNTY						
BJ-59-22-304	George Blivens	1965	246	4,2	--	Ty	295	55	Apr. 15, 1965	S,E,1	D,S	25[3]	--	Apr. 15, 1965	--
305	Howard Horn	1960	100±	6	10-100	Ty	275	7.4	Dec. 17, 1969	S,E,2	Irr	35[3]	--	1960	Irrigates 6 acres of grass.
* 401	City of Bryan	1915	2,053	8,6	1,563-1,950	Tqc,Tc Twi	350	46.0	Dec. 6, 1937	N	N	--	--	--	Abandoned. Formerly furnished part of city supply.[2]
* 402	do.	1925	303	--	174-303	Ty	350	--	--	N	N	85[3]	--	1925	Do.
* 403	do.	1933	873	12	232-870	Ty,Ts	350	--	--	N	N	830[3]	262	June 1933	Do.
404	Eddie Johnson	1962	144	3	--	Ty	352	80	Oct. 27, 1962	J,E,3/4	D,S	5[3]	46	Oct. 27, 1962	--
501	E. C. Martin	1968	276	4,2	261-276	Ty	362	123	Sept. 12, 1968	S,E,3/4	D,S	35[3]	--	Sept. 12, 1968	--
502	Elsie Jackson	1966	285	2	--	Ty	300	25	July 20, 1968	J,E,1/2	D	5[3]	--	July 20, 1968	[2]
503	James L. Jones	1967	215	2	--	Ty	290	35	Oct. 24, 1967	J,E,3/4	D	3[3]	--	Oct. 24, 1967	--
* 504	George Carter	1967	348	4,2	275-348	Ty	320	60	Oct. 30, 1967	S,E,1	D,S	20[3]	--	Oct. 30, 1967	--
505	Lynn Weedon	1968	287	4,2	272-287	Ty	350	86	Sept. 4, 1968	S,E,2	D,S	31[3]	--	Sept. 4, 1968	--
506	Roy Foster	1965	287	4,2	--	Ty	335	105	June 3, 1965	S,E,1	D,S	25[3]	--	June 3, 1965	--
* 601	Harry Stitler	1954	300	7	--	Ty	302	51.6 54.6	Oct. 10, 1960 Nov. 20, 1969	S,E,5	Irr	180[3]	--	1954	Irrigates 60 acres of grass.
602	do.	1966	205	4,2	179,205	Ty	315	60	June 17, 1966	S,E,3/4	D,S	--	--	--	--
603	do.	1966	246	4,2	--	Ty	315	75	June 22, 1966	S,E,1	D,S	22[3]	--	June 22, 1966	--
604	J. L. Stanfield	1968	575	4,2	536-575	Ty	325	75	May 3, 1968	S,E,3/4	D,S	20[3]	95	May 3, 1968	--
605	Melvin Ordrasek	1969	323	4,2	--	Ty	320	85	Jan. 14, 1969	S,E,1 1/2	D,S	30[3]	--	Jan. 14, 1969	--
606	Mike Ruffino	1965	266	4,2	--	Ty	320	60	June 24, 1965	S,E,3/4	D,S	20[3]	--	June 24, 1965	[2]
* 607	Jimmie Weedon	1968	410	4,2	--	Ty	300	80	Nov. 29, 1968	S,E,3/4	D,S	--	--	--	--
901	Herman Homeyer	1968	389	4,2	--	Ty	320	66	June 25, 1968	S,E,1	D,S	20[3]	--	June 25, 1968	--
902	Dr. J. J. Hall	1968	266	4,2	245-266	Ty	275	68	July 22, 1968	S,E,1	D,S	60[3]	--	July 22, 1968	--
903	Mount Enterprize Church	--	40	36	--	Ty	285	37.2	Nov. 21, 1969	N	N	--	--	--	Dug well, shored with brick.
904	Bethel Baptist Church	1963	390	3,2	--	Ty	330	70	Mar. 3, 1963	P,E,3/4	D	--	--	--	[2]
905	Frank Hudson	--	328	4,2	--	Ty	330	100	--	S,E,1	D,S	19[3]	--	--	--
906	Glen Hyden	1966	346	4,2	--	Ty	312	80	June 26, 1966	P,E,3/4	D,S	--	--	--	--
907	J. E. Pate	1968	308	4.2	--	Ty	290	70	June 19, 1968	S,E	D,S	16[3]	--	June 19, 1968	--
23-101	Kazmeier Hatchery, Inc.	1965	328	4,2	--	Ty	290	70	Sept. 20, 1965	S,E,3/4	D,S	--	--	--	[2]
102	W. W. Gilpin	1968	246	4,2	231-246	Ty	303	48	Mar. 26, 1968	P,E,1/2	D,S	75[3]	--	Mar. 26, 1968	--
103	do.	--	135	4	--	Ty	303	34.3	Dec. 17, 1969	N	N	--	--	--	--
104	Tom Saville	1968	390	4,2	--	Ty	303	90	Aug. 1, 1968	S,E,1	D,S	20[3]	--	Aug. 1, 1968	--
201	--	--	72	3	--	Ty	212	7.4	Dec. 12, 1969	P,H	D	--	--	--	--
202	-- Cobbs	--	270	--	--	Ty	270	--	--	--	D,S	--	--	--	--
203	C. R. Saxon	--	186	3	--	Ty	270	--	--	J,E	D,S	--	--	--	--
204	do.	--	160	4	--	Ty	220	+	Dec. 12, 1969	Flows	S	--	--	--	Temp. 72°F (22.0° C).
401	J. P. Smith	1968	451	4,2	--	Ty	312	120	Apr. 2, 1968	S,E,1	D,S	20[3]	--	--	--
402	Dave Shaw	1967	210	4,2	--	Ty	--	80	Oct. 12, 1967	S,E,1	D,S	20[3]	--	--	[2]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
* BJ-59-23-403	Travis Weedon	1954	1,210	4	1,180-1,210	Ts	288	45 80	1954 1969	S,E,2	D,S	--	--	--	--
* 404	James Amundson	1969	--	4	--	Ty	240	22.7 23.3	Dec. 11, 1969 July 15, 1970	J,E	D,S	--	--	--	--
405	James Gray	1969	50±	--	--	Ty	255	--	--	J,E,3/4	D	--	--	--	--
701	Barker Allen	1969	328	4,2	305-328	Ty	312	81.2	Nov. 21, 1969	S,E	D,S	--	--	--	[2]
702	W. R. McCullough	1947	200±	4	--	Ty	255	--	--	P,E	D,S	--	--	--	--
* 703	Travis Weedon	--	550	3	--	Ty	220	+	Dec. 11, 1969	Flows	S	--	--	--	Casing gun-perforated at about 550 ft. Measured flow 5 gpm on Dec. 11, 1969.
801	--	--	--	3 1/2	--	Ty	255	--	--	P,W	S	--	--	--	--
29-203	Clyde Berger	1968	287	4,2	251-287	Ty	260	38	Sept. 9, 1968	S,E,3/4	D,S	60[3]	--	Sept. 9, 1968	[2]
204	--	--	50	6	--	Qt	242	41.4	Dec. 8, 1969	N	N	--	--	--	--
205	Guy W. Foster	1962	385	4	271-385	Ty	265	60	1962	P,E	D,S	--	--	--	--
* 206	do.	1968	63	4	53-63	Qfpa	228	--	--	P,E	S	--	--	--	--
207	do.	--	48	4	--	Qfpa	228	40.0	July 20, 1970	N	N	--	--	--	--
208	Bennie Bomnskie	1966	205	4,2	178-205	Ty	275	65	June 1, 1966	S,E,1	D,S	20[3]	--	June 1, 1966	--
209	Clyde Porterfield	1967	246	4,2	--	Ty	290	50	Dec. 8, 1967	S,E,5	D	60[3]	--	Dec. 8, 1967	--
301	Country Kitchen	--	256	4	--	Ty	315	--	--	N	N	--	--	--	Abandoned.
302	Mrs. C. P. Foster	1968	98	4	88-98	Ty	290	79	Jan. 17, 1968	J,E,1/2	D,S	--	--	--	--
303	Dr. R. S. Titus	1968	262	4,2	--	Ty	255	32	Feb. 12, 1968	S,E,1/2	S	75[3]	--	Feb. 12, 1968	--
* 304	B. C. Jones Water Co.	1961	300±	--	--	Ty	320	--	--	S,E,1	P	--	--	--	Furnishes water for subdivision.
* 305	Gainer B. Jones	1968	315	4,2	274-305	Ty	329	100	Aug. 6, 1968	S,E,2	D,S	30[3]	75	Aug. 6, 1968	[2]
306	Camp Howdy	1965	266	--	--	Ty	290	60	Mar. 5, 1965	S,E,1	D	25[3]	--	Mar. 5, 1965	Furnishes water for girl scout camp.
* 307	Country Kitchen	1966	462	--	--	Ty	315	--	--	S,E	D	--	--	--	--
528	U.S. Geological Survey test hole	1963	37	--	--	Qfpa	238	23	Nov. 21, 1963	--	--	--	--	--	[3] [2]
529	do.	1963	70	--	--	Qfpa	184	--	--	--	--	--	--	--	Test in edge of Brazos River. [3] [2]
536	Gifford Hill & Co., Inc.	--	50	16	--	Qfpa	224	30.4	July 20, 1970	T,G	Ind	--	--	--	Furnished water for washing sand and gravel.
602	B. J. Varisco	--	50±	30	--	Qt	272	47.2	May 15, 1964	N	N	--	--	--	Dug well. Abandoned.
* 603	Brushy Water Supply Corp.	1966	1,110	7	1,022-1,100	Ts	292	80	Aug. 31, 1966	S,E,10	P	113[3]	86	Aug. 31, 1966	Furnishes water for rural area. Drilled to 1,502 ft. and plugged back. [4]
604	Dr. L. C. Grumbles	1962	535	4,2	460-535	Ty	300	65	Dec. 16, 1962	S,E,3/4	D,S	--	--	--	[2]
605	N. J. Rowan	1969	307	4,2	--	Ty	282	70	Apr. 15, 1969	S,E,1	D,S	23[3]	--	Apr. 15, 1969	--
606	B. B. Holland	1963	190	4,2	159-190	Ty	290	64	Apr. 27, 1963	S,E,1	D,S	11[3]	--	Apr. 27, 1963	--
* 30-101	Texas A&M University	1937	771	8	--	Ty	340	152	1937	N	N	100[3]	90	1937	Formerly furnished part of water for experiment station.
* 102	do.	--	495	--	--	Ty	340	152	do.	N	N	26[3]	95	do.	Do.
* 103	do.	1914	960	--	--	Ty	340	--	--	N	N	--	--	--	Formerly furnished part of University system.
* 104	do.	1922	451	--	--	Ty	--	--	--	N	N	--	--	--	Do.[2]
202	do.	1920	674	12.8	117-674	Ty	310	135	1937	N	N	156[3]	--	1937	Do.
204	Henry Kapchinskie	1965	465	4,2	--	Ty	268	--	--	S,E	D,S	--	--	--	Deepened from 235 to 465 ft. in 1965.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
BJ-59-30-205	Joe Cemino	1969	614	4,2	--	Ty	265	25	Feb. 20, 1969	S,E,5	P	65[3/]	--	Feb. 20, 1969	Furnishes water for trailer park.
206	Charles Cemino	1967	618	4,2	565-618	Ty	270	60	Nov. 8, 1967	P,E,5	P	60[3/]	--	Nov. 8, 1967	Do.[2/]
* 301	Buddy Williams	1966	445	4,2	360-445	Ty	268	100	June 18, 1968	S,E,3	D,S	40[3/]	--	June 18, 1968	Irrigated some in 1966; ceased as pumped sand.
* 302	Mrs. Victoria Kapchinskie	1969	200	4,2	--	Ty	265	--	--	S,E	D,S	--	--	--	--
303	Jessie Henton	1963	451	4,2	400-451	Ty	255	60	June 30, 1963	S,E,1	D	13[3/]	--	June 30, 1963	--
304	Frank Arriens	1963	447	4.2	408-447	Ty	250	10	July 10, 1963	S,E	D	18[3/]	--	July 10, 1963	[2/]
305	L. L. Carroll	1901	290	3,2	230-290	Ty	307	--	--	P,E	D,S	--	--	--	--
306	Roy Kelly	1962	318	4,2	287-318	Ty	318	140	Sept. 22, 1962	S,E,3/4	D,S	--	--	--	--
307	do.	1962	283	3.2	220-283	Ty	298	70	Sept. 25, 1962	J.E,1	D,S	--	--	--	--
401	W. J. Sustaire	1967	382	4	--	Ty	320	115	May 1967	S,E,1	D,S	--	--	--	--
* 402	L. S. Pope	1965	410	4,2	--	Ty	322	80	July 5, 1965	S,E,3/4	D.S	--	--	--	--
403	Mrs. A. L. Parson	--	641	4,2	--	Ty	333	80	--	S,E.1	D,S	20[3/]	--	--	[2/]
404	J. C. Hill	1963	430	4,2	--	Ty	321	100	Jan. 29, 1963	P,E,1/2	D	--	--	--	--
405	R. R. Janac	1967	543	4,2	--	Ty	292	90	June 15, 1967	S,E,3/4	D,S	15[3/]	--	June 15, 1967	--
406	W. H. Walker	1963	369	3.2	349-369	Ty	285	115	Jan. 13, 1963	P,E,1/2	D,S	--	--	--	--
407	E. A. Holick	1956	567	4,2	--	Ty	302	80	1956	P,E	D,S	--	--	--	--
501	Don Cain	1966	574	4,2	--	Ty	302	80	Feb. 9, 1966	S,E,1	P	18[3/]	--	--	Standby well for trailer park.[2/]
502	Fletcher German	1963	410	4,2	--	Ty	295	80	Sept. 16, 1963	S,E,1/2	D,S	10[3/]	--	--	--
503	Eddie Marshall	1963	439	4,2	--	Ty	290	80	Aug. 15, 1963	P,E,1/2	D,S	--	--	--	--
504	Abner White	1963	274	3,2	--	Ty	302	105	Apr. 29, 1963	P,E,3/4	D.S	--	--	--	--
506	Donald Carroll	1963	500	4,2	--	Ty	335	150	1963	J,E	D,S	--	--	--	--
601	Dr. A. W. Blising	1963	533	4,2	--	Ty	295	60	June 10, 1963	J,E	D,S	--	--	--	[2/]
* 704	Dilford Carter	1969	700	4	--	Ty	275	--	--	S,E	D	--	--	--	--
801	Minter Spring	--	Spring	--	--	Tj	265	+	Dec. 2, 1969	Flows	H	--	--	--	Measured flow 4 gpm on July 20, 1970.
802	Bill Henry	1963	553	4.2	--	Ty	330	90	Dec. 7, 1963	P,E,3/4	D,S	--	--	--	[2/]
803	Thomas Arhopulos	--	125	4	--	Tj	310	16	1957	J,E	D,S	--	--	--	--
804	R. A. Nolan	1942	314	3 1/2	--	Tj	283	65	1942	P,E	D,S	--	--	--	--
805	Wellborn Water Supply Corp. well 1	1966	1,177	8,4	1,147-1,177	Ty	325	124.7	Dec. 9, 1969	S,E,15	P	45[3/]	--	1966	Test hole drilled to 2,258 ft and plugged back. In conjunction with wells BJ-59-30-805 and BJ-69-30-806, furnishes water for rural system.[4/]
* 806	Wellborn Water Supply Corp. well 2	1966	1,155	8,4	1,125-1,155	Ty	340	105	1966	S,E,7 1/2	P	35[3/]	--	1966	Drilled to 1,217 ft. and plugged back.[4/]
* 807	Wellborn Water Supply Corp. well 3	1966	1,155	8.4	1,115-1,155	Ty	322	85	June 28, 1966	S,E,7 1/2	P	45[3/]	--	1966	Drilled to 1,211 ft. and plugged back.[4/]
901	J. C. Wade	--	400±	--	--	Tj	309	--	--	J,E	D,S	--	--	--	--
31-101	Tarance Bazy	1935	40	8	--	Tj	245	30.6	Dec. 11, 1969	B,H	D	--	--	--	--
* 201	W. P. Smith	1969	344	4,2	324-344	Ty	252	60	Mar. 26, 1969	P,E,1/2	D,S	35[3/]	--	Mar. 26, 1969	[2/]
202	do.	1965	220±	3,2	--	Ty	252	39.4	Dec. 11, 1969	N	N	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
BRAZOS COUNTY															
* BJ-59-31-401	Jim Carll	1964	674	4,2	--	Ty	273	50	Oct. 9, 1964	S,E,1	D,S	20[3]	--	Oct. 9, 1964	[2]
502	Fred Albricht	--	100±	4	--	Tj	215	--	--	J,E	D,S	--	--	--	--
503	E. E. Allen	--	--	--	--	Tj	220	--	--	S,E	S	--	--	--	--
* 504	do.	--	500±	2	--	Ty	195	+	Dec. 4, 1969	Flows	S	--	--	--	Measured flow 1 gpm on Dec. 4, 1969.
505	A. F. Sharp	1967	118	4,2	--	Tj	212	--	--	--	D,S	--	--	--	--
* 506	A. W. McCullough	--	700±	3	--	Ty	197	+	Dec. 11, 1969	Flows	S	--	--	--	Measured flow 2 gpm on Dec. 11, 1969.
* 601	Sulphur Spring	--	Spring	--	--	Tj	185	+	July 16, 1970	Flows	N	--	--	--	In bed Navasota River. Has H_2S odor.
* 701	Russel Mahaffey	1963	287	4,2	--	Tj	312	90	Dec. 4, 1963	P,E,3/4	D,S	--	--	--	[2]
702	Texas International Speedway	1969	1,200+	6	--	Ty	255	--	--	N	N	40[3]	--	1969	Test hole. Principal water encountered at 150 ft. Inadequate so piped water from Texas A&M University.
801	Spruiell Bosley, Jr.	1963	165	3,2	--	Tj	237	25	May 19, 1963	J,E,1/2	D,S	--	--	--	--
* 802	W. E. Crenshaw	1962	82	4	70-82	Tj	242	25	Sept. 18, 1962	J,E,3/4	D,S	--	--	--	--
803	B. S. Bradley	1963	111	4,2	--	Tj	212	5	Feb. 28, 1963	J,E,1/2	D,S	--	--	--	--
804	Mrs. Lloyd Lunsford	1965	209	4,2	--	Tj	240	15	May 1, 1965	S,E,1/2	D,S	17[3]	--	May 1, 1965	--
* 805	A. C. Smith	--	25	--	--	Tj	204	17.0	Dec. 17, 1969	J,E	D,S	--	--	--	Dug well.
* 38-201	Thomas Arhopulos	1938	900±	4	--	Ty	250	--	--	P,E,1	S	--	--	--	--
202	T. W. Stousland	--	20	30	--	Tj	235	3.9	Dec. 9, 1969	B,H	D,S	--	--	--	Dug well.
301	M. I. Cooner	--	250±	3	--	Ty	280	100	--	--	N	--	--	--	--
601	H. H. Moore	--	65	18	--	Qfpa	203	23.3 25.0 22.9	Aug. 9, 1960 June 3, 1963 Oct. 15, 1969	T,G	Irr	--	--	--	--
602	do.	1963	72?	16	--	Qfpa	205	22.3	Apr. 30, 1964	T,G	Irr	--	--	--	--
603	do.	1963	72?	16	--	Qfpa	206	21.5 24.2	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	--	--	--	--
604	do.	1964	72?	16	--	Qfpa	203	20.3 23.0	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	--	--	--	--
605	do.	1963	72?	16	--	Qfpa	205	29.8 30.7	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	--	--	--	--
* 606	do.	1963	72?	16	--	Qfpa	205	26.4 28.2	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	837	33.54	July 24, 1964	--
607	do.	--	60	16	--	Qfpa	203	24.6	do.	T,G	Irr	--	--	--	--
608	do.	--	65	16	--	Qfpa	206	21.1	do.	T,G	Irr	--	--	--	--
609	do.	--	68	16	--	Qfpa	205	25.4	do.	T,G	Irr	--	--	--	--
610	do.	--	68	16	--	Qfpa	202	29.1	Oct. 15, 1969	T,G	Irr	--	--	--	--
611	do.	--	60	16	--	Qfpa	206	29.1	do.	T,G	Irr	--	--	--	--
612	do.	--	82	16	--	Qfpa	205	29.3	do.	T,G	Irr	--	--	--	--
613	do.	--	67	16	--	Qfpa	205	31.2	do.	T,G	Irr	--	--	--	--
614	Shields Crenshaw	1966	--	4	--	Tj	220	--	--	P,E	S	--	--	--	--
* 901	J. P. Terrell & Son	1957	70	18	--	Qfpa	200	24.6	Aug. 9, 1960	T,G	Irr	380	35.04	July 2, 1964	[1]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
* BJ-59-38-902	J. P. Terrell & Son	1956	73	18	--	Qfpa	204	12.7 15.5 23.9	Aug. 9, 1960 June 6, 1963 Oct. 13, 1969	T,G	Irr	--	--	--	--
* 903	do.	1956	72	18	--	Qfpa	204	12.1 14.6 23.1	Aug. 9, 1960 June 6, 1963 Oct. 15, 1969	T,G	Irr	--	--	--	--
* 904	do.	1956	66	18	--	Qfpa	203	12.5	Aug. 9, 1960	T,G	Irr	--	--	--	1/
906	H. H. Moore	1964	69	16	--	Qfpa	203	17.9 23.8	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	--	--	--	--
907	do.	1963	64	16	--	Qfpa	200	18.3	Apr. 30, 1963	T,G	Irr	--	--	--	--
908	do.	1963	66	16	--	Qfpa	203	13.8	do.	T,G	Irr	--	--	--	--
* 909	do.	1964	65	15	--	Qfpa	203	24.3	Oct. 15, 1969	T,G	Irr	503	--	July 24, 1964	--
910	do.	1964	72?	16	--	Qfpa	205	24.4	do.	T,G	Irr	832	--	do.	--
911	do.	1963	72?	16	--	Qfpa	203	16.6 23.8	Apr. 30, 1964 Oct. 15, 1969	T,G	Irr	--	--	--	--
912	-- Moore	--	66	16	--	Qfpa	198	23.6	Oct. 13, 1969	T,G	Irr	--	--	--	--
913	do.	--	65	16	--	Qfpa	198	22.9	do.	T,G	Irr	--	--	--	--
914	J. P. Terrell & Son	--	77	16	--	Qfpa	203	23.6	Oct. 15, 1969	T,G	Irr	--	--	--	--
915	do.	--	--	16	--	Qfpa	199	19.3	do.	T,G	Irr	--	--	--	--
916	-- Moore	--	--	14	--	Qfpa	203	--	--	T,G	Irr	--	--	--	--
917	H. H. Moore	--	--	--	--	Qfpa	200	--	--	T,G	Irr	--	--	--	--
918	do.	--	59	16	--	Qfpa	200	23.9	Oct. 16, 1969	T,G	Irr	--	--	--	--
919	do.	--	67	16	--	Qfpa	195	24.6	Dec. 4, 1969	T,G	Irr	--	--	--	--
920	do.	--	--	16	--	Qfpa	195	26.1	do.	T,G	Irr	--	--	--	--
921	do.	--	66	16	--	Qfpa	195	25.6	do.	T,G	Irr	--	--	--	--
922	do.	--	60	16	--	Qfpa	195	24.9	do.	T,G	Irr	--	--	--	--
923	do.	--	68	16	--	Qfpa	195	24.6	do.	T,G	Irr	--	--	--	--
* 924	do.	--	66	16	--	Qfpa	195	26.7	Jan. 20, 1970	T,G	Irr	--	--	--	--
* 925	J. P. Terrell & Son	--	480	3,2	--	Ty	202	3.7	July 16, 1970	P,E	S	--	--	--	--
926	H. H. Moore	--	66	16	--	Qfpa	--	34.3	Nov. 4, 1970	T,E	Irr	--	--	--	--
* 39-101	Elsie Hill	1942	528	4	508-528	Ty	289	--	--	N	N	100	--	1942	Furnished water for oil well drilling rigs.[2]
103	Mrs. H. P. Crosby	1969	177	4,2	151-177	Tcs	295	60	Apr. 21, 1969	S,E,3/4	D,S	--	--	--	2/
104	Jerry Shelton	1968	185	4,2	151-185	Tcs	295	60	Sept. 7, 1968	S,E,3/4	D,S	18[3]	--	Sept. 7, 1968	2/
110	P. P. Prescott	1967	279	4,2 1/2	246-279	Ty	310	45	Apr. 1967	P,E	D,S	--	--	--	2/
* 201	A. C. Smith	1961	120	--	--	Tj	255	--	--	S,E	D,S	--	--	--	--
* 401	Calvin Ross	1969	125	4,2	--	Tj	280	71	Apr. 22, 1969	S,E,1/2	D,S	8[3]	--	--	2/
* 402	Lewis Loftin	1968	235	4	--	Tj	265	50	Apr. 1, 1968	S,E,3/4	D,S	--	--	--	2/
403	W. L. Jericho	1969	348	4,2	--	Tj	315	15	Nov. 1969	S,E	D,S	--	--	--	--
* 404	J. P. Terrell & Son	1956	280±	4,2	--	Tj	235	24.0	Jan. 20, 1970	J,E	D,S	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BRAZOS COUNTY								
BJ-59-39-405	J. P. Terrell & Son	--	135	4	--	Tj	247	35.1	Jan. 20, 1970	P,H	N	--	--	--	--
406	do.	1958	280	4,2	--	Tj	225	41.2	do.	J,E	D,S	--	--	--	--
501	T. J. Moore	1963	70	15	--	Qfpa	191	10.9 16.9	June 6, 1963 Oct. 16, 1969	T,G	Irr	600[3]	--	--	--
502	do.	--	61	16	--	Qfpa	195	11.6	do.	T,G	Irr	--	--	--	--
503	do.	--	62	16	--	Qfpa	214	15.4	Dec. 4, 1969	T,G	Irr	--	--	--	--
504	do.	--	--	16	--	Qfpa	190	15.3	do.	T,G	Irr	--	--	--	--
505	-- Embrick	1966	276	4,2	--	Tj	265	70	Oct. 14, 1966	S,E,3/4	D,S	14[3]	--	Oct. 14, 1966	[2]
* 506	Tom C. Moore	--	300±	4	--	Tj	205	+	Dec. 4, 1969	Flows	D,S	--	--	--	Measured flow 3.7 gpm on July 21, 1970.
* 507	Prince Holiday	1965	292	4,2	--	Tj	272	60	Aug. 13, 1965	S,E,1/2	D,S	15[3]	--	--	[2]
601	Mrs. Tony Salvaggio	1959	70	18	--	Qfpa	190	14.0 12.0 16.5	Aug. 10, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	750[3]	--	--	--
602	H. M. Elliott	1955	73	18	--	Qfpa	188	8.3 7.3 11.7	Aug. 10, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	--
603	Mrs. Tony Salvaggio	1956	60	18	--	Qfpa	192	12.6 12.0 16.1	Aug. 10, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	750[3]	--	--	--
604	do.	1956	70	18	--	Qfpa	192	13.3 12.5 16.8	Aug. 10, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	750[3]	--	--	--
605	T. J. Moore	--	56	18	--	Qfpa	191	12.1 14.4 17.1	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	367 865	31.73 36.10	July 22, 1963 July 24, 1964	-- --
* 606	do.	1963	61	15	--	Qfpa	192	13.9 15.6 17.2	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	740	28.84	July 23, 1964	--
607	do.	1963	62	15	--	Qfpa	192	12.0 15.0 18.2	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	526	31.25	do.	--
608	do.	1963	71	15	--	Qfpa	191	12.0 14.0 17.8	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	781 743	30.88 31.30	July 22, 1963 July 23, 1964	--
609	do.	1963	57	15	--	Qfpa	187	7.0 9.8	June 6, 1963 Apr. 30, 1964	T,G	Irr	302	38.61	July 22, 1963	--
610	do.	1963	64	15	--	Qfpa	190	12.5 17.4	June 6, 1963 Oct. 16, 1969	T,G	Irr	600[3]	--	1963	--
* 611	do.	1963	60	15	--	Qfpa	185	6.5	June 6, 1963	T,G	Irr	423 375	37.39 31.30	July 22, 1963 July 23, 1964	[1]
612	do.	--	56	18	--	Qfpa	192	12.5 18.5	June 6, 1963 Oct. 16, 1969	T,G	Irr	600[3]	--	--	--
* 613	O. J. Fuchs	1963	258	4	--	Tj	270	--	--	S,E	D,S	--	--	--	--
* 614	Tom C. Moore	--	400±	4	--	Tj	192	+ 10	Jan. 20, 1970	Flows	D	--	--	--	Measured flow 7.5 gpm on Nov. 5, 1970.
* 701	T. J. Moore	1963	60	15	--	Qfpa	201	10.0 12.5 18.6	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	1,000[3]	--	1963	--
702	do.	1963	59	15	--	Qfpa	200	5.6 12.6	June 5, 1963 Oct. 16, 1969	T,G	Irr	600[3]	--	do.	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
BRAZOS COUNTY															
BJ-59-39-703	T. J. Moore	1963	78	15	--	Qfpa	200	12.7 14.6 23.2	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	913 650	46.15 43.09	July 22, 1963 July 24, 1964	--
704	do.	1963	69	15	--	Qfpa	200	12.2 14.8 19.5	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	1,000[3]	--	1963	--
* 705	do.	1963	73	15	--	Qfpa	200	13.5 16.0 19.0 16.2	June 6, 1963 Apr. 30, 1964 Oct. 16, 1969 Apr. 30, 1964	T,G	Irr	488 588	31.91 49.86	July 22, 1963 July 24, 1964	--
706	H. H. Moore	1963	66	16	--	Qfpa	202	22.8	Oct. 16, 1969	T,G	Irr	--	--	--	--
707	J. P. Terrell & Son	--	--	16	--	Qfpa	202	21.5	Oct. 13, 1969	T,G	Irr	--	--	--	--
708	-- Moore	--	--	16	--	Qfpa	202	--	--	T,G	Irr	--	--	--	--
709	H. H. Moore	--	--	16	--	Qfpa	202	21.8	Oct. 16, 1969	T,G	Irr	--	--	--	--
710	-- Moore	--	17	36	--	Qfpa	196	10.3	Dec. 4, 1969	N	N	--	--	--	Dug well, shored with tile.
711	Tom C. Moore	--	200±	2	--	Tj	194	+ + .8	do. Nov. 4, 1970	N	N	--	--	--	--
* 712	J. P. Terrell & Son	--	600±	4	--	Ty	202	11.5	Jan. 20, 1970	C,E	D,S	--	--	--	--
801	-- McDonald	--	57	18	--	Qfpa	196	13.8 17.5 18.9	Aug. 9, 1960 June 6, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	--
802	-- Bosse	1963	64	15	--	Qfpa	190	10.0	June 6, 1963	T,G	Irr	--	--	--	[1]
803	do.	1960	66	18	--	Qfpa	190	14.5 17.2	June 6, 1963 Dec. 4, 1969	T,G	Irr	--	--	--	--
804	U.S. Geological Survey	1963	80	--	--	--	193	24.0	Dec. 9, 1963	N	N	--	--	--	Test hole.[2]
* 806	--	--	--	14	--	Qfpa	193	--	--	T,G	Irr	--	--	--	--
* 807	--	--	1,000±	5	--	Ty	192	+	Dec. 18, 1969	Flows	N	--	--	--	Measured flow 10 gpm on Dec. 18, 1969.
808	--	--	60	16	--	Qfpa	200	25.0	Oct. 16, 1969	T,G	Irr	--	--	--	--
901	M. H. Elliott	1956	66	18	--	Qfpa	190	16.9	Oct. 27, 1959	T,G	Irr	--	--	--	[1]
902	Tom Rotello	1955	74	18	--	Qfpa	190	16.2 14.8	Sept. 22, 1960 June 6, 1963	T,G	Irr	--	--	--	--
* 903	do.	1955	62	18	--	Qfpa	185	14.3 8.6 12.6 16.3	Sept. 22, 1960 May 19, 1961 June 7, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	Three wells have total yield of 1,300 gpm.
904	do.	1955	52	14	--	Qfpa	185	13.1 11.4 15.6	Sept. 22, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	--
905	do.	1955	62	14	--	Qfpa	185	11.2 9.7 14.0	Sept. 22, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	--
906	M. H. Elliot	1955	72	18	--	Qfpa	188	9.6 8.9 12.6	Aug. 10, 1960 June 7, 1963 Oct. 16, 1969	T,G	Irr	--	--	--	--
* 907	H. H. Moore	1963	70	16	--	Qfpa	187	36.1 33.5	Apr. 30, 1964 Oct. 16, 1969	T,G	Irr	194	20.34	July 23, 1964	--
908	do.	--	60	16	--	Qfpa	194	37.2	do.	N	N	--	--	--	Abandoned in 1969.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BRAZOS COUNTY							
BJ-59-39-909	Roy W. Moore	--	61	16	--	Qfpa	183	26.6	Oct. 16, 1969	T,G	Irr	--	--	--	--
* 910	do.	1965	70	16	--	Qfpa	190	18.7	Dec. 18, 1969	T,G	Irr	--	--	--	--
911	M. H. Elliott	--	--	16	--	Qfpa	190	--	--	T,G	Irr	--	--	--	--
912	do.	--	--	14	--	Qfpa	190	--	--	T,G	Irr	--	--	--	--
913	Roy W. Moore	1965	65	16	--	Qfpa	187	24.7	Dec. 18, 1969	T,G	Irr	--	--	--	--
914	-- Moore	--	62	16	--	Qfpa	187	37.7	do.	T,G	Irr	--	--	--	--
* 915	T. B. Rotello	--	1,050±	4	--	Ty	192	+	do.	Flows	D,S	--	--	--	--
916	Roy W. Moore	--	70	16	--	Qfpa	185	37.7	Jan. 20, 1970	T,G	Irr	--	--	--	--
* 917	do.	--	250±	3	--	Tcs	186	30.5	do.	J,E	D,S	--	--	--	--
40-401	Rotello-Farms Cattle Co.	--	53	18	--	Qfpa	192	23.1	Aug. 10, 1960	N	N	--	--	--	Yield insufficient,
402	--	--	34	30	--	Qfpa	185	23.0	Dec. 3, 1969	N	N	--	--	--	Dug well, shored with rock,
* 403	Rotello-Farms Cattle Co.	1969	73	4	64-73	Tcs	195	16.4	Dec. 18, 1969	S,E,3/4	D,S	--	--	--	--
46-308	J. P. Terrell & Son	--	59	16	--	Qfpa	195	28.4	Jan. 20, 1970	T,G	Irr	--	--	--	--
309	H. H. Moore	--	60	16	--	Qfpa	200	37.8	Nov. 4, 1970	T,G	Irr	--	--	--	--
* 47-104	Tom C. Moore	--	114	4	--	Tcs	200	2.7 4.3	Dec. 4, 1969 Nov. 4, 1970	P,H	D	--	--	--	--
304	G. W. Lott	1942	137	6	82-137	Tcs	185	+ 6.6 + 7.2 6.0	Oct. 15, 1942 Oct. 19, 1942 Dec. 17, 1969	N	N	--	--	--	Drilled as formation test to 2,107 ft., plugged back to 137 ft. Uncased below 82 ft. Flowed when drilled. 4/
* 305	Joe Olander Estate	--	245	2	--	Tcs	182	+	July 1, 1942	D,E	D,S	--	--	--	Measured flow 2 gpm on July 1, 1942.
306	U.S. Geological Survey	1963	68	--	--	--	185	37.5	Dec. 9, 1963	N	N	--	--	--	Test hole. 2/
* 308	G. W. Lott	--	146	4	--	Tcs	187	17.7 17.8	Dec. 17, 1969 Jan. 20, 1970	J,E	D,S	--	--	--	--
								BURLESON COUNTY							
BS-59-18-801	Jesse Whited	--	38	36	--	Tqc	455	18.7	Mar. 23, 1970	J,E	D,S	--	--	--	Dug well.
802	do.	--	235	3	--	Tqc	455	--	--	P,W	D,S	--	--	--	--
* 901	A. R. Richardson	1926	58	10	--	Tqc	510	54.2	Sept. 2, 1936	N	N	--	--	--	Abandoned. 1/
902	M. A. Sprull	--	70	42	--	Tqc	485	48.9	Mar. 23, 1970	B,H	D,S	--	--	--	Dug well, shored with brick.
* 903	H. L. Tabor	1967	357	4,2	315-357	Tqc	515	90	Nov. 1967	J,E	S	10 3/	--	Nov. 1967	2/
* 904	Gilbert Weichert	1965	635	4,2	--	Tc,Twi	488	151.5	Mar. 24, 1970	S,E	S	--	--	--	2/
905	do.	--	60	30	--	Tqc	495	22.2 29.2	Mar. 24, 1970 July 10, 1970	N	N	--	--	--	Dug well, shored with tile.
* 906	do.	--	200	--	--	Tqc	495	--	--	N	N	--	--	--	Abandoned.
907	Mrs. O. H. Roskey	1962	277	4,2	237-277	Tqc	495	75	May 12, 1962	N	N	13 3/	--	May 12, 1962	Do. 2/
* 19-401	J. F. Keller	1930	66	30	--	Tqc	360	62.7	Sept. 2, 1936	N	N	--	--	--	Dug well. Abandoned.
501	Dr. Clarence Kemp	1966	280	4,2	--	Tqc	460	90	Sept. 27, 1966	S,E	D,S	25 3/	--	Sept. 27, 1966	2/
* 601	Lawson Mini Ranch	1917	15	30	--	Tqc	450	8.5	Sept. 1, 1936	N	N	--	--	--	Dug well. Abandoned.
602	do.	--	38	30	--	Tqc	450	28.8	Mar. 25, 1970	J,E	D,S	--	--	--	Dug well, shored with concrete rings.
* 603	Annie N. Jennings	1875	58	30	--	Tqc	430	15.8	Sept. 1, 1936	J,E	D,S	--	--	--	Dug well, shored with rock.
* 604	Claude McFarland	1967	334	4,2	301-334	Tqc	370	105	Feb. 3, 1967	S,E,1/3	D,S	12 3/	--	Feb. 3, 1967	2/

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-19-605	Claude McFarland	1966	126	4	105-126	Tqc	370	45	Oct. 21, 1961	N	N	13[3/]	--	Oct. 21, 1966	Abandoned.
606	L. D. Stewart	1968	164	4,2	122-164	Tqc	435	90	July 1968	S,E,1/3	D	--	--	--	--
* 701	R. M. Moorman	1933	42	30	--	Tqc	430	35.0	Sept. 2, 1936	N	N	--	--	--	Dug well, abandoned.
* 702	Denton Valley Farm	1965	240	4	210-240	Tqc	415	110	Sept. 2, 1965	S,E,3/4	D,S	20[3/]	--	Sept. 2, 1965	[2/]
801	Lee Fazzino	--	200±	2	--	Tqc	298	+	Mar. 13, 1970	Flows	S	--	--	--	Measured flow 8 gpm on March 13, 1970. Temp. 70°F (21.0°C).
* 802	do.	1935	37	30	--	Tqc	307	17.3 9.4	Sept. 2, 1936 Mar. 24, 1970	N	N	--	--	--	Dug well, shored with concrete rings.
* 803	C. A. Baines	--	65	30	--	Tqc	410	46.9 58.0	Nov. 2, 1936 Mar. 24, 1970	N	N	--	--	--	Do.
* 804	Tony Salvaggio	--	300±	3	--	Tqc	273	+	Mar. 26, 1970	Flows	S	--	--	--	Measured flow 6.5 gpm on March 26, 1970.
* 805	Ben Green	1968	230	4,2	--	Tqc	355	43.7	Mar. 31, 1970	S,E,1/4	D,S	20[3/]	--	Apr. 1968	--
* 806	Ed Williams Estate	1934	62	36	--	Tw	332	38.6	Oct. 21, 1936	N	N	--	--	--	Dug well. Abandoned.
901	Hovorak Bros.	1949	230	3	--	Ts	260	+	Mar. 25, 1970	Flows	S	--	--	--	--
* 902	Philip Conerway	1965	295	4,2	90-132	Ts	295	25	Oct. 6, 1965	S,E,1/3	D,S	12[3/]	--	Oct. 6, 1965	--
* 903	W. E. Garner	1965	205	4,2	163-205	Ts	320	40	July 9, 1965	S,E,1/3	D,S	13[3/]	--	July 9, 1965	[2/]
904	Loehr Bros.	--	100±	4	--	Ts	257	+	Mar. 26, 1970	Flows	S	--	--	--	Measured flow 4.6 gpm on March 26, 1970. Temp. 69°F (20.5°C).
905	do.	--	8	27	--	Ts	260	1.5	do.	N	N	--	--	--	Dug well, shored with concrete rings.
906	-- Alford	--	400±	--	--	Tqc	245	+	do.	Flows	D,S	--	--	--	Measured flow 20 gpm on March 26, 1970. Temp. 73°F (23.0° C).
907	do.	--	100±	4	--	Ts	245	+	do.	Flows	S	--	--	--	Measured flow 1.5 gpm on March 26, 1970. Temp. 69°F (20.5°C).
* 20-116	W. F. Tonn	--	22	30	--	Qt	316	20.1 17.4 16.4	May 14, 1964 Mar. 12, 1970 Nov. 6, 1970	P,E	D,S	--	--	--	Dug well, shored with concrete rings.
* 120	Cavitt Sisters	1931	950?	4	--	Tc,Twi	280	+ 2.0	Nov. 6, 1970	Flows	S	--	--	--	Converted oil test. Measured flow 5 gpm on March 25, 1970.
* 121	R. A. Alford	1959	1,250	4,2	--	Tc,Twi	275	+	Mar. 25, 1970	Flows	D,S	--	--	--	--
* 122	Alford Bros.	1910	700?	4	--	Tqc	282	+	do.	Flows	S	--	--	--	--
* 401	Oscar Weeber	--	40	10	--	Tw	290	38.3	Sept. 21, 1936	N	N	--	--	--	Dug well. Abandoned.
* 402	Adolph Hajousky	--	500?	3	--	Tqc	295	+	do.	--	D	--	--	--	Flow 1 gpm on Sept. 21, 1936.
403	--	--	34	30	--	Qt	323	31.8 29.0	May 14, 1964 Mar. 12, 1970	N	N	--	--	--	Dug well, shored with concrete rings.
404	Barney Catron	1956	71	16	--	Qt,Ts	299	42.7 42.6 42.7	Mar. 25, 1970 Nov. 6, 1970 Feb. 1, 1971	T	Irr	--	--	--	Irrigated about 100 acres in 1958. Not used several years.
405	AGM Poultry Co.	1968	315	4,2	273-315	Tqc	303	70	Mar. 1968	S,E,1/3	D,S	20[3/]	--	Mar. 1968	[2/]
406	John Morris	1967	120	2	99-120	Tqc	295	60	Nov. 1967	P,E	D,S	7[3/]	--	Nov. 1967	--
407	Oscar Weeber	1967	320	4,2	278-320	Tqc	290	42	June 12, 1967	J,E	S	20[3/]	--	June 12, 1967	--
408	Adolph Hajousky	1967	210	4,2	168-210	Tqc	297	40	May 1967	S,E,1/3	D,S	12[3/]	--	May 1967	--
409	L. C. Hall, Sr.	1969	230	4,2	188-230	Tqc	298	40	Dec. 1969	S,E,1/3	D,S	30[3/]	--	Dec. 1969	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
BURLESON COUNTY															
* BS-59-20-545	L. C. Hall, Sr.	--	Spring	--	--	Ts	220	+	May 1964	Flows	--	--	--	--	Spring in bank of Brazos River.
* 704	Cordus Jackson	--	40	27	--	Ts	313	35.8	Mar. 26, 1970	J,E	D,S	--	--	--	Dug well, shored with concrete rings.
* 25-501	M. D. Shedenhelm	--	362	4	--	Tc	392	19.5	July 16, 1964	S,E,1	D,S	--	--	--	--
502	John R. Praesel	1968	614	4,2	593-614	Tc,Twi	425	53	May 8, 1968	S,E,1	D,S	6[3/]	--	May 8, 1968	[2/]
* 503	A. G. Praesel	1965	211	4	171-211	Tqc	440	67	Oct. 13, 1965	S,E,1	S	--	--	--	--
504	do.	--	15	30	--	Tqc	440	3.6	Mar. 30, 1970	J,E	S	--	--	--	Dug well, shored with concrete rings.
* 505	R. E. Brown	1968	231	4	210-231	Tqc	435	61	July 26, 1968	S,E,1	S	30[3/]	--	July 26, 1968	[2/]
507	C. C. Willard	1966	66	4	45-66	Tqc	388	29	May 11, 1966	S,E	N	--	--	--	--
603	Lloyd Morton	1962	114	4	94-114	Tqc	430	5	Aug. 6, 1962	S,E	D,S	--	--	--	--
604	--	--	53	27	--	Tqc	485	47.1	Mar. 27, 1970	N	N	--	--	--	Dug well, shored with concrete rings.
605	Frank Burrough, Jr.	1965	132	4	108-132	Tqc	450	59	Nov. 20, 1965	S,E	S	33[3/]	--	Nov. 20, 1965	[2/]
* 901	S. Tarwater	1957	315	2	--	Tqc	337	+	Mar. 20, 1970	Flows	S	--	--	--	--
902	do.	1954	290	4	--	Tqc	387	28	1954	S,E	D,S	--	--	--	--
* 903	M. E. Willard	1961	310	2	270-310	Tqc	340	+	Mar. 30, 1970	Flows	S	--	--	--	[2/]
26-101	I C Ranch	--	--	--	--	--	465	--	--	P,E	D,S	--	--	--	--
* 202	J. T. Segler	1947	350	4	--	Tc	430	43	1947	S,E	D,S	--	--	--	--
* 203	do.	1934	23	4	--	Tqc	430	19.8	Sept. 4, 1936	N	N	--	--	--	Abandoned.
204	Boyd-Eanes	1955	--	4	--	--	430	--	--	A	S	--	--	--	Formerly furnished water for drilling oil test. Rarely used.
* 302	Ray Hill	1910	90	10	--	Tqc	457	44.0	Sept. 4, 1936	J,E	D,S	--	--	--	[1/]
* 303	John King	--	27	30	--	Tqc	325	23.0 18.2	Sept. 4, 1936 Mar. 23, 1970	J,E	D,S	--	--	--	Dug well, shored with brick.
* 304	G. I. Perkins	--	Spring	--	--	Tqc	470	+	Sept. 16, 1936	Flows	S	--	--	--	Flow estimated 3 gpm.
* 305	Henry Adamek	--	48	30	--	Tqc	438	19	Oct. 1, 1936	P,W	D,S	--	--	--	Dug well, curbed with brick.
* 306	J. P. Winkler	1917	17	30	--	Tqc	464	13.6 11.7 11.6	Sept. 11, 1936 Mar. 24, 1970 July 10, 1970	B,H	D,S	--	--	--	Dug well, curbed with tile.
* 501	J. Janicek	--	36	36	--	Tqc	412	24.5 26.5	Sept. 15, 1936 Mar. 23, 1970	J,E	S	--	--	--	Dug well, shored with brick.
* 502	Ethel Hensley	1928	39	36	--	Ts	515	31.7 30.3	Sept. 12, 1936 Mar. 23, 1970	N	N	--	--	--	Do.
503	--	--	71	8	--	Tqc	500	60.7	Mar. 31, 1970	P,E	N	--	--	--	--
504	Camp Wagon Wheel	1966	480	4,2	417-480	Tqc	505	140	Mar. 31, 1966	S,E	D,S	10[3/]	--	Mar. 31, 1966	[2/]
* 601	E. J. Schweda	--	42	30	--	Tw	--	--	--	--	D	--	--	--	Dug well.
602	Steve Neal	1964	172	2	--	Tqc	336	1.2	Mar. 27, 1970	N	N	10	15	Aug. 4, 1964	[2/]
603	-- James	--	40	27	--	Tw	400	19.8	do.	B,H	D,S	--	--	--	Dug well, shored with concrete rings.
* 604	Mrs. A. B. James	1911	30	8	--	Tqc	380	8.4	Oct. 9, 1936	N	N	--	--	--	Abandoned.
* 605	J. R. Bent	--	85	30	--	Ts	465	55.0 55.6	Sept. 12, 1936 Mar. 27, 1970	J,E	D	--	--	--	Dug well, shored with concrete rings.
* 606	Spring Lake Spring	--	Spring	--	--	Ts	350	+	Oct. 8, 1936	Spring	--	--	--	--	Flow 20 gpm on Oct. 8, 1936. Covered by lake in 1970.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL			METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA			REMARKS
							ALTITUDE OF LAND SURFACE (FT)	ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			YIELD	DRAWDOWN	DATE	
									BURLESON COUNTY						
* BS-59-26-701	Webb Price	1916	42	30	--	Tqc	469	29.0 26.4	Sept. 22, 1936 May 8, 1970	J,E	D,S	--	--	--	Dug well, shored with brick.
* 702	F. C. Anderson	1964	583	4,2	497-583	Tc	464	120	Sept. 1969	S,E	D,S	80[3]	32	Sept. 1969	Recased and cemented in 1969 after casing failure allowed entrance of mineralized water.[2]
* 703	do.	1969	563	4,2	542-563	Tc	490	122	Oct. 14, 1969	S,E	D,S	35[3]	20	Oct. 14, 1969	Casing cemented from 0 to 500 ft.[2]
704	--	--	24	36	--	Ts	475	22.6	Mar. 30, 1970	N	N	--	--	--	Dug well, shored with brick.
* 801	R. C. Ryan	--	48	30	--	Tw	508	32.6 8.7	Sept. 3, 1936 Mar. 23, 1970	B,H	D,S	--	--	--	Do.
* 802	Fred W. Newcomb	1968	648	4,2	606-648	Tc	450	80	Mar. 1968	S,E	D,S	20[3]	--	Mar. 1968	--
901	John Oggero	1964	105	4,2	63-105	Ts	430	--	--	J,E	D,S	12[3]	--	Oct. 31, 1964	--
* 902	C. C. Nelm	--	47	30	--	Ts	--	41.3	Oct. 10, 1936	N	N	--	--	--	Dug well. Abandoned.
* 27-201	Denton Valley Farm	1957	167±	2	--	Tqc	310	+	Mar. 13, 1970	Flows	S	--	--	--	Measured flow 2 gpm on March 13, 1970.
* 202	Caldwell Fishing Club	1924	227	2	--	Ts	315	+	Oct. 21, 1936	P,E	D	--	--	--	Measured flow 2 gpm on Oct. 21, 1936. Not flowing on March 26, 1970.
* 203	do.	--	27	30	--	Ts	325	17.4 15.5	Oct. 21, 1936 Mar. 26, 1970	P,E	D	--	--	--	Dug well, shored with tile rings.
* 204	Jack Manuel	1965	205	4,2	163-205	Ts	312	22	Aug. 24, 1965	J,E,1/2	D,S	13[3]	--	Aug. 24, 1965	[2]
* 205	do.	1934	9	30	--	Ts	312	7.9	Oct. 21, 1936	N	N	--	--	--	Dug well, shored with concrete rings.
206	L. B. Moers	1965	380	4,2	338-380	Tqc	350	35	Nov. 13, 1966	S,E,1/3	D	50[3]	--	Nov. 13, 1966	--
301	Hovorak Bros.	1952	440	3,2	--	Tqc	390	90	1952	J,E	D,S	--	--	--	--
302	Joe Surovik	1967	543	4,2	498-543	Tqc	365	80	Sept. 1967	S,E,1/3	D,S	--	--	--	[2]
* 303	--	--	350±	4	--	Tqc	260	+	Apr. 1, 1970	Flows	S	--	--	--	--
304	Phil Alford	1962	238	4,2	196-238	Ts	403	80	Aug. 15, 1962	S,E,1/3	S	15[3]	--	Aug. 15, 1962	--
* 305	Mary Teal	1920	24	8	--	Tcm	375	14.2	Nov. 2, 1936	N	N	--	--	--	--
* 401	Otto Berndt	1936	45	8	--	Ts	381	29.5	Nov. 13, 1936	--	--	--	--	--	[1]
402	Dean Lake Ranch	--	Spring	--	--	Ts	390	+	Mar. 24, 1970	Flows	S	--	--	--	Line of seeps.
* 501	Frank Hckalopka	1933	32	8	--	Tcm	368	10.5 9.7	Sept. 19, 1936 Mar. 31, 1970	N	N	--	--	--	--
* 502	F. A. Surovik	1964	1,070	4,2	1,030- 1,070	Tc	405	--	--	S,E	D,S	50[3]	--	1964	[2]
503	do.	--	90	5	--	Tcm	405	33.7	Apr. 3, 1970	N	N	--	--	--	--
* 504	Henry Jackson	1935	19	30	--	Ts	375	14.8 12.5	Sept. 2, 1936 Apr. 14, 1970	J,E	D,S	--	--	--	Dug well, shored with brick.
* 601	Mrs. Frank Kubin	1913	124	10	--	Tcm	391	29.0 19.3	Sept. 21, 1936 Apr. 3, 1970	J,E	D,S	--	--	--	--
* 602	-- Hanacik	1930	315	6	--	Ts	382	29.0	Sept. 19, 1936	J,E	D,S	--	--	--	--
* 603	Franklin Steck	1965	560	4,2	518-560	Tqc	388	84	Apr. 16, 1965	S,E,1	D,S	25[3]	--	Apr. 16, 1965	[2]
604	do.	--	340	4	320-340	Tqc	386	89.4	Apr. 1, 1970	P	N	--	--	--	--
* 605	H. A. Rosenbaum	1968	330	412	--	Tqc	420	102	Nov. 1968	S,E,1/3	D,S	13[3]	--	Nov. 1968	--
* 606	Rudy Steck	1966	600	4,2	558-600	Tqc	393	94	Oct. 10, 1966	S,E,1/3	D,S	23[3]	--	Oct. 10, 1966	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER OF CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
BS-59-27-607	John Kubin	1962	696	4,2	654-696	Tqc	390	90	July 7, 1962	S,E,1	D,S	5[3]	40	July 7, 1962	[2]
608	CSA and SPJST Lodge	1969	270	4,2	228-270	Tcm	400	103	May 12, 1969	S,E,1/2	D	20[3]	--	May 12, 1969	[2]
* 609	W. E. Steck	1966	540	4,2	498-540	Tqc	378	78	Oct. 1, 1966	S,E,1/3	D,S	27[3]	--	Oct. 1, 1966	--
701	Mrs. Viola Davis	1956	750±	12	--	Tqc	413	51.9	May 8, 1970	N	N	--	--	--	Formerly irrigated 40 acres of feedstuff.
* 702	Joe Veiss	1935	20	8	--	Tcm	405	6.0	Oct. 8, 1936	--	--	--	--	--	[1]
* 703	Coopers Hollow Country Club	1965	190	4,2	--	Ts	355	19	Jan. 27, 1965	S,E,1	D	50[3]	--	Jan. 27, 1965	--
704	Ray Marek	1965	320	4,2	278-320	Tqc	435	70	Mar. 23, 1965	N	N	13[3]	--	Mar. 23, 1965	--
705	do.	--	100±	2	--	Tcm	435	43.9	Apr. 14, 1970	N	N	--	--	--	--
* 706	R. B. Wilkens	1957	900±	--	--	Tc	450	--	--	S,E	D,S	--	--	--	--
707	do.	--	100±	3	--	Ts	460	--	--	P,W	S	--	--	--	--
* 708	R. H. Poehl	1933	92	8	--	Tcm	422	57.0 20.6	Sept. 25, 1936 Apr. 24, 1970	N	N	--	--	--	--
709	R. O. Hoffman	1968	441	4,2	--	Ts	415	101	Oct. 5, 1968	S,E,3/4	D,S	--	--	--	--
710	do.	1964	451	4,2	--	Ts	415	80	Nov. 11, 1964	S,E,3/4	D,S	10[3]	--	Nov. 11, 1964	[2] --
711	R. W. Slovacek	1968	---	4	--	Ts	432	--	--	J,E	D,S	--	--	--	--
* 712	Mrs. Viola Davis	--	700±	4	--	Tqc	422	--	--	S,E	D,S	--	--	--	--
* 713	Ray Marek	1965	421	4,2	381-421	Ts	435	102	Nov. 8, 1965	S,E,1/2	D,S	25[3]	--	Nov. 8, 1965	--
* 714	City of Caldwell new well 3	1964	1,314	16,12,8	1,070-1,304	Tc,Twi	430	107.1	Feb. 19, 1971	S,E,100	P	1,105	213.5	Feb. 19, 1971	Underreamed and gravel wall from 1,028 to 1,210 ft. [2] [4]
* 715	Clint Lewis	1962	547	4,2	--	Tqc	425	60	Oct. 26, 1962	S,E,1	D,S	13[3]	66	Oct. 26, 1962	[2]
* 801	City of Caldwell old well 1	1935	160	10	140-160	Ts	330	+ .7	Sept. 25, 1936 Apr. 1, 1940	--	N	200[3]	14	1935	Abandoned. Flowed 40 gpm in 1935.
* 802	City of Caldwell old well 2	1936	271	10	--	Ts	330	+ 1.5 .7	Sept. 25, 1936 Jan. 10, 1938 Apr. 1, 1940	--	N	200[3]	--	1936	Abandoned. Flowed 40 gpm in 1936.
* 803	City of Caldwell new well 2	1942	1,236	10,5	1,048-1,206	Tc,Twi	330	+ 7 6.6	Mar. 20, 1942 Feb. 18, 1971	T,E,25	P	310[3]	24	1942	Underreamed and gravel wall from 1,048 to 1,206 ft. [2]
* 804	City of Caldwell new well 1	1942	1,210	10,6,5	1,028-1,210	Tc,Twi	330	+ 4.3	1942 Feb. 18, 1971	T,E,25	P	391	41.8	Feb. 18, 1971	Underreamed and gravel wall from 1,028 to 1,210 ft.
* 805	D. L. Alford	--	275±	6	--	Ts	320	.9 +	Oct. 30, 1970 Feb. 2, 1971	Flows	S,I	--	--	--	Measured flow 50 gpm on Feb. 2, 1971.
* 806	Santa Fe Industries	1936	351	10,5	280-351	Ts	405	87.4 78.2	May 3, 1938 Dec. 15, 1939	N	N	200[3]	--	1936	Abandoned. Formerly furnished water for locomotives.
* 807	do.	1933	353	--	--	Ts	405	82.4 81.5 80.3 81.1	Oct. 19, 1938 May 2, 1939 Dec. 6, 1939 Nov. 21, 1940	N	N	--	--	--	Do.
808	Tom F. Vajdak	1963	172	4,2	99-172	Ts	325	+	Oct. 23, 1963	Flows	D,S	25[3]	--	Oct. 23, 1963	--
809	City of Caldwell	1900?	--	10	--	Ts	405	71.5	Oct. 30, 1970	A	N	--	--	--	Formerly furnished water for city.
* 901	John Grace	1963	570	4,2	528-570	Ts	425	100	Oct. 29, 1963	S,E,3/4	D,S	17[3]	89	Oct. 29, 1963	[2]
28-101	Joe B. Drgac	1967	380	4,2	--	Tqc	365	97	Oct. 1967	S,E,1/3	D,S	14[3]	--	Oct. 1967	[2]
102	Franklin Steck	--	100±	4	--	Tcm	315	20.9	Apr. 1, 1970	P,W	S	--	--	--	--
* 201	Black Lake Rod & Gun Club	--	51	18	--	Qfpa	239	9.6	Jan. 27, 1960	T,G	Irr	--	--	--	Pumped to fill lake. [1]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL			METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA			REMARKS
							ALTITUDE OF LAND SURFACE (FT)	ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	DATE OF MEASUREMENT			YIELD	DRAWDOWN	DATE	
									BURLESON COUNTY						
* BS-59-28-202	Morello Estate	1957	1,200±	4	--	Tqc	256	+	June 17, 1963	Flows	D,S	--	--	--	--
203	--	--	16	30	--	Qt	312	14	May 13, 1964	J,E	D,S	--	--	--	Dug well, shored with concrete rings.
* 204	Black Lake Rod & Gun Club	--	1,100±	2	--	Tqc	239	+	Mar. 13, 1970	Flows	D	--	--	--	Measured flow 30 gpm on March 13, 1970. Flows into swimming pool, then overflows into lake.
205	J. J. Skrivanek, Jr.	1967	325	4,2	--	Ts	330	60	Aug. 1967	S,E,1/3	S	--	--	--	--
* 206	do.	1963	1,475	4,2	--	Tc,Twi	342	--	--	S,E	D,S	--	--	--	--
* 207	do.	--	228	4,2	--	Tqc	305	--	--	P,E	D,S	--	--	--	--
* 208	Rufus Johnson	1965	240	4,2	198-240	Tqc	335	56	June 1, 1965	S,E,1/3	D,S	20[3]	--	June 1, 1965	[2]
* 209	Austin Williams	1968	200	2	158-200	Ts	325	70	Oct. 1968	S,E,1/3	D,S	15[3]	--	Oct. 1968	--
* 210	Webb Howell	--	800±	2	--	Tqc	255	+	Nov. 20, 1936	Flows	D,S	--	--	--	--
211	J. J. Skrivanek, Jr.	--	75	8	--	Tcm	330	38.6	Apr. 1, 1970	N	N	--	--	--	--
301	Pete R. Scarmardo	1956	53	18	--	Qfpa	241	40	1956	N	N	350	--	1956	Abandoned.
302	do.	1957	53	18	--	Qfpa	242	19.3 18.7	May 28, 1963 Oct. 20, 1969	T,G	Irr	285	--	Aug. 7, 1964	--
303	Sam Scarmardo	--	60	18	--	Qfpa	246	19.6 22.5	May 28, 1963 Oct. 20, 1969	T,G	Irr	--	--	--	--
304	Don Fazzino	1956	62	18	--	Qfpa	244	33.7	Mar. 15, 1957	N	N	--	--	--	Abandoned in 1964. Well BS-59-28-329 located 20 ft. south. [1]
305	do.	1956	60	18	--	Qfpa	242	28.6	Apr. 10, 1957	T,G	Irr	--	--	--	[1]
306	C. E. Scarmardo	--	58	18	--	Qfpa	243	27.0	do.	T,G	Irr	309	15.88	June 25, 1965	[1]
307	Pete Scarmardo	1955	65	16	--	Qfpa	240	16.7 18.8	June 4, 1964 Oct. 20, 1969	T,G	Irr	525 426 435	-- -- --	1956 1957 July 11, 1963	--
308	Luke Scarmardo	--	60	18	--	Qfpa	240	20.0	Apr. 10, 1957	T,G	Irr	584	--	July 14, 1964	[1]
309	Frank DeStefano	--	72	18	--	Qfpa	237	37.8	Feb. 27, 1960	T,E	Irr	878 668	12.51 10.30	July 10, 1963 July 7, 1964	--
310	do.	--	--	18	--	Qfpa	235	30.9	Aug. 1, 1960	T,G	Irr	1,235 749	15.37 19.76	Aug. 8, 1963 July 7, 1964	[1]
311	Will Scarmardo	1954	65	14	--	Qfpa	232	18.9 23.5 24.0	May 31, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	1,134 504 800 1,205	-- -- 14.76 25.99	1956 1957 July 10, 1963 July 7, 1964	--
* 312	do.	1957	79	18	--	Qfpa	232	21.0 17.6 23.0	Aug. 1, 1960 May 31, 1963 Oct. 21, 1969	T,G	Irr	1,002	--	1957	--
313	Sam C. Scarmardo	--	78	18	--	Qfpa	234	29.6	Mar. 15, 1957	T,G	Irr	--	--	--	[1]
314	-- Scarmardo	1956	61	18	--	Qfpa	235	10.0 17.0	May 15, 1963 Oct. 20, 1969	T,G	Irr	870 951	-- --	1956 1957	--
* 315	-- Morello	1955	55	18	--	Qfpa	245	29.0 33.2	May 29, 1961 May 29, 1963	T,G	Irr	--	--	--	--
* 316	-- Scarmardo	1955	61	18	--	Qfpa	242	22.9 23.3	May 28, 1963 Oct. 20, 1969	T,G	Irr	--	--	--	--
317	J. Scarmardo	--	52	--	--	Qfpa	232	15.0 20.2 21.9	May 15, 1963 June 4, 1964 Oct. 20, 1969	T,G	Irr	460 549	16.23 17.98	July 10, 1963 July 7, 1964	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
BS-59-28-318	L. Patranella	--	68	18	--	Qfpa	230	11.2	May 16, 1963	T,G	Irr	--	--	--	--
319	J. Scarmardo	--	52	18	--	Qfpa	240	9.6 11.1	May 17, 1963 Oct. 20, 1969	T,G	Irr	429	--	July 7, 1964	--
320	M. Malazzo	--	53	18	--	Qfpa	240	17.2	May 28, 1963	N	N	--	--	--	--
321	do.	--	46	18	--	Qfpa	240	14.5 13.9	May 28, 1963 Oct. 20, 1969	T,E	Irr	--	--	--	--
322	S. Scarmardo	--	58	16	--	Qfpa	244	22.1 23.6	May 28, 1963 Oct. 20, 1969	T,G	Irr	--	--	--	--
323	-- Altimore	1955	58	--	--	Qfpa	235	--	--	T,G	Irr	--	--	--	--
324	--	--	59	--	--	Qfpa	243	16.1 18.6 20.9	May 31, 1963 June 4, 1964 Oct. 20, 1969	T,G	Irr	575 568	27.24 24.86	July 11, 1963 July 14, 1964	--
* 325	L. M. Scarmardo	1957	980	4	--	Tqc	241	+ +	June 17, 1963 Mar. 13, 1970	Flows	D	--	--	--	--
* 326	do.	1939	787	--	--	Tqc	244	+ +	June 17, 1963 Mar. 13, 1970	Flows	D	--	--	--	--
* 327	do.	--	--	--	--	Qfpa	242	17.8 22.0	June 4, 1964 Oct. 20, 1969	T,G	Irr	695 605	-- 19.51	July 11, 1963 July 7, 1964	--
328	do.	--	--	--	--	Qfpa	242	18.9 22.7	June 4, 1964 Oct. 20, 1969	T,G	Irr	597	23.84	July 7, 1964	--
329	Don Fazzino	1964	65±	16	--	Qfpa	244	28.3	Mar. 20, 1964	T,G	Irr	173	--	do.	1/
330	L. Scarmardo	--	--	--	--	Qfpa	242	20.8 21.3	June 4, 1964 Oct. 20, 1969	T,G	Irr	384 295	-- 14.75	July 9, 1963 July 14, 1964	--
331	M. Malazzo	--	--	--	--	Qfpa	240	14.9	do.	T,E	Irr	--	--	--	--
332	J. Scarmardo	--	57	18	--	Qfpa	243	--	--	T,G	Irr	--	--	--	--
333	-- Scarmardo	--	55±	18	--	Qfpa	243	18.3	Oct. 29, 1969	T,G	Irr	--	--	--	--
334	-- Morello	--	--	16	--	Qfpa	245	31.9	Oct. 20, 1969	T,G	Irr	--	--	--	--
335	-- Scarmardo	--	--	16	--	Qfpa	242	21.2	do.	T,G	Irr	--	--	--	--
336	--	--	52	16	--	Qfpa	241	16.4	do.	T,G	Irr	--	--	--	--
337	-- DeStefano	--	--	16	--	Qfpa	235	26.9	do.	T,G	Irr	--	--	--	--
338	--	--	--	16	--	Qfpa	240	20.1	Oct. 29, 1969	T,G	Irr	--	--	--	--
339	-- Scarmardo	--	--	--	--	Qfpa	240	22.1	do.	T,G	Irr	--	--	--	--
340	do.	--	--	--	--	Qfpa	235	--	--	T,G	Irr	--	--	--	--
401	Walter Lightsey	--	500	3	--	Ts	260	+	Mar. 13, 1970	Flows	S	--	--	--	Measured flow 10 gpm on March 13, 1970. Temp. 74°F (23.5°C)
402	-- Loehr	--	300±	3	--	Tcm	260	+	do.	Flows	S	--	--	--	Measured flow 1.6 gpm on March 13, 1970. Temp. 72°F (22.0°C)
403	F. J. Sebesta	1967	415	4,2	--	Ts	312	35	Sept. 1967	S,E,3/4	D,S	25 3/	--	Sept. 1967	2/
404	Edd Loehr	1967	187	4,2	167-187	Ts	308	60	May 24, 1967	P,G	D,S	12 3/	--	May 24, 1967	--
405	Walter Engleman	1966	569	4,2	527-569	Tqc	342	60	Dec. 2, 1966	J,E,3/4	D,S	20 3/	--	Dec. 2, 1966	2/
406	Rudy Loehr	1967	325	4,2	283-325	Ts	320	40	June 19, 1967	S,E,2	S	60 3/	--	June 19, 1967	--
* 501	E. G. Sebesta	--	57	18	--	Qfpa	238	12.4	Jan. 27, 1960	N	N	--	--	--	Abandoned. 1/
* 502	P. G. Haines	--	50	18	--	Qfpa	236	9.5	do.	N	N	--	--	--	1/

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
BURLESON COUNTY															
* BS-59-28-503	E. G. Sebesta	--	1,000±	2	--	Tqc	236	+	Aug. 8, 1963	Flows	N	--	--	--	--
504	do.	1963	57	--	--	Qfpa	238	12.3 13.8	June 4, 1964 Oct. 20, 1969	T,G	Irr	--	--	--	--
505	do.	--	--	14	--	Qfpa	241	16.4	do.	T,G	Irr	--	--	--	--
506	-- Haines ?	--	--	16	--	Qfpa	240	17.2	do.	T,G	Irr	--	--	--	--
507	do.	--	56	16	--	Qfpa	239	14.5	do.	T,G	Irr	--	--	--	--
508	Edd Mikeska	1966	123	4,2	98-123	Ty	305	80	July 21, 1966	E	D	33 3/	--	July 21, 1966	--
509	Franklin Steck	1968	332	4,2	302-332	Ts	250	+	Apr. 1, 1970	Flows	S	--	--	--	Flow 6 gpm. Temp. 69°F (20.5°C). 2/
510	--	--	300±	2	--	Ts	250	+	Apr. 2, 1970	Flows	S	--	--	--	Measured flow 0.5 gpm. Temp. 71°F (22.0°C).
* 601	P. G. Haines?	1956	58	18	--	Qfpa	241	18.2	Apr. 10, 1947	T,G	Irr	670	20.69	June 25, 1964	1/
602	-- Scarmardo	1956	58	18	--	Qfpa	236	7.6	Aug. 1, 1960	N	N	536 365	-- --	1956 1957	--
603	--	--	61	18	--	Qfpa	237	16.0	Jan. 27, 1960	T,G	Irr	--	--	--	1/
604	-- Scarmardo	1955	69	18	--	Qfpa	239	15.4	do.	T,G	Irr	858	--	1956	1/
606	J. Scarmardo	--	51	--	--	Qfpa	235	10.3 17.1	May 15, 1963 Oct. 20, 1969	T,G	Irr	--	--	--	--
607	L. Patranella	--	62	18	--	Qfpa	240	10.5	May 16, 1963	T,G	Irr	--	--	--	--
608	do.	--	--	--	--	Qfpa	241	11.9	do.	N	N	--	--	--	--
609	do.	--	64	--	--	Qfpa	233	10.2	do.	T,G	Irr	--	--	--	--
* 610	do.	--	65	16	--	Qfpa	237	10.7	May 15, 1963	T,G	Irr	--	--	--	--
611	do.	--	--	--	--	Qfpa	237	13.9	Oct. 20, 1969	T,G	Irr	--	--	--	--
612	-- Scarmardo ?	--	--	--	--	Qfpa	236	--	--	T,G	Irr	--	--	--	--
613	do.	--	--	16	--	Qfpa	236	18.4	Oct. 20, 1969	T,G	Irr	--	--	--	--
614	do.	--	51	18	--	Qfpa	239	23.2	Oct. 21, 1969	T,G	Irr	--	--	--	--
615	--	--	--	--	--	Qfpa	237	--	--	T,G	Irr	--	--	--	--
616	-- Haines	--	--	16	--	Qfpa	240	14.1	Oct. 20, 1969	T,G	Irr	--	--	--	--
* 617	Mrs. R. L. Knight	--	500?	2	--	Ts	240	+	Dec. 17, 1936	N	N	--	--	--	Flowed 2 gpm in 1936. Abandoned prior to 1970.
* 618	do.	--	500?	2	--	Ts	240	+	do.	N	N	--	--	--	Do.
* 619	Tunis Water Supply Corp.	1967	780	8,4	685-765	Ts	265	55	June 28, 1967	S,E	P	82 3/	56	June 29, 1967	Drilled to 1,508 ft. and plugged back. Underreamed and gravel-packed from 675 to 780 ft. 2/ 4/
* 620	W. H. Oliver	--	800?	2	--	Ts	235	+ +	Nov. 20, 1936 Apr. 2, 1970	Flows	S	--	--	--	Measured flow 1.5 gpm on April 2, 1970.
* 701	T. L. Calvin	1964	553	4,2	--	Ts	365	80	Aug. 19, 1964	S,E,1	D,S	--	--	--	2/
* 702	James Engleman	1964	498	4,2	456-498	Ts	342	50	Mar. 26, 1964	J,E,3/4	D,S	25 3/	--	Mar. 26, 1964	2/
* 703	Kenneth Kovar	1963	478	4,2	436-478	Ts	383	93	Dec. 9, 1963	S,E,3/4	D,S	8 3/	--	Dec. 9, 1963	--
* 801	Vince Hejl	1922?	58	8	--	Ty	328	50.5	Dec. 17, 1936	N	N	--	--	--	--
802	do.	1952	490	4	--	Tcm	328	--	--	P,E	D	--	--	--	--
901	E. Porter	--	56	--	--	Qfpa	232	11.5 13.9	May 31, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-28-902	Merced Rioz	1965	174	4,2	132-174	Ty	328	32	Sept. 30, 1965	S,E,1/3	D,S	30 3/	--	Sept. 30, 1965	2/
903	J. Marek	1931	2,286	--	--	--	270	--	--	N	N	--	--	--	Oil test. Sparta Sand at 2,070-2,233 ft. 2/
* 904	do.	1920	115	8	115	Ty	301	90	1920	N	N	--	--	--	--
* 905	do.	1922	1,560	4	--	Tqc?	270	+ +	Jan. 8, 1937 Oct. 29, 1970	Flows	N	30 1	-- --	Jan. 8, 1937 Oct. 29, 1970	Converted oil test. Unknown how much hole open.
* 906	do.	1927	1,920	8,4	--	Ts?	265	+ +	Jan. 8, 1937 Oct. 29, 1970	Flows	S	--	--	--	Converted oil test. Sparta Sand at 1,200 ft. Measured flow 237 gpm on Feb. 2, 1971.
* 907	do.	1945	239	4,2	--	Ty	275	20	1945	J,E	D,S	--	--	--	--
908	do.	1932	2,300	--	--	--	--	--	--	N	N	--	--	--	Oil test. Top Sparta Sand at 1,230 ft.
29-101	W. Scarmardo	1955	60	14	--	Qfpa	233	22.4 20.6 24.6	Aug. 1, 1960 May 9, 1963 Oct. 21, 1969	T,G	Irr	750 636	-- --	1956 1957	--
102	do.	1956	73	18	--	Qfpa	231	22.7	May 9, 1963	T,G	Irr	540 840	-- --	1956 1957	--
103	-- Scarmardo	1955	77	18	--	Qfpa	235	26.0 25.4 27.9	July 27, 1960 May 9, 1963 Oct. 21, 1969	T,G	Irr	180	--	1956	--
104	do.	1956	71	18	--	Qfpa	229	20.1	July 27, 1960	T,G	Irr	795 935	-- 19.66	1957 July 15, 1964	1/
105	do.	1955	58	18	--	Qfpa	231	17.9 16.0 21.9 23.3	June 27, 1960 May 9, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	237 385 521	-- -- 25.77	1956 1957 July 15, 1964	--
106	Pete & Sam Scarmardo	1955	54	18	--	Qfpa	230	16.7	July 27, 1960	T,G	Irr	720	--	1956	1/
* 107	-- Scarmardo	1956	57	18	--	Qfpa	231	19.9 19.2 21.8 25.5	Feb. 15, 1961 May 29, 1961 May 9, 1963 Oct. 21, 1969	T,G	Irr	462 553	-- --	1956 1957	Temp. 69°F (20.5°C)
108	do.	1957	69	18	--	Qfpa	229	21.5	Aug. 1, 1960	T,G	Irr	505	--	1957	--
* 109	-- Bush	1955	56	18	--	Qfpa	229	15.8 15.9 21.6	July 27, 1960 May 8, 1963 Oct. 21, 1969	T,G	Irr	333	--	1956	Temp. 70°F (21.0°C).
111	do.	--	68	14	--	Qfpa	229	21.2 25.6 23.7	May 8, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	636 417	18.95 14.32	Aug. 1, 1963 July 15, 1964	--
* 112	Joe S. Campise	--	--	14	--	Qfpa	229	31.9 33.3 33.2	May 9, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	324 512	7.79 12.34	July 10, 1963 July 7, 1964	Temp. 71°F (21.5°C).
113	-- Scarmardo	--	63	18	--	Qfpa	231	16.2 23.0	May 6, 1963 Oct. 21, 1969	T,G	Irr	--	--	--	--
114	-- Altimore	--	58	--	--	Qfpa	234	32.6	June 3, 1963	T,G	Irr	--	--	--	--
115	-- Scarmardo	--	--	16	--	Qfpa	230	22.5	Oct. 21, 1969	T,G	Irr	--	--	--	--
201	Joe S. Campise	--	67	18	--	Qfpa	229	32.6 33.5	May 9, 1963 Oct. 21, 1969	T,G	Irr	--	--	--	--
202	--	--	--	18	--	Qfpa	228	32.6	May 9, 1963	--	--	--	--	--	--
401	-- Scarmardo	1955	61	18	--	Qfpa	236	--	--	T,G	Irr	220 214	-- --	1956 1957	--
402	Mrs. -- Haswell	--	67±	18	--	Qfpa	236	22.6	Mar. 15, 1957	T,G	Irr	1,200	17.58	July 15, 1964	1/

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-29-403	Carl Scarmardo	1955	62	18	--	Qfpa	233	17.8 15.7 25.6	July 27, 1960 May 8, 1963 Oct. 29, 1969	T,G	Irr	--	--	--	--
404	do.	--	--	18	--	Qfpa	232	16.3 14.4	July 20, 1960 May 8, 1963	T,G	Irr	--	--	--	--
406	-- Bush	1955	54	16	--	Qfpa	230	14.2 22.6	July 27, 1960 Oct. 22, 1969	T,G	Irr	174 350	-- --	1956 1957	--
407	do.	1954	57	18	--	Qfpa	228	12.0	July 27, 1960	T,G	Irr	211 400	-- --	1956 1957	
409	Carl Scarmardo	1955	62	18	--	Qfpa	227	16.3 22.2	May 1, 1963 Oct. 21, 1969	T,G	Irr	670	--	do.	
* 410	H. Porter	--	71	18	--	Qfpa	227	24.9	Mar. 14, 1957	T,G	Irr	--	--	--	1/
411	J. W. Giesenschlag	--	57	18	--	Qfpa	227	10.9	Apr. 25, 1958	T,G	Irr	491	37.67	July 7, 1964	1/
412	M. Porter	1958?	--	18	--	Qfpa	230	8.6 14.1	Apr. 24, 1963 Oct. 27, 1969	T,G	Irr	--	--	--	--
413	do.	1958?	54	18	--	Qfpa	228	7.4 13.2	Apr. 24, 1963 Oct. 27, 1969	T,G	Irr	--	--	--	--
414	do.	1958?	--	18	--	Qfpa	229	7.6 13.9	Apr. 24, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
415	do.	1958?	71	18	--	Qfpa	228	7.3 14.0	Apr. 24, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
416	do.	1958?	--	16	--	Qfpa	227	7.0	Apr. 24, 1963	T,G	Irr	--	--	--	--
417	do.	1958?	--	--	--	Qfpa	229	8.6 14.7	Apr. 24, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
418	do.	1957?	51	--	--	Qfpa	230	7.3 12.9	Apr. 24, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
419	H. Porter	--	53	14	--	Qfpa	225	9.9 17.9	May 1, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
420	do.	--	66	14	--	Qfpa	226	11.6 19.9	May 1, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
421	do.	--	60±	-	--	Qfpa	226	10.5	May 2, 1963	T,G	Irr	--	--	--	--
422	do.	1954?	72	--	--	Qfpa	227	10.9 20.7	May 2, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
423	do.	1958?	51	--	--	Qfpa	226	10.0 16.9 19.5	May 2, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	297	14.85	July 10, 1963	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
BURLESON COUNTY															
BS-59-29-424	H. Porter	--	53	14	--	Qfpa	228	10.1 18.0 19.9	May 2, 1963 June 4, 1964 Oct. 27, 1969	T,G	Irr	305 316	31.43 18.19	July 26, 1963 July 6, 1964	--
425	Joe S. Campise	--	63	--	--	Qfpa	234	14.7 19.9	May 8, 1963 Oct. 29, 1969	T,G	Irr	--	--	--	--
* 426	-- Bush	--	55	18	--	Qfpa	229	21.8	Oct. 22, 1969	T,G	Irr	--	--	--	--
427	Joe S. Campise	--	51	--	--	Qfpa	229	15.7 22.5	May 8, 1963 Oct. 21, 1969	T,G	Irr	--	--	--	--
428	-- Bush	1956	50	18	--	Qfpa	229	16.1 15.1 21.8	July 27, 1960 May 8, 1963 Oct. 21, 1969	T,G	Irr	175	--	1956	--
429	Tony Salvaggio	--	--	18	--	Qfpa	231	12.7	May 9, 1963	T,G	Irr	--	--	--	--
430	-- Bush	--	--	18	--	Qfpa	235	13.8 18.7	May 15, 1963 Oct. 29, 1969	T,G	Irr	--	--	--	--
431	M. Malazzo	--	59	18	--	Qfpa	231	10.0 13.1 13.0	May 31, 1963 June 4, 1964 Oct. 27, 1969	T,G	Irr	300 329	12.93 9.28	July 9, 1963 July 6, 1964	--
432	C. Cantella	--	61	16	--	Qfpa	231	10.3 13.3 13.9	May 31, 1963 June 4, 1964 Oct. 27, 1969	T,G	Irr	480	14.77	July 9, 1963	--
* 433	E. Porter	--	59	18	--	Qfpa	231	14.4	Apr. 25, 1958	T,G	Irr	642	10.80	July 6, 1964	1/
434	--	1963	--	--	--	Qfpa	229	20.3 21.6	June 4, 1964 Oct. 22, 1969	T,G	Irr	410 284	-- 27.51	July 10, 1963 July 7, 1964	--
435	U.S. Geological Survey	1963	61	--	--	--	235	18.1	Nov. 20, 1963	N	N	--	--	--	Test hole. 2/
436	H. Porter	1964	53	--	--	Qfpa	227	18.1	Oct. 22, 1969	T,G	Irr	--	--	--	--
437	do.	1964	42	16	--	Qfpa	227	--	--	N	N	--	--	--	Well caved.
438	do.	--	55	16	--	Qfpa	227	20.0	Oct. 22, 1969	T,G	Irr	--	--	--	--
439	M. Porter	1964	65	16	--	Qfpa	227	14.9	do.	T,G	Irr	--	--	--	--
440	do.	--	15±	16	--	Qfpa	227	--	--	N	N	--	--	--	Well caved.
441	E. Porter	1960?	54	--	--	Qfpa	230	14.5	Oct. 22, 1969	T,G	Irr	--	--	--	--
442	--	--	--	16	--	Qfpa	225	13.9	Oct. 27, 1969	T,G	Irr	--	--	--	--
443	M. Porter	1964	--	--	--	Qfpa	228	18.5	do.	T,G	Irr	--	--	--	--
444	--	--	--	--	--	Qfpa	236	18.3	Oct. 29, 1969	T,G	Irr	--	--	--	--
445	J. Scarmardo	--	--	16	--	Qfpa	233	--	--	T,G	Irr	--	--	--	--
446	-- Scarmardo	--	--	--	--	Qfpa	233	--	--	T,G	Irr	--	--	--	--
447	J. Scarmardo	--	--	16	--	Qfpa	233	19.8	Oct. 29, 1969	T,G	Irr	--	--	--	--
448	Sam Bush	--	--	--	--	Qfpa	233	--	--	T,G	Irr	--	--	--	--
449	Nick Bush	--	--	--	--	Qfpa	231	--	--	T,G	Irr	--	--	--	--
* 450	Joe Campise	1967	134	4,2	108-134	Ty	233	30	Nov. 22, 1967	S,E	D	--	--	--	--
* 451	H. R. Hutson	1965	661	4,2	--	Ts?	231	50	Apr. 5, 1968	S,E,1/2	D	--	--	--	2/
* 452	Tony Salvaggio	1965	1,200±	4,2	1,150- 1,200	Tqc	231	+	Oct. 29, 1970	Flows	D	--	--	--	Estimated flow 5 gpm.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
BS-59-29-501	Joe S. Campise	1955	69	18	--	Qfpa	228	23.4 26.7 24.6 28.3	July 27, 1960 Sept. 27, 1960 May 8, 1963 Oct. 21, 1969	T,G	Irr	--	--	--	--
* 502	Luke Bush	1954	63	18	--	Qfpa	228	21.7	July 27, 1960	T,G	Irr	563	19.80	July 15, 1964	1/
503	do.	--	57	18	--	Qfpa	227	26.2 28.1 29.5	July 26, 1960 May 3, 1963 Oct. 21, 1969	N	N	--	--	--	--
504	Joe Varisco	--	55	18	--	Qfpa	226	25.2 25.8 29.2 26.7	July 27, 1960 May 2, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	--	--	--	--
505	J. Scarmardo	--	--	18	--	Qfpa	226	19.2 19.4 23.5 23.4	July 27, 1960 May 2, 1963 June 4, 1964 Oct. 21, 1969	N	N	337	--	July 12, 1963	--
506	C. Scarmardo	1955	50	18	--	Qfpa	227	15.7 17.0 22.3	July 27, 1960 May 1, 1963 Oct. 21, 1969	T,G	Irr	456	--	1956	--
507	Texas A&M University Farm	--	55	--	--	Qfpa	226	18.1	Apr. 25, 1958	T,E,15	Irr	--	--	--	1/
508	-- Scarmardo	1957	57	18	--	Qfpa	228	19.6	July 27, 1960	T	Irr	--	--	--	1/
* 509	-- Porter	--	55	--	--	Qfpa	227	10.8 16.2 16.5	May 1, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	625 503 395	34.91 33.34 36.97	July 10, 1963 July 6, 1964 July 31, 1964	--
510	H. Porter	--	60±	--	--	Qfpa	226	10.7 16.2 17.1	May 1, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	207 386	23.98 32.18	July 10, 1963 July 6, 1964	--
511	do.	--	60±	--	--	Qfpa	227	10.4 16.1 17.9	May 1, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	561 550	-- 21.19	July 10, 1963 July 7, 1964	--
512	do.	--	60±	14	--	Qfpa	225	10.5 18.2	May 1, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
513	do.	--	60±	--	--	Qfpa	226	11.0 16.6 18.0	May 1, 1963 June 4, 1963 Oct. 22, 1969	T,G	Irr	420 529	35.06 11.34	July 12, 1963 July 6, 1964	--
514	do.	--	50	--	--	Qfpa	224	11.2 18.5	May 1, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
515	do.	--	57	--	--	Qfpa	224	10.7 16.3 18.5	May 1, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	415	24.71	July 10, 1963	--
516	do.	--	60±	14	--	Qfpa	226	12.2 17.4 19.4	May 1, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	281	23.33 22.45	July 10, 1963 July 15, 1964	--
517	Joe Varisco	--	53	14	--	Qfpa	225	24.9 27.3 25.1	May 2, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	250	5.54	July 10, 1963	--
518	do.	--	56	18	--	Qfpa	224	22.1 25.6	May 2, 1963 June 6, 1964	T,G	Irr	480	24.38	do.	--
519	--	--	49	--	--	Qfpa	224	12.0	May 2, 1963	T,G	Irr	--	--	--	--
520	Joe Varisco	1962	57±	16	--	Qfpa	225	23.8 26.8 25.4	May 2, 1963 June 4, 1964 Oct. 21, 1969	T,G	Irr	350	10.95	July 10, 1963	--
521	Luke Bush	1954	64	18	--	Qfpa	227	16.8 22.3	May 3, 1963 Oct. 21, 1969	T,G	Irr	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
BS-59-29-522	Luke Bush	1961	64	--	--	Qfpa	228	33.9	May 10, 1963	N	N	--	--	--	Abandoned. Insufficient yield.
523	--	--	58	--	--	Qfpa	225	10.4 16.7	June 3, 1963 Oct. 27, 1969	T,G	Irr	--	--	--	--
524	Jones Bridge Co.	--	300	3	--	Ty	226	15.5	May 15, 1964	J	N	--	--	--	--
525	U.S. Geological Survey	1963	65	--	--	--	226	31.8	Nov. 21, 1963	N	N	--	--	--	Test hole. 2/
526	do.	1963	57	--	--	--	224	22.0	do.	N	N	--	--	--	Do.
* 527	Tony Varisco	1954?	2,000±	4	--	Tqc	226	+ +	May 15, 1964 July 9, 1969	Flows	D,S	--	--	--	--
529	Luke Bush	1965	--	16	--	Qfpa	226	--	--	T,G	Irr	--	--	--	--
530	Joe Varisco	--	55	16	--	Qfpa	226	25.2	Oct. 21, 1969	T,G	Irr	--	--	--	--
531	do.	--	50	16	--	Qfpa	225	24.6	do.	N	N	--	--	--	--
532	do.	--	--	--	--	Qfpa	226	--	--	T,G	Irr	--	--	--	--
533	H. Porter	--	52	18	--	Qfpa	225	17.5	Oct. 22, 1969	T,G	Irr	--	--	--	--
534	do.	--	52	--	--	Qfpa	225	18.1	do.	T,G	Irr	--	--	--	--
* 535	Luke Bush	1957	1,912	4,2	--	Tqc	225	+	July 9, 1970	Flows	D,S	--	--	--	--
701	Elsik Estate	--	58±	18	--	Qt	240	32.9 32.9 30.8	July 26, 1960 Sept. 23, 1960 May 4, 1970	T,G	Irr	--	--	--	--
702	J. Falco	--	57	14	--	Qfpa	228	10.8 9.1 14.6	July 26, 1960 Apr. 25, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
* 703	J. W. Giesenschlag	1957	57	18	--	Qfpa	228	12.9	Apr. 25, 1958	T,G	Irr	--	--	--	1/
704	Laura B. Shipp	1955	68	16	--	Qfpa	227	11.9	Feb. 15, 1960	T,G	Irr	--	--	--	1/
* 705	J. W. Giesenschlag	1954	48	18	--	Qfpa	227	11.4	do.	T,G	Irr	--	--	--	1/
706	do.	--	--	--	--	Qfpa	225	6.4 14.0	Apr. 19, 1963 Oct. 23, 1969	T,G	Irr	--	--	--	--
707	--	--	17	30	--	Qfpa	223	2.9 10.9 9.3	Apr. 17, 1963 Dec. 11, 1964 Oct. 22, 1969	N	N	--	--	--	Dug well.
708	-- Porter	--	55	14	--	Qfpa	227	7.2 15.8	Apr. 24, 1963 Oct. 23, 1969	T,G	Irr	--	--	--	--
* 709	do.	1957	--	--	--	Qfpa	228	8.3 12.7 16.5	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	750 432	13.32 10.89	July 11, 1963 July 7, 1964	--
710	E. Porter	1957?	70	--	--	Qfpa	228	8.2 16.8	Apr. 25, 1963 Oct. 23, 1969	T,G	Irr	--	--	--	--
711	do.	1957?	60±	--	--	Qfpa	228	8.2 16.5	Apr. 25, 1963 Oct. 23, 1969	T,G	Irr	--	--	--	--
712	do.	1957?	55	14	--	Qfpa	227	7.5 12.2 16.2	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	550 308	13.71 11.91	July 11, 1963 July 7, 1964	--
713	do.	1957?	57	18	--	Qfpa	227	8.0 13.3 16.8	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	500 403	19.56 14.62	July 11, 1963 July 7, 1964	--
714	-- Porter	--	--	--	--	Qfpa	227	6.6 12.2 14.8	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	253	19.43	July 11, 1963	--

See footnotes at end of table.

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
									BURLESON COUNTY						
BS-59-29-715	-- Porter	--	52	--	--	Qfpa	226	6.5 12.3 14.9	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	203 333	22.06 15.63	July 11, 1963 July 7, 1964	--
716	J. W. Giesenschlag	--	80	14	--	Qfpa	228	8.3 12.7 15.4	Apr. 25, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	515 1,123	13.22 22.86	July 9, 1963 July 7, 1964	--
717	J. Falco	--	57	--	--	Qfpa	229	8.8 15.0	Apr. 25, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
718	J. Mallazo	--	54	18	--	Qfpa	230	10.0 13.3	Apr. 26, 1963 June 4, 1964	T,G	Irr	385	21.01	July 7, 1964	--
719	E. Porter	--	57	--	--	Qfpa	230	9.9 13.3 14.1	Apr. 26, 1963 June 4, 1964 Oct. 22, 1969	T,G	Irr	--	--	--	--
720	do.	--	58	--	--	Qfpa	230	10.4 13.4	Apr. 26, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
721	do.	--	55	--	--	Qfpa	230	9.8 13.0	Apr. 26, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
722	do.	--	54	--	--	Qfpa	230	10.3 13.3	May 31, 1963 Oct. 22, 1969	T,G	Irr	--	--	--	--
723	U.S. Geological Survey	1963	52	--	--	--	228	13.7	Nov. 26, 1963	N	N	--	--	--	Test hole. 2/
724	do.	1963	47	--	--	--	220	5.2	do.	N	N	--	--	--	Do.
725	do.	1963	32	--	--	--	220	6.1	Nov. 20, 1963	N	N	--	--	--	Do.
726	-- Porter	1964	--	16	--	Qfpa	230	16.0	Oct. 23, 1969	T,G	Irr	--	--	--	--
727	do.	1964	52	16	--	Qfpa	229	13.7	do.	T,G	Irr	--	--	--	--
728	do.	1964	49	--	--	Qfpa	226	15.2	do.	T,G	Irr	--	--	--	--
729	Laura B. Shipp	--	--	16	--	Qfpa	227	15.0	Oct. 27, 1969	T,G	Irr	--	--	--	--
* 730	Elsik Estate	1925	890	3	878-890	Ts	227	+	Nov. 17, 1936	P	N	--	--	--	Flow 5 gpm on Nov. 17, 1936. Ceased to flow before 1960.
* 731	J. W. Giesenschlag	1964	200	4,2	--	Ty	225	5	Sept. 25, 1964	S,E,1/2	D	--	--	--	2/
801	Chance Farm well 1	1955	57	18	--	Qfpa	224	21.2	Apr. 10, 1957	T,G	Irr	411	12.49	June 13, 1964	Reported 935 acre-feet of ground water from 16 wells in 1969. 1/
802	Chance Farm well 2	--	45	18	--	Qfpa	222	4.5	July 26, 1960	T,G	Irr	--	--	--	--
* 803	Texas A&M University Farm	--	51	18	--	Qfpa	221	13.3	Apr. 25, 1958	T,E,25	Irr	--	--	--	1/
804	Lightsey Bros.	1954	76	14	--	Qfpa	220	9.3	July 8, 1960	T,G	Irr	760 610 594	56.14 47.13 35.02	July 11, 1963 Aug. 1, 1963 June 13, 1964	1/
805	Texas A&M University Farm	--	77	18	--	Qfpa	219	6.8	do.	T,G	Irr	--	--	--	1/
806	Lightsey Bros.	--	57	18	--	Qfpa	220	7.1 9.4 14.5 14.1	July 26, 1960 Apr. 18, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	400	24.52	July 11, 1963	--
807	--	--	60	--	--	Qfpa	222	8.4 13.0	Apr. 9, 1963 Oct. 27, 1969	T,G	Irr	--	--	--	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-29-808	Chance Farm well 3	--	--	14	--	Qfpa	219	6.2 12.0	Apr. 18, 1963 Oct. 23, 1969	T,G	Irr	--	--	--	--
* 809	Chance Farm well 2	--	57	--	--	Qfpa	217	7.5 12.0 12.0	Apr. 18, 1963 June 4, 1964 Oct. 23, 1969	T,G	Irr	276 271	41.50 20.14	July 11, 1963 July 13, 1964	--
810	U.S. Geological Survey	1963	67	--	--	--	225	15.0	Nov. 20, 1963	N	N	--	--	--	Test hole. 2/
811	do.	1963	57	--	--	--	227	14.0	Nov. 21, 1963	N	N	--	--	--	Do.
812	-- Porter	1964	62	--	--	Qfpa	227	17.6 14.6	Dec. 11, 1964 Oct. 27, 1969	T,G	Irr	--	--	--	--
813	Laura B. Shipp	--	57	16	--	Qfpa	225	10.0	Oct. 23, 1969	T,G	Irr	--	--	--	--
814	Texas A&M University Farm	--	55	16	--	Qfpa	222	22.9	Nov. 10, 1969	T,G	Irr	--	--	--	--
* 815	do.	--	1,000±	3	--	Ts	223	+	Nov. 3, 1970	Flows	S	--	--	--	--
901	-- Loehr	1956	52	18	--	Qfpa	215	20.6	July 26, 1960	T,G	Irr	--	--	--	1/
902	Chance Farm well 4	--	58	--	--	Qfpa	221	17.5	June 3, 1963	T,G	Irr	--	--	--	1/ 2/
903	--	--	46	16	--	Qfpa	215	14.3 15.0	June 3, 1963 Oct. 23, 1969	N	N	--	--	--	--
904	Chance Farm well 5	1964	--	16	--	Qfpa	221	17.5 16.2	June 5, 1964 Oct. 29, 1969	T,G	Irr	456	20.63	July 15, 1964	--
905	Chance Farm	1962	60	--	--	--	217	13.2	Dec. 6, 1963	N	N	--	--	--	Test hole 17. 2/
906	do.	1962	57	--	--	--	218	--	--	N	N	--	--	--	Test hole. 2/
907	do.	1962	59	--	--	--	220	--	--	N	N	--	--	--	Do.
908	do.	1957	60	--	--	--	221	--	--	N	N	--	--	--	Do.
909	--	--	55	--	--	Qfpa	216	15.4	Oct. 23, 1969	T,G	Irr	--	--	--	--
910	--	--	55	14	--	Qfpa	215	14.1	do.	T,G	Irr	--	--	--	--
911	Chance Farm well 13	1965	71	16	--	Qfpa	216	12.4	Oct. 27, 1969	T,G	Irr	--	--	--	--
912	Chance Farm well 12	1965	66	16	--	Qfpa	216	13.3	Oct. 29, 1969	T,G	Irr	--	--	--	--
913	Chance Farm well 11	1965	65	16	--	Qfpa	218	12.9	do.	T,G	Irr	--	--	--	--
914	Chance Farm well 14	1965	58	16	--	Qfpa	216	13.1	do.	T,G	Irr	--	--	--	--
915	Chance Farm well 9	1966	65	16	--	Qfpa	219	13.7	do.	T,G	Irr	--	--	--	--
* 916	Chance Farm	1965	64	16	--	Qfpa	218	12.7	do.	T,G	Irr	--	--	--	--
917	Chance Farm well 8	1964	60	16	--	Qfpa	221	16.0	do.	T,G	Irr	--	--	--	--
918	Chance Farm	1967	1,505	6,4	1,450-1,505	Tqc	220	5	Jan. 13, 1967	S,E	D,S	150 3/	--	Jan. 13, 1967	2/ 4/
919	Texas A&M University Farm	1965	55	--	--	Qfpa	220	17.6	Nov. 3, 1970	T,G	Irr	--	--	--	--
30-701	H. Porter	--	58	18	--	Qfpa	216	25.2 24.2	June 11, 1963 Nov. 10, 1969	T,G	Irr	--	--	--	--
702	Chance Farm	1945	400±	3	--	Tqc	220	+ 7.7	June 11, 1963 July 9, 1970	J,E	S	--	--	--	Ceased to flow between 1963 and 1970.
* 703	H. Porter	--	1,500±	4	--	Tqc	216	+	Nov. 10, 1970	Flows	D,S	--	--	--	--
33-304	-- Perry	--	--	--	--	Tqc	320	+	Apr. 13, 1970	Flows	S	--	--	--	Estimated flow 2 gpm.
34-102	--	--	24	24	--	Tqc	405	16.6	do.	N	N	--	--	--	Dug well, shored with tile.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
* BS-59-34-103	--	--	25	24	--	Tqc	392	17.4	Nov. 16, 1936	N	N	--	--	--	Dug well, shored with tile.
* 104	Sunny Side School	1925	28	8	--	Tqc	400	13.1	do.	N	N	--	--	--	Abandoned prior to 1970.
* 201	M. E. Willard	1961	300	4,2	260-300	Tqc	338	+	Apr. 13, 1970	Flows	D,S	--	--	--	Measured flow 0.5 gpm on April 13, 1970. [2]
* 301	Louis Schaper	--	44	30	--	Ts	435	25.2	Apr. 24, 1970	J,E	D,S	--	--	--	Dug well, shored with brick.
* 302	Hubert Wendel	--	465±	2	--	Tqc	370	+	May 8, 1970	Flows	S	--	--	--	--
303	W. W. Farmer	1967	560	4,2	518-560	Tqc	425	60	Dec. 1967	S,E,1/3	D	50[3]	--	Dec. 1967	[2]
* 402	Dan W. Blaha	1960	340	4,2	--	Tqc	378	28	1960	S,E	D,S	--	--	--	--
* 403	do.	--	66	8	--	Tqc	377	25.1 29.0	Nov. 16, 1960 Apr. 13, 1970	N	N	--	--	--	--
* 501	Mrs. Charles Krall	1932	33	8	--	Tcm	394	29.2	Oct. 15, 1936	N	N	--	--	--	Destroyed. [1]
503	C. H. Barnett	1955	210	2	168-210	Tqc	300	+	Apr. 13, 1970	Flows	D,S	--	--	--	Originally drilled to 187 ft., had small flow. Pulled casing and deepened to 210 ft.
504	Early Knox	1943	22	30	--	Ts	375	12.6	do.	B,H	D,S	--	--	--	Dug well, shored with concrete rings.
* 505	do.	--	21	8	--	Ts	375	17.0	Oct. 12, 1936	N	N	--	--	--	Abandoned.
* 506	Copperas Springs	--	Spring	--	--	Tw	355	+	do.	Flows	S	--	--	--	Flow estimated 2 gpm on Oct. 12, 1936.
507	C. H. Barnett	--	34	30	--	Ts	368	17.8	Apr. 20, 1970	N	N	--	--	--	Dug well, shored with concrete rings.
508	do.	--	108	--	--	Ts	368	--	--	N	N	--	--	--	--
509	Mrs. Charles Krall	1940	86	4,2	--	Tcm	394	--	--	--	D,S	--	--	--	--
* 510	J. M. Paukraf	1926	59	8	--	Ts,Tcm	390	29.5	Oct. 15, 1936	J,E	D,S	--	--	--	--
* 511	Henry Mitchell	1918	80	10	--	Ts	418	40.3	Sept. 22, 1936	J,E	D,S	--	--	--	--
* 512	H. H. Bell	1966	240	4,2	194-240	Tqc	306	+	Apr. 13, 1970	Flows	D,S	--	--	--	Measured flow 8 gpm on April 13, 1970. [2]
* 601	Deanville Water Supply Corp.	1967	784	8,4	734-784	Tqc	385	90	Jan. 27, 1967	S,E,7 1/2	P	60[3]	79	Jan. 27, 1967	Furnishes water for community and rural customers. Drilled to 1,555 ft. and plugged back. [2] [4]
* 602	Gus Brinkman	1923	420	4	--	Ts	385	60	1936	T,E	N	30[3]	--	1936	Formerly furnished community of Deanville.
* 603	Kubella Estate	1925	150	8	--	Tcm	333	1.0	Oct. 13, 1936	Flows,J,E	D,S	--	--	--	Estimated flow 2 gpm on Oct. 13, 1936. 1970, still flows at times.
* 604	F. J. Miman Estate	1968	572	4,2	509-572	Tqc	355	19.9	Apr. 20, 1970	S,E	D,S	67[3]	--	Aug. 20, 1968	[2]
605	do.	--	42	8	--	Tcm	355	17.3	do.	B,H	S	--	--	--	--
* 606	M. Laffere	--	149	8	--	Tcm	350	11.0 15.2	Oct. 13, 1936 May 8, 1970	B,H	D	--	--	--	--
901	Joseph Beran	1969	510	4,2	--	Ts	352	63	Aug. 4, 1969	S,E,3/4	D,S	30[3]	--	Aug. 4, 1969	[2]
902	do.	--	119	8	--	Ty	352	59.4	Apr. 20, 1970	N	N	--	--	--	--
903	A. Aluska	1965	430±	2	--	Ts	290	+	do.	Flows	D,S	--	--	--	Estimated flow 20 gpm on April 20, 1970. Temp. 72°F (22.0°C).
* 904	R. Muzny	1967	438	4,2	--	Ts	308	+	do.	Flows	D,S	--	--	--	Measured flow 15 gpm on April 20, 1970.
905	Balcar Lake Club	--	200±	6	--	Ts	328	+	do.	Flows	D,S	--	--	--	Measured flow 5.3 gpm on April 20, 1970.
* 35-101	Frank Kristoff	1900	150	6	--	Tcm	385	40	Aug. 1957	B,H	D	--	--	--	--
102	Prince Williams	--	247	3	--	Ts	355	+	Apr. 24, 1970	Flows	S	--	--	--	Estimated flow 10 gpm. Temp. 66°F (19.0°C).
103	--	--	14	27	--	Tcm	365	5.6	July 13, 1970	P,E	N	--	--	--	Dug well, shored with concrete rings.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
☆ BS-59-35-105	R. J. Smith	1919	277	4	257-277	Ts	338	+ 8.9	Oct. 1, 1936 Oct. 30, 1970	S,E	D,S	--	--	--	Ceased to flow about 1951.
☆ 201	Ernest Homeyer	1965	535	4,2	493-535	Tqc	385	51	July 15, 1965	S,E	D,S	20[3/]	--	July 15, 1965	--
202	-- Jones	1950?	325	4,2	--	Tcm	325	+	Apr. 17, 1970	Flows	D,S	--	--	--	--
203	Lee Alford	1963	370	2	328-370	Tcm	295	+	do.	Flows	S	12[3/]	--	Dec. 30, 1963	Measured flow 2 gpm on April 17, 1970. Temp. 69°F (20.5°C).
204	George Norville	1964	402	4,2	360-402	Tcm	355	45	Dec. 29, 1964	S,E,3/4	D	30[3/]	--	Dec. 29, 1964	--
205	J. C. Robbins	1964	525	4,2	483-525	Tqc	332	45	Dec. 4, 1964	S,E,1 1/2	D,S	40[3/]	--	Dec. 4, 1964	[2/]
206	Julius Rogers	1962	395	4,2	351-393	Tcm	335	14	Dec. 1962	S,E,1/3	D,S	25[3/]	--	Dec. 1962	--
☆ 207	J. Janacek	--	49	30	--	Tcm	--	11.3	Oct. 1, 1936	N	N	--	--	--	Abandoned prior to 1970.
301	Edward Varner	1966	460	4,2	418-460	Ts	310	+	May 25, 1966	Flows? S,E	D,S	30[3/]	--	May 25, 1966	[2/]
☆ 302	do.	--	17	36	--	Ty	333	12.5	Oct. 14, 1936	N	N	--	--	--	Abandoned prior to 1970.
☆ 303	Pabulek Spring	--	Spring	--	--	Ty	--	+	Sept. 24, 1936	Flows	--	--	--	--	--
☆ 304	Leroy Calvin	1920	54	8	--	Ty	288	19.1	Oct. 14, 1936	N	N	--	--	--	Abandoned prior to 1970.
☆ 401	J. W. Mikeska	1927	430	8	390-430	Tcm?	383	30	1927	P,E	S	--	--	--	--
501	-- Mynar	--	24	8	--	Ty	299	4.0	Apr. 17, 1970	N	N	--	--	--	--
☆ 502	G. A. Walman	1925	22	30	--	Ty	378	19.3 21.2	Nov. 6, 1936 Apr. 17, 1970	N	N	--	--	--	Dug well, shored with tile.
☆ 503	Ignac Konuicka	1967	646	4,2	604-646	Ts	372	70	July 24, 1967	S,E,1/3	D,S	20[3/]	--	July 24, 1967	--
☆ 601	Hubert Scott	1966	480	4,2	438-480	Tcm	311	25	July 5, 1966	S,E,1/3	D,S	50[3/]	--	July 5, 1966	[2/]
602	Clarence Pertl	1966	180	4,2	138-180	Ty	305	+	Apr. 21, 1970	Flows	D,S	30[3/]	--	Mar. 21, 1966	--
☆ 603	J. D. Duncan	1967	192	4,2	180-192	Ty	275	10	July 12, 1967	S,E,1/2	D,S	17[3/]	--	July 12, 1967	--
☆ 604	Alvin Hien	1897	43	8	--	Ty	303	34.3 33.7	Oct. 14, 1936 Apr. 21, 1970	N	N	--	--	--	--
605	Frances Duncan	--	71	8	--	Ty	315	40.3	do.	J,E	S	--	--	--	--
☆ 802	G. G. Weichert	1967	305	4,2	263-305	Ty	385	90	Aug. 1967	S,E,1/3	S	--	--	--	--
☆ 803	Otto Meier	1911	61	8	--	Ty	365	51.1	Dec. 11, 1936	C,E	S	--	--	--	--
☆ 901	A. F. Ahrens	1967	435	4,2	393-435	Ty	372	90	Oct. 1967	S,E,1/3	D,S	15[3/]	--	Oct. 1967	[2/]
☆ 902	-- Weichert	1930	107	8	--	Ty	360	80.5 62.6	Nov. 12, 1936 Apr. 16, 1970	N	N	--	--	--	--
903	W. Meyer	1966	390	4,2	348-390	Ty	380	90	Aug. 1966	S,E,1/3	D,S	8[3/]	--	Aug. 1966	--
904	A. Schultz, Jr.	1969	330	4	--	Ty	358	--	--	S,E	D,S	--	--	--	--
905	E. Schultz	1969	585	4,2	--	Ty	350	--	--	S,E	D,S	--	--	--	--
906	W. Meyer	--	81	8	--	Ty	340	61.3	Apr. 16, 1970	N	N	--	--	--	--
36-201	Vince Hyvl	1963	382	4,2	340-382	Ty	355	103	Apr. 6, 1963	S,E,3/4	D,S	10[3/]	17	Apr. 6, 1963	--
☆ 202	Chuck Hinds	1963	392	4,2	--	Ty	362	140	Mar. 23, 1963	S,E	D,S	20[3/]	--	Mar. 23, 1963	[2/]
203	R. J. Shultz	1963	262	4,2	220-262	Ty	372	132	June 8, 1963	S,E,3/4	D,S	11[3/]	28	June 8, 1963	--
204	T. H. Groce	1963	300	4,2	264-300	Ty	330	80	Mar. 6, 1963	J,E,1 1/2	D,S	5[3/]	20	Mar. 6, 1963	--
☆ 205	Vernon Jurries	1969	825	4,2	785-825	Ts	353	70	June 4, 1969	S,E	D,S	60[3/]	--	June 4, 1969	[2/]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-36-206	Vernon Jurries	1965	320	4,2	278-320	Ty	353	70	May 4, 1965	N	N	25[3/]	130	May 4, 1965	Abandoned.
* 207	Larry Valigura	1968	882	4,2	848-882	Ts	348	75	Sept. 19, 1968	S,E,3/4	D,S	60[3/]	--	Sept. 19, 1968	2/
* 301	H. Wilson	1929	74	8	74	Ty	300	67.5	Dec. 17, 1936	J,E	D,S	--	--	--	--
302	J. M. Daniels	1965	380	4,2	338-380	Ty	320	100	June 10, 1965	S,E,3/4	D,S	13[3/]	--	June 10, 1965	--
303	A. Schoenenman	1963	508	4,2	--	Ty	275	75	Aug. 19, 1963	S,E,3/4	D,S	--	--	--	2/
601	Leon Giesenschlag	1968	369	4,2	--	Ty	325	140	Nov. 20, 1968	S,E,1	D,S	--	--	--	--
* 602	Ray Maas	1968	315	4,2	273,315	Ty	328	84	Mar. 1968	S,E,1/3	D,S	20[3/]	--	Mar. 1968	2/
603	Ernest Wilhow	1964	270	4,2	236-270	Ty	248	10	June 8, 1964	S,E,1/2	D,S	20[3/]	90	June 8, 1964	2/
* 701	Olem Lednicky	1968	277	4,2	243-277	Ty	325	78	Nov. 14, 1968	S,E,1/2	D,S	75[3/]	--	Nov. 14, 1968	2/
702	Bain Tuttle	1966	380	4,2	338-380	Ty	303	70	Apr. 27, 1966	S,E,1/3	S	20[3/]	--	Apr. 27, 1966	--
703	J. Johnson	1968	325	4,2	237-279	Ty	325	77	Oct. 22, 1968	S,E,3/4	D,S	75[3/]	--	Oct. 22, 1968	--
* 704	Karl Bracewell	1969	330	4,2	288-330	Ty	340	90	Mar. 1969	S,E,3/4	D,S	20[3/]	--	Mar. 1969	--
705	A. Smith	--	--	--	--	Ty	335	--	--	S,E	S	--	--	--	--
706	A. Schoppe	1924	75	8	--	Ty	335	74.1	Oct. 14, 1936	N	N	--	--	--	Abandoned.
707	do.	--	--	--	--	Ty	328	--	--	S,E	D,S	--	--	--	--
* 801	T. Y. York	1938	397	4	340-397	Ty	338	97	Aug. 1938	P,W	D,S	35[3/]	--	Aug. 1938	--
* 802	Lyons Water Supply Corp.	1963	1,609	7,3	1,513-1,573	Ts	305	66	Sept. 25, 1963	S,E,15	P	150[3/]	--	Sept. 25, 1963	Furnishes water for Lyons and Center Line. 2/ 4/
803	Bert Landolt	1962	232	4,2	170-232	Ty	306	90	Sept. 17, 1962	S,E,1/3	D,S	6[3/]	60	Sept. 17, 1962	--
* 804	R. W. Schoppe	1957	479	4	--	Ty	310	100	1957	J,E	D,S	--	--	--	Waters gardens.
901	R. L. Mahoney	1968	300	4,2	258-300	Ty	305	78	Feb. 1968	S,E,1/2	D,S	25[3/]	--	Feb. 1968	2/ --
* 902	Mrs. Lee Woods	1932	140	8	--	Ty	278	46.3 40.0	Oct. 22, 1936 Apr. 15, 1970	J,E	S	--	--	--	--
* 903	Nelson Swartz	--	27	30	--	Ty	265	23.3	Oct. 22, 1936	N	N	--	--	--	Abandoned.
* 904	do.	1957	400	4,2	--	Ty	260	--	--	J,E	D,S	--	--	--	--
* 37-101	Snook well 1	1922	1,620	2 1/2	1,550-1,620	Ts	240	+	Nov. 5, 1936	N	N	--	--	--	Estimated flow 30 gpm on Nov. 5, 1936. Not used since prior to 1960.
* 102	Snook well 2	1926	1,267	4	1,010-1,020	Ty	240	+	Nov. 17, 1936	N	N	--	--	--	Estimated flow 20 gpm on Nov. 17, 1936. Not used since prior to 1960.
103	Snook well 3	1954	619	--	--	Ty	240	--	--	N	N	--	--	--	Not used since prior to 1958.
* 104	Snook Water Supply Corp.	1958	1,381	4	1,341-1,381	Ts	240	+	Aug. 31, 1960	S,E	P	--	--	--	Furnishes, as did 3 wells above, water for Snook community and rural area.
* 105	J. J. Sebesta	--	24	--	--	Qt	247	--	--	P,W	D,S	--	--	--	Dug well.
106	W. J. Slovacek	--	44	16	--	Qt	252	27.6 27.3	May 29, 1963 May 6, 1970	T,G	Irr	--	--	--	--
* 107	R. Sebesta, Sr.	1898	30	30	--	Qt	253	26.0	May 15, 1964	J,E	S	--	--	--	Dug well, shored with concrete rings.
* 108	W. H. Giesenschlag	--	1,550	8	--	Tqc	279	+ +	Dec. 2, 1937 May 4, 1970	Flows	D,S	--	--	--	Converted oil test. Estimated flow 40 gpm in Dec. 1937. 2/
109	Frank B. Janac	1966	266	4,2	--	Ty	249	30	Oct. 1, 1966	S,E,1/2	D,S	--	--	--	--
* 110	John Gunek	--	31	30	--	Ty	252	27.8	Nov. 5, 1936	--	S	--	--	--	Dug well, shored with tile.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
									BURLESON COUNTY						
*BS-59-37-111	-- Wincher	1912	73	8	--	Ty	290	42.0 40.9	Nov. 5, 1936 July 9, 1970	N	N	--	--	--	--
201	Henry Kobar	1958	42	18	--	Qt	242	28.5	July 26, 1960	T,G	Irr	400[3]	--	1958	[1]
202	do.	--	60	--	--	Qfpa	212	10.8	Apr. 17, 1963	T,G	Irr	--	--	--	[1]
203	Chance Farm well 6	1964	47	16	--	Qfpa	215	13.5 13.0	June 4, 1964 Oct. 23, 1969	T,G	Irr	--	--	--	--
204	Chance Farm	1962	42	--	--	--	213	--	--	N	N	--	--	--	Test hole 9. [2]
205	do.	1962	52	--	--	--	216	--	--	N	N	--	--	--	Test hole 8. [2]
206	do.	1962	64	--	--	--	216	--	--	N	N	--	--	--	Test hole 7. [2]
207	Chance Farm well 7	1964	65	16	--	Qfpa	215	12.9	Oct. 23, 1969	T,G	Irr	700[3]	--	1964	--
208	Chance Farm well 9	1965	58	16	--	Qfpa	214	11.0	do.	T,G	Irr	500[3]	--	1965	--
* 209	Edmund Sebesta, Jr.	1963	295	4,2	255-295	Ty	248	21	Apr. 27, 1963	S,E	D,S	25[3]	63	Apr. 27, 1963	[2]
210	Henry Vajdak	--	44	18	--	Qfpa	216	5.3	May 6, 1970	T,G	Irr	--	--	--	--
211	do.	--	45	18	--	Qfpa	215	4.6	do.	T,G	Irr	--	--	--	--
212	do.	1963	46	4	36-46	Qt	230	22	Dec. 3, 1963	S,E	D,S	17[3]	--	Dec. 3, 1963	[2]
* 213	Richard J. Junek	1964	42	4	30-42	Qt	231	10	Aug. 4, 1964	S,E	D,S	15[3]	--	Aug. 4, 1964	--
* 301	P. G. Longmire	--	57	18	--	Qfpa	212	16.8	Apr. 25, 1958	T,G	Irr	173	11.72	July 11, 1963	[1]
302	--	--	54	18	--	Qfpa	207	13.4 11.4 15.3	July 7, 1960 June 5, 1963 Oct. 24, 1969	N	N	--	--	--	--
303	Baker Farm	1954	57	18	--	Qfpa	212	15.7	Apr. 25, 1958	T,E,20	Irr	950[3]	28	1954	[1]
304	J. Varisco	--	50	18	--	Qfpa	210	13.1 17.3 18.3	June 5, 1963 June 4, 1964 Oct. 24, 1969	T,G	Irr	244 574	22.28 18.95	Aug. 1963 July 13, 1964	--
305	do.	--	50	18	--	Qfpa	210	12.2 15.6	June 5, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
306	do.	--	50	18	--	Qfpa	210	12.2 15.4	June 5, 1963 Oct. 24, 1969	N	N	--	--	--	--
* 307	do.	--	54	18	--	Qfpa	213	11.5	June 5, 1963	T,G	Irr	408	19.34	July 13, 1964	[1]
308	do.	--	49	18	--	Qfpa	215	11.8 14.0	June 5, 1963 Oct. 24, 1964	N	N	--	--	--	--
309	do.	--	45	--	--	Qfpa	211	11.7	June 5, 1963	N	N	--	--	--	--
310	-- Longmire	--	62	--	--	Qfpa	212	13.4 15.1	June 5, 1963 Oct. 27, 1969	T,G	Irr	--	--	--	--
311	--	--	48	14	--	Qfpa	212	10.7 13.4 12.1	June 5, 1963 June 4, 1964 Oct. 24, 1969	T,G	Irr	340 266	23.54 20.37	July 11, 1963 July 15, 1964	--
312	--	--	59	--	--	Qfpa	212	8.0 10.7	June 5, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
313	--	--	51	14	--	Qfpa	211	16.0 16.9	June 4, 1964 Oct. 24, 1969	T,G	Irr	549 441	-- 13.78	Aug. 14, 1963 July 13, 1964	--
314	U.S. Geological Survey	1963	52	--	--	--	215	13.6	Dec. 6, 1963	N	N	--	--	--	Test hole. [2]
315	Chance Farm	--	64	--	--	--	214	--	--	N	N	--	--	--	Do. [2]
316	do.	1962	65	--	--	--	215	--	--	N	N	--	--	--	Do. [2]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-37-317	Chance Farm	1962	59	--	--	--	215	--	--	N	N	--	--	--	Test hole. [2/]
318	J. Varisco	--	57	16	--	Qfpa	213	16.2	Oct. 24, 1969	T,G	Irr	--	--	--	--
319	do.	--	48	16	--	Qfpa	213	16.9	do.	T,G	Irr	--	--	--	--
320	-- Longmire?	1964	67	--	--	Qfpa	214	14.8	do.	T,G	Irr	--	--	--	--
321	--	--	57	--	--	Qfpa	214	9.8	do.	T,G	Irr	--	--	--	--
322	-- Longmire?	--	56	--	--	Qfpa	212	15.3	do.	T,G	Irr	--	--	--	--
323	do.	--	67	--	--	Qfpa	215	16.3	do.	T,G	Irr	--	--	--	--
324	-- Porter?	--	55	16	--	Qfpa	210	15.1	do.	T,G	Irr	--	--	--	--
325	do.	--	56	18	--	Qfpa	217	15.6	do.	T,G	Irr	--	--	--	--
326	Chance Farm well 10	1965	63	16	--	Qfpa	212	10.8	Nov. 10, 1969	T,G	Irr	--	--	--	--
327	--	--	49	16	--	Qfpa	210	14.6	Oct. 24, 1969	T,G	Irr	--	--	--	--
328	J. Varisco	--	1,200±	4	--	Ty	210	+	May 7, 1970	Flows	S	--	--	--	Measured flow 2 gpm on May 7, 1970. Temp. 85°F (29.5° C).
402	Milton Lewis	1966	500	4,2	--	Ty	252	40	Mar. 25, 1966	S,E,1	D,S	25[3/]	--	Mar. 25, 1966	[2/]
501	Walter Vajdak	1964	256	4,2	235-256	Ty	245	42	Nov. 3, 1964	S,E,3/4	D	20[3/]	--	Nov. 3, 1964	[2/]
502	Henry Kovar	1964	32	4	22-32	Qt	225	14.0	May 6, 1970	P,E	S	17[3/]	--	Aug. 5, 1964	--
503	N. L. Myers	1965	417	4,2	397-417	Ty	265	54	Dec. 13, 1965	S,E,1/2	D,S	25[3/]	--	Dec. 13, 1965	--
* 601	Henry Vajdak	--	61	18	--	Qfpa	211	14.5	Feb. 15, 1960	T	Irr	--	--	--	--
* 602	Baker Farm	1959	286	4,2	217-259	Tj	258	--	--	J,E	D,S	--	--	--	--
603	do.	1945	1,887	4,2	1,838-1,882	Ts	225	+ + 1.3	Nov. 1945 July 9, 1970	N	N	10[3/]	--	Nov. 1945	[2/] [4/]
604	--	--	60±	18	--	Qfpa	209	11.9	June 5, 1963	N	N	--	--	--	--
605	--	--	62	18	--	Qfpa	210	10.0	do.	--	--	--	--	--	--
606	--	--	55	18	--	Qfpa	210	9.9 13.7	June 5, 1963 Oct. 24, 1969	N	N	--	--	--	--
* 607	Baker Ranch	1949	236	--	--	Ty	222	--	--	J,E	D	--	--	--	--
* 608	-- Bailey	--	1,032	3	--	Ty	209	+ +	Dec. 14, 1936 May 5, 1970	Flows	N	--	--	--	Estimated flow 30 gpm on May 5, 1970.
609	Leroy Hoskins	1968	287	4,2	--	Ty	242	40	Mar. 6, 1968	S,E,3/4	D,S	15[3/]	--	Mar. 6, 1968	[2/]
* 610	G. Hinton	1919	35	30	--	Qt	225	26.1 21.1	Dec. 14, 1936 May 6, 1970	B,H	D	--	--	--	Dug well, shored with tile.
* 611	Baker Ranch	1966	240	4,2	177-240	Tj	235	35	Mar. 2, 1966	S,E,3/4	D,S	60[3/]	--	Mar. 2, 1966	--
612	-- Scarmardo	--	53	16	--	Qfpa	204	12.5	Nov. 10, 1969	T,G	Irr	--	--	--	--
613	do.	--	--	16	--	Qfpa	205	14.2	do.	T,G	Irr	--	--	--	--
614	do.	--	--	16	--	Qfpa	205	--	--	T,E,15	Irr	--	--	--	--
615	do.	--	65	16	--	Qfpa	210	14.6	Nov. 10, 1969	T,E,10	Irr	--	--	--	--
801	Baker Ranch	1958	207	2	167-207	Tj	240	--	--	J,E	S	--	--	--	Formerly furnished water for charcoal plant. [2/]
* 802	W. C. Konecny	1968	372	4,2	330-372	Ty	302	83	Aug. 1968	S,E,1/3	D,S	12[3/]	--	Aug. 1968	[2/]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-37-803	Baker Ranch	1965	228	4,2	186,228	Tj	300	80	Oct. 11, 1965	S,E,2	D	20[3/]	--	Oct. 11, 1965	2/
804	do.	--	47	26	--	Tj	230	17.0	May 7, 1970	N	N	--	--	--	Dug well, shored with tile.
901	J. C. Herndon	1963	295	4,2	253-295	Tj	257	60	Oct. 7, 1963	S,E,1/3	S	8[3/]	--	Oct. 7, 1963	2/
38-101	--	--	57	18	--	Qfpa	209	19.0 19.7 20.5	July 7, 1960 May 28, 1963 Oct. 24, 1969	N	N	--	--	--	--
* 102	-- Longmire	--	58	18	--	Qfpa	210	16.8	Apr. 25, 1958	T,G	Irr	735	15.22	July 13, 1964	1/
103	Baker Farm	1957	71	18	--	Qfpa	212	14.2 16.1 19.6	July 7, 1960 May 28, 1963 Oct. 24, 1969	T,E	Irr	--	--	--	--
104	do.	1957	49	18	--	Qfpa	210	14.0 16.1	May 28, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
105	W. Gaubatz	1957	47	18	--	Qfpa	211	17.4	Apr. 25, 1958	T,E	Irr	256	15.74	July 15, 1964	1/
106	do.	1957	70	18	--	Qfpa	211	26.8	do.	T,G	Irr	--	--	--	1/
107	-- Longmire	--	62	18	--	Qfpa	211	32.3	July 7, 1960	N	N	--	--	--	1/
* 108	--	--	49	18	--	Qfpa	212	15.5 19.0	May 28, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
109	H. Porter	--	53	--	--	Qfpa	208	11.8 13.5	May 28, 1963 Nov. 10, 1969	T,G	Irr	--	--	--	--
110	-- Alexander	1955	61	--	--	Qfpa	212	20.3 21.2	May 28, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
111	-- Porter?	--	51	--	--	Qfpa	211	18.6 19.5	May 28, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
112	do.	--	59	--	--	Qfpa	210	14.6 16.4	June 5, 1963 Oct. 24, 1969	T,G	Irr	--	--	--	--
113	do.	1969	47	16	--	Qfpa	210	15.9	Oct. 24, 1969	T,G	Irr	--	--	--	--
114	Luke Restivo	--	--	16	--	Qfpa	210	--	--	T,G	Irr	--	--	--	--
115	J. Varisco	--	--	16	--	Qfpa	212	15.5	Oct. 27, 1969	T,G	Irr	--	--	--	--
116	-- Longmire	--	--	16	--	Qfpa	210	13.9	do.	T,G	Irr	--	--	--	--
117	W. Gaubatz	--	--	--	--	Qfpa	209	--	--	T,G	Irr	--	--	--	--
118	H. Porter	1964	57	18	--	Qfpa	207	15.4	Nov. 10, 1969	T,G	Irr	--	--	--	--
119	do.	--	52	16	--	Qfpa	212	15.9	do.	T,G	Irr	--	--	--	--
120	Luke Restivo	--	50	--	--	Qfpa	211	24.4	May 7, 1970	N	N	--	--	--	--
121	do.	1966	72	16	--	Qfpa	212	26.6	do.	T,G	Irr	--	--	--	--
401	Baker Farm	1957	56	18	--	Qfpa	209	18.2	Apr. 25, 1958	N	N	300[3/]	--	1957	1/
402	do.	1957	57	18	--	Qfpa	209	22.4 20.5 21.3	July 6, 1960 May 29, 1963 Oct. 28, 1969	T,E,20	Irr	950[3/]	23	do.	--
* 403	do.	1957	57	18	--	Qfpa	207	20.7	May 29, 1960	T,E,1 1/2	Irr	575	--	do.	1/
* 404	do.	1960	61	18	--	Qfpa	205	19.6	July 7, 1960	T,E,40	Irr	--	--	--	1/
405	do.	--	60	18	--	Qfpa	207	19.7 16.8 16.9 18.0	July 7, 1960 May 29, 1963 June 4, 1964 Nov. 10, 1970	T,E,40	Irr	424	30.30	Aug. 1, 1963	--

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COM-PLET-ED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEAR-ING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-38-406	J. C. Lauderdale	1955	65	18	--	Qfpa	207	19.1 17.1 19.2	Sept. 23, 1960 June 4, 1963 Oct. 29, 1969	T,G	Irr	--	--	--	--
* 407	do.	1955	80	18	--	Qfpa	209	19.6 17.8 19.4 19.6	Sept. 23, 1960 June 4, 1963 June 5, 1964 Oct. 28, 1969	T,G	Irr	640 597	21.92 22.40	July 12, 1963 July 15, 1964	--
408	-- Porter	--	64	18	--	Qfpa	212	14.4	Apr. 25, 1958	T,G	Irr	392	14.87	July 15, 1964	[1]
409	F. Fojt	--	54	--	--	Qfpa	209	12.0 13.7	May 29, 1963 June 5, 1964	T,G	Irr	482	37.97	Aug. 1, 1963	--
* 410	do.	--	54	--	--	Qfpa	209	14.0 15.7 15.9	May 29, 1963 June 5, 1964 Nov. 10, 1969	T,G	Irr	457 283	34.71 20.28	1963 July 13, 1964	--
411	do.	--	53	--	--	Qfpa	210	15.1 16.9 16.4	May 29, 1963 June 5, 1964 Nov. 10, 1969	T,G	Irr	244 153	29.42 19.18	Aug. 1, 1963 July 13, 1964	--
412	R. Kemp	--	54	--	--	Qfpa	204	14.0 17.2	June 4, 1964 Oct. 28, 1969	T,G	Irr	--	--	--	--
* 413	do.	1930	25	36	--	Qfpa	210	16.1	Dec. 21, 1936	N	N	--	--	--	Dug well, shored with planking.
* 414	--	1927	20	30	--	Qfpa	208	4.2	do.	P,H	N	--	--	--	Dug well, shored with concrete.
415	Baker Farm	--	--	--	--	Qfpa	211	--	--	T,E	Irr	--	--	--	--
416	John See	--	56	16	--	Qfpa	210	32.1	Oct. 28, 1969	T,G	Irr	--	--	--	--
* 417	Baker Farm	--	700±	6	--	Ty	209	+	May 7, 1970	Flows	N	--	--	--	Measured flow 2 gpm on May 7, 1970.
418	-- Bailey	--	49	18	--	Qfpa	210	10.1	May 5, 1970	N	N	--	--	--	--
419	--	--	--	8	--	Qfpa	210	17.3	do.	S,E	Irr	--	--	--	--
* 501	John See	1954	56	18	--	Qfpa	210	30.7	July 7, 1960	T,G	Irr	520	11.93	Aug. 7, 1964	[1]
502	--	1956	70	18	--	Qfpa	208	32.7	do.	T,G	Irr	--	--	--	[1]
503	-- Johnson	--	68	18	--	Qfpa	208	30.1	do.	T,G	Irr	--	--	--	[1]
504	Old River Ranch well 3	--	65	18	--	Qfpa	205	28.8 29.6 31.0 28.8	July 25, 1960 Sept. 23, 1960 June 4, 1963 Oct. 28, 1969	T,G	Irr	--	--	--	--
505	Old River Ranch well 4	1960	--	18	--	Qfpa	215	29.6	July 25, 1960	N	N	--	--	--	--
506	-- Johnson	--	55	18	--	Qfpa	205	26.7 26.0 23.7	Sept. 23, 1960 May 29, 1963 Oct. 28, 1969	N	N	--	--	--	--
507	5-B Ranch	1956	57	18	--	Qfpa	202	30.0	July 25, 1960	T,G	Irr	--	--	--	[1]
508	do.	1956	63	18	--	Qfpa	203	30.0	do.	T,G	Irr	1,200[3]	--	1956	[1]
509	Old River Ranch well 2	1957	62	18	--	Qfpa	202	24.8 24.3 22.9	July 25, 1960 Sept. 23, 1960 June 4, 1963	T,G	Irr	--	--	--	--
510	Old River Ranch well 1	1953	57	18	--	Qfpa	208	26.1 25.6 24.1 21.5	July 25, 1960 Sept. 23, 1960 June 4, 1963 Oct. 28, 1969	T,G	Irr	--	--	--	--
511	J. C. Lauderdale	1955	41	18	--	Qfpa	201	20.0	Sept. 23, 1960	N	N	--	--	--	Abandoned. [1]

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
							BURLESON COUNTY								
BS-59-38-512	J. C. Lauderdale	1955	55	18	--	Qfpa	201	22.5 21.5 22.2	Sept. 23, 1960 June 4, 1963 Oct. 28, 1969	T,G	Irr	--	--	--	--
513	do.	--	58	16	--	Qfpa	200	18.8	do.	T,G	Irr	--	--	--	--
514	5-B Ranch	--	50	18	--	Qfpa	204	27.6	do.	T,G	Irr	--	--	--	--
515	do.	--	56	18	--	Qfpa	203	27.3	do.	N	N	--	--	--	--
517	C. Giesenschlag	1964	75	3,2,2 1/2	--	Qfpa	208	--	--	--	--	--	--	--	2/
701	Baker Farm	1957	56	18	--	Qfpa	205	16.1	Apr. 25, 1958	T,E,15	Irr	374	16.62	July 13, 1964	1/
702	do.	--	--	18	--	Qfpa	203	12.6	Nov. 10, 1969	T,E,20	Irr	--	--	--	--
703	do.	1957	61	18	--	Qfpa	203	10.2 12.4	June 4, 1963 Nov. 10, 1969	T,E	Irr	--	--	--	--
704	do.	1957	65	--	--	Qfpa	206	19.3 15.4 15.8 17.5	July 7, 1960 Mar. 7, 1961 June 4, 1963 June 5, 1964	T,E,50	Irr	1,460	19.46	July 12, 1963	--
705	E. F. Clay	--	500±	10	--	Ty	206	--	--	J,E,1/2	S	--	--	--	Cased to 40 ft. Temp. 71°F(21.5° C)
706	--	--	24	18	--	Tj	210	15.7	June 4, 1963	N	N	--	--	--	Dug well, shored with concrete rings.
* 707	Brazos County	--	Spring	--	--	Qt	260	+	Dec. 21, 1936	Flows	--	--	--	--	--
708	--	--	11	30	--	Qt	240	4.5	May 5, 1970	N	N	--	--	--	Dug well, shored with rock.
* 709	Clay Water Supply Corp.	1963	553	--	--	Ty	260	--	--	S,E	P	--	--	--	4/
710	R. S. Brewton	--	21	27	--	Qfpa	204	5.3	May 5, 1970	N	N	--	--	--	Dug well, shored with concrete rings.
* 711	Sulphur Spring	--	Spring	--	--	Qt	210	+	do.	N	N	--	--	--	--
712	J. C. Patrick	--	--	--	--	Tj	212	--	--	S,E	S	--	--	--	--
* 713	Santa Fe Industries	--	688	12,4	--	Ty	208	--	--	--	U	--	--	--	Formerly furnished water for locomotives and section houses. 2/
* 801	T. S. Bailey	1955	55	18	--	Qfpa	197	30.9	June 4, 1963	T,G	Irr	500 3/	--	1955	--
* 802	do.	1955	56	18	--	Qfpa	200	32.2	do.	T,G	Irr	600 3/	--	do.	--
803	Old River Ranch	--	1,300±	6	--	Ty	215	+	May 5, 1970	Flows	S	--	--	--	--
* 804	do.	--	1,200±	4	--	Ty	285	--	--	S,E	D,S	--	--	--	--
805	do.	--	430±	4	--	Ty	--	--	--	N	N	--	--	--	--
806	5-B Ranch	--	--	18	--	Qfpa	202	23.3	Oct. 28, 1969	N	N	--	--	--	--
* 905	do.	1955	79	18	--	Qfpa	200	36.4 37.3	June 4, 1963 Oct. 28, 1969	T,G	Irr	175 3/	--	1955	--
* 42-302	Edwin Zgabay	--	620	2	--	Ts	288	+	Apr. 20, 1970	Flows	D,S	--	--	--	Measured flow 3 gpm on April 20, 1970.
* 43-101	R. O. Flippin	--	88	8	--	Ty	380	72.4	Nov. 12, 1936	N	N	--	--	--	Abandoned.
102	--	--	--	--	--	Ty	308	--	--	P,W	S	--	--	--	--
* 202	Ofclarzak Farm	--	71	8	--	Ty	258	20.7	Nov. 12, 1936	N	N	--	--	--	Abandoned.
* 203	do.	1964	278	4,2	--	Ty	258	--	--	S,E	D,S	--	--	--	--
* 204	Chas. Tonn	1911	87	8	--	Ty	350	38.0 31.2	Nov. 12, 1936 Apr. 16, 1970	J,E	D,S	--	--	--	--
301	Dr. W. S. Houston	--	320±	--	--	Ty	325	--	--	J,E	P	--	--	--	Furnishes water for rural subdivision.

See footnotes at end of table.

Table 12.--Records of Wells and Springs--Continued

WELL NUMBER	OWNER	DATE COMPLETED	DEPTH OF WELL (FT)	DIAMETER IN CASING (IN.)	PRODUCING INTERVAL (FT.)	WATER-BEARING UNIT	WATER LEVEL: ALTITUDE OF LAND SURFACE (FT)	WATER LEVEL: ABOVE (+) OR BELOW LAND SURFACE DATUM (FT)	WATER LEVEL: DATE OF MEASUREMENT	METHOD OF LIFT	USE OF WATER	WELL PERFORMANCE DATA: YIELD	WELL PERFORMANCE DATA: DRAWDOWN	WELL PERFORMANCE DATA: DATE	REMARKS
								BURLESON COUNTY							
BS-59-43-403	--	--	--	--	--	Ty	290	--	--	S,E	P	--	--	--	Furnishes water for rural subdivision.
* 501	John E. Newman	1956	3,839	7	2,154-2,202 and 3,570-3,838	Twi,Twis	265	+ 63.0 + 87.9	Nov. 11, 1959 July 30, 1965	Flows	Irr	--	--	--	Original gun-perforated at 2,154-2,204 ft. measured flow 110 gpm on Nov. 11, 1959. Later gun-perforated 3,570-3,838 ft., measured flow 1,100 gpm on July 30, 1965. [4]
* 601	Birch Creek Park Estates	1969	438	4	--	Ty	310	--	--	S,E	P	--	--	--	Furnishes water for rural subdivision.
* 602	H. E. Heine	--	59	8	--	Tj	265	17.1	Apr. 23, 1970	B,H	D,S	--	--	--	--
* 603	Texas Parks & Wildlife	1970	299	4	--	Tj	--	--	--	S,E	P	--	--	--	Furnishes water for Birch Creek Unit.
* 44-101	Herman Witte	1925	91	8	--	Tj	300	59.9	Sept. 24, 1936	N	N	--	--	--	Abandoned. [2]
* 102	Big Creek Grocery	1969	660	4	--	Ty	295	--	--	S,E	D	--	--	--	--
103	R. D. Burkett	1968	340	4,2	298-340	Ty	295	45	May 1968	S,E,1/3	D	20[3]	--	May 1968	[2]
* 104	E. Basquez	--	17	40	--	Tj	263	14.6	Oct. 22, 1936	N	N	--	--	--	Abandoned.
105	Gertrude Caughran	1968	334	4,2	298-334	Tj	296	40	June 14, 1968	S,E,3/4	D	20[3]	--	June 14, 1968	[2]
* 106	Marshall Oaks Subdivision	1969	--	4	--	Ty	288	--	--	S,E	P	--	--	--	--
107	W. Boone	1966	182	4,2	170-182	Tj	298	42	Dec. 1, 1966	S,E	D	25[3]	--	Dec. 1, 1966	--
108	J. S. Lewis	1968	330	4,2	288-330	Ty	295	40	Nov. 1968	S,E,1/3	D	25[3]	--	Nov. 1968	--
* 201	U.S. Corps of Engineers	--	37	30	--	Tj	225	27.2	Oct. 22, 1936	N	N	--	--	--	--
* 301	Santa Fe Industries	--	815	8	775-815	Ty	253	--	--	T,E,20	Ind	250[3]	--	1960	These two wells originally furnished water for locomotives and tie yard; 1970 only tie yard. [2]
302	do.	--	815	8	775-815	Ty	253	--	--	T,E,10	Ind	150[3]	--	1960	--
* 303	City of Somerville	1914	198	8	178-198	Tj	250	60	Jan. 5, 1937	N	N	250[3]	--	1937	Originally Gulf Coast Utilities operated public water-supply system.
* 304	City of Somerville well 2	1949	203	12,8	166-201	Tj	250	--	--	T,E,115	P	--	--	--	Test hole drilled to 304 ft. and plugged back. Standby well. [2]
* 305	City of Somerville well 3	1954	2,020	10,8,7	1,880-2,010	Ts	250	+ +	1954 1970	T,E,7 1/2	P	240[3]	--	1954	[2]
* 307	B. H. Gaines	1968	280	4,2	--	Ty	280	38	Feb. 1968	S,E	S	30[3]	--	Feb. 1968	[2]
308	--	--	88	28	--	Tj	302	70.8	Apr. 15, 1970	J,E	S	--	--	--	Dug well, shored with concrete rings.
309	--	--	14	24	--	Tj	245	12.2	May 7, 1970	N	N	--	--	--	Do.
401	U.S. Corps of Engineers	--	60	8	--	Tj	260	30.0	Apr. 16, 1970	N	N	--	--	--	--
* 402	do.	1970	240	4	--	Tj	255	6.2	Apr. 23, 1970	S,E	P	--	--	--	Furnishes water for Burch Creek Park.
* 501	do.	1970	160	4	--	Tj	290	--	--	S,E	P	--	--	--	Furnishes water for Big Creek Park.
* 601	Bob Brantley	1934	10	30	--	Tj	240	5.5	Sept. 24, 1936	N	N	--	--	--	Dug well, shored with concrete rings.
45-101	Inez Balki	1967	240	4,2	198-240	Tj	214	40	July 6, 1967	S,E,1/4	D,S	20[3]	--	July 6, 1967	[2]
201	Baker Ranch	1965	266	4,2	224-266	Tj	200	13.9	July 8, 1970	S,E	D	13[3]	--	Mar. 15, 1965	[2] --
202	do.	--	--	4	--	Tj	208	9.0	do.	S,E	D	--	--	--	--
* 203	do.	1964	103	4	83-103	Tj	255	42.5	do.	S,E	S	10[3]	--	Oct. 16, 1964	--
* 204	do.	--	Spring	--	--	Tj	220	Flows	Dec. 16, 1936	Flows	S	--	--	--	--

* For chemical analyses of water from wells and springs, see table 17.
1/ For water levels in wells, see table 16.
2/ For drillers' logs of wells, see tables 14 and 15.
3/ Reported by driller or others.
4/ Electric log in files of U.S. Geological Survey, Austin, Texas, or Texas Water Development Board, Austin, Texas.

Table 13.—Records of Oil and Gas Wells Used for Data-Control Points 1/

WELL	OPERATOR	LEASE AND WELL	DATE OF LOG
	BRAZOS COUNTY		
(In Robertson County)	Vam Oil Company	Seale No. 1	Oct. 21, 1949
BJ-59-13-303	Frank C. Kallina and C. R. Hardy	Blanton No. 1	June 12, 1966
14-302	Michel T. Halbouty et al	Allen & Clay No. 1	Nov. 10, 1964
605	Mudge Oil Company	Koppe No. 1	Aug. 6, 1943
804	W. Earl Rowe	E. A. Keller No. 1	May 27, 1969
20-836	Hamman Oil & Refining Company	Brazos Varisco No. 1	Dec. 16, 1948
837	do.	Brazos Varisco No. 2	Dec. 29, 1948
838	do.	Sims No. 1	Aug. 20, 1944
21-908	Michael A. Salvato	C. S. Beckwith No. 1	Jan. 12, 1957
23-501	Southwood Oil Co. & Slick Oil Co., Ltd.	E. V. Peters No. 1	Sept. 13, 1943
704	Slick Oil Co., Ltd.	H. L. Weedon No. 1	Nov. 8, 1954
29-601	Vee Tipt Oil Co.	N. A. Stewart No. 1	Jan. 23, 1943
29-607	A. E. Burgin et al	N. A. Stewart No. 1	Nov. 2, 1946
30-505	Thomas J. Haberle	I. H. Lloyd No. 1	Feb. 23, 1960
602	Liberty Workover & Drilling Company	P. G. Longmire No. 1	Oct. 26, 1952
809	Thomas J. Haberle	R. Creed No. 1	Sept. 20, 1954
902	Petroleum, Heat, & Power Company	J. J. Cahill No. 1	May 28, 1942
31-203	Humble Oil & Refining Company	R. P. Trant No. 1	June 20, 1958
38-203	Far West Oil Co. & Holly Development Company	John A. Arhopulos No. 1	Sept. 16, 1950
615	Lonnie Holotik	P. P. Prescott No. 1	Apr. 14, 1960
617	Phillips Petroleum Company	Renchie No. 1	Feb. 25, 1943
39-105	M. W. Hunter	W. J. Jericho No. 1	Dec. 24, 1938
108	Phillips Petroleum Company	Dona Hollaway No. 1	Oct. 9, 1943
39-109	Phillips Petroleum Company	Mitch No. 1	Dec. 15, 1941
111	do.	Schoeps No. 1	Nov. 27, 1944
114	Marshall Stone	Weems No. 1	Apr. 5, 1950
203	J. Elmer Thomas	Milo Heirs No. 1	Nov. 8, 1943
204	Phillips Petroleum Company	S. E. Dunlap No. 1	Nov. 1, 1943
205	do.	Verna No. 1	Nov. 1, 1943
303	S. W. Breeding & Marshall Stone	Knox Williams No. 1	Aug. 28, 1950
305	Fred W. Shield	Louis Orlando Estate No. 1	Mar. 19, 1967
306	The Texas Company	Orlando No. 1	Jan. 8, 1956
508	Carlon Oil Co. & Crown Central Petroleum Co.	Viola Burrows No. 1	Aug. 28, 1964
	BURLESON COUNTY		
BS-59-19-807	Scurlock Oil Company	Abbie Clanton No. 1	Sept. 3, 1963
25-508	Chapman Oil Co.	Jestus Alford No. 1	July 27, 1967
601	Morris K. Womack	Coffield No. 1-A	June 6, 1953

Table 13.—Records of Oil and Gas Wells Used for Data-Control Points—Continued

WELL	OPERATOR	LEASE AND WELL	DATE OF LOG
BS-59-19-602	A. B. Alkek	Harriston No. 1	Oct. 10, 1954
607	Livingston Drilling and Well Service	J. E. Dyer No. 1	June 14, 1950
609	W. H. Foster	Russell et al No. 1	Feb. 3, 1955
26-104	A-Bear Oil Co.	Majejowsky No. 1	Apr. 6, 1967
201	Cathy & Oak Oil Company	Boyd-Eanes No. 1	May 22, 1955
205	B. W. Foss	Margaret Black No. 1	Mar. 12, 1951
301	Jordan Drilling Company	Hitchcock No. 1	June 21, 1948
401	Jackson Oil Co. & S. H. Killingsworth	Thomas Yarrell No. 1	Apr. 16, 1958
903	B. C. Bukowski & Perry	Cade No. 1	July 1, 1943
27-306	Richard B. Hemingway & J. D. Bartell	A. W. Telg No. 1	Jan. 28, 1963
28-103	Hammon Oil & Refining Company	J. K. Drgac No. 1	Jan. 31, 1954
212	do.	Worthington No. 1	Sept. 17, 1944
341	M-R Exploration Company	J. M. Fountsin No. 2	Oct. 24, 1936
34-502	Maresh & Billingsley Oil Company	Frank Horak No. 1	Jan. 14, 1949
36-304	H. Y. Barnett	C. Fick No. 1	June 28, 1940
37-401	Roy Davis Company	J. W. Lewis No. 1	Sept. 12, 1951
403	Raven Oil Company	Lewis Estate No. 1	Apr. 10, 1941
504	General American Oil Co. of Texas	Jordan Heirs No. 1	Mar. 28, 1948
701	J. H. Liles	G. Scott No. 1	June 20, 1937
805	Parker & McCune	Hohlt No. 1	Jan. 2, 1950
806	do.	Hohlt No. 2	Oct. 13, 1950
38-518	Carlon Oil Co.	M. W. Hohlt No. 4	Sept. 9, 1961
807	do.	M. W. Hohlt No. 2	Mar. 18, 1961
43-201	Chas. E. Fraser, Inc.	Marek No. 1	Oct. 27, 1943
302	Dugger & Herring et al	J. E. Weiler No. 1	July 24, 1964
44-202	M. L. Carr	Lauderdale-Lockhart No. 1	Nov. 21, 1961
45-103	Peerless Oil & Gas Company	Santa Fe No. 1	Apr. 13, 1939

1/ Electrical logs in files of U. S. Geological Survey and Texas Water Development Board, Austin, Texas.

Table 14.—Drillers' Logs of Wells

BRAZOS COUNTY

Well BJ-59-06-302

Owner: Bruce Weaver
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Clay, red, and surface sand	70	70
Shale, gray	32	120
Shale, sandy	41	143
Shale	41	184
Shale, sandy	41	225
Sand and iron water	62	287
Sand and shale	20	307
Shale, sandy	52	359
Sand	10	369
Shale, gray	30	399
Sand, gray	31	430

Well BJ-59-06-501

Owner: Willie Skubol
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Shale	100	100
Sand	8	108
Shale	5	113

Well BJ-59-06-604

Owner: H. B. Poteet
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Sandstone	26	26
Shale, gray	15	41
Shale and rocks	20	61
Shale, gray	41	102
Sand	10	112
Shale, gray, and sand	52	164
Shale	20	184
Sand, gray	21	205
Shale, gray	62	267
Shale, sandy	20	287
Shale, hard	3	290
Sand	38	328

Well BJ-59-06-702

Owner: Joe R. Nash
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Shale, blue	237	237
Sand	18	255

Well BJ-59-13-302

Owner: Triangle Z Dairy
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Soapstone	20	20
Shale, hard rocks	62	82
Shale	41	123
Shale, sandy	41	164
Shale	10	174
Sand and iron water	166	340
Shale, sandy	8	348
Shale	41	389
Shale, hard	21	410
Shale, sandy	5	415
Sand	10	425
Shale	10	435
Sand, gray	23	458

Well BJ-59-13-605

Owner: A. Kapetsky
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Shale	200	200
Sand	15	215
Shale	31	246
Sand	5	251
Sand, shaly	16	267
Shale	23	290
Sand	10	300
Shale	7	307

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-13-901		
Owner: Cullen Mancusco Driller: B. G. & R. Drilling Company		
Soapstone	20	20
Shale	21	41
Shale and rocks	41	82
Shale	44	126
Shale, sandy	7	133
Sand	17	150
Well BJ-59-14-101		
Owner: James Millberger Driller: B. G. & R. Drilling Company		
Clay	20	20
Shale	30	50
Rock	1	51
Shale	51	102
Sand	21	123
Shale	10	133
Well BJ-59-14-104		
Owner: Jim Nichols Driller: Carl Ryan Drilling Company		
Shale	40	40
Sand	40	80
Shale	146	226
Sandstone	3	229
Shale	44	273
Sand	40	313
Well BJ-59-14-202		
Owner: Knox Kelly Driller: B. G. & R. Drilling Company		
Clay	20	20
Shale, gray	205	225
Shale, sandy	41	266
Sand, gray	21	287
Well BJ-59-14-402		
Owner: Bill Presnal Driller: Carl Ryan Drilling Company		
Shale	30	30
Sand	21	51
Shale	193	244
Sand	13	357
Shale	28	285
Sand	11	296
Shale	25	321
Sand	5	326
Shale	20	346
Well BJ-59-14-501		
Owner: J. H. Harris Driller: B. G. & R. Drilling Company		
Soapstone and surface sand	20	20
Shale, gray	205	225
Shale, sandy	21	246
Shale	35	281
Shale, sandy	26	307
Rock	1	308
Shale	56	364
Shale, sandy	66	430
Sand and shale	21	451
Sand, fine, gray	30	481
Shale	52	533
Sand and shale streaks	41	574
Sand	20	594
Well BJ-59-14-603		
Owner: Henry Odom Driller: Carl Ryan Drilling Company		
Shale	50	50
Shale, sandy	60	110
Shale, blue	10	120

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-14-603—Continued		
Sand	40	160
Shale	7	167
Sand	28	195
Sand, fine	17	212

Well BJ-59-14-704

Owner: P. A. Linerode
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Shale	154	154
Sand, white	10	164
Shale, blue	21	185
Shale streaks, blue	15	200
Shale, blue	174	374
Sand, brown	13	387
Shale, brown	30	417
Sand, blue	14	431

Well BJ-59-14-802

Owner: Aubrey Moore
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Soapstone, blue-gray	20	20
Shale, gray	41	61
Shale, sandy	21	82
Shale, gray	123	205
Sand	3	208
Shale, gray	55	263
Sand	4	267
Shale, gray	102	102
Shale, sandy	81	450
Shale, blk.	7	457
Sand, white with gray	14	471

Well BJ-59-14-902

Owner: Howard Horn
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Soapstone	20	20
Shale, gray	38	58

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-14-902—Continued		
Sand and shale (coarse)	24	82
Shale	164	246
Shale, sandy	61	307
Sand, fine, blue-gray	29	336
Shale, gray	170	506
Rock	2	508
Shale, sandy	4	512
Shale & sand	21	533
Sand, blue, coarse, 14 gr.	20	553

Well BJ-59-15-402

Owner: Henry Odom, well 2
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	50	50
Sand	10	60
Shale	57	117
Sand	24	141

Well BJ-59-15-701

Owner: Bert Weeks
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Sand and gravel	15	15
Shale and lignite	26	41
Shale, sandy	20	61
Shale and lignite	21	82
Shale, gray	61	143
Sand, coarse	72	215
Shale, gray	59	274
Rock	2	276
Shale, gray	26	302
Shale, sandy	5	307
Sand, gray	21	328

Well BJ-59-15-803

Owner: Martin Riley
Driller: B. G. & R. Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Sand, surface, and shale	20	20
Shale	100	120

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-15-803—Continued		
Shale, sandy	3	123
Shale	61	184
Shale, sandy	21	205
Shale	10	215
Sand (had iron here)	25	240
Shale, sandy	42	282
Shale, sandy and rocks	46	328
Shale	146	474
Sand, gray	18	492

Well BJ-59-20-562

Owner: Brazos River Chemical Company
Driller: Carl Ryan Drilling Company

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

Well BJ-59-20-564

Owner: Steele's Store
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Loam, sandy	15	15
Quicksand	40	55
Logs	3	58
Gravel	24	82
Slate, black	42	124
Sand	6	130
Slate, black	10	140
Sand, water	85	225
Slate, black	20	245
Sand	48	293
Slate, black	42	335
Slate, white	15	350
Sand	12	362
Slate, white	18	380

Well BJ-59-20-564—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand	20	400
Rock, red	3	403
Sand	37	440
Slate, black	40	480
Sand	38	518
Slate, black	22	540
Sand showing oil	15	555
Slate, black	134	689
Lime	1	690
Sand, water	15	705
Slate	40	745
Sand, water	5	750
Slate	35	785
Sand, artesian water	75	860
Slate	55	915
Sand	107	1,022
Slate, green	14	1,036
Sand, green water	44	1,080
Sand, brown	12	1,092
Lime	4	1,096
Slate	71	1,167
Lime	3	1,170
Coal	2	1,172
Slate, brown	13	1,185
Sand, no water	10	1,195
Slate	23	1,218
Sand, water	18	1,236
Lime, black, hard	4	1,240
Slate, brown, and mud	57	1,297
Lime	2	1,299
Mud, brown	81	1,380
Lime	3	1,383
Slate	67	1,450

Well BJ-59-20-564—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand and shale, mixed	10	1,460
Sand, gray	50	1,510
Slate, brown	5	1,515
Lime	1	1,516
Slate, brown	14	1,530
Shell, lime	2	1,532
Sand	113	1,645
Slate	35	1,680
Sand, water	85	1,765
Shell, hard	6	1,771
Sand	29	1,800
Slate, brown	35	1,835
Coal	3	1,838
Slate, brown	7	1,845
Sand	52	1,897
Slate	4	1,901
Lime	19	1,920
Slate	5	1,925
Lime, soft	8	1,933
Slate	2	1,935
Sand	20	1,955
Slate	15	1,970
Sand	13	1,983
Slate	14	1,997
Sand, water and warm water	11	2,008
Slate	204	2,212
No record	1,923	4,135

Well BJ-59-20-920

Owner: Texas A & M University, Well 4
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil and clay	12	12
Sand, coarse, and gravel	23	35
Shale and rock layers	87	122
Shale and shells	31	153

Well BJ-59-20-920—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale and shells and sandy shale	111	264
Shale	29	293
Shale, sandy	20	313
Sand, fine, gray	9	322
Shale, hard	11	333
Shale, sandy	10	343
Sand cuts, some shale streaks	72	415
Shale, hard, sandy	13	428
Shale	10	438

Well BJ-59-20-929

Owner: Red Barn Chemical, Inc.
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Clay	42	42
Gravel	30	72

Well BJ-59-20-931

Owner: Texas A & M University, Test Well Brandesky 1
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Shale, blue	74	74
Shale, brown	44	118
Sand, fine blue	10	128
Shale, gray	159	287
Shale, gray, and sand layers	73	360
Shale and sand streaks	34	394
Sand, white	99	493

Well BJ-59-20-932

Owner: Anthony Salvaggio
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Shale	50	50
Gravel	12	62
Shale	218	280
Shale, sandy	30	310
Sand	150	460
Shale	10	470
No record	37	507

Well BJ-59-20-201

Owner: City of Bryan, Well 6
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Soil, black sandy	2	2
Clay, brown and white	13	15
Sand, dark gray and shale	39	54
Shale, dark gray and some shells	95	149
Shale, dark gray and boulders	2	151
Shale, dark gray and some shells	32	183
Shale, dark gray and boulders	4	187
Shale, dark gray and shells	49	236
Sand, fine-grained, gray	14	250
Shale, dark gray and shells	34	284
Sand, dark gray, few shale streaks	36	320
Shale, brown, and sandy streaks	15	335
Sand, hard gray, shale and lignite	6	341
Shale, gray, few sand breaks, some lignite	9	350
Sand, layers, fine-grained, gray, some lignite	15	365
Sand, fine, gray, cut clean	92	457
Shale, brown, sandy streaks	2	459
Sand, coarse, gray, cut clean	10	469
Sand, fine gray, shale layers	21	490
Shale, brown, cut core	9	499

Well BJ-59-21-203

Owner: City of Bryan, Well 8
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	2	2
Clay, white and brown	15	17
Sand, brown, and gravel	18	35

Well BJ-59-21-203—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale, gray and sand streaks	3	38
Sand, gray, and lignite	25	63
Shale, gray	4	67
Shale, yellow and white	13	80
Shale, gray	25	105
Shale, yellow and white, and brown sand streaks	17	122
Sand, gray, shale and lignite	14	136
Shale, gray and white, and layers of lignite	21	157
Shale, hard gray	23	180
Shale and lignite	5	185
Rock	2	187
Shale, hard gray	21	208
Shale, gray, and shale and lignite	24	232
Sand, fine gray	14	246
Shale, gray, and sand streaks	14	260
Shale, gray, and shells	21	281
Sand, gray, and shale layers	14	295
Sand, fine gray	17	312
Shale, gray, and lignite layers	15	327
Sand, fine brown	16	343
Sand, gray, shale, and lignite	25	368
Sand, gray, some shale and lignite	20	388
Sand, gray	65	453
Sand, gray, and shale breaks	42	495
Sand, gray, and little lignite	45	540
Shale, brown	14	554

Well BJ-59-21-204

Owner: City of Bryan, Well 7
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Soil, sandy	2	2
Clay, white and yellow	5	7
Sand and clay	43	50
Clay, gray sandy	33	83
Shale, shale	55	138
Shale and boulders	2	140
Shale, gray	30	170
Shale and shell	4	174
Shale, gray	22	196
Shale and shell	2	198
Shale, sandy, and lignite	18	216
Shale and shells	6	222
Sand, gray	17	239
Shale, gray, and shells	26	265
Sand, gray	12	277
Sand, gray, shell, lignite	16	293
Sand, gray, and shale breaks	17	310
Sand, gray	27	337
Sand, brown and blue, and lignite	54	391
Sand, light and gray, and few shale breaks	27	418
Sand, sharp gray, brown shale and layers of sand	28	446
Shale, brown, and layers of sand	23	469
Sand, sharp gray	56	525
Shale, brown	14	539

Well BJ-59-21-205

Owner: City of Bryan, Well 12
Driller: Texas Water Wells, Inc.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	9	9
Sand, surface	3	12

Well BJ-59-21-205—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay	18	30
Sand	20	50
Shale	35	85
Sand	5	90
Shale	19	109
Sand-clay	83	192
Shale	58	250
Sand	225	475
Shale	65	540
Sand	60	600
Shale	30	630
Sand, sandy shale	245	875
Shale	45	920
Sand, shale	50	970
Shale	120	1,090
Lime and shale	70	1,160
Shale, sandy	300	1,400
Shale	500	1,960
Shale, sandy	170	2,130
Lignite and shale	80	2,210
Shale, sandy	210	2,420
Sand	460	2,880
Shale and sand	60	2,940
Shale	7	2,947

Well BJ-59-21-206

Owner: City of Bryan, Well 1
Driller: Layne Texas Company

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	4	4
Clay	13	17
Sand	10	27
Rock	1	28
Shale, gray, and shells	27	55
Shale, brown	27	82
Sand	3	85

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-206—Continued		
Shale	2	87
Sand	5	92
Shale, brown	10	102
Sand, fine green	13	115
Shale, brown	17	132
Rock	1	133
Shale, light gray, boulders, and shell streaks	92	225
Shale, light gray, and shell layers	33	258
Rock	1	259
Shale, gray, and layers of shell and boulders	26	285
Sand and layers of shale	12	297
Shale, gray, and shells	27	324
Shale, gray, and layers of sand	13	337
Shale, sandy	20	357
Shale, gray, and sand streaks	27	384
Shale, hard brown sandy, and streaks of sand and lignite	33	417
Sand with streaks of brown shale and lignite	23	440
Shale, brown sandy, and lignite and shale	19	459
Shale, hard	3	462
Sand, hard pack	10	472
Sand, and layers of shale SP	12	484
Sand and layers of shale (cored)	9	493
Sand (Sparta?)	50	543
Shale, hard	10	553
Shale, brown, and shell	14	567
Sand	5	572
Shale, brown and green, shell and lignite	52	624
Rock	1	625
Shale, brown and green, with shells, lignite and pyrite	23	648
Sand (QC) tested	40	688
Shale, brown, and shells and lignite	36	724
Rock	1	725
Shale, and shells and lignite	9	734
Shale, sandy, and lignite	28	762
Shale	3	765
Shale, sandy, layers of sand, lignite and glauconite	23	788
Sand and shale, shale, shale streaks, and lignite	42	830
Shale, lignite and shells	21	851
Sand, fine	7	858
Shale, hard brown, and lignite	32	890
Shale, brown, and shells, layers of sand	28	918
Shale, brown, and shells	12	930
Rock	1	931
Sand, muddy, and brown shale streaks	11	942
Sand, ruddy, and brown shale streaks (cored)	8	950
Sand, ruddy, and brown shale streaks	39	989
Rock	2	991
Shale, brown, shells, and lignite	41	1,032
Shale, brown sandy, shells and lignite	22	1,054
Rock	1	1,055
Shale, hard brown and gray, shells and lignite	89	1,144
Shale, hard, and shells with layers of rock and lime	34	1,178
Rock	4	1,182
Shale	2	1,184

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-206—Continued		
Rock	1	1,186
Shale, hard blue and brown	39	1,224
Sand, hard pack	7	1,231
Shale	4	1,235
Sand, hard pack, layers of rock with shell, and shale	15	1,250
Rock, shells, shale, and layers of hard rock	21	1,271
Rock, shale, shells, layers of hard rock and pyrites	24	1,295
Shale, hard, and lignite	23	1,318
Shale, brown, and lignite	30	1,348
Shale, sandy	42	1,390
Shale, sandy (cored)	10	1,400
Shale, sandy	28	1,428
Shale and streaks of sandy shale	10	1,438
Sand, muddy, with layers of shale	23	1,461
Sand, shaly, with layers of shale (cored)	9	1,470
Sand, and layers of shale	14	1,484
Shale, sandy	5	1,489
Sand (cored) - no recovery	9	1,498
Sand, shaly, with lignite mica	31	1,529
Shale, brown and gray shale and lignite	31	1,560
Rock, sand	2	1,562
Shale	26	1,588
No report	88	1,676
Sand	92	1,768

Well BJ-59-21-207

Owner: City of Bryan, Well 14
Driller: Layne Texas Company

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	3	3
Clay	133	136
Well BJ-59-21-207—Continued		
Sand	30	166
Shale	59	225
Sand	2	227
Shale, and sandy shale	145	372
Sand	124	496
Shale	24	520
Sand	20	540
Shale	52	592
Sand	5	597
Shale, and sandy shale	120	717
Sand	78	795
Shale	40	835
Sand	3	838
Shale	164	1,002
Sand	6	1,008
Shale, and sandy shale	71	1,079
Sand	49	1,128
Rock, hard, shale and sandy shale	28	1,156
Sand	44	1,200
Rock	1	1,201
Sand	17	1,218
Rock	1	1,219
Sand	11	1,230
Shale and sand streaks	46	1,276
Shale, hard	31	1,307
Sand	15	1,322
Shale, sandy	62	1,384
Shale	18	1,402
Sand	15	1,417
Shale, and sandy shale	86	1,503
Rock	1	1,504
Shale, sandy, and shale	43	1,547
Sand	18	1,565
Shale, sandy	245	1,810
Sand	31	1,841
Rock	4	1,845

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-207—Continued		
Shale, hard, and rock streaks	25	1,870
Shale, sandy, and lignite	78	1,948
Sand	38	1,986
Rock	1	1,987
Shale, and sand streaks	68	2,055
Sand	28	2,083
Shale	39	2,122
Sand	77	2,199
Shale	23	2,222
Sand and lignite streaks	96	2,318
Lime	4	2,322
Sand	124	2,446
Rock	1	2,447
Sand and lignite	55	2,502
Sand and lime	32	2,534
Lime, hard	2	2,536
Sand	10	2,546
Shale	4	2,550
Sand	42	2,592
Shale, rocky	13	2,605
Shale, and sandy shale	54	1,659
Sand and lime	30	2,689
Sand, rock and lignite	30	2,719
Shale and lime	21	2,740
Sand, and lime streaks	10	2,750
Sand, and chalk streaks	30	2,780
Shale, sandy, and lime	90	2,870
Well BJ-59-21-208		
Owner: City of Bryan, Well 13 Driller: —		
Topsoil	9	9
Clay	48	57
Well BJ-59-21-208—Continued		
Shale	8	65
Sand-shale	13	78
Shale	34	112
Sand-shale	8	120
Sand	123	243
Sand-shale	37	280
Sand	44	324
Shale	41	363
Shale, sandy	47	412
Sand	46	458
Shale, sandy	127	585
Sand	69	654
Shale	13	667
Sand	78	745
Sand-shale, sticks	120	865
Shale	222	1,087
Sand	51	1,138
Shale	154	1,292
Sand	18	1,310
Shale	110	1,420
Shale, sand	82	1,502
Shale, black	271	1,773
Sand, shale	149	1,922
Shale, sandy	157	2,079
Shale	66	2,145
Gumbo	53	2,198
Shale, sandy	66	2,264
Lime	16	2,280
Shale	6	2,286
Shale, sandy	14	2,300
Sand, hard	200	2,500
Sand, shale	151	2,651
Shale, hard	10	2,661
Sand, hard	49	2,710
Sand-shale	60	2,770
Sand	33	2,803

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-208—Continued		
Shale, hard	26	2,829
Shale, sandy	21	2,850
Shale, hard	10	2,860
Well BJ-59-21-302		
Owner: City of Bryan, Well 2 Driller: —		
Clay, red and white	27	27
Shale, sandy	23	50
Shale, gray	108	158
Rock	2	160
Shale, gray, and shell	47	207
Rock	1	208
Shale, gray, boulders and shell	32	240
Rock	1	241
Shale, gray, boulders and shell	54	295
Rock	1	296
Sand and shale	11	307
Sand and shell	30	337
Sand and shale	25	362
Sand, fine-grained	30	392
Shale, lignite and sand	46	438
Sand and shale	85	523
Well BJ-59-21-303		
Owner: City of Bryan, Well 10 Driller: —		
Clay	100	100
Clay, sandy, and gravel streaks	48	148
Clay	98	246
Shale, and small pieces of shells	130	376
Shale, shells, lignite	54	430
Sand and shale streaks	45	475

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-303—Continued		
Shale, sandy	15	490
Sand and shale streaks	80	570
Shale, sandy	40	610
Shale and shells	54	664
Shale, sandy	52	716
Shale	44	760
Shale, sandy, and lignite	48	808
Shale	51	859
Shale, sandy	120	979
Shale, shells and lignite	139	1,118
Shale and shells	165	1,283
Shale, sandy, shells and sand breaks	48	1,331
Shale, sandy, and shale streaks	59	1,390
Shale and lignite	61	1,451
Shale and shells	199	1,650
Shale, sandy, and lignite	42	1,692
Shale and sand streaks	41	1,733
Rock	2	1,735
Shale	82	1,817
Shale and lignite	92	1,909
Shale	91	2,000
Shale, sandy, and lignite	60	2,060
Shale	62	2,122
Shale, sandy	10	2,132
Sand	43	2,175
Shale, hard, and lignite	23	2,198
Shale, sandy, and shale streaks	40	2,238
Shale, hard	3	2,241
Shale, sandy, and shale streaks	25	2,266
Shale	5	2,271
Shale and lignite	41	2,312
Shale	10	2,322

Table 14.—Drillers' Logs of Wells—Continued

Well BJ-59-21-303—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale and lignite	18	2,340
Sand	74	2,414
Shale, sandy	34	2,448
Sand	28	2,476
Shale	24	2,500
Shale and lignite	20	2,520
Lignite	50	2,570
Shale and lignite	43	2,613
Shale	8	2,621
Sand	75	2,696
Sand, cored	25	2,721
Sand	79	2,800
Sand, cored	20	2,820
Sand	80	2,900
Sand, cored, and shale streaks	25	2,925
Sand, cored	43	2,968
Sand and shalestreaks	12	2,980
Shale, sandy	10	2,990
Sand and shale streaks	45	3,035
Sand	18	3,053
Sand and shale streaks	17	3,070
Sand, cored, and shale	20	3,090
Shale, sandy	17	3,107
Shale, sandy, and sand	20	3,127
Shale, sandy, hard streaks	23	3,150

Well BJ-59-21-304

Owner: City of Bryan, Well 3
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay	28	28
Clay, red and white	47	75
Rock	1	76
Shale, sandy	28	104
Sand	12	116
Rock	1	117
Sand, hard, green	24	141
Shale, gray	44	185

Well BJ-59-21-304—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Rock	2	187
Shale and rock layers	3	190
Rock	1	191
Shale, gray	32	223
Shale, gray, and shell	24	247
Shale, shell, and boulders	23	270
Rock	1	271
Shale, shell, and boulders	24	295
Sand and shale layers	19	314
Shale and shell	28	342
Shale and sand	31	373
Shale and sand layers	20	393
Shale and sandy shale	24	417
Sand	72	489
Shale	9	498

Well BJ-59-21-305

Owner: City of Bryan, Well 4
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay	8	8
Clay, yellow	24	32
Rock	1	33
Shale, gray	46	79
Rock	1	80
Shale, gray	13	93
Sand and shale	31	124
Shale	7	131
Shale, sandy, and shell	16	147
Shale, gray	35	182
Shale	22	204
Shale and boulders	5	209
Rock	1	210
Shale	10	220
Rock	1	221
Shale	10	231
Rock	1	232

Well BJ-59-21-305—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale	2	234
Rock	1	235
Shale, gray	29	264
Shale and boulders	27	291
Rock	1	292
Shale, gray	31	323
Shale, sandy	15	338
Shale, gray, and shells	21	359
Sand with shale breaks	30	389
Shale	5	394
Sand (tight)	31	425
Shale	25	450
Shale, sandy	69	519
Sand	5	524
Shale	5	529
Sand	68	597
Shale, brown	26	623
Sand, hard	10	633
Shale, sandy	16	649
Shale, sandy (cored)	2	651
Shale and lime	8	659
Sand and sandy shale	18	677

Well BJ-59-21-306

Owner: City of Bryan, Well 9
Driller: Layne Texas Company

	THICKNESS (FEET)	DEPTH (FEET)
Clay	143	143
Clay, sandy	25	168
Sand, gray, with black specks	15	183
Shale and streaks of sand	20	203
Shale, sandy	27	230
Shale, sticky	41	271
Shale, sand, and rock layers	9	280
Shale and rock layers	90	370
Shale, sandy	40	410
Shale and rock layers	35	445

Well BJ-59-21-306—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, fine gray, and streaks of shale	30	475
Sand, fine gray	23	498
Shale	11	509
Sand, fine gray	75	584
Shale	5	589
Sand, gray	29	618
Sand, fine gray, and streaks of shale	35	653
Shale	13	666
Shale, sandy	24	690
Shale	20	710

Well BJ-59-21-401

Owner: Texas A & M University, Test Well 8 (1952)
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	2	2
Clay	13	15
Shale, sand and shell	112	127
Sand, fine gray	18	145
Sand, fine gray, and streaks of shale	37	182
Shale	29	211
Sand, fine gray, and lignite	72	283
Sand and shale streaks	12	295
Sand, fine gray	33	328
Shale, sandy	27	355
Shale	36	291
Sand, hard, and shale	25	416
Sand, fine gray, with black specks	52	468
Shale, hard, sandy	17	485
Shale	33	518
Sand, fine gray and streaks of shale	57	575
Sand, fine gray	23	598
Sand and streaks of shale	43	641
Sand, fine gray	40	681
Shale, sandy, and shell	20	701

Well BJ-59-21-401—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, brown	41	742
Shale, sandy, and shell	40	782
Sand, fine gray	20	802
Shale, sandy, and shale	40	842
Sand	18	860
Shale	32	892
Sand	4	896
Shale and streaks of rock, sand and shell	88	984
Shale, sandy	21	1,005
Shale and rock layers	63	1,068
Sand and streaks of shale	21	1,089
Shale, sandy, and shale	31	1,120
Sand	5	1,125
Shale	9	1,134
Sand, fine gray	27	1,161
Shale	7	1,168
Sand, gray	66	1,234
Sand and streaks of shale	61	1,295
Shale, sandy, and shale	33	1,328
Rock	1	1,329
Shale	6	1,335

Well BJ-59-21-402

Owner: Texas A & M Univ., Well 5
Driller: Layne Texas Co.

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	3	3
Sand	12	15
Clay	125	140
Clay, sandy, with sand streaks	73	213
Sand and clay streaks	30	243
Sand	90	333
Shale	84	417
Sand, shaly	63	480
Shale	45	525
Sand, shaly	35	560

Well BJ-59-21-402—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale, sandy	138	698
Sand and shale streaks	48	746
Shale	44	790
Sand and shale streaks	75	865
Shale	68	933
Shale, sandy	104	1,037
Sand	16	1,053
Shale, sandy	5	1,058
Sand	42	1,100
Sand, shaly	15	1,115
Sand, shale breaks	85	1,200
Sand, shaly	20	1,220
Sand, shale streaks	55	1,275
Sand, shaly	58	1,333
Shale, sandy	12	1,345

Well BJ-59-21-408

Owner: Clyde Porterfield
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	154	154
Sand	26	180
Shale	72	252
Sand	15	267
Sand, fine	13	280
Sand	14	294
Sand, shaly	13	307
Sand	41	348

Well BJ-59-21-501

Owner: City of Bryan, Well 5
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Soil, black	3	3
Clay, yellow	6	9
Clay, sandy	8	17
Clay, blue	12	29
Shale with sand breaks	60	89
Rock	1	90
Shale and shell layers	28	118

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-501—Continued		
Shale	27	145
Rock	1	146
Shale	24	170
Shale, hard, and layers of hard sand	113	283
Rock, hard	2	285
Shale, hard, shell, and layers of hard sand	42	327
Sand, and layers of shale	8	335
Sand, and layers of shell	25	360
Sand, and layers of shell and sand	13	373
Shale, and layers of hard sand	19	392
Sand, hard	10	402
Sand, and layers of shale and shell	16	418
Sand	9	427
Sand and layers of shell and lignite	22	449
Sand with few shale breaks	16	465
Sand, hard	5	470
Sand, with few hard streaks	23	493
Sand, with lignite and shale breaks	37	530
Shale, hard	5	535
Sand, with few shale breaks	44	579
Shale, sandy	5	584
Well BJ-59-21-502		
Owner: City of Bryan, Test Well 2 Driller: Layne Texas Company		
Topsoil	3	3
Clay, blue	39	42
Clay, sandy	20	62
Clay	22	84
Shale and streaks of sand	49	133
Shale, sandy	14	147
Shale	9	156
Well BJ-59-21-502—Continued		
Sand, fine, gray	16	172
Shale, and streaks of sand and shell	64	236
Shale, sandy, & sand	49	285
Shale	28	313
Sand, fine, gray	38	351
Shale, and streaks of sand	68	419
Sand, gray, with black specks	100	519
Sand, with lots of shale	40	559
Sand, gray	22	581
Shale	19	600
Well BJ-59-21-505		
Owner: Clyde Porterfield Driller: Carl Ryan Drilling Company		
Shell	75	75
Sand	10	85
Shale	215	300
Sand	16	316
Shale, sandy	12	328
Well BJ-59-21-507		
Owner: Ruble Smith Driller: Carl Ryan Drilling Company		
Shale	35	35
Sand	27	62
Shale	171	233
Sand	6	239
Shale	217	456
Sand	13	469
Shale	2	471
Well BJ-59-21-601		
Owner: City of Bryan, Test Well 4 Driller: Layne Texas Company		
Surface soil	3	3
Sand and gravel	3	6
Sand	21	27

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-601—Continued		
Clay and sand layers	43	70
Shale, hard	113	183
Shale and sand layers	12	195
Shale	37	232
Shale and sandy shale	23	255
Shale	34	289
Shale and rock layers	5	294
Shale and sandy shale	22	316
Rock, hard	2	318
Shale	37	355
Shale and thin sand layers	23	378
Shale, sandy, and shale	22	400
Sand	20	420
Shale	24	444
Sand	3	447
Shale and sandy shale	25	472
Shale and sand layers	16	488
Sand	14	502
Shale and sand layers	32	534
Sand, gray, cut good	50	584
Shale	3	587
Sand, gray, cut good	67	654
Shale	5	659
Sand and thin shale layers	17	676
Sand, gray, good	10	686
Shale	14	700
Well BJ-59-21-602		
Owner: City of Bryan, Test Well 3 Driller: Layne Texas Company		
Clay	10	10
Sand	7	17
Sand, brown, and clay streaks	25	42
Sand, fine gray	22	64

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-602—Continued		
Sand, fine gray and shale streaks	36	100
Shale	165	265
Rock	2	267
Shale and rock layers	83	350
Shale, sandy	43	393
Shale and sandy shale	45	438
Sand, fine gray, and shale streaks	20	458
Shale, sandy and shale	40	498
Sand	11	509
Shale	7	516
Sand, fine gray	14	530
Shale	6	536
Sand, fine gray	11	547
Shale, sandy, and shale	31	578
Sand, and sandy shale	22	600
Sand, fine gray	20	620
Sand, coarse gray	11	631
Sand, fine gray and streaks of shale	70	701
Sand	7	708
Shale	13	721
Well BJ-59-21-604		
Owner: R. D. Simpson Driller: Carl Ryan Drilling Company		
Shale, sandy	60	60
Shale	128	188
Shale, heavy	15	203
Sand	7	210
Shale	5	215
Shale, sandy	12	227
Shale	39	266

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-704		
Owner: Texas A & M Univ., Well 3 Driller: —		
Topsoil and clay	21	21
Gravel, sandy	18	39
Shale	111	150
Shale with shell	73	223
Shale	108	331
Shale, sandy	6	337
Sand, fine	10	347
Sand, fine, gray, cuts good	125	472
Shale	10	482
Well BJ-59-21-705		
Owner: Texas A & M Univ., Well 2 Driller: —		
Topsoil and clay	8	8
Sand and gravel	36	44
Shale	46	90
Shale and sandy shale	37	127
Shale, hard	28	155
Shale, hard, shells, and rock layers	87	242
Sand	10	252
Shale, sandy, and shale streaks	47	299
Shale, sandy, and layers of shale and lignite	61	360
Sand, few layers of lignite	63	423
Shale	3	426
Sand, good, cut clean, lignite streaks	42	468
Shale	19	487
Well BJ-59-21-706		
Owner: Texas A & M Univ., Well 1 Driller: —		
Topsoil and clay	12	12
Sand and gravel	33	45
Shale, sandy shale and shells	143	188
Well BJ-59-21-706—Continued		
Shale, sandy shale, and shells with rock layers	102	290
Shale, sandy, and sand streaks	60	350
Shale, and sandy shale layers	45	395
Sand, hard, cuts fair	35	430
Shale, sandy	17	447
Sand, cuts good	75	522
Shale	11	533
Well BJ-59-21-714		
Owner: Texas A & M Univ. (formerly USAFB Well 7) Driller: —		
Surface soil	6	6
Clay	11	17
Sand	17	34
Clay	2	36
Clay and sandy clay breaks	15	51
Gravel	5	56
Shale, hard, and gravel	31	87
Shale, hard	15	102
Shale, sandy, and sand streaks	26	128
Shale and sand	20	148
Shale and gravel	29	177
Shale, sticky	47	224
Shale, sandy	10	234
Shale, sandy, and shale breaks	76	310
Shale, hard sticky	8	318
Sand, and sandy shale	68	386
Shale, sandy	12	398
Sand, and shale streaks	22	420
Shale and lignite	25	445
Sand	14	459
Shale, sandy	16	475

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-714—Continued		
Sand, and shale streaks	174	649
Shale, and sandy shale streaks	19	668
Shale, sandy	18	686
Sand, good	15	701
Sand, few shale streaks	47	748
Shale, sandy	8	756
Shale	15	771
Sand and shale streaks	29	800
Shale	17	817
Shale, sandy, and sand streaks	19	836
Shale	11	847
Sand and shale streaks	15	862
Shale	20	882
Sand	35	917
Shale, sandy	21	938
Shale	10	948
Sand	8	956
Shale	41	997
Shale, sandy	39	1,036
Shale and lime streaks	60	1,096
Sand	6	1,102
Shale, few sand streaks	133	1,235
Shale, hard	27	1,262
Shale	52	1,314
Sand	21	1,335
Shale	38	1,373
Shale, sandy	21	1,394
Shale	19	1,413
Sand	13	1,426
Shale and sand breaks	12	1,438
Sand	11	1,449
Shale	11	1,460
Sand and shale breaks	33	1,493
Shale	15	1,508

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-714—Continued		
Sand, few shale streaks	47	1,555
Sand and shale, broken	30	1,585
Sand and shale streaks	38	1,623
Shale	19	1,642
Sand	10	1,652
Shale and hard sand streaks	91	1,743
Sand	11	1,754
Shale	31	1,785
Sand	5	1,790
Shale, sandy, and sand rock streaks	70	1,860
Sand rock	4	1,864
Shale	18	1,882
Shale, sandy, and sand streaks	56	1,938
Shale	8	1,946
Shale, sandy, and hard sand streaks	83	2,029
Sand, and hard sand layers	41	2,070
Shale, sandy, and hard streaks sand and shell	30	2,100
Shale, sandy, and sand breaks	36	2,136
Shale, hard, and lignite	30	2,166
Shale, sandy, and lignite	54	2,220
Shale and lignite	30	2,250
Shale, hard	4	2,254
Shale, sandy, and sand streaks	24	2,278
Sand and shale streaks	22	2,300
Shale, and sand streaks	38	2,338
Shale, sandy	12	2,350
Shale	8	2,358
Sand	16	2,374
Shale, and sand streaks	55	2,429
Sand	17	2,446
Shale	6	2,452
Sand, and shale streaks	11	2,463

Well BJ-59-21-714—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale, sandy, and shale streaks	33	2,496
Shale, and sand streaks	22	2,518
Shale, hard	10	2,528
Shale, sandy	15	2,543
Shale, sandy, and lime layers	38	2,581
Shale, and hard sand layers	34	2,615
Sand	20	2,635
Sand and shale	14	2,649
Sand	12	2,661
Shale	7	2,668
Sand	6	2,674
Shale	34	2,708
Shale and sand, broken	3	2,711
Shale, sandy, and sand streaks	59	2,770
Shale, hard	8	2,778
Shale, sandy	5	2,783
Sand, and shale streaks	118	2,901
Shale	8	2,909
Sand	3	2,912
Shale	4	2,916
Sand	12	2,928
Shale, sandy	14	2,942
Shale	5	2,947
Shale, sandy, and sand	51	2,998
Shale	62	3,060

Well BJ-59-21-715

Owner: Texas A&M University
Driller: Texas Water Supply Corp.

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	6	6
Sand, brown	23	29
Gravel	1	30
Shale, sandy	12	42
Gravel	6	48
Shale	20	68
Rock	1	69
Shale, and streaks of sandy shale	57	126

Well BJ-59-21-715—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Rock	1	127
Shale	11	138
Sand	4	142
Shale, hard	36	178
Sand	8	186
Shale	14	200
Sand, some shale streaks	18	218
Shale, hard	14	232
Shale, sandy, and boulders	43	275
Shale, hard green, and boulders	141	416
Sand and shale	82	498
Sand, hard	40	538
Sand, soft, some shale	47	585
Shale	7	592

Well BJ-59-21-716

Owner: Texas A&M University (formerly USAFB Well 6)
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	5	5
Sand and gravel	26	31
Clay, brown sticky	97	128
Clay, with streaks of sand and rock	126	254
Sand rock	14	268
Clay, with streaks of rock	26	294
Clay, sandy	23	317
Sand	36	353
Clay, sandy	37	390
Sand, hard	110	500
Clay	5	505

Well BJ-59-21-718

Owner: Texas A&M University (formerly USAFB Well 5)
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Surface sand	20	20
Sand	15	35
Shale	72	107

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-718—Continued		
Sand and boulders	15	122
Shale and boulders	183	305
Sand	10	315
Shale and sand	35	350
Shale	20	370
Shale, sandy	25	395
Sand	8	403
Shale	3	406
Shale, sandy	4	410
Sand	14	424
Shale, sandy	8	432
Sand	50	482
Shale	10	492

Well BJ-59-21-719

Owner: U.S. Air Force Base (formerly USAFB Well 7)
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Surface	3	3
Clay	23	26
Shale, blue	44	70
Shale, sticky, blue	14	84
Shale, brown	46	130
Shale, blue	13	143
Shale, thin rock layers	96	239
Rock, hard	1	240
Shale	4	244
Rock, hard	1	245
Shale, rock layers	45	290
Shale, sandy, and shale	22	312
Sand, fine gray, and shale layers	28	340
Sand, gray, fair	24	364
Shale, sandy	23	387
Sand, light gray, and lignite	147	534
Shale	9	543

Well BJ-59-21-720

Owner: Texas A&M University (formerly USAFB Test Well 6)
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Sand, brown	3	3
Sand, medium	6	9
Sand, coarse, and gravel	31	40
Shale, hard blue	7	47
Shale, sticky blue	125	172
Shale, thin rock layers	7	179
Shale, thin sand streaks	103	282
Shale, brown, sandy	27	309
Shale break	4	313
Sand	31	344
Shale, and sandy shale	35	379
Shale, sandy, and sand	24	403
Sand, broken	9	412
Shale, sandy	13	425
Sand, fine, gray	7	432
Sand, light gray, and shale layers	77	509
Shale, and sandy shale	13	522

Well BJ-59-21-723

Owner: Texas A&M University, Well 6
Driller: Katy Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and clay	14	14
Sand and gravel	15	29
Clay (some small rocks)	134	163
Clay, tough	17	180
Clay	106	286
Clay (very small sand strips)	26	312
Sand	30	342
Clay	29	371
Sand	8	379
Clay	27	406
Sand (good)	40	446
Clay	131	577
Sand	51	628

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-723—Continued		
Clay and sand strips	13	641
Clay	38	679
Sand	35	714
Clay and small sand strips	18	732
Sand	31	763
Clay and small sand strips	22	785
Sand	46	831
Shale and small sand strips	29	860
Shale	110	970
Shale and small sand strips	45	1,015
Shale	168	1,183
Rock and shell	1	1,184
Sand	6	1,190
Shale, hard	15	1,205
Sand, fine	25	1,230
Shale	17	1,247
Sand	19	1,266
Shale	38	1,304
Shale, soft	15	1,319
Shale, hard	14	1,333
Shale, soft	10	1,343
Sand, rocky	30	1,373
Sand and small shale strips	79	1,452
Shale, soft	24	1,476
Sand	11	1,487
Rock	2	1,489
Sand and small shale strips	43	1,532
Shale	28	1,560
Shale, hard	6	1,566
Sand, and shale strips	32	1,598
Shale, hard	9	1,607
Rock	1	1,608
Shale	2	1,610
Sand, and hard spots	16	1,626
Shale	66	1,692
Sand and rock	19	1,711

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-21-723—Continued		
Shale, soft	11	1,722
Shale, sandy, and rocks	9	1,731
Shale	47	1,778
Sand and rocks	7	1,785
Shale, and small sand strips	25	1,810
Rock	2	1,812
Shale	51	1,863
Rock	1	1,864
Shale, and sand strips	18	1,882
Sand	14	1,896
Shale	10	1,906
Sand	26	1,932
Shale	6	1,938
Shale, sandy	26	1,964
Shale, and hard spots	18	1,982
Shale, soft	7	1,989
Rock	1	1,990
Shale, and hard spots	10	2,000
Shale, and sand strips	28	2,028
Sand, and sand rocks	24	2,052
Shale	6	2,058
Sand and sand rocks	24	2,082
Shale	8	2,090
Sand, rocky	27	2,117
Sand, and small shale strips	45	2,162
Shale, and sand strips	22	2,184
Sand	7	2,191
Shale, and lignite rock	3	2,194
Shale, sandy, and lignite rock	10	2,204
Sand	17	2,221
Shale, sandy	20	2,241
Shale, and hard spots	16	2,257
Shale, hard	22	2,279
Lignite	1	2,280

Table 14.—Drillers' Logs of Wells—Continued

Well BJ-59-21-723—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale, soft, and lignite strips	13	2,293
Shale, hard	16	2,309
Sand	12	2,321
Shale	68	2,389
Sand	24	2,413
Shale, hard	62	2,475
Lignite, and hard shale strips	34	2,509
Sand	21	2,530
Sand, and small shale strips	23	2,553
Shale and lignite	5	2,558
Sand	7	2,565
Shale and lignite	9	2,574
Shale, sandy	54	2,628
Shale and hard strips	60	2,688
Shale and sand strips	110	2,798
Shale	15	2,813
Sand, and small strips of shale	46	2,859
Sand rock, hard	1	2,860
Sand (good)	68	2,928
Shale and sand strips	10	2,938
Lignite and shale strips	34	2,972
Shale and hard sand strips	15	2,987
Sand	71	3,058
Shale	102	3,160

Well BJ-59-21-802

Owner: Fred Hall
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand	15	15
Gravel	3	18
Shale	204	222
Sand, fine	6	228
Shale	285	513
Sand	20	533

Well BJ-59-21-906

Owner: Mr. Dalbert Orr
Driller: B. G. & R. Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soapstone	20	20
Sand and shale	21	41
Shale, gray	41	82
Shale, sandy	61	143
Shale	41	184
Shale, sandy	21	205
Shale	61	266
Shale and sand streaks	21	287
Sand	35	322

Well BJ-59-21-907

Owner: Erving Lenz
Driller: B. G. & R. Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soapstone and shale	41	41
Sand	3	44
Shale and lignite	17	61
Shale	21	82
Shale, sandy	73	155
Shale	131	286
Sand, shale streaks	21	307
Sand, fine white	16	323

Well BJ-59-22-101

Owner: Marden Lab
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	119	119
Sand, fine	5	124
Shale	56	180
Sand, fine	15	195
Shale	129	324
Sand, fine	14	338
Shale streaks	10	348
Shale	182	530
Sand	14	544

Table 14.—Drillers' Logs of Wells—Continued

Well BJ-59-22-401

Owner: City of Bryan, Well 4
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	5	5
Clay	5	10
Sand and clay	8	18
Water sand	4	22
Clay, red	4	26
Clay, yellow	54	80
Shale, light	85	165
Rock, red	3	168
Shale and sand	72	240
Gumbo	30	270
Shale	210	480
Rock	4	484
Shale	116	600
Gumbo	30	630
Sand	15	645
Shale	135	780
Sand	20	800
Shale	200	1,000
Rock	20	1,020
Shale	160	1,180
Sand	35	1,215
Shale	95	1,310
Rock	2	1,312
Shale	48	1,360
Gumbo	25	1,385
Shale	98	1,483
Shells and lignite	8	1,491
Shale	24	1,515
Gumbo	13	1,528
Sand and shale	12	1,540
Rock	2	1,542
Shale	18	1,560
Rock	3	1,563
Sand	10	1,573
Rock	2	1,575

Well BJ-59-22-401—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale	55	1,630
Rock	4	1,634
Shale	26	1,660
Rock	3	1,663
Shale	59	1,722
Sand	78	1,800
Shale	80	1,880
Sand	20	1,900
Shale	30	1,930
Sand	21	1,950
Shale	68	2,018
Gumbo	35	2,053

Well BJ-59-22-402

Owner: City of Bryan
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay	10	10
Sand	15	25
Clay	5	30
Sand	10	40
Shale	20	60
Sand	5	65
Shale	35	100
Sand, hard	5	105
Shale	65	170
Rock	1	171
Pack sand	3	174
Water sand	61	235
Shale	5	240
Gumbo and shale	63	303

Well BJ-59-22-403

Owner: City of Bryan
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Soil, sandy	2	2
Clay	5	7
Clay, sandy	12	19
Clay	32	51

Well BJ-59-22-403—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale and sand	117	168
Clay, brown, and coal	34	202
Rock	1	203
Gumbo	14	217
Rock	1	218
Shale and boulders	20	238
Shale, sandy	27	265
Shale	12	277
Shale, sandy	15	292
Shale	19	311
Shale, hard sticky	12	323
Gumbo	15	338
Rock	1	339
Gumbo	16	355
Shale	19	374
Sand	15	389
Shale	22	411
Sand shale	18	429
Shale	5	434
Shale, sticky	102	536
Shale, soft, and boulders	30	566
Shale and boulders	44	610
Shale	78	688
Sand	40	728
Shale	30	758
Sand	112	870
Shale, sandy	3	873

Well BJ-59-22-502

Owner: Elsie Jackson
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand	64	64
Shale and sand	49	113
Sand, coarse	15	128
Shale	57	185
Coal	10	195
Shale	83	278
Sand	7	285

Well BJ-59-22-606

Owner: Mike Ruffino
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	195	195
Sand	13	208
Shale	2	210
Sand	10	220
Sand shale	24	244
Sand	11	255
Shale	11	266

Well BJ-59-22-904

Owner: Bethel Baptist Church
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale, brown	80	80
Sand, blue	15	95
Shale, blue	90	185
Sand, blue	12	197
Shale, blue	172	369
Sand, fine	11	380
Sand, blue	10	390

Well BJ-59-23-101

Owner: Kazmeier Hatchery, Inc.
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	10	10
Gravel	10	20
Shale	30	50
Sand	15	65
Shale	72	137
Sand	5	142
Shale	37	179
Sand	3	182
Shale	89	271
Sand	3	274
Shale	31	305
Sand	17	322
Shale	6	328

Well BJ-59-23-402

Owner: Dave Shaw
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand	87	87
Shale	13	100
Sand	7	107
Shale	69	176
Sand	13	189
Shale	21	210

Well BJ-59-23-701

Owner: Barker Allen
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	132	132
Shale, sandy	4	136
Shale	44	180
Sand	20	200
Shale	84	284
Shale, hard	21	305
Sand, coarse	10	315
Sand, fine	13	328

Well BJ-59-29-203

Owner: Clyde Berger
Driller: B. G. & R. Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand and gravel	36	36
Shale, black	25	61
Gravel	14	75
Shale, gray	7	82
Shale and lignite	20	102
Shale	78	180
Sand	14	194
Sandy shale	42	236
Sand	31	267
Sandy shale	20	287

Well BJ-59-29-305

Owner: Gainer B. Jones
Driller: Cecil C. Capps

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	3	3

Well BJ-59-29-305—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay	39	42
Sandstone, blue	58	100
Sand, white	5	105
Sandstone, blue	53	158
Sand, blue	2	160
Sandstone, blue	26	186
Sand, streaky blue	8	194
Shale, blue, and coal	68	262
Sand, salt-and-pepper	32	294
Shale, blue	21	315

Well BJ-59-29-604

Owner: Dr. L. C. Grumbles
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay, red	20	20
Sand, red	14	34
Shale, sandy	186	220
Sand, fine	7	227
Shale, blue	183	410
Sand, blue	10	420
Shale, blue	100	520
Sand, white	15	535

Well BJ-59-30-104

Owner: Texas A&M University
Driller: Southern Well Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	90	90
Rock	1	91
Clay	9	100
Boulders	3	103
Clay	12	115
Rock	3	118
Shale	68	186
Clay	8	194
Sand	34	228
Clay	20	248
Gumbo and shale	62	310
Sand, hard, fine	38	348
Shale, gumbo and lignite	42	390

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-30-104—Continued		
Sand	11	401
Gumbo	3	404
Sand	30	434
Gumbo	17	451
Well BJ-59-30-206		
Owner: Charles Cemino Driller: Carl Ryan Drilling Co.		
Shale	113	113
Sand	12	125
Shale	31	156
Sand shale	8	164
Shale	31	195
Sand	10	205
Shale	19	224
Sand	12	236
Shale	128	364
Sand	21	385
Shale	191	576
Sand	42	618
Well BJ-59-30-304		
Owner: Frank Arriens Driller: Carl Ryan Drilling Co.		
Shale	277	277
Sand	11	288
Shale	5	293
Sand	17	310
Shale coal streaks	18	328
Sand, fine	4	332
Shale	88	420
Sand shale streaks	10	430
Sand	15	445
Shale	2	447
Well BJ-59-30-403		
Owner: Mrs. A. L. Parson Driller: Carl Ryan Drilling Co.		
Gravel	5	5

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-30-403—Continued		
Shale	247	252
Shale, sandy	65	317
Sand salt	52	369
Shale	41	410
Sand	12	422
Shale	192	614
Sand	15	629
Shale	12	641
Well BJ-59-30-501		
Owner: Don Cain Driller: Carl Ryan Drilling Co.		
Shale, blue	167	167
Shale, sandy	18	185
Shale	115	300
Shale, sandy	22	322
Shale	7	329
Sand, fine	8	337
Shale	211	548
Sand	10	558
Shale	16	574
Well BJ-59-30-601		
Owner: Dr. A. W. Blesing Driller: Carl Ryan Drilling Co.		
Shale	240	240
Sand, fine	40	280
Sand	9	289
Shale	15	304
Sand	9	313
Shale	187	500
Sand	33	533
Well BJ-59-30-802		
Owner: Bill Henery Driller: Carl Ryan Drilling Co.		
Shale	312	312
Sand	11	323
Shale	67	390

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-30-802—Continued		
Shale, sandy	118	508
Sand, fine	15	523
Sand	14	537
Shale	16	553
Well BJ-59-31-201		
Owner: W. P. Smith Driller: B. G. & R. Drilling Co.		
Soapstone	20	20
Sand	16	36
Shale	16	52
Sand	9	61
Shale	139	200
Shale, sandy	5	205
Sand	11	216
Shale	25	241
Shale, sandy	5	246
Shale	78	324
Sand	4	328
Shale	2	330
Sand (well made)	14	344
Well BJ-59-31-401		
Owner: Jim Carll Driller: Carl Ryan Drilling Co.		
Shale	364	364
Shale, sandy	31	395
Sand	10	405
Sand, shaley	36	441
Shale	21	462
Sand	8	470
Shale	89	559
Sand	7	566
Shale	6	572
Shale streaks	2	574
Not given	100	674

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-31-701		
Owner: Russell Mahaffey Driller: Carl Ryan Drilling Co.		
Shale, blue	160	160
Sand	10	170
Shale	4	174
Sand	106	280
Shale	7	287
Well BJ-59-39-101		
Owner: Elsie Hill Driller: H. L. Edwards Drilling Co. (in acct. with W. J. Swinehart)		
Clay	28	28
Sand, white	3	31
Clay	19	50
Sand, white	10	60
Rock	3	63
Shale, sandy	20	83
Sand, fine	12	95
Shale	103	198
Shale, sandy	16	214
Shale and rock	10	224
Sand, fine, blue	24	248
Shale, hard	29	277
Sand, fine, blue	14	291
Shale, sandy, coal, lignite	27	318
Lignite and red shale	22	340
Shale	62	402
Rock, sandy	5	407
Shale	19	426
Rock, sandy	8	434
Shale	66	500
Sand, salt-and-pepper, and lignite	28	528

	THICKNESS (FEET)	DEPTH (FEET)
Well BJ-59-39-103		
Owner: Mrs. H. P. Crosby Driller: Carl Ryan Drilling Co.		
Shale	43	43
Sand and gravel	39	82
Shale	46	128
Sandy	10	138
Shale	17	155
Sand	16	171
Shale	6	177
Well BJ-59-39-104		
Owner: Jerry Shelton Driller: Carl Ryan Drilling Co.		
Shale	98	98
Sand, fine	5	103
Coal	10	113
Sand	10	123
Shale	35	158
Sand	27	185
Well BJ-59-39-110		
Owner: P. P. Prescott Driller: Falkenbury Drilling Co.		
Surface sand	10	10
Sand	40	50
Shale	51	101
Clay	45	146
Shale	22	168
Clay	52	220
Sand	59	279
Well BJ-59-39-401		
Owner: Calvin Ross Driller: Carl Ryan Drilling Co.		
Sand and gravel	40	40
Well BJ-59-39-401—Continued		
Shale	55	95
Sand	28	123
Shale	2	125
Well BJ-59-39-402		
Owner: Lewis Loftin Driller: Falkenbury Drilling Co.		
Surface soil, clay, and sand	33	33
Sand	10	43
Shale	34	77
Clay	68	145
Sand, broken, clay, and lignite	22	167
Clay	33	200
Rock	5	205
Sand	30	235
Well BJ-59-39-505		
Owner: —Embrick Driller: Carl Ryan Drilling Co.		
Sand and gravel	17	17
Shale	94	111
Sand	11	122
Sand, fine	19	141
Sand	135	276
Well BJ-59-39-507		
Owner: Prince Holiday Driller: Carl Ryan Drilling Co.		
Sand gravel	15	15
Sand rock	59	74
Shale	92	166
Sand, fine	10	176
Shale	91	267
Sand	25	292

BURLESON COUNTY

Well BS-59-18-903

Owner: H. L. Tabor
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Sand	60	60
Shale	20	80
Sand	100	180
Shale	10	190
Sand	80	270
Lignite	10	280
Sand, water-bearing	77	357

Well BS-59-18-904

Owner: Gilbert Weichert
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	75	75
Sand, and shale streaks	142	217
Rock	1	218
Shale streaks	7	225
Sand, and shale streaks	192	417
Shale, and rock streaks	6	423
Shale	185	608
Sand	15	623
Sand, and rock streaks	7	630
Sand	5	635

Well BS-59-18-907

Owner: Mrs. O. H. Roskey
Driller: Buddy B. Nelson

	THICKNESS (FEET)	DEPTH (FEET)
Sand, surface	16	16
Clay, gummy	45	61
Sand, and lignite streaks	30	91
Clay, plastic	9	100
Shell, and small boulders	79	179
Lignite, and sandy shell	45	224
Sand, fine, gray	53	277

Well BS-59-19-501

Owner: Dr. Clarence Kemp
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and sand	40	40
Shale, black	80	120
Sand	40	160
Shale	40	200
Sand, water-bearing	80	280

Well BS-59-19-604

Owner: Claude McFarland
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Shale, light	30	40
Shale, sandy	140	180
Lignite	30	210
Shale, blue	10	220
Sand, water-bearing	114	334

Well BA-59-19-702

Owner: Denton Valley Farm
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Sand	6	6
Shale	94	100
Sand	40	140
Shale, hard, sandy	40	180
Sand, water-bearing	40	220
Shale, hard, sandy	20	240

Well BS-59-19-903

Owner: W. E. Garner
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	20	20
Shale, and rock	60	80
Sand	10	90
Shale, black, and rock	90	180
Sand, water-bearing	20	200
Shale	5	205

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-20-405

Owner: AGM Poultry Company
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Sand	70	80
Shale, and rock stringers	40	120
Shale, sandy	60	180
Shale, rocky	60	240
Sand, and rock	40	280
Sand, water-bearing	35	315

Well BS-59-25-502

Owner: John R. Praesel
Driller: W. E. (Bill) New Water Well Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, sandy, red	2	2
Clay, red	8	10
Clay, sandy, brown	70	80
Sand, water, brown	15	95
Shale, sandy, gray	25	120
Shale, blue	255	375
Coal streaks and water sand	30	405
Sand, water, white	35	440
Shale, gray	95	535
Coal	2	537
Shale, hard, blue	43	580
Rock streaks, hard, and shale	9	589
Sand, water, white	23	612
Shale, hard, brown	2	614

Well BS-59-25-505

Owner: R. E. Brown
Driller: W. E. (Bill) New Water Well Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Soil, brown, and clay	5	5
Sand, light pink, and clay	15	20
Clay, red	11	31
Shale, brown	2	33
Coal, and shale	2	35
Shale, gray	35	70

Well BS-59-25-505—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, water	18	88
Shale, rock and shale	110	198
Shale, hard, brown, sandy	22	200
Sand, water	11	231

Well BS-59-25-605

Owner: Frank Burrough, Jr.
Driller: W. E. (Bill) New Water Well Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand, red, and clay	4	4
Clay, gray, and some sand	11	15
Clay, gray	35	50
Shale, sandy, blue	42	92
Shale, sandy, gray	13	105
Coal	2	107
Sand, water	23	130
Shale, blue	2	132

Well BS-59-25-903

Owner: M. E. Willard
Driller: Buddy B. Nelson

	THICKNESS (FEET)	DEPTH (FEET)
Sand, surface	5	5
Clay, red, sandy	10	15
Shell, with clay streaks	15	30
Sand	20	50
Clay, gray, sandy	76	126
Shell, with clay streaks	75	201
Clay, plastic, gray	9	210
Shell	35	245
Sand, gray, with shell streaks	65	310

Well BS-59-26-504

Owner: Camp Wagon Wheel—B. L. Gaar
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Sand, loose	40	40
Sand, hard	100	140
Shale	60	200
Sand, hard	235	435

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-26-504—Continued		
Sand, water-bearing	25	460
Shale	20	480
Well BS-59-26-602		
Owner: Steve Neal Driller: Charlie J. Loehr		
Topsoil	10	10
Sand	10	20
Gravel	20	40
Shale, hard	30	70
Rock	10	80
Sand and shale	24	104
Sand, water-bearing	68	172
Well BS-59-26-702		
Owner: F. C. Anderson Driller: Charlie J. Loehr		
Sand, brown, and clay	10	10
Shale, sandy, gray	150	160
Rock, sand, and coal	18	178
Sand, water, gray	12	190
Shale, brown	215	405
Rock, hard, gray	95	500
Shale, brown	35	535
Sand, water	48	583
Well BS-59-26-703		
Owner: F. C. Anderson Driller: W. E. (Bill) New Water Well Drilling Co.		
Sand, brown	10	10
Shale, gray, sandy	150	160
Lignite, and gray shale	4	164
Sand, water, gray	26	190
Shale, brown	225	415
Shale, hard and soft	85	500
Shale streaks	30	530
Shale, sandy, gray	33	563

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-204		
Owner: Jack Manuel Driller: Charlie J. Loehr		
Sand	40	40
Rock, and shale	80	120
Sand	40	160
Shale, hard	20	180
Sand, water-bearing	25	205
Well BS-59-27-302		
Owner: Joe Surovik Driller: Charlie J. Loehr		
Topsoil	10	10
Clay, red	90	100
Shale, hard, blue	20	120
Shale, sandy	100	220
Sand, hard, and rock	80	300
Sand	60	360
Shale, hard	120	480
Sand stringers	20	500
Sand, water-bearing	43	543
Well BS-59-27-502		
Owner: F. A. Surovik Driller: Pomykal Drilling Co.		
Clay, yellow	35	35
Shale, black	25	60
Sand	2	62
Shale	23	85
Sand	35	120
Shale	8	128
Sand	172	300
Shale	40	340
Sand	55	395
Shale	55	450
Sand	25	475
Shale	20	495

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-502—Continued		
Shale, sandy	205	700
Sand	35	735
Shale	70	805
Sand	10	815
Shale	165	980
Rock and shale	20	1,000
Sand	15	1,015
Shale, sandy	20	1,035
Sand	35	1,070
Well BS-59-27-603		
Owner: Franklin Steck Driller: Charlie J. Loehr		
Shale	120	120
Sand	80	200
Shale, hard	120	320
Sand	60	380
Shale, hard	80	460
Sand, hard	60	520
Sand, soft, water-bearing	20	540
Sand, hard	20	560
Well BS-59-27-607		
Owner: John Kubin Driller: Charlie J. Loehr		
Topsoil	10	10
Rock and shale	80	90
Shale and sand	50	140
Shale	190	330
Sand, white	90	420
Shale	210	630
Sand, white	40	670
Sand and shale	26	696
Well BS-59-27-608		
Owner: CSA & SPJST Lodge Driller: Pomykal Drilling Co.		
Clay	15	15
Shale, sandy, and iron ore	13	28
Well BS-59-27-608—Continued		
Shale, sandy	20	48
Shale	64	112
Rock	1	113
Shale	7	120
Rock	2	122
Shale	18	140
Shale, sandy, and rock streaks of fossils	50	190
Shale and rock streaks	60	250
Sand with shale streaks	12	262
Shale, sandy	8	270
Well BS-59-27-710		
Owner: R. O. Hoffman Driller: Carl Ryan Drilling Co.		
Clay, white	42	42
Shale, blue	143	185
Shale, sandy	119	304
Shale	4	308
Shale, sandy	12	320
Shale	80	400
Sand	51	451
Well BS-59-27-714		
Owner: City of Caldwell Driller: Katy Drilling Company		
Clay, surface	16	16
Iron ore and rock	3	19
Clay, sandy, sticky	36	55
Shale, blue	49	104
Shale, sandy	61	165
Sand	153	318
Shale, tough	41	359
Shale, sandy, and lime rock	9	368
Sand	31	399
Rock, lime	1	400
Sand	28	428

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-714—Continued		
Shale, sandy, and lime rock	48	476
Sand, with lime rock strips	45	521
Rock	1	522
Sand, and shale	19	541
Shale	14	555
Sand, and shale	3	558
Shale	15	573
Sand	39	612
Shale	11	623
Sand	15	638
Shale, blue, tough	18	656
Sand	21	677
Shale	15	692
Sand, and shale breaks	23	715
Shale, tough	13	728
Sand	30	758
Shale, sandy, and tough shale strips	36	794
Sand	31	825
Sand, and shale	27	852
Shale, tough	63	915
Shale, sandy	21	936
Shale, tough	26	962
Shale, and sand strips	31	993
Sand, fine, tight, and shale strips, and lime rock strips	35	1,028
Shale, tough	20	1,048
Shale, sandy	16	1,064
Shale, tough	10	1,074
Sand	23	1,097
Shale with sand breaks	7	1,104
Sand	14	1,118
Shale with sand and lime rock breaks	6	1,124
Sand with lime rock strips	38	1,162

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-714—Continued		
Shale with sand strips	12	1,174
Shale, tough	32	1,206
Sand	114	1,320
Shale	26	1,346
Well BS-59-27-715		
Owner:Clint Lewis Driller: Carl Ryan Drilling Co.		
Shale, blue	170	170
Sand, white, and shale streaks	97	267
Shale, blue	79	346
Sand, blue, shaly	64	410
Sand	137	547
Well BS-59-27-803		
Owner: City of Caldwell Driller: Layne Texas Company		
Sand, surface	10	10
Shale, black	34	44
Sand, packed	46	90
Shale, hard, black	13	103
Shale, sandy	9	112
Sand, fine, packed	44	156
Shale, hard	3	159
Sand	57	216
Shale, tough	4	220
Sand	18	238
Shale, tough	2	240
Sand	3	243
Shale, tough	5	248
Sand	4	252
Shale, tough	32	284
Sand	2	286
Shale, tough	25	311
Sand	6	317
Shale, sandy	6	323

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-803—Continued		
Sand	48	371
Shale, sandy	19	390
Sand rock, hard	3	393
Shale, tough, sticky	12	405
Shale, hard	1	406
Shale, tough	9	415
Sand	54	469
Shale, tough	7	476
Sand and shale breaks	7	483
Shale, tough	16	499
Sand and shale breaks	20	519
Sand (tested)	32	551
Shale, sandy	31	582
Shale, tough	14	596
Sand	31	627
Shale	6	633
Sand	15	648
Shale, sandy	23	671
Shale, tough	14	685
Sand	39	724
Shale, tough	5	729
Sand and shale breaks	10	739
Shale, sticky	47	786
Shale and sand breaks	15	801
Shale, sticky	25	826
Shale and sand breaks	16	842
Lime and sticky breaks	81	923
Shale, sticky	13	936
Sand	4	940
Sand (tested)	64	1,004
Shale, tough	12	1,016
Sand	21	1,037
Shale, sandy	7	1,044
Sand (tested)	162	1,206
Shale, sticky	32	1,238

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-27-901		
Owner: John Grace Driller: Charlie J. Loehr		
Clay, red	80	80
Shale, sandy	40	120
Rock and shale	40	160
Shale, hard, black	340	500
Sand, water-bearing	70	570
Well BS-59-28-101		
Owner: Joe B. Drgac Driller: Charlie J. Loehr		
Topsoil and gravel with shale	60	60
Shale	40	100
Sand	10	110
Shale	110	220
Shale, sandy	40	260
Shale, hard	80	340
Sand, water-bearing; and rock	40	380
Well BS-59-28-208		
Owner: Rufus Johnson Driller: Charlie J. Loehr		
Topsoil	5	5
Shale, soft	55	60
Shale, rock	100	160
Sand, water-bearing	80	240
Well BS-59-28-403		
Owner: Franklin J. Sebesta Driller: Charlie J. Loehr		
Topsoil and clay	20	20
Shale and rock	100	120
Rock and gravel	20	140
Shale	140	280
Shale, hard, rock	70	350
Sand, water-bearing	65	415

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-28-405

Owner: Walter Engleman
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	20	20
Clay, blue	60	80
Shale, black, and rock	140	220
Shale, soft, and sand	180	400
Shale, hard, blue	120	520
Sand, water-bearing	49	569

Well BS-59-28-509

Owner: Franklin Steck
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Shale, blue	10	10
Clay, yellow	30	40
Shale, soft, sandy	40	80
Shale, blue	80	160
Shale, and sand stringers	20	180
Shale	90	270
Sand, water-bearing	62	332

Well BS-59-28-619

Owner: Tunis Water Supply Corporation
Driller: B. Yarbro

	THICKNESS (FEET)	DEPTH (FEET)
Surface soil	10	10
Sand	12	22
Gravel	32	54
Clay and gravel	8	62
Clay	24	86
Lignite	2	88
Clay	4	92
Clay and gravel	30	122
Clay and streaks	62	184
Shale	26	210
Sand and shale	35	245
Limestone	2	247
Shale and streaks of lime	28	275

Well BS-59-28-619—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale and sand streaks	55	330
Shale and streaks of lime	92	422
Shale	89	511
Shale, limestone, and sand streaks	89	600
Sand and shale streaks	12	612
Shale and lime layers	142	754
Shale and sand streaks	108	862
Sand	48	910
Shale and sand streaks	28	938
Shale, brown	52	990
Shale and sand streaks	100	1,090
Sand, fine	18	1,108
Shale and sand streaks	72	1,180
Shale, hard	31	1,211
Shale and sand streaks	67	1,278
Sand, fine	25	1,303
Shale and sand streaks	112	1,415
Shale, hard, and lime streaks	93	1,508

Well BS-59-28-701

Owner: T. L. Calvin
Driller: Carl Ryan Drilling Company

	THICKNESS (FEET)	DEPTH (FEET)
Rock, sand	55	55
Shale, blue	48	103
Sand, fine	24	127
Shale	78	205
Sand, fine	25	230
Shale	164	394
Sand	4	398
Shale	62	460
Sand	10	470

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-28-701—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale	5	475
Sand	10	485
Shale	25	510
Sand	43	553

Well BS-59-28-702

Owner: James Engleman
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	7	7
Shale, blue, sandy	53	60
Rock and shale	60	120
Sand, black	20	140
Rock and hard shale	80	220
Shale, blue	168	
Sand, dark	32	420
Shale, blue	10	430
Sand, water-bearing	68	498

Well BS-59-28-902

Owner: Merced Rioz
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	5	5
Sand and gravel	50	50
Lignite	20	75
Shale, hard	75	150
Sand, water-bearing	24	174

Well BS-59-28-903

Owner: Joseph Marek
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Clay	4	4
Sand	12	16
Sand, red	6	22
Sand, hard	3	25
Sand, water	10	35
Shale	27	62
Sand	36	98
Shale	2	100
Sand	18	118

Well BS-59-28-903—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale	15	133
Sand	6	139
Lignite	11	150
Shale	8	158
Lignite	6	164
Shale	7	171
Sand	3	174
Sand and shale	23	197
Sand	27	224
Shale	10	234
Sand, green	12	246
Rock	2	248
Shale and rock	17	265
Shale	2	267
Sand	9	276
Shale	35	311
Shale and rock	42	353
Sand and shale	2	355
Shale	20	375
Shale and rock	39	414
Sand, green, and shale	6	420
Shale	26	446
Sand	14	460
Shale	2	462
Sand	19	481
Shale	59	540
Rock, blue shell	1/2	540 1/2
Shale	3 1/2	544
Rock, blue shell	1	545
Shale	1	546
Rock, blue shell	3	549
Shale	2	551
Rock, blue shell	1	552
Shale	19	571
Rock, blue shell	1/2	571 1/2
Shale	11 1/2	583

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-28-903—Continued		
Rock, blue shell	1/2	583 1/2
Shale	23 1/2	607
Rock, blue shell	1	608
Shale	16	624
Rock, shell	3	627
Shale	13	640
Sand	3	643
Shale	11	654
Shale, sandy	19	673
Shale	2	675
Sand	3	678
Shale	4	682
Sand	4	686
Shale	12	698
Sand	3	701
Shale, sandy	15	716
Shale	6	722
Shale, sandy	7	729
Shale	25	754
Shale, sandy	7	761
Shale	35	796
Sand	9	805
Shale and sand	8	813
Shale	7	820
Sand	3	823
Shale	1	824
Sand	2	826
Shale	15	841
Sand	1	842
Shale	1	843
Sand, green, and shale	1	844
Sand and shale	4	848
Sand	2	850
Sand	4	854
Shale	3	857
Sand	41	898

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-28-903—Continued		
Shale	23	921
Sand	4	925
Shale	41	966
Sand	4	970
Shale	4	974
Shale, sandy	23	997
Shale, hard	3	1,000
Sand	10	1,010
Rock	1/2	1,010 1/2
Sand, brown	4 1/2	1,015
Shale	17	1,032
Sand	9	1,041
Rock or boulders	1/2	1,041 1/2
Sand, hard	3 1/2	1,045
Sand	3	1,048
Sand and shale	22	1,070
Shale	7	1,077
Rock or boulders	1	1,078
Shale	9	1,087
Rock or boulders	1	1,088
Shale	27	1,115
Sand	16	1,131
Shale	9	1,140
Sand, hard	7	1,147
Sand, water	16	1,163
Shale	14	1,177
Sand	26	1,203
Shale	5	1,208
Sand	9	1,217
Shale	10	1,227
Sand	81	1,308
Shale, sandy	5	1,313
Shale	32	1,345
Shale, sandy	58	1,403
Rock	2	1,405
Shale	23	1,428

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-28-903—Continued		
Sand	31	1,459
Shale	11	1,470
Sand	9	1,479
Shale	7	1,486
Rock	2	1,488
Shale	9	1,497
Sand	3	1,500
Shale	2	1,502
Sand	4	1,506
Shale	4	1,510
Rock	2	1,512
Shale	23	1,535
Iron pyrites	1/2	1,535 1/2
Shale, sandy	14 1/2	1,550
Shale	130	1,680
Sand	2	1,682
Rock	1	1,683
Sand (sulphur odor)	18	1,701
Shale	3	1,704
Sand, hard	3	1,707
Shale	8	1,715
Sand, hard	42	1,757
Shale	17	1,774
Sand, hard (sulphur odor)	18	1,792
Shale	13	1,805
Sand	33	1,838
Shale	38	1,876
Sand	11	1,887
Shale, sandy	10	1,897
Sand	20	1,917
Shale	9	1,926
Sand	14	1,940
Shale	9	1,949
Sand	10	1,959
Shale	9	1,968
Sand	32	2,000
Shale	74	2,074
Shale, sandy	26	2,100
Shale	21	2,121
Sand and bitumimous shale	38	2,159
Shale, lignite shale	59	2,218
Coal (lignite shale)	5	2,223
Shale (lignite shale)	62	2,285
Rock	1	2,286
Well BS-59-29-451		
Owner: H. R. Husdon Driller: Carl Ryan Drilling Co.		
Clay	35	35
Sand	15	50
Gravel	3	53
Shale	137	190
Sand, fine	7	197
Shale	35	232
Sand, fine	12	244
Shale	4	248
Sand	413	661
Shale, sandy	15	676
Well BS-59-29-731		
Owner: J. W. Giesenschlag Driller: Charlie J. Loehr		
Shale, red	38	38
Gravel	2	40
Shale, hard, and rock	20	60
Shale, blue	80	140
Sand, water-bearing	60	200
Well BS-59-29-918		
Owner: Chance Farm Driller: Layne Texas Company		
Topsoil	5	5
Clay, sandy, and sand streaks	27	32

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-29-918—Continued		
Sand	9	41
Gravel	16	57
Clay, hard	3	60
Shale	98	158
Shale, sandy	28	186
Shale	82	268
Shale, sandy, and sand streaks	15	283
Shale, sandy, and shale	17	300
Sand	6	306
Shale, sandy	10	316
Sand, hard, and sandy shale	19	335
Shale, sandy, and sand streaks	28	363
Sand, and sandy shale	13	376
Shale, and sandy shale	84	460
Shale, and hard sand breaks	208	668
Shale, and sand streaks	77	745
Rock	1	746
Shale, hard	54	800
Shale, and sandy shale	79	879
Sand, and sandy shale	16	895
Shale, sandy shale, and sand streaks	71	966
Sand	21	987
Shale, and sandy shale	30	1,017
Shale	73	1,090
Shale breaks and hard sand	112	1,202
Shale, and sandy shale	57	1,259
Sand, and sandy shale	33	1,292
Shale, and sandy shale	35	1,327
Sand, and sandy shale	20	1,347
Shale	5	1,352
Sand, and shale breaks	10	1,362
Sand and shale	12	1,374
Sand, and sandy shale	71	1,445
Sand, broken	46	1,491
Shale	14	1,505
Well BS-59-34-201		
Owner: M. E. Willard Driller: Buddy B. Nelson		
Sand, surface	4	4
Clay, plastic, with shell streaks	12	16
Clay, gray, plastic	9	25
Clay, sandy	35	60
Rocks, lime	5	65
Shell, with clay streaks	15	80
Shell, sandy	31	111
Clay, plastic, with sand streaks	29	140
Clay, gray, plastic	23	163
Sand, light gray, medium	50	213
Sand	87	300
Well BS-59-34-303		
Owner: W. W. Farmer Driller: Charlie J. Loehr		
Topsoil, rock, and shale	20	20
Shale	60	80
Sand, shale	60	140
Shale, hard	140	280
Sand	40	320
Shale, hard, and rock	60	380
Sand	40	420
Shale, and rock stringers	60	480
Sand, water-bearing	80	560
Well BS-59-34-512		
Owner: H. H. Bell Driller: Charlie J. Loehr		
Sand	20	20

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-34-512—Continued		
Shale, blue	20	40
Shale, soft, sandy	80	120
Shale, hard	60	180
Sand, water-bearing	60	240
Well BS-59-34-601		
Owner: Deanville Water Supply Corp. Driller: Key Water Well Drilling & Devel. Co., Garrison, Texas		
Shale	295	295
Sand	26	321
Shale	218	539
Sand	42	581
Shale	54	635
Sand	21	656
Shale	55	711
Sand	91	802
Shale	99	901
Sand	42	943
Shale	258	1,201
Shale, sandy	132	1,333
Shale	126	1,459
Shale, sandy	38	1,497
Shale	58	1,555
Well BS-59-34-604		
Owner: F. J. Miman Driller: Pomykal Drilling Co.		
Clay, yellow	30	30
Shale, black	165	195
Sand	10	205
Shale	10	215
Sand	8	223
Shale	37	260
Sand	30	290
Sand and shale streaks	30	320
Sand	45	365
Shale	40	405
Well BS-59-34-604—Continued		
Rock, and shale	10	415
Shale, sandy, and rock	41	456
Sand	39	495
Shale	45	540
Sand	5	545
Shale, sandy	10	555
Sand	17	572
Well BS-59-34-901		
Owner: Joseph Beran Driller: B. G. & R. Drilling Co.		
Soapstone	20	20
Shale	109	129
Sand	2	131
Shale, sandy	12	143
Shale	185	328
Shale, sandy	7	335
Shale	60	395
Shale, sandy	8	403
Shale	37	440
Sand	11	451
Shale	12	463
Shale, sandy	17	480
Shale	11	491
Sand	19	510
Well BS-59-35-205 C		
Owner: J. C. Robins Driller: Charlie J. Loehr		
Topsoil	20	20
Clay, yellow	8	28
Shale, blue	69	97
Rock	3	100
Shale, blue, and rock	160	260
Sand and shale	90	350
Shale, soft	90	440

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-35-205—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand and shale	40	480
Sand, water-bearing	45	525

Well BS-59-35-301

Owner: Edward Varner
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	4	4
Sand	36	40
Shale	180	220
Rock and shale	40	260
Shale, hard	110	370
Shale and sandy stringers	30	400
Sand, water-bearing	60	460

Well BS-59-35-601

Owner: Hubert Scott
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Shale, sandy	70	80
Rock and shale	40	120
Sand	80	200
Rock and shale	60	260
Sand, hard	80	340
Shale, hard	20	360
Sand, hard	40	400
Sand, water-bearing	80	480

Well BS-59-35-901

Owner: Alton F. Ahrens
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil and sand	60	60
Shale	60	120
Sand	20	140
Shale	60	200
Sand, hard	60	260
Shale, hard	120	380
Sand, water-bearing	55	435

Well BS-59-36-202

Owner: Chuck Hinds
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	60	60
Shale, sandy	12	72
Rock and shale	77	149
Shale	13	162
Shale, fine	207	369
Sand, shaly	10	379
Sand	13	392

Well BS-59-36-205

Owner: Vernon Jurries
Driller: Pomykal Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	65	65
Shale, sandy	35	100
Shale	45	145
Sand	55	200
Shale	50	250
Sand and shale	50	300
Rock	2	302
Sand	18	320
Shale	440	760
Shale, sandy	25	785
Sand	25	810
Shale	2	812
Sand	13	825

Well BS-59-36-207

Owner: Larry Valigura
Driller: Pomykal Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	30	30
Sand, black, and shale	50	80
Shale, sandy	15	95
Shale	75	170
Sand	6	176
Shale	9	185
Sand	23	208

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-36-207—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale	27	235
Sand	27	262
Shale, sandy	18	280
Shale	10	290
Sand	35	325
Shale	450	775
Shale and sand	70	845
Sand	37	882

Well BS-59-36-303

Owner: Alfred Shoenenman
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Shale	65	65
Shale, sandy	90	155
Shale	178	333
Sand	7	340
Shale	29	369
Sand	11	380
Shale	65	445
Shale, sandy	15	460
Sand	48	508

Well BS-59-36-602

Owner: Ray Maas
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Sand and shale	70	80
Shale, sandy, and rock	120	200
Shale	60	260
Sand, water-bearing	55	315

Well BS-59-36-603

Owner: Ernest Wilhow
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	4	4
Shale, blue	52	56
Lignite	10	66
Shale, blue	20	86
Rock	4	90

Well BS-59-36-603—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Shale, blue	100	190
Sand, water-bearing	70	260
Shale, blue	10	270

Well BS-59-36-701

Owner: Olem Lednicky
Driller: Pomykal Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay and sand	20	20
Shale	42	62
Lignite	8	70
Shale, sandy	8	78
Shale	65	143
Shale, sandy	51	194
Sand, fine	10	204
Shale, sandy	55	259
Sand	18	277

Well BS-59-36-802

Owner: Lyons Water Supply Corp.
Driller: Layne Texas Company

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	3	3
Clay	50	53
Sand and clay streaks	22	75
Shale	25	100
Sand, fine, and shale streaks	22	122
Shale, and sandy shale	132	254
Sand, fine, gray	27	281
Shale, and sandy shale	39	320
Sand streaks, shale, and lignite	18	338
Shale, and sandy shale	24	362
Sand and lignite	4	366
Shale	43	409
Shale, sandy	35	444
Sand, fine	20	464
Shale	6	470
Sand and shale streaks	21	491
Shale, and sandy shale	94	585

Well BS-59-36-802—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand	15	600
Sand and shale streaks	28	628
Shale, sandy	25	653
Sand and shale streaks	8	661
Shale and sandy shale	204	865
Sand and shale streaks	40	905
Shale and sandy shale	197	1,102
Shale, sandy	37	1,139
Shale, and sandy shale	263	1,402
Sand, fine, and shale streaks	10	1,412
Shale, sandy, and sand streaks	40	1,452
Shale	36	1,488
Shale, sandy, and sand	20	1,508
Sand and shale streaks	62	1,570
Shale	39	1,609

Well BS-59-36-901

Owner: Rev. R. L. Mahoney
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Sand	10	10
Shale	150	160
Sand	20	180
Shale and rock	60	240
Sand, water-bearing	60	300

Well BS-59-37-108

Owner: W. H. Giesenschlag
Driller: Jas. Oliphant Caldwell Oil Company

	THICKNESS (FEET)	DEPTH (FEET)
Clay	30	30
Shale	220	250
Gumbo	10	260
Shale	140	400
Sand, water	90	490
Gumbo	15	505
Shale	95	600
Gumbo	25	625
Shale	55	680

Well BS-59-37-108—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, hard	5	685
Shale	15	700
Gumbo and boulders	30	730
Shale	50	780
Gumbo	20	800
Shale	80	880
Gumbo	20	900
Shale	100	1,000
Sand, water	30	1,030
Shale	35	1,065
Sand, water	105	1,170
Shale	48	1,218
Gumbo	10	1,228
Sand, water	11	1,239
Shale	21	1,260
Sand, water	90	1,350
Shale	10	1,360
Rock	3	1,363
Shale	7	1,370
Rock	3	1,373
Gumbo	20	1,393
Shale	32	1,425
Sand, hard	6	1,431
Shale	14	1,445
Gumbo	6	1,451
Sand, water	49	1,500
Gumbo	5	1,505
Shale	15	1,520
Sand, water	20	1,540
Gumbo	6	1,546
Sand, water	34	1,580
Shale	10	1,590
Rock	5	1,595
No record	2,021	3,616

Well BS-59-37-209 X C

Owner: Edmund Sebesta, Jr.
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	10	10
Sand and gravel	20	30
Shale, blue	60	90
Rock	3	93
Shale, sandy	147	240
Rock and shale	11	251
Sand, water-bearing	44	295

Well BS-59-37-212

Owner: Henry Vajdak
Driller: Pomykal Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	10	10
Sand	25	35
Gravel	11	46

Well BS-59-37-402 * C

Owner: Milton Lewis
Driller: Carl Ryan Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Clay	16	16
Gravel and sand	29	45
Shale, blue	290	335
Sand, fine	6	341
Shale, gray	18	359
Sand, fine	6	365
Shale, blue	90	455
Shale, sandy	15	470
Sand, gooa	25	495
Shale, blue	5	500

Well BS-59-37-501

Owner: Walter Vajdak
Driller: Pomykal Drilling Co.

	THICKNESS (FEET)	DEPTH (FEET)
Sand and clay	25	25
Shale, blue	55	80
Shale, blue, sandy	5	85
Shale	85	170
Shale, sandy and hard	65	235
Sand	21	256

Well BS-59-37-603

Owner: Baker Farm
Driller: —

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	3	3
Sand, fine, red	10	13
Sand rock	7	20
Sand and boulders	20	40
Sand, gravel, and clay layers	35	75
Rock and lignite layers	5	80
Sand, cut good and clean	40	120
Clay	25	145
Sand	81	226
Shale	80	306
Shale streaks, sandy	34	340
Shale	20	360
Sand	15	375
Shale, sandy	45	420
Sand, fine, gray	60	480
Shale	20	500
Sand, fine, hard	67	567
Rock	2	569
Sand, fine, hard	34	603
Rock	1	604
Shale, sandy	16	620
Shale	115	735
Sand	5	740
Shale	65	805
Sand	10	815
Shale	23	838
Sand rock	12	850
Shale	15	865
Sand	5	870
Shale	37	907
Rock and sand	8	915
Shale	40	955
Sand	20	975
Shale	50	1,025
Sand	75	1,100

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-37-603—Continued		
Shale, hard, sandy	60	1,160
Shale rock	50	1,210
Sand	18	1,228
Rock	1	1,229
Sand and thin rock layers	11	1,240
Shale	90	1,330
Sand	10	1,340
Shale, sandy	20	1,360
Shale, hard, and rock layers	90	1,450
Shale, sandy, soft	10	1,460
Shale and rock	87	1,547
Sand and rock	10	1,557
Shale	183	1,740
Shale, hard, and rock layers	40	1,780
Shale, hard	21	1,801
Sand and sandy shale	57	1,858
Sand and thin shale breaks	24	1,882
Shale	5	1,887
Well BS-59-37-609		
Owner: Leroy Hoskins Driller: Carl Ryan Drilling Co.		
Shale	159	159
Rock, soft	63	222
Sand	4	226
Shale	4	230
Sand	6	236
Shale and sand	51	287
Well BS-59-37-801		
Owner: Baker Ranch Driller: —		
Topsoil	10	10
Lignite	5	15
Shale, hard	35	50
Sand	12	62

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-37-801—Continued		
Shale, hard	108	170
Sand	35	205
Shale	2	207
Well BS-59-37-802		
Owner: W. C. Konecny Driller: Charlie J. Loehr		
Topsoil	10	10
Sand	110	120
Shale	40	160
Sand	50	210
Sand, hard, and shale	110	320
Sand, water-bearing	52	372
Well BS-59-37-803		
Owner: Baker Ranch Driller: Charlie J. Loehr		
Topsoil	11	11
Shale, sandy	69	80
Lignite	15	95
Shale, hard	88	183
Sand, water-bearing	45	228
Well BS-59-37-901		
Owner: J. C. Herndon Driller: Charlie J. Loehr		
Topsoil	10	10
Sand	20	30
Shale	10	40
Sand	50	90
Shale	50	140
Shale, hard	40	180
Rock	10	190
Shale, soft	20	210
Coal	20	230
Sand, water-bearing	65	295

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-38-517		
Owner: Cecial Giesenschlag Driller: Charlie J. Loehr		
Topsoil	3	3
Sand, red	17	20
Shale, red	33	53
Sand, water-bearing, and gravel	20	73
Shale	2	75
Well BS-59-38-713		
Owner: Santa Fe Lines Driller: —		
Soil	15	15
Clay	13	28
Rock	13	41
Sand	26	67
Lignite	7	74
Sand rock, blue	14	88
Sand, blue	36	124
Sand rock, gray	37	161
Lignite	8	169
Limestone, blue	16	185
Sand	3	188
Sand rock, gray	9	197
Soapstone	20	217
Rock	3	220
Soapstone	29	249
Sand, fine, blue	5	254
Limestone	7	261
Soapstone	10	271
Rock	11	282
Soapstone	138	420
Sand, water, fine	60	480
Soapstone	45	525
Sand, close blue, lignite, and soapstone	83	608
Sand, water	5	613
Lignite and soapstone	19	632
Sand, water	4	636
Well BS-59-38-713—Continued		
Soapstone and sand	11	647
Sand, water	40	687
Rock	1	688
Well BS-59-44-101		
Owner: Herman Witte Driller: —		
Surface material	4	4
Sand and sandy clay	61	65
Rock, blue, hard	2	67
Sand, blue-green	24	91
Well BS-59-44-103		
Owner: R. D. Burkett Driller: Charlie J. Loehr		
Topsoil	5	5
Sandstone and rock	75	80
Shale	80	160
Sand	10	170
Shale, meal-like	90	260
Sand, water-bearing	80	340
Well BS-59-44-105		
Owner: Gertrude Caughran Driller: Cecil C. Capps		
Topsoil	2	2
Clay, gray, and sand rock	40	42
Shale, blue	244	286
Shale, sandy, blue	12	298
Rock	1	299
Sand, gray	13	312
Rock	1	313
Sand, gray	12	325
Shale, blue	9	334
Well BS-59-44-301		
Owner: Santa Fe Industries Driller: —		
Clay	18	18

Table 14.—Drillers' Logs of Wells—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-44-301—Continued		
Sand	6	24
Lignite and brown clay	161	185
Sand	15	200
Gumbo, blue	300	500
Lignite	6	506
Gumbo, blue	94	600
Sand	8	608
Gumbo	182	790
Sand	25	815
Well BS-59-44-304		
Owner: City of Somerville, Well 2 Driller: —		
Topsoil	20	20
Sand	10	30
Clay	13	43
Shale	125	168
Sand, good	27	195
Shale	28	223
Sand, fair	20	243
Shale streaks, sandy	27	270
Shale	5	275
Sand, fair	12	287
Shale	17	304
Well BS-59-44-305		
Owner: City of Somerville, Well 3 Driller: —		
Clay	18	18
Sand	16	34
Shale	128	162
Sand	42	204
Shale	73	277
Sand and shale	15	292
Shale	278	570
Rock	1	571
Shale, sandy	14	585
Shale, sandy, and shale	95	680

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-44-305—Continued		
Shale	82	762
Shale, sandy	21	783
Shale	19	802
Shale, sandy	17	819
Shale	15	834
Shale, sandy	28	862
Shale	102	964
Shale, sandy, and sandy	35	999
Shale, hard	25	1,024
Shale, soft, sandy	41	1,065
Shale, and sandy shale	138	1,203
Shale	19	1,222
Rock	2	1,224
Shale	60	1,284
Shale, sandy	12	1,296
Shale, hard layers	478	1,774
Shale, sandy	137	1,911
Sand, on thin shale breaks	99	2,010
Shale	10	2,020
Well BS-59-44-307		
Owner: Billy H. Gains Driller: Charlie J. Loehr		
Sand	10	10
Rock	10	20
Shale	80	100
Sand	80	180
Shale	60	240
Sand, water-bearing	40	280
Well BS-59-45-101		
Owner: Inez Balke Driller: Charlie J. Loehr		
Topsoil and shale	20	20
Lignite and shale	40	60
Shale	100	160

Table 14.—Drillers' Logs of Wells—Continued

Well BS-59-45-101—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, hard	40	200
Sand, water-bearing	40	240

Well BS-59-45-201

Owner: Baker Ranch
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Topsoil	5	5
Sand and rock	35	40
Lignite	3	43
Shale, hard	117	160

Well BS-59-45-201—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Lignite	4	164
Sand, water-bearing	102	266

Well BS-59-45-203

Owner: Baker Ranch
Driller: Charlie J. Loehr

	THICKNESS (FEET)	DEPTH (FEET)
Shale	40	40
Sand and gravel	60	100
Lignite	3	103

Table 15.—Drillers' Logs of Test Holes in the Flood Plain of the Brazos River

BRAZOS COUNTY

Well BJ-59-20-541

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil, sandy	2	2
Clay, sandy, silty, red-brown	10	12
Clay, silty, red-brown	5	17
Sandy, with silt and clay, brown, wet 27′-32′	30	47
Sand with gravel (estimate 10% gravel of 1/4″ to 1 1/2″ diameter)	18	65
Sparta Sand:		
Sand, medium-grained, gray	13	78
Sand, gray clay	2	80

Well BJ-59-20-542

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, blocky, red-brown	35	37
Sand, with clay and silt, fine-medium-grained, red-brown	22 1/2	59 1/2
Sand and gravel (estimate ±40% gravel, 1″ diameter or less)	4 1/2	64
Cook Mountain Formation:		
Shale, fossiliferous, gray-green	3	67

Well BJ-59-20-628

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Clay, slightly sandy, silty, tight, red-brown	27	27
Clay, sandy, silty, red-brown	5	32
Sand, with clay and silt, wet at ±32′	12	44
Sand with gravel	5	49
Cook Mountain Formation:		
Sand, with clay, hard, gray-green	3	52

Well BJ-59-20-629

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, slightly sandy, silty, red-brown, tight	35	37

Well BJ-59-20-629—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Sand, with clay and silt	10	47
Sand and gravel, (estimate 40% or less gravel of ± 1/2″ diameter)	9	56
Cook Mountain Formation:		
Sand, with clay, hard, gray-green	4	60

Well BJ-59-20-828

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, blocky, red-brown	30	32
Sand, with clay and silt, fine and medium-grained, red-brown	28	60
Cook Mountain Formation:		
Shale, fossiliferous, pyrite, glauconitic, gray-green, hard	7	67

Well BJ-59-20-917

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, sand lense 5-7′, red-brown	18	20
Sand, fine to coarse-grained, silty, red-brown, wet at ± 20′	20	40
Sand, and gravel (estimate ±40% gravel, 1/2″ diameter or less)	3 1/2	43 1/2
Cook Mountain Formation:		
Shale, hard, fossiliferous, gray-green	1½	45

Well BJ-59-20-918

	THICKNESS (FEET)	DEPTH (FEET)
Soil	4	4
Sand, with clay and silt, red-brown to tan	8	12
Sand with scattered gravel (estimate 5% or less)	13	25
Sand and gravel (estimate ± 30% gravel of 1″ diameter or less), wet at ± 32 1/2′	42	67
Bedrock: very hard, gray-green stains	0	at 67

Table 15.—Drillers' Logs of Test Holes in the Flood Plain of the Brazos River—Continued

Well BJ-59-20-919

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Road fill	4	4
Sand, with gravel (estimate ± 10% gravel, 1/2" diameter or less with larger gravel at depth), cream to tan	38	42
Cook Mountain Formation:		
Shale, fossiliferous, gray-green, hard	5	47

Well BJ-59-29-528

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Clay, sandy, brownish with white streaks	8	8
Sand, with clay, silt, and small gravel intervals, tan, wet at ± 23'	27	35
Yegua Formation:		
Sand, gray, and clay, hard	2	37

Well BJ-59-29-529

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Sand, coarse	6	6
Sand, coarse, and fine gravel	9	15
Bedrock:		
Clay, blue, with traces of sand	4	19
Sand, blue, with traces of shale	12	31

Well BJ-59-29-529—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Clay, blue, with sand, traces of shale	19	50
Sand, blue, with traces of clay and shale	20	70

Well BJ-59-39-804

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, blocky, red-brown, becomes more sandy with depth, wet at 20'-27'	40	42
Sand, with clay and silt, red-brown	15	57
Sand and gravel (estimate to 40% gravel of 1 1/2" diameter or less, limestone and quartz pebbles)	18	75
Clay, tight, bluish-green-gray with white streaks (ash ?)	5	80

Well BJ-59-47-306

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Clay, silty, blocky, brown	17	17
Clay, sandy, silty	3	20
Sand, with clay, silty, red-brown	9	29
Clay, sandy, silty, red-brown	11	40
Sand, with clay and silt, brown	22	62
Sand with gravel	6 5/12	68 5/12
Sandstone, hard, white, medium-grained, calcareous cement	2/12	68 1/2

BURLESON COUNTY

Well BS-59-29-435

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil, sandy and silty	5	5
Clay, sandy, silty, red-brown	7	12
Sand, with silt and clay, red-brown, wet near 17'	35	47
Sand, with small gravel, coarseness increases with depth	8 1/2	55 1/2
Yegua Formation:		
Sand, gray, hard	5 1/2	61

Well BS-59-29-525

	THICKNESS (FEET)	DEPTH (FEET)
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, red-brown	16	18
Sand, silty, red-brown, wet ± 32'	22	40
Sand and gravel (estimate to 60% gravel in places to 1 1/2" diameter ± most common)	21	61
Yegua Formation:		
Clay, green-gray, with lignite and ash streaks	4	65

Table 15.—Drillers' Logs of Test Holes in the Flood Plain of the Brazos River—Continued

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-29-526		
Flood-plain alluvium:		
Soil, clay	3	3
Clay, slightly sandy, silty, blocky, red-brown	26	29
Sand, with clay and silt, wet 29'-32'	16	45
Sand and gravel (estimated ± 15% gravel of 1/2" diameter or smaller)	10	55
Yegua Formation:		
Clay and sand, streaked, gray, hard	2	57
Well BS-59-29-723		
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, red-brown	6	8
Sand, with clay and silt	9	17
Clay, sandy, silty, red-brown	7	24
Sand, fine-medium-grained, wet, gravel at 42-44	20	44
Clay, sandy, yellow	6 1/2	50 1/2
Yegua Formation:		
Clay, blue-gray, with ash	1 1/2	52
Well BS-59-29-724		
Flood-plain alluvium:		
Soil	2	2
Clay, sandy, silty, blocky, red-brown, wet ± 15'	5	7
Clay, slightly sandy, brown	8	15
Sand, with silt and clay, becoming coarser with depth	25	40
Sand with gravel	4	44
Yegua Formation:		
Sand with clay and lignite, gray	3	47
Well BS-59-29-725		
Flood-plain alluvium:		
Soil, clay	2	2
Sand, with clay and silt, medium-grained, wet 6'	5	7
Well BS-59-29-725—Continued		
Sand and gravel (estimate 40% or less gravel, to 1 1/2" diameter with ± 1/2" size common), yellowish-tan	18	25
Yegua Formation:		
Sand, medium-grained, with clay and silt streaks, gray, packed, tight	7	32
Well BS-59-29-810		
Flood-plain alluvium:		
Soil	3	3
Clay, slightly sandy, tight, red-brown	4	7
Clay, sandy, silty, red-brown, wet 14'-15'	10	17
Sand and gravel (estimate in places 50% gravel or less, mostly under 1/2" diameter, sand fine to coarse-grained	50	67
Yegua Formation:		
Traces of brown and gray clay	0	at 67
Well BS-59-29-811		
Flood-plain alluvium:		
Road fill	2	2
Clay, sandy, brown, wet 12' 17'	25	27
Sand, with gravel, wet 27' 28', Clay lenses ± 44'-46 1/2"	28	55
Yegua Formation:		
Clay, sandy, with ash, gray	2	57
Well BS-59-29-902		
Flood-plain alluvium:		
Clay	30	30
Sand	6	36
Sand and gravel	22	58
Yegua Formation:	2	60
Well BS-59-29-905		
Flood-plain alluvium:		
Clay	30	30
Sand	6	36

	THICKNESS (FEET)	DEPTH (FEET)
Well BS-59-29-905—Continued		
Sand and gravel	24	60
Yegua Formation	0	at 60
Well BS-59-29-906		
Flood-plain alluvium:		
Clay	30	30
Sand	7	37
Sand and gravel	20	57
Well BS-59-29-907		
Flood-plain alluvium:		
Clay	35	35
Sand	9	44
Sand and gravel	15	59
Yegua Formation:	0	at 59
Well BS-59-29-908		
Flood-plain alluvium:		
Unknown	40	40
Sand and gravel	17	57
Yegua Formation:	3	60
Well BS-59-37-204		
Flood-plain alluvium:		
Clay	19	19
Sand	17	36
Gravel and sand	6	42
Yegua Formation:	0	at 42
Well BS-59-37-205		
Flood-plain alluvium:		
Clay	18	18
Sand	20	38
Sand and gravel	14	52
Yegua Formation:	0	at 52
Well BS-59-37-206		
Flood-plain alluvium:		
Well BS-59-37-206—Continued		
Sand and clay	17	40
Sand	11	51
Sand and gravel	13	64
Yegua Formation:	0	at 64
Well BS-59-37-314		
Flood-plain alluvium:		
Soil	2	2
Clay, slightly sandy, brown	8	10
Clay, sandy, silty, blocky to sticky, red-brown	30	40
Sand with gravel	4	44
Yegua Formation:		
Sand with clay and silt	8	52
Well BS-59-37-315		
Flood-plain alluvium:		
Clay	55	55
Clay, sandy	9	64
Yegua Formation:	0	at 64
Well BS-59-37-316		
Flood-plain alluvium:		
Clay	33	33
Sand	9	42
Clay and gravel	23	65
Yegua Formation:	0	at 65
Well BS-59-37-317		
Flood-plain alluvium:		
Clay	51	51
Sand and clay	8	59
Yegua Formation:	0	at 59
Well BS-59-37-717		
Flood-plain alluvium:		
Clay	51	51
Sand and clay	[illegible]	

Table 16.—Water Levels in Wells

(Depth to Water in Feet Below Land-Surface Datum)

BRAZOS COUNTY

Well BJ-59-06-301

Owner: Grant McDonald

DATE	WATER LEVEL
Jan. 12, 1938	21.65
May 4, 1938	20.20
Oct. 19, 1938	21.42
Feb. 3, 1939	22.57
May 3, 1939	23.28
July 17, 1939	24.50
Dec. 7, 1939	28.80
Apr. 2, 1940	25.72
July 10, 1940	26.04
Nov. 22, 1940	26.19
June 2, 1941	20.56

Well BJ-59-06-701

Owner: W. H. Hanover

DATE	WATER LEVEL
Jan. 12, 1938	23.50
Oct. 19, 1938	30.65
Feb. 3, 1939	25.43
May 3, 1939	25.72
July 17, 1939	27.56
Dec. 7, 1939	28.76
Apr. 2, 1940	27.08
July 10, 1940	18.72
Nov. 22, 1940	29.01
June 2, 1941	25.00

Well BJ-59-20-503

Owner: Vince Court

DATE	WATER LEVEL
July 15, 1960	38.90
May 30, 1961	35.66
Feb. 4, 1963	37.93
June 3, 1964	41.17
Oct. 14, 1969	41.84

Well BJ-59-20-505

Owner: Varisco Estate

DATE	WATER LEVEL
Apr. 11, 1957	37.05
May 22, 1957	34.14
June 20, 1957	33.16
Dec. 30, 1957	35.39
Apr. 15, 1958	34.19
July 18, 1958	32.82
Nov. 5, 1959	36.92
Jan. 25, 1960	36.04
Feb. 18, 1960	36.13
July 13, 1960	36.30
Sept. 28, 1960	37.33
Feb. 15, 1961	30.89
May 30, 1961	31.86
Oct. 2, 1962	35.11
Jan. 9, 1963	35.21
Mar. 23, 1963	35.35
Aug. 26, 1963	40.86
Oct. 3, 1963	39.51
Dec. 19, 1963	39.02
Mar. 30, 1964	38.97
June 3, 1964	38.85
July 1, 1964	38.41
Oct. 6, 1964	43.21
Apr. 26, 1965	40.30
May 12, 1966	38.04
Apr. 27, 1967	40.08
Apr. 3, 1968	41.04
Apr. 8, 1969	38.21
Oct. 14, 1969	40.43
Mar. 26, 1970	39.38
Mar. 18, 1971	40.87

Well BJ-59-20-506

Owner: Wilson Estate

DATE	WATER LEVEL
Apr. 11, 1957	36.02
May 22, 1957	35.93
June 20, 1957	34.84
Dec. 30, 1957	35.79
Apr. 15, 1958	35.29
July 18, 1958	34.13
Nov. 5, 1959	35.94
Jan. 25, 1960	35.90
Feb. 18, 1960	35.84
July 13, 1960	35.18
Sept. 28, 1960	35.51
Feb. 15, 1961	32.97
May 29, 1961	31.81
Jan. 9, 1963	35.27
Mar. 25, 1963	35.14
Aug. 26, 1963	37.46
Oct. 3, 1963	37.34
Dec. 19, 1963	37.41
Mar. 30, 1964	37.67
Oct. 6, 1964	40.71
Apr. 26, 1965	40.41
May 12, 1966	40.54
Apr. 27, 1967	40.68
Apr. 3, 1968	42.47
Apr. 8, 1969	40.70
Mar. 26, 1970	39.92
Mar. 19, 1971	40.37

Well BJ-59-20-509

Owner: L. Nigliazzo

DATE	WATER LEVEL
July 15, 1960	35.57
Sept. 28, 1960	36.54
Feb. 15, 1961	34.02

DATE		WATER LEVEL
Well BJ-59-20-509—Continued		
Feb.	4, 1963	35.75
June	3, 1964	38.61
Oct.	9, 1969	42.23
Well BJ-59-20-603		
Owner: C. Porterfield		
Mar.	15, 1957	30.7
Apr.	11, 1957	30.58
May	22, 1957	30.14
June	20, 1957	29.98
Dec.	30, 1957	31.80
Apr.	15, 1958	31.58
May	8, 1958	31.25
July	18, 1958	31.91
Nov.	5, 1959	33.50
Jan.	25, 1960	32.89
Feb.	18, 1960	33.08
July	13, 1960	32.91
Sept.	28, 1960	33.57
Feb.	15, 1961	32.92
May	30, 1961	32.71
Oct.	2, 1962	35.13
Jan.	9, 1963	34.38
Mar.	25, 1963	34.19
June	27, 1963	34.98
Aug.	26, 1963	36.31
Oct.	3, 1963	35.62
Dec.	19, 1963	35.27
Mar.	30, 1964	35.17
July	1, 1964	35.14
Oct.	6, 1964	38.14
Apr.	26, 1965	42.04
May	12, 1966	38.39
Apr.	27, 1967	40.13
Apr.	8, 1969	40.87
Oct.	8, 1969	41.05
Mar.	27, 1970	41.10
Mar.	18, 1971	41.47

DATE		WATER LEVEL
Well BJ-59-20-607		
Owner: M. Fazzino		
Feb.	26, 1963	32.74
Oct.	3, 1963	34.43
Dec.	19, 1963	35.40
Mar.	30, 1964	34.82
Oct.	6, 1964	39.03
Apr.	26, 1965	38.06
Well BJ-59-20-802		
Owner: W. Wallin		
Apr.	11, 1957	35.27
May	22, 1957	28.96
June	20, 1957	26.41
Apr.	15, 1958	32.43
July	18, 1958	32.05
Nov.	5, 1959	33.36
Jan.	25, 1960	32.28
Feb.	18, 1960	32.40
July	13, 1960	34.46
Sept.	28, 1960	35.73
May	30, 1961	32.53
Oct.	2, 1962	36.00
Jan.	9, 1963	34.54
Mar.	25, 1963	34.54
Aug.	26, 1963	38.80
Oct.	3, 1963	37.99
Dec.	19, 1963	37.18
Mar.	30, 1964	36.65
June	3, 1964	36.22
Apr.	26, 1965	36.87
May	12, 1966	35.09
Apr.	27, 1967	37.32
Apr.	3, 1968	37.77
Apr.	8, 1969	35.35
Oct.	10, 1969	37.84
Mar.	26, 1970	36.34
Mar.	18, 1971	37.75

DATE		WATER LEVEL
Well BJ-59-20-803		
Owner: Jerry Smith		
Nov.	5, 1959	33.53
Jan.	25, 1960	32.17
Feb.	18, 1960	32.53
July	13, 1960	34.48
Sept.	28, 1960	36.91
Feb.	15, 1961	29.67
May	30, 1961	32.84
Oct.	10, 1969	38.40
Well BJ-59-20-804		
Owner: Jack Demetary		
Apr.	11, 1957	35.84
May	27, 1957	35.55
June	20, 1957	35.35
Dec.	30, 1957	37.23
Apr.	15, 1958	36.16
July	18, 1958	35.22
Nov.	5, 1959	36.60
Jan.	25, 1960	36.24
Feb.	18, 1960	36.21
July	13, 1960	36.70
Sept.	28, 1960	37.03
Feb.	15, 1961	34.77
May	30, 1961	33.37
Oct.	2, 1962	35.08
Jan.	9, 1963	35.23
Feb.	25, 1963	33.74
Aug.	26, 1963	37.97
Oct.	3, 1963	37.22
Dec.	19, 1963	36.79
Mar.	30, 1964	36.82
Oct.	6, 1964	44.83
Apr.	26, 1965	40.07
May	12, 1966	44.00
Apr.	27, 1967	38.94
Apr.	3, 1968	40.32
Apr.	8, 1969	40.16
Oct.	10, 1969	40.19

DATE		WATER LEVEL
Well BJ-59-20-804--Continued		
Mar.	26, 1970	39.29
Mar.	18, 1971	38.76
Well BJ-59-20-805		
Owner: Philip Noto, Jr.		
Mar.	15, 1957	29.8
May	8, 1958	29.62
May	30, 1961	26.75
Feb.	4, 1963	27.48
Oct.	9, 1969	34.30
Well BJ-59-20-820		
Owner: —		
Jan.	25, 1963	30.69
Oct.	3, 1963	33.69
Dec.	19, 1963	33.58
Mar.	30, 1964	33.89
June	3, 1964	34.04
Oct.	6, 1964	36.93
Apr.	26, 1965	36.32
May	12, 1966	35.51
Apr.	27, 1967	36.29
Apr.	3, 1968	36.74
Apr.	8, 1969	36.39
Oct.	9, 1969	36.46
Mar.	26, 1970	36.91
Mar.	18, 1971	37.95
Well BJ-59-20-902		
Owner: Vince Court		
Apr.	10, 1957	30.87
May	22, 1957	30.14
June	20, 1957	31.58
Apr.	15, 1958	30.26
July	18, 1958	29.81
Nov.	13, 1959	28.43
Jan.	25, 1960	27.76
July	13, 1960	27.65
Sept.	28, 1960	30.26

DATE		WATER LEVEL
Well BJ-59-20-902—Continued		
Feb.	15, 1961	26.81
May	30, 1961	26.17
Oct.	2, 1962	28.15
Jan.	9, 1963	28.39
Mar.	25, 1963	27.37
Aug.	26, 1963	32.82
Oct.	3, 1963	32.58
Dec.	19, 1963	30.05
Mar.	30, 1964	29.09
June	3, 1964	28.79
Oct.	6, 1964	34.18
Apr.	26, 1965	31.04
May	12, 1966	29.18
Apr.	27, 1967	30.01
Apr.	3, 1968	30.33
Apr.	8, 1969	29.61
Oct.	10, 1969	31.80
Mar.	26, 1970	29.27
Mar.	18, 1971	31.48
Well BJ-59-20-904		
Owner: Lee Fazzino		
Aug.	2, 1960	28.95
Sept.	20, 1960	30.20
Feb.	15, 1961	28.72
Feb.	4, 1963	27.00
Oct.	10, 1969	34.29
Well BJ-59-20-907		
Owner: Vince Court		
Mar.	15, 1957	33.5
Apr.	10,1957	33.31
May	22, 1957	32.89
June	20, 1957	32.72
Dec.	30, 1957	34.13
Apr.	15, 1958	32.81
May	8, 1958	32.46
July	18, 1958	31.59

DATE		WATER LEVEL
Well BJ-59-20-907—Continued		
Nov.	5, 1959	33.42
Jan.	25, 1960	32.81
Feb.	18, 1960	32.74
July	13, 1960	32.10
Sept.	28, 1960	33.60
Feb.	15, 1961	29.33
May	30, 1961	28.46
Oct.	2, 1962	31.26
Jan.	9, 1963	30.32
Mar.	25, 1963	29.77
Aug.	26, 1963	35.03
Oct.	3, 1963	33.57
Dec.	19, 1963	32.99
Mar.	30, 1964	32.90
Oct.	6, 1964	39.28
Apr.	26, 1965	35.79
May	12, 1966	37.94
Apr.	27, 1967	34.60
Apr.	3, 1968	36.00
Apr.	8, 1969	33.63
Oct.	10, 1969	36.02
Mar.	26, 1970	34.68
Mar.	18, 1971	34.78
Well BJ-59-20-908		
Owner: —		
Jan.	21, 1960	38.08
Feb.	18, 1960	37.88
July	13, 1960	39.70
Sept.	28, 1960	39.73
Feb.	15, 1961	35.64
May	30, 1961	35.55
May	28, 1963	38.60
Oct.	3, 1963	40.73
Dec.	19, 1963	40.71
Mar.	30, 1964	41.11
Oct.	6, 1964	43.19
Apr.	26, 1965	41.14

Table 16.—Water Levels in Wells—Continued

DATE		WATER LEVEL
Well BJ-59-20-908—Continued		
May	12, 1966	39.39
Apr.	27, 1967	41.42
Apr.	3, 1968	40.69
Apr.	8, 1969	39.22
Oct.	13, 1969	40.09
Mar.	26, 1970	40.26
Mar.	18, 1971	41.78
Well BJ-59-21-721		
Owner: Pat Dooley		
Jan.	27, 1960	37.44
July	13, 1960	38.81
Sept.	28, 1960	38.75
Feb.	16, 1961	34.85
May	30, 1961	34.16
May	28, 1963	37.27
Nov.	17, 1969	36.59
July	22, 1970	36.68
Well BJ-59-38-901		
Owner: J. P. Terrell & Son		
Aug.	9, 1960	24.55
Sept.	22, 1960	25.59
May	19, 1961	22.24
Jan.	22, 1963	27.01
Mar.	25, 1963	27.51
Oct.	2, 1963	28.66
Dec.	6, 1963	28.60
Mar.	31, 1964	27.31
June	26, 1964	27.93
Oct.	6, 1964	30.80
Apr.	27, 1965	28.73
May	12, 1966	26.30
Apr.	27, 1967	30.29
Apr.	2, 1968	30.92

DATE		WATER LEVEL
Well BJ-59-38-901—Continued		
Apr.	7, 1969	28.91
Oct.	13, 1969	28.40
Mar.	27, 1970	26.96
Mar.	18, 1971	30.60
Well BJ-59-38-904		
Owner: J. P. Terrell & Son		
Aug.	9, 1960	12.52
Sept.	22, 1960	12.70
May	19, 1961	9.88
Jan.	22, 1963	11.23
Mar.	25, 1963	11.32
Oct.	2, 1963	14.56
Dec.	6, 1963	14.22
Mar.	31, 1964	13.67
June	26, 1964	13.70
Oct.	6, 1964	19.23
Apr.	27, 1965	16.89
May	12, 1966	16.67
Apr.	27, 1967	20.15
Apr.	2, 1968	20.39
Apr.	7, 1969	18.60
Oct.	13, 1969	23.05
Mar.	27, 1970	21.06
Mar.	18, 1971	22.44
Well BJ-59-39-611		
Owner: T. J. Moore		
June	6, 1963	6.48
Oct.	2, 1963	11.82
Dec.	6, 1963	11.08
Mar.	31, 1964	9.58
June	26, 1964	8.86
Oct.	6, 1964	13.96
Apr.	27, 1965	10.11

DATE		WATER LEVEL
Well BJ-59-39-611—Continued		
May	12, 1966	9.62
Apr.	27, 1967	10.12
Apr.	2, 1968	12.55
Apr.	7, 1969	9.73
Oct.	16, 1969	12.02
Mar.	27, 1970	9.86
Mar.	18, 1971	11.80
Well BJ-59-39-802		
Owner: — Bosse		
June	6, 1963	9.95
Oct.	2, 1963	13.14
Dec.	6, 1963	13.36
Mar.	31, 1964	12.37
June	26, 1964	11.76
Oct.	6, 1964	15.09
Apr.	27, 1965	13.04
May	12, 1966	12.94
Apr.	27, 1967	14.74
Apr.	2, 1968	16.30
Apr.	7, 1969	12.91
Oct.	16, 1969	14.29
Mar.	27, 1970	12.48
Mar.	18, 1971	14.91
Well BJ-59-39-901		
Owner: M. H. Elliott		
Oct.	27, 1959	16.94
Oct.	28, 1959	16.95
Apr.	1, 1960	15.11
Aug.	9, 1960	15.41
Sept.	22, 1960	16.22
June	6, 1963	15.36
Oct.	16, 1969	18.28

BURLESON COUNTY

Well BS-59-18-901

Owner: A. R. Richardson

DATE	WATER LEVEL
Sept. 2, 1936	54.2
Jan. 10, 1938	55.03
Apr. 3, 1938	53.72
Oct. 22, 1938	54.89
May 2, 1939	55.00
July 15, 1939	54.92
Dec. 6, 1939	55.03
Apr. 1, 1940	55.06
July 9, 1940	55.21
Nov. 21, 1940	55.31
June 2, 1941	55.71

Well BS-59-26-302

Owner: Ray Hill

DATE	WATER LEVEL
Sept. 4, 1936	44.00
Jan. 10, 1938	43.28
Oct. 22, 1938	43.67
May 2, 1939	44.18
July 15, 1939	44.20
Dec. 6, 1939	44.52
Apr. 1, 1940	44.48
July 9, 1940	44.44
Nov. 21, 1940	44.53
June 2, 1941	43.71

Well BS-59-27-401

Owner: Otto Berndt

DATE	WATER LEVEL
Nov. 13, 1936	29.47
Jan. 10, 1938	30.10
Oct. 22, 1938	29.70
May 2, 1939	32.14
July 15, 1939	31.52
Dec. 6, 1939	31.51
July 9, 1940	32.32
Nov. 21, 1940	32.27
June 2, 1941	27.47

Well BS-59-27-702

Owner: Joe Veiss

DATE	WATER LEVEL
Oct. 8, 1936	6.0
Jan. 10, 1938	11.47
May 3, 1938	7.83
Oct. 22, 1938	8.23
May 2, 1939	12.33
July 15, 1939	12.56
Dec. 6, 1939	14.24
Apr. 1, 1940	12.20
July 9, 1940	11.34
Nov. 21, 1940	12.34
June 2, 1941	6.46

Well BS-59-28-201

Owner: Black Lake Rod and Gun Club

DATE	WATER LEVEL
Jan. 27, 1960	9.64
July 13, 1960	7.08
Sept. 27, 1960	9.72
Feb. 15, 1961	3.20
May 17, 1963	6.49
Oct. 29, 1969	9.34
Mar. 13, 1970	6.48

Well BS-59-28-304

Owner: Don Fazzino

DATE	WATER LEVEL
Mar. 15, 1957	33.7
Apr. 10,1957	33.51
May 22, 1957	30.99
June 20, 1957	30.04
Dec. 30, 1957	30.30
Apr. 15, 1958	28.77
July 17, 1958	27.80
Nov. 5, 1959	28.71
Jan. 25, 1960	27.90
Feb. 15, 1960	27.83
July 13, 1960	27.80
Sept. 27, 1960	29.19

Well BS-59-28-304—Continued

DATE	WATER LEVEL
Feb. 15, 1961	26.23
May 29, 1961	25.27
Oct. 17, 1961	25.02
Oct. 2, 1962	27.57
Jan 9, 1963	26.07
Mar. 25, 1963	25.62
June 27, 1963	25.71
Aug. 27, 1963	30.06
Oct. 3, 1963	28.62
Dec. 19, 1963	27.63

Well BS-59-28-305

Owner: Don Fazzino

DATE	WATER LEVEL
Apr. 10, 1957	28.58
May 22, 1957	26.82
June 20, 1957	26.53
Dec. 30, 1957	27.77
Apr. 15, 1958	25.02
July 17, 1958	22.81
Nov. 5, 1959	23.97
Jan. 25, 1960	23.49
Feb. 15, 1960	23.33
July 13, 1960	23.04
Sept. 27, 1960	24.51
Feb. 15, 1961	20.04
May 29, 1961	18.83
Oct. 17, 1961	18.77
Oct. 2, 1962	21.35

Well BS-59-28-306

Owner: C. E. Scarmardo

DATE	WATER LEVEL
Apr. 10, 1957	26.98
May 22, 1957	26.29
June 20, 1957	26.06
Dec. 30, 1957	26.98
Apr. 15, 1958	25.78
July 17, 1958	24.11

DATE		WATER LEVEL
Well BS-59-28-306—Continued		
Nov.	5, 1959	23.94
Jan.	25, 1960	23.31
Feb.	15, 1960	23.18
July	13, 1960	23.32
Sept.	27, 1960	24.08
Feb.	15, 1961	21.71
May	29, 1961	20.30
Oct.	17, 1961	19.68
Oct.	2, 1962	20.54
Jan.	9, 1963	19.98
Mar.	25, 1963	19.34
Aug.	27, 1963	22.60
Oct.	3, 1963	22.01
Dec.	19, 1963	21.55
Mar.	30, 1964	21.61
June	4, 1964	21.59
Oct.	6, 1964	26.56
Apr.	26, 1965	24.71
May	12, 1966	22.41
Apr.	27, 1967	22.69
Apr.	1, 1968	24.60
Apr.	9, 1969	21.51
Apr.	29, 1969	22.69
Mar.	25, 1970	20.96
Mar.	17, 1971	21.64
Well BS-59-28-308		
Owner: Luke Scarmardo		
Apr.	10, 1957	19.95
May	22, 1957	19.28
June	20, 1957	18.98
Dec.	30, 1957	19.91
Apr.	15, 1958	18.82
July	17, 1958	17.93
Nov.	5, 1959	17.62
Jan.	25, 1960	17.36
July	8, 1960	16.53
Sept.	27, 1960	17.77

DATE		WATER LEVEL
Well BS-59-28-308—Continued		
Feb.	15, 1961	15.10
May	29, 1961	13.98
Oct.	17, 1961	14.05
Oct.	1, 1962	14.95
Jan.	9, 1963	14.21
Mar.	25, 1963	13.70
Aug.	27, 1963	16.92
Oct.	3, 1963	16.21
Dec.	19, 1963	15.91
Mar.	30, 1964	16.00
Oct.	6, 1964	19.55
Apr.	26, 1965	18.09
May	12, 1966	15.95
Apr.	27, 1967	17.97
Apr.	1, 1968	19.65
Apr.	9, 1969	15.38
Oct.	20, 1969	18.83
Mar.	25, 1970	16.91
Mar.	17, 1971	17.66
Well BS-59-28-310		
Owner: Frank DeStefano		
Aug.	1, 1960	30.93
Sept.	27, 1960	31.78
Feb.	15, 1961	28.29
May	29, 1961	28.15
May	29, 1963	29.74
Oct.	3, 1963	32.32
Dec.	19, 1963	32.27
Mar.	30, 1964	32.20
June	4, 1964	32.16
Oct.	6, 1964	36.43
Apr.	26, 1965	35.84
May	12, 1966	27.39
Apr.	27, 1967	32.52
Apr.	1, 1968	30.31
Apr.	9, 1969	27.24
Oct.	20, 1969	31.72

DATE		WATER LEVEL
Well BS-59-28-310—Continued		
Mar.	25, 1970	29.23
Mar.	17, 1971	33.42
Well BS-59-28-313		
Owner: Sam C. Scarmardo		
Mar.	15, 1957	29.6
Apr.	10, 1957	29.35
May	22, 1957	28.48
June	20, 1957	28.11
Dec.	30, 1957	27.89
Apr.	15, 1958	25.72
July	17, 1958	23.99
Nov.	5, 1959	24.86
Jan.	25, 1960	24.02
Feb.	15, 1960	23.81
July	8, 1960	23.35
Sept.	27, 1960	24.88
Feb.	15, 1961	19.29
May	29, 1961	18.76
Oct.	17, 1961	19.02
Oct.	2, 1962	22.20
Jan.	9, 1963	22.23
Mar.	25, 1963	21.48
Aug.	27, 1963	27.54
Oct.	3, 1963	26.43
Dec.	19, 1963	25.66
Mar.	30, 1964	25.61
Oct.	6, 1964	20.38
Apr.	26, 1965	27.70
May	12, 1966	23.31
Apr.	27, 1967	24.43
Apr.	1, 1968	30.27
Apr.	9, 1969	23.11
Oct.	29, 1969	25.38
Mar.	25, 1970	23.93
Mar.	17, 1971	26.03

Table 16.—Water Levels in Wells—Continued

DATE		WATER LEVEL
Well BS-59-28-329		
Owner: Don Fazzino		
Mar.	20, 1964	28.33
Oct.	6, 1964	32.01
Apr.	26, 1965	29.89
May	12, 1966	26.58
Apr.	27, 1967	27.70
Apr.	1, 1968	28.71
Apr.	9, 1969	25.36
Mar.	25, 1970	25.61
Mar.	17, 1971	26.30
Well BS-59-28-501		
Owner: E. G. Sebesta		
Jan.	27, 1960	12.40
July	8, 1960	11.35
Sept.	27, 1960	13.18
Feb.	15, 1961	9.50
May	29, 1961	10.25
May	17, 1963	11.04
Well BS-59-28-502		
Owner: P. G. Haines		
Jan.	27, 1960	9.52
July	8, 1960	8.79
Sept.	27, 1960	10.40
Feb.	15, 1961	7.26
May	29, 1961	7.83
May	16, 1963	7.59
Oct.	20, 1969	11.04
Well BS-59-28-601		
Owner: P. G. Haines		
Apr.	10, 1957	18.15
May	22, 1957	17.11
June	20, 1957	16.78
Dec.	30, 1957	17.25
Apr.	15, 1958	16.40
July	17, 1958	15.36
Nov.	5, 1959	16.15

DATE		WATER LEVEL
Well BS-59-28-601—Continued		
Jan.	25, 1960	15.85
Feb.	15, 1960	15.73
July	8, 1960	14.51
Sept.	27, 1960	15.91
Feb.	15, 1961	13.27
May	29, 1961	12.40
Oct.	17, 1961	12.71
Oct.	1, 1962	13.67
Jan.	9, 1963	12.93
Mar.	25, 1963	12.36
Aug.	27, 1963	14.44
Oct.	31, 1963	14.35
Dec.	19, 1963	14.54
Mar.	30, 1964	14.69
Oct.	6, 1964	16.34
Apr.	26, 1965	15.84
May	12, 1966	14.79
Apr.	27, 1967	17.04
Apr.	1, 1968	20.50
Apr.	9, 1969	14.37
Oct.	20, 1969	15.50
Mar.	25, 1970	15.53
Mar.	17, 1971	16.70
Well BS-59-28-603		
Owner: —		
Jan.	27, 1960	15.99
July	8, 1960	14.15
Sept.	27, 1960	16.15
Feb.	15, 1961	11.87
May	29, 1961	11.70
May	16, 1963	12.19
Oct.	20, 1969	15.47
Well BS-59-28-604		
Owner: — Scarmardo		
Jan.	27, 1960	15.39
July	8, 1960	13.62
Sept.	27, 1960	15.27

DATE		WATER LEVEL
Well BS-59-28-604—Continued		
Feb.	15, 1961	9.61
May	29, 1961	9.67
May	15, 1963	14.25
Oct.	21, 1969	19.74
Well BS-59-29-104		
Owner: — Scarmardo		
July	27, 1960	20.10
Feb.	15, 1961	17.77
May	9, 1963	19.59
June	4, 1964	23.62
Oct.	21, 1969	22.53
Well BS-59-29-106		
Owner: Pete and Sam Scarmardo		
July	27, 1960	16.71
Sept.	27, 1960	20.35
Feb.	15, 1961	11.81
May	29, 1961	12.61
May	9, 1963	15.01
Oct.	21, 1969	22.18
Well BS-59-29-402		
Owner: Mrs. — Haswell		
Mar.	15, 1957	22.6
Apr.	10, 1957	22.48
May	22, 1957	21.98
June	20, 1957	21.79
Dec.	30, 1957	22.93
Apr.	15, 1958	21.31
Apr.	25, 1958	21.22
July	17, 1958	20.01
Nov.	5, 1959	18.38
Jan.	25, 1960	18.12
Feb.	15, 1960	17.87
July	8, 1960	16.89
Sept.	27, 1960	18.37
Feb.	15, 1961	15.80
May	29, 1961	14.05

Table 16.—Water Levels in Wells—Continued

DATE	WATER LEVEL
Well BS-59-28-402—Continued	
Oct. 17, 1961	13.70
Oct. 1, 1962	15.55
Jan. 8, 1963	15.19
Mar. 25, 1963	14.55
June 27, 1963	15.27
Aug. 27, 1963	18.08
Oct. 3, 1963	18.07
Dec. 19, 1963	18.21
Mar. 30, 1964	18.39
July 2, 1964	18.93
Oct. 6, 1964	20.61
Apr. 26, 1965	20.71
May 12, 1966	22.40
Apr. 27, 1967	19.56
Apr. 4, 1968	21.44
Apr. 9, 1969	18.30
Oct. 29, 1969	18.42
Mar. 25, 1970	17.29
May 7, 1970	16.90
June 1, 1970	16.67
July 6, 1970	17.00
Aug. 7, 1970	19.60
Sept. 4, 1970	22.82
Oct. 2, 1970	21.32
Nov. 2, 1970	19.50
Dec. 7, 1970	19.30
Jan. 7, 1971	19.20
Feb. 4, 1971	21.30
Mar. 17, 1971	19.14
Well BS-59-29-410	
Owner: H. Porter	
Mar. 14, 1957	24.9
Oct. 3, 1957	22.3
Apr. 17, 1958	15.4
Apr. 25, 1958	14.98
July 17, 1958	11.24
Nov. 5, 1959	14.43
Jan. 25, 1960	11.81
Well BS-59-29-410—Continued	
Feb. 15, 1960	11.06
July 8, 1960	9.45
Sept. 27, 1960	14.47
Feb. 15, 1961	4.10
May 29, 1961	6.53
Oct. 17, 1961	9.32
Oct. 1, 1962	15.36
Jan. 8, 1963	12.02
Mar. 25, 1963	10.57
Aug. 27, 1963	21.13
Oct. 3, 1963	18.99
Dec. 19, 1963	17.35
Mar. 30, 1964	16.36
Oct. 6, 1964	21.78
Apr. 26, 1965	18.46
May 12, 1966	12.12
Apr. 27, 1967	15.21
Apr. 2, 1968	18.40
Apr. 9, 1969	14.52
Oct. 27, 1969	17.93
Mar. 25, 1970	11.54
Mar. 17, 1971	17.50
Well BS-59-29-411	
Owner: J. W. Giesenschlag	
Apr. 25, 1958	10.85
July 17, 1958	9.33
Nov. 5, 1959	11.05
Jan. 25, 1960	9.81
Feb. 15, 1960	9.25
July 8, 1960	7.87
Sept. 27, 1960	9.58
Feb. 15, 1961	3.58
May 29, 1961	5.06
Oct. 1, 1962	10.52
Jan. 8, 1963	7.93
Mar. 25, 1963	7.39
Aug. 27, 1963	12.43
Oct. 3, 1963	12.06
Well BS-59-29-411—Continued	
Dec. 19, 1963	11.80
Mar. 30, 1964	11.35
July 2, 1964	12.09
Oct. 6, 1964	14.87
Apr. 26, 1965	13.10
May 12, 1966	9.88
Apr. 28, 1967	12.47
Apr. 1, 1968	14.17
Apr. 9, 1969	10.02
Mar. 24, 1970	10.24
Mar. 16, 1971	12.43
Well BS-59-29-433	
Owner: E. Porter	
Apr. 25, 1958	14.39
July 17, 1958	13.08
Nov. 5, 1959	14.61
Jan. 25, 1960	13.77
Feb. 15, 1960	13.49
July 8, 1960	12.90
Sept. 27, 1960	13.86
Feb. 15, 1961	9.86
May 29, 1961	10.44
Oct. 17, 1961	11.23
Oct. 1, 1962	13.38
Jan. 8, 1963	12.53
Mar. 25, 1963	12.02
Aug. 27, 1963	15.11
Oct. 3, 1963	14.78
Dec. 19, 1963	14.88
Mar. 30, 1964	14.40
July 2, 1964	14.49
Oct. 6, 1964	16.49
Apr. 26, 1965	15.38
May 12, 1966	13.83
Apr. 27, 1967	14.10
Apr. 1, 1968	16.49
Apr. 9, 1969	13.44
Oct. 27, 1969	14.52

Table 16.—Water Levels in Wells—Continued

DATE		WATER LEVEL
Well BS-59-29-433—Continued		
Mar.	24, 1970	12.96
Mar.	16, 1971	15.74
Well BS-59-29-502		
Owner: Luke Bush		
July	27, 1960	21.75
Sept.	27, 1960	25.71
May	3, 1963	22.67
Oct.	3, 1963	30.15
Dec.	19, 1963	28.15
Mar.	30, 1964	27.52
Oct.	6, 1964	32.62
Apr.	26, 1965	29.16
May	12, 1966	26.50
Apr.	27, 1967	27.62
Apr.	1, 1968	28.88
Apr.	9, 1969	25.90
Oct.	27, 1969	26.73
Mar.	25, 1970	25.34
Mar.	16, 1971	27.30
Well BS-59-29-507		
Owner: Texas A&M University Farm		
Apr.	25, 1958	18.08
July	17, 1958	16.73
Nov.	5, 1959	18.00
Jan.	25, 1960	17.28
Feb.	15, 1960	17.00
July	7, 1960	17.32
Sept.	27, 1960	17.40
Feb.	15, 1961	14.58
May	29, 1961	13.75
Jan.	8, 1963	14.92
Mar.	25, 1963	14.74
Oct.	8, 1963	18.35
Dec.	19, 1963	18.75
Mar.	30, 1964	18.95
Oct.	6, 1964	21.51
Apr.	26, 1965	20.70
May	12, 1966	16.93

DATE		WATER LEVEL
Well BS-59-29-507—Continued		
Apr.	28, 1967	19.41
Apr.	2, 1968	21.41
Apr.	10, 1969	15.32
Oct.	28, 1969	16.92
Mar.	25, 1970	17.18
Well BS-59-29-508		
Owner: — Scarmardo		
July	27, 1960	19.58
Sept.	27, 1960	23.84
Mar.	7, 1961	16.31
May	29, 1961	15.44
May	8, 1963	20.52
Oct.	27, 1969	25.18
Well BS-59-29-703		
Owner: J. W. Giesenschlag		
Apr.	25, 1958	12.90
July	17, 1958	10.18
Nov.	5, 1959	12.58
Jan.	25, 1960	11.24
Feb.	15, 1960	10.71
July	8, 1960	9.87
Sept.	27, 1960	11.44
Feb.	15, 1961	5.51
Mar.	7, 1961	4.95
May	29, 1961	6.76
Oct.	17, 1961	8.56
Oct.	1, 1962	11.50
Jan.	8, 1963	10.13
Mar.	25, 1963	9.32
Aug.	27, 1963	14.72
Oct.	3, 1963	14.10
Dec.	19, 1963	13.70
Mar.	30, 1964	13.13
Oct.	6, 1964	17.41
Apr.	26, 1965	15.37
May	12, 1966	12.96
Apr.	28, 1967	13.68
Apr.	1, 1968	16.28

DATE		WATER LEVEL
Well BS-59-29-703—Continued		
Apr.	9, 1969	12.80
Oct.	27, 1969	14.49
Mar.	24, 1970	12.53
Mar.	16, 1971	14.43
Well BS-59-29-704		
Owner: Laura B. Shipp		
Feb.	15, 1960	11.86
July	7, 1960	10.36
Sept.	27, 1960	10.94
Feb.	16, 1961	5.48
May	29, 1961	6.42
Apr.	19, 1963	7.72
June	4, 1964	12.52
Well BS-59-29-705		
Owner: J. W. Giesenschlag		
Feb.	15, 1960	11.37
July	7, 1960	9.80
Sept.	27, 1960	10.52
Feb.	16, 1961	4.43
May	29, 1961	5.66
Apr.	19, 1963	6.85
Oct.	3, 1963	12.52
Dec.	19, 1963	12.45
Mar.	31, 1964	11.71
July	2, 1964	11.80
Oct.	6, 1964	16.50
Apr.	26, 1965	14.90
May	12, 1966	11.24
Apr.	28, 1967	11.69
Apr.	2, 1968	13.22
Apr.	10, 1969	11.03
Mar.	24, 1970	12.76
Mar.	16, 1971	14.44
Well BS-59-29-801		
Owner: Chance Farm Well 1		
Apr.	10, 1957	21.15
May	22, 1957	15.87
June	20, 1957	16.30

Table 16.—Water Levels in Wells—Continued

DATE	WATER LEVEL
Well BS-59-29-801—Continued	
Dec. 30, 1957	14.85
Apr. 15, 1958	13.79
Apr. 25, 1958	13.99
July 17, 1958	12.36
Nov. 5, 1959	14.40
Jan. 25, 1960	13.65
Feb. 15, 1960	13.18
July 7, 1960	12.30
Sept. 23, 1960	13.44
Feb. 16, 1961	9.27
Mar. 7, 1961	8.61
May 29, 1961	9.51
Oct. 17, 1961	9.39
Oct. 1, 1962	12.10
Jan. 8, 1963	12.17
Mar. 25, 1963	10.06
Aug. 27, 1963	14.35
Oct. 3, 1963	14.47
Dec. 19, 1963	14.50
Mar. 31, 1964	14.15
Oct. 6, 1964	17.25
Apr. 26, 1965	16.00
May 12, 1966	11.95
Apr. 28, 1967	16.18
Apr. 2, 1968	17.82
Apr. 10, 1969	12.47
Oct. 27, 1969	13.59
Mar. 25, 1970	12.54
Mar. 17, 1971	16.19
Well BS-59-29-803	
Owner: Texas A&M University Farm	
Apr. 25, 1958	13.25
July 17, 1958	12.64
Nov. 5, 1959	14.20
Jan. 25, 1960	13.91
Feb. 15, 1960	13.69
July 7, 1960	13.18

DATE	WATER LEVEL
Well BS-59-29-803—Continued	
Sept. 23, 1960	13.79
Feb. 16, 1961	10.11
May 29, 1961	10.50
Oct. 17, 1961	11.20
Oct. 1, 1962	14.32
Jan. 8, 1963	12.58
Mar. 25, 1963	12.30
Aug. 27, 1963	14.41
Oct. 2, 1963	14.76
Dec. 19, 1963	15.17
Mar. 31, 1964	15.10
June 4, 1964	15.23
Oct. 6, 1964	17.58
Apr. 26, 1965	17.19
May 12, 1966	11.96
Apr. 28, 1967	16.30
Apr. 2, 1968	16.96
Apr. 10, 1969	10.77
Oct. 27, 1969	13.90
Mar. 25, 1970	12.99
Mar. 17, 1971	21.39
Well BS-59-29-804	
Owner: Lightsey Bros.	
July 8, 1960	9.28
Sept. 23, 1960	12.36
Mar. 7, 1961	6.48
May 29, 1961	9.22
Apr. 18, 1963	8.89
June 4, 1964	13.36
Oct. 23, 1969	14.43
Well BS-59-29-805	
Owner: Texas A&M University Farm	
July 8, 1960	6.82
Sept. 23, 1960	10.15
Mar. 7, 1961	3.34
May 29, 1961	5.92

DATE	WATER LEVEL
Well BS-59-29-805—Continued	
Apr. 18, 1963	6.16
Oct. 23, 1969	12.28
Well BS-59-29-901	
Owner: — Loehr	
July 26, 1960	20.64
Sept. 23, 1960	20.64
Mar. 7, 1961	18.89
May 29, 1961	18.45
June 3, 1963	19.17
June 5, 1964	16.47
Oct. 23, 1969	15.30
Well BS-59-29-902	
Owner: Chance Farm well 4	
June 3, 1963	17.54
Oct. 3, 1963	19.41
Dec. 19, 1963	19.68
Mar. 31, 1964	19.54
Oct. 6, 1964	22.60
Apr. 26, 1965	21.38
Apr. 28, 1967	18.48
Oct. 29, 1969	18.59
Mar. 17, 1971	19.19
Well BS-59-34-501	
Owner: Mrs. Charles Krall	
Oct. 15, 1936	29.21
Jan. 10, 1938	29.16
May 3, 1938	28.44
Oct. 18, 1938	28.04
Feb. 2, 1939	28.14
May 2, 1939	29.20
July 15, 1939	30.02
Well BS-59-37-201	
Owner: Henry Kobar	
July 26, 1960	28.53
Sept. 23, 1960	28.20
Feb. 16, 1961	28.04

DATE	WATER LEVEL
Well BS-59-34-501—Continued	
May 29, 1961	27.62
Apr. 17, 1963	26.88
Oct. 3, 1963	27.34
Dec. 19, 1963	27.38
Mar. 31, 1964	27.32
July 2, 1964	27.20
Oct. 6, 1964	30.18
Apr. 26, 1965	28.44
May 12, 1966	27.10
Apr. 28, 1967	26.41
Apr. 4, 1968	27.54
Apr. 10, 1969	26.56
Oct. 23, 1969	25.94
Mar. 24, 1970	25.82
July 7, 1970	25.64
Mar. 16, 1971	26.10
Well BS-59-37-202	
Owner: Henry Kobar	
Apr. 17, 1963	10.78
Oct. 3, 1963	14.18
Mar. 31, 1964	13.06
July 2, 1964	13.46
Oct. 6, 1964	15.52
Apr. 26, 1965	14.19
Apr. 28, 1967	14.36
Nov. 10, 1969	10.64
Mar. 24, 1970	8.06
May 6, 1970	6.85
Mar. 16, 1971	10.48
Well BS-59-37-301	
Owner: P. G. Longmire	
Apr. 25, 1958	16.78
July 17, 1958	15.54
Nov. 5, 1959	16.91
Jan. 25, 1960	16.55
Feb. 15, 1960	16.34
July 7, 1960	14.86
Sept. 23, 1960	15.34

DATE	WATER LEVEL
Well BS-59-37-301—Continued	
Feb. 16, 1961	12.59
May 29, 1961	12.60
Oct. 17, 1961	12.39
Oct. 1, 1962	14.02
Jan. 8, 1963	13.48
Mar. 25, 1963	13.78
Aug. 27, 1963	16.59
Oct. 2, 1963	16.45
Dec. 19, 1963	16.75
Mar. 31, 1964	16.68
Oct. 6, 1964	21.84
Apr. 26, 1965	19.89
May 12, 1966	14.49
Apr. 28, 1967	16.92
Apr. 2, 1968	18.42
Apr. 10, 1969	14.29
Oct. 27, 1969	15.99
Mar. 25, 1970	12.26
Mar. 17, 1971	16.98
Well BS-59-37-303	
Owner: Baker Farm	
Apr. 25, 1958	15.70
July 17, 1958	17.22
Feb. 15, 1960	14.76
July 7, 1960	14.68
Sept. 23, 1960	13.80
Mar. 7, 1961	10.03
May 29, 1961	10.88
Oct. 17, 1961	9.55
Oct. 1, 1962	13.70
Jan. 8, 1963	12.14
Mar. 25, 1963	11.64
Aug. 27, 1963	17.34
Oct. 2, 1963	16.59
Dec. 19, 1963	16.49
Mar. 31, 1964	15.49
July 2, 1964	14.78
Oct. 16, 1964	18.32

DATE	WATER LEVEL
Well BS-59-37-303—Continued	
Apr. 26, 1965	17.07
Apr. 28, 1967	17.22
Oct. 24, 1969	15.41
Mar. 24, 1970	13.70
Mar. 16, 1971	16.31
Well BS-59-37-307	
Owner: J. Varisco	
June 5, 1963	11.50
Oct. 2, 1963	16.19
Dec. 19, 1963	16.17
Mar. 31, 1964	15.26
July 2, 1964	14.06
Oct. 6, 1964	16.79
Apr. 26, 1965	16.14
May 12, 1966	12.34
Apr. 28, 1967	13.08
Apr. 4, 1968	13.51
Oct. 24, 1969	14.63
Mar. 16, 1971	14.54
Well BS-59-38-102	
Owner: — Longmire	
Apr. 25, 1958	16.82
July 17, 1958	15.99
Nov. 5, 1959	15.85
Jan. 25, 1960	15.64
Feb. 15, 1960	15.58
July 8, 1960	14.79
Sept. 23, 1960	14.83
Feb. 16, 1961	12.70
Mar. 7, 1961	13.01
May 29, 1961	12.63
Oct. 17, 1961	11.88
Oct. 1, 1962	13.09
Jan. 8, 1963	12.98
Mar. 25, 1963	13.07
Aug. 27, 1963	15.48
Oct. 2, 1963	15.36
Dec. 19, 1963	15.39

DATE	WATER LEVEL
Well BS-59-38-102—Continued	
Mar. 31, 1964	15.31
July 2, 1964	15.58
Oct. 6, 1964	19.91
Apr. 26, 1965	18.48
May 12, 1966	16.08
Apr. 28, 1967	16.94
Apr. 2, 1968	17.35
Apr. 10, 1969	15.79
Oct. 27, 1969	15.08
Mar. 25, 1970	13.61
Mar. 17, 1971	15.60
Well BS-59-38-105	
Owner: W. Gaubatz	
Apr. 25, 1958	17.42
July 17, 1958	18.11
Nov. 5, 1959	19.25
Jan. 25, 1960	18.15
Feb. 15, 1960	16.94
July 6, 1960	16.66
Sept. 23, 1960	18.46
Mar. 7, 1961	14.69
May 29, 1961	16.01
Oct. 17, 1961	15.40
Oct. 1, 1962	19.58
Jan. 8, 1963	16.48
Mar. 25, 1963	17.05
June 6, 1963	18.23
Aug. 27, 1963	21.51
Oct. 2, 1963	20.80
Dec. 19, 1963	20.29
Mar. 31, 1964	18.84
July 2, 1964	19.23
Oct. 6, 1964	22.06
Apr. 26, 1965	20.09
May 12, 1966	14.66
Apr. 28, 1967	19.39
Apr. 2, 1968	22.26
Oct. 27, 1969	17.35

DATE	WATER LEVEL
Well BS-59-38-105—Continued	
Mar. 24, 1970	16.47
Mar. 16, 1971	19.55
Well BS-59-38-106	
Owner: W. Gaubatz	
Apr. 25, 1958	26.78
July 17, 1958	27.67
Nov. 5, 1959	28.45
Jan. 25, 1960	27.15
Feb. 15, 1960	26.90
July 6, 1960	26.84
Sept. 23, 1960	27.43
Mar. 7, 1961	24.23
May 29, 1961	25.41
Oct. 17, 1961	25.17
Oct. 1, 1962	27.72
Jan. 8, 1963	27.12
Mar. 25, 1963	27.45
June 26, 1963	27.66
Aug. 27, 1963	31.51
Oct. 2, 1963	29.95
Dec. 19, 1963	29.43
Mar. 31, 1964	29.12
July 2, 1964	28.76
Oct. 6, 1964	30.51
Apr. 26, 1965	29.10
May 12, 1966	26.69
Apr. 28, 1967	30.75
Apr. 11, 1969	27.07
Oct. 28, 1969	27.92
Mar. 24, 1970	26.19
Mar. 16, 1971	28.87
Well BS-59-38-107	
Owner: — Longmire	
July 7, 1960	32.31
Sept. 23, 1960	32.86
Mar. 7, 1961	26.01
May 29, 1961	30.64
May 8, 1963	33.11
Oct. 28, 1969	33.74

DATE	WATER LEVEL
Well BS-59-38-401	
Owner: Baker Farm	
Apr. 25, 1958	18.22
July 17, 1958	18.11
Nov. 5, 1959	18.41
Jan. 25, 1960	17.95
Feb. 15, 1960	17.84
July 6, 1960	17.72
Sept. 23, 1960	17.96
Feb. 16, 1961	16.35
May 29, 1961	16.00
Oct. 17, 1961	15.50
Oct. 1, 1962	17.16
Jan. 8, 1963	16.60
Mar. 25, 1963	16.54
June 26, 1963	17.57
Aug. 27, 1963	19.90
Oct. 2, 1963	19.17
Dec. 19, 1963	19.73
Mar. 31, 1964	18.36
Oct. 6, 1964	20.64
Apr. 26, 1965	20.38
May 12, 1966	14.40
Oct. 27, 1969	19.58
Mar. 24, 1970	18.43
Mar. 16, 1971	19.79
Well BS-59-38-403	
Owner: Baker Farm	
May 29, 1960	20.71
July 6, 1960	22.77
Sept. 23, 1960	23.28
Mar. 7, 1961	20.39
May 29, 1963	22.58
Oct. 28, 1969	23.79
Well BS-59-38-404	
Owner: Baker Farm	
July 7, 1960	19.60
May 29, 1963	17.44
June 4, 1964	18.79

DATE		WATER LEVEL
Well BS-59-38-404—Continued		
Oct.	28, 1969	20.23
Nov.	10, 1969	20.15
Well BS-59-38-408		
Owner: — Porter		
Apr.	25, 1958	14.43
July	17, 1958	14.11
Nov.	5, 1959	15.17
Jan.	25, 1960	14.43
Feb.	15, 1960	14.20
July	7, 1960	12.44
Sept.	23, 1960	13.46
Feb.	16, 1961	10.53
May	29, 1961	10.88
Oct.	17, 1961	10.22
Oct.	1, 1962	13.20
Jan.	8, 1963	12.07
Mar.	25, 1963	11.60
Aug.	27, 1963	15.84
Oct.	2, 1963	15.77
Dec.	19, 1963	16.00
Mar.	31, 1964	15.21
June	4, 1964	14.53
July	2, 1964	14.51
Oct.	6, 1964	17.35
Apr.	26, 1965	17.04
May	12, 1966	13.91
Apr.	28, 1967	15.37
Apr.	2, 1968	18.60
Oct.	27, 1969	14.13
Mar.	25, 1970	12.87
Mar.	17, 1971	19.97
Well BS-59-38-501		
Owner: John See		
July	7, 1960	30.73
Sept.	23, 1960	31.80
Mar.	7, 1961	24.25
May	29, 1961	28.45
May	29, 1963	32.61
Well BS-59-38-501—Continued		
Oct.	2, 1963	34.79
Dec.	19, 1963	34.61
Mar.	31, 1964	34.24
July	2, 1964	33.39
Oct.	6, 1964	36.72
Apr.	26, 1965	32.26
May	12, 1966	26.25
Apr.	28, 1967	29.33
Oct.	28, 1969	32.46
Mar.	24, 1970	29.99
Mar.	16, 1971	34.67
Well BS-59-38-502		
Owner: —		
July	7, 1960	32.69
Sept.	23, 1960	34.61
Mar.	7, 1961	26.35
May	29, 1963	34.54
Oct.	28, 1969	34.44
Well BS-59-38-503		
Owner: — Johnson		
July	7, 1960	30.08
Sept.	23, 1960	30.68
Mar.	7, 1961	26.34
May	29, 1963	32.33
Oct.	28, 1969	30.36
Well BS-59-38-507		
Owner: 5-B Ranch		
July	25, 1960	29.98
Sept.	23, 1960	30.41
Mar.	7, 1961	27.81
May	29, 1961	27.98
June	4, 1963	30.40
Oct.	2, 1963	30.94
Dec.	19, 1963	31.16
Mar.	31, 1964	31.23
Oct.	6, 1964	33.44
Apr.	26, 1965	31.57
May	12, 1966	29.98
Well BS-59-38-507—Continued		
Apr.	28, 1967	30.60
Apr.	2, 1968	32.84
Apr.	11, 1969	29.52
Oct.	28, 1969	27.19
Mar.	16, 1971	29.64
Well BS-59-38-508		
Owner: 5-B Ranch		
July	25, 1960	30.01
Sept.	23, 1960	30.36
Mar.	7, 1961	28.16
May	29, 1961	27.87
June	4, 1963	30.41
Oct.	28, 1969	26.98
Well BS-59-38-511		
Owner: J. C. Lauderdale		
Sept.	23, 1960	19.98
June	4, 1963	19.32
Oct.	2, 1963	20.42
Dec.	19, 1963	20.70
Mar.	31, 1964	19.84
July	2, 1964	20.07
Oct.	6, 1964	22.19
Apr.	26, 1965	21.26
Apr.	28, 1967	20.69
Apr.	4, 1968	22.31
Well BS-59-38-701		
Owner: Baker Farm		
Apr.	25, 1958	16.14
July	17, 1958	16.70
Nov.	5, 1959	18.21
Jan.	25, 1960	17.08
Feb.	15, 1960	16.83
July	6, 1960	16.82
Sept.	23, 1960	16.82
Feb.	16, 1961	14.62
Mar.	7, 1961	14.01
May	29, 1961	14.33
Oct.	17, 1961	13.69

Table 16.—Water Levels in Wells—Continued

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
Well BS-59-38-701—Continued		**Well BS-59-38-701—Continued**		**Well BS-59-38-701—Continued**	
Oct. 1, 1962	16.43	Dec. 19, 1963	18.68	Apr. 28, 1967	19.62
Jan. 8, 1963	15.06	Mar. 31, 1964	17.51	Apr. 2, 1968	22.48
Mar. 25, 1963	14.77	July 2, 1964	17.35	Apr. 11, 1969	18.55
June 26, 1963	14.77	Oct. 6, 1964	22.06	Oct. 27, 1969	18.28
Aug. 27, 1963	19.99	Apr. 26, 1965	22.20	Mar. 24, 1970	16.71
Oct. 2, 1963	19.73	May 12, 1966	18.82	Mar. 16, 1971	17.85

Table 17.--Chemical Analyses of Water from Wells and Springs

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

When no potassium (K) is reported, sodium and potassium are calculated and reported as sodium (Na)
Bicarbonate (HCO_3) includes and carbonate (CO_3) present.

Water-bearing unit: Twi, Wilcox Group excluding Simsboro Sand Member of Rockdale Formation of Plummer (1932) ; Twis, Simsboro Sand Member of Rockdale Formation of Plummer (1932); Tc, Carrizo Sand; Tqc, Queen City Sand; Tw, Weches Formation; Ts, Sparta Sand; Tcm, Cook Mountain Formation; Ty, Yegua Formation; Tj, Jackson Group; Tcs, Catahoula Sandstone; Qt, Terrace deposits; Qfpa, Flood-plain alluvium.

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
								--	--															
BRAZOS COUNTY																								
BJ-59-06-301	33	Jan. 12, 1938	Tcm	--	--	45	5.0	90	--	157	54	88	--	103	--	424	135	--	--	--	--	--	--	--
302	415-430	Nov. 11, 1969	Ts	13	0.25 1/ 2/	36	10	60	--	180	81	19	0.0	4.0	--	312	131	50	2.3	0.33	509	7.6	23.5	74
502	350?	July 23, 1970	Ts	--	.66 1/	44	14	--	--	172	11	52	--	--	--	--	167	--	--	.00	463	7.5	23.0	73
602	210?	do.	Ts	--	.06 1/	24	5.6	--	--	180	48	14	--	--	--	--	83	--	--	1.29	426	7.6	21.0	70
603	185	July 13, 1970	Ts	--	.27 1/	24	6.2	--	--	136	31	25	.1	--	0.10	--	85	--	--	.52	355	7.3	--	--
701	34	Jan. 12, 1938	Tcm	--	--	108	17	67	--	399	136	88	--	70	--	585	341	--	--	--	--	--	--	--
702	255	July 13, 1970	Ts	--	.17 1/	40	12	--	--	144	76	66	.1	--	--	--	150	--	--	.00	600	7.4	--	--
801	326	do.	Ts	--	1.1 1/	24	6.0	--	--	120	25	29	.1	--	.04	--	85	--	--	.28	330	6.9	--	--
901	697	Nov. 11, 1969	Tqc	11	.08 1/ 2/	18	6.7	91	--	172	80	23	.1	16	.15 3/	331	72	73	4.7	1.37	527	7.1	--	--
902	300?	do.	Ts	12	--	7.0	1.8	144	--	192	88	60	.1	6.2	--	413	25	93	13	2.65	689	7.4	--	--
07-401	--	July 23, 1970	Ts	--	.40 1/	5.4	1.3	--	--	410	53	33	--	--	--	--	19	--	--	6.34	839	7.7	--	--
13-302	443-458	Nov. 12, 1969	Tqc	14	--	29	9.6	59	--	258	0.4	15	.0	8.2	--	262	112	53	2.4	1.99	444	7.2	--	--
601	216	July 15, 1970	Ts	--	.11 1/	45	13	--	--	234	96	126	--	--	--	--	166	--	--	.52	959	7.3	--	--
602	266	do.	Ts	--	.25 1/	34	9.8	--	--	236	.0	45	.0	--	--	--	126	--	--	1.36	493	7.5	--	--
603	286	do.	Ts	--	.11 1/	28	6.7	--	--	228	.0	51	--	--	--	--	98	--	--	1.79	512	7.4	--	--
604	240?	do.	Ts	--	.09 1/	34	9.2	--	--	238	.0	42	.0	--	--	--	123	--	--	1.44	498	7.3	--	--
903	34	do.	Ts	--	.19 1/	24	6.4	--	--	164	65	45	--	--	--	--	86	--	--	.96	550	7.1	--	--
14-103	96	Dec. 16, 1969	Ts	--	.14 1/ 4/	34	12	--	--	228	41	78	--	--	--	--	134	--	--	1.05	682	7.7	--	--
201	262-307	July 15, 1969	Ts	--	.07 1/	36	8.1	--	--	160	130	80	--	--	--	--	124	--	--	.15	853	7.1	--	--
401	307-322	do.	Ts	--	.04 1/	22	5.8	--	--	174	27	27	.0	--	.10	--	79	--	--	1.28	419	7.2	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BRAZOS COUNTY																								
BJ-59-14-501	579-594	July 15, 1970	Ts	--	0.10 1/	5.9	2.6	--	--	100	0.0	28	--	--	0.06	--	25	--	--	1.13	256	6.8	--	--
602	225	Nov. 13, 1969	Ty	44	.49 1/ 5/	9.8	2.2	92	--	138	21	68	0.2	2.2	1.1	308	34	86	6.9	1.59	466	7.6	--	--
704	418-431	July 15, 1970	Ts	--	.24 1/	1.6	.2	--	--	424	.0	58	--	--	--	--	5	--	--	6.85	797	7.9	--	--
705	100?	Dec. 16, 1969	Ty	--	--	48	16	--	--	200	245	490	--	--	--	--	186	--	--	.00	2,320	7.7	20.5	69
803	512	Jan. 21, 1970	Tcm	11	.10	8.0	.8	378	--	706	.2	186	1.5	.2	--	933	24	97	34	11.1	1,580	8.1	--	--
903	308-323	July 15, 1970	Tcm	--	.04 1/	10	1.6	--	--	360	284	264	--	--	--	--	32	--	--	5.27	1,980	7.6	--	--
15-201	600?	July 20, 1970	Tcm	--	.04 1/	3.2	.7	--	--	564	60	61	--	--	--	--	11	--	--	9.02	1,150	8.0	24.5	76
401	835-875	Nov. 14, 1969	Ts	17	.22 1/ 5/	.0	.2	59	--	125	.2	18	.2	.0	.06	156	1	99	26	2.03	251	7.3	--	--
402	126-141	July 20, 1970	Ty	84	.10 1/	24	5.5	57	--	80	92	32	.1	.4	.04	334	82	60	2.7	.00	428	6.8	--	--
703	900?	Nov. 19, 1969	Ts	17	---	.0	.2	71	--	170	.4	9.4	.6	1.6	--	184	1	99	31	2.77	297	8.2	--	--
704	173-195	July 16, 1970	Ty	61	3.3 1/	42	11	114	--	86	31	209	.2	.7	--	514	150	62	4.0	.00	881	6.6	--	--
705	445-461	do.	Tcm	--	.04 1/	6.3	1.6	--	--	488	284	290	1.1	--	--	--	22	--	--	7.56	2,210	7.7	--	--
6/ 801	208-250	Jan. 15, 1957	Ty	--	--	12	15	169	--	171	100	152	--	--	--	--	920	--	--	--	--	--	--	--
801	208-250	Nov. 14, 1969	Ty	44	--	7.5	.9	165	--	158	28	155	.1	4.6	.11	483	22	94	15	2.15	806	7.1	24.0	75
6/ 802	90	Sept. 24, 1954	Ty	--	--	25	12	133	--	102	37	195	--	--	--	--	110	72	--	--	--	--	--	--
6/ 803	477-492	Nov. 19, 1969	Ty	12	.05 1/ 5/	5.5	1.3	533	--	556	314	275	1.4	4.9	--	1,420	19	98	53	8.73	2,260	8.0	--	--
6/ 20-503	70	Jan. 27, 1953	Qfpa	--	--	124	34	86	--	345	99	177	--	--	--	--	449	--	--	--	--	--	--	--
503	70	June 19, 1963	Qfpa	21	2.9	136	31	39	--	592	30	24	.4	.5	.52	573	467	15	.8	.36	947	7.2	21.0	69
509	67	July 17, 1963	Qfpa	17	4.9	108	24	269	--	758	192	93	.5	.0	.83	1,080	368	61	6.1	5.06	1,620	7.0	21.0	70
520	80	June 19, 1963	Qfpa	20	6.3	142	31	49	--	634	30	26	.3	.0	.42	611	482	18	1.0	.75	1,000	6.9	21.0	70
521	70	July 17, 1970	Qfpa	--	7.9 1/	150	31	--	--	652	26	22	--	--	.27	--	--	--	--	.66	1,040	7.2	21.0	70
522	--	July 17, 1963	Qfpa	21	1.6	142	38	72	--	632	54	66	.3	.0	.24	705	511	24	1.4	.14	1,130	7.1	22.0	72
524	--	June 19, 1963	Qfpa	20	9.4	142	62	155	--	708	182	126	.1	.0	.24	1,040	610	36	2.7	.00	1,610	7.2	21.0	70
527	70?	May 14, 1963	Qfpa	20	5.3	129	42	57	1.7	648	57	17	.1	.2	.24	643	494	20	1.1	.73	1,050	6.8	21.5	71
528	--	do.	Qfpa	21	4.6	143	38	77	2.7	698	57	29	.2	1.2	.24	713	514	24	1.5	1.17	1,190	6.8	20.5	69
528	--	June 19, 1963	Qfpa	22	2.6	--	--	--	--	704	56	34	--	--	--	--	505	--	--	1.44	1,150	7.0	--	--
528	--	Aug. 8, 1963	Qfpa	22	2.6	136	40	70	--	684	53	28	.3	.0	.25	686	504	23	1.4	1.13	1,090	6.8	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BRAZOS COUNTY																								
BJ-59-20-529	68	June 19, 1963	Qfpa	21	6.7	170	32	58	--	686	57	42	0.3	0.5	0.34	718	556	19	1.1	0.13	1,150	6.9	20.5	69
550	67	July 17, 1970	Qfpa	--	.00 1/	120	28	--	--	748	206	105	--	--	.84	--	414	--	--	3.97	1,720	7.3	21.0	70
559	900?	Oct. 14, 1969	Tc	13	.25 1/ 7/	.8	.2	125	--	278	27	12	.4	1.7	--	317	3	99	31	4.50	518	8.0	--	--
563	350	Nov. 3, 1970	Tqc	--	--	2.0	.4	--	--	442	51	23	--	--	--	--	6	--	--	7.12	835	8.3	22.0	72
564	1,500	Nov. 13, 1937	Twi,Tc	--	--	4	< 5	459	--	1,130	11	50	2.2	< 20	--	1,080	10	--	--	--	--	--	--	--
564	1,500	Apr. 3, 1956	Twi,Tc	17	.11	1.8	.5	437	--	1,100	.0	37	2.4	.2	--	1,040	6	99	75	--	1,650	8.5	32.0	90
565	400?	Nov. 13, 1937	Tqc	--	--	8	< 5	130	--	311	25	14	.4	< 20	--	330	20	--	--	--	--	--	--	--
603	60	July 8, 1963	Qfpa	10	.60	18	5.6	202	--	388	.0	134	.2	.0	.45	561	68	87	11	5.00	956	7.8	20.5	69
603	60	July 17, 1964	Qfpa	10	.62	18	5.6	197	1.5	392	.4	123	.2	.2	.42	549	68	86	10	5.06	947	7.9	--	--
616	49	July 17, 1963	Qfpa	13	.11	8.0	3.9	516	--	682	77	365	1.2	1.0	1.3	1,320	36	97	37	10.5	2,180	8.2	--	--
621	75	July 16, 1963	Qfpa	13	.04	62	18	436	--	508	192	395	.6	1.2	.96	1,370	228	81	13	3.76	2,230	7.6	--	--
627	714	Nov. 3, 1970	Tqc	--	--	2.2	.6	--	--	516	27	50	--	--	--	--	8	--	--	9.30	962	8.1	--	--
645	400?	July 22, 1970	Tqc	--	.14 1/	2.5	.6	--	--	420	186	41	--	--	--	--	8	--	--	6.71	1,160	8.1	23.0	73
702	400?	Dec. 19, 1969	Tqc	--	.03 1/ 8/	4.0	1.0	--	--	170	70	10	--	--	--	--	14	--	--	2.50	463	7.3	23.0	73
703	450?	do.	Tqc	--	.05 1/ 8/	3.0	.9	--	--	184	85	12	--	--	--	--	11	--	--	2.80	524	8.0	23.5	74
802	62	June 27, 1963	Qfpa	18	2.5	147	43	134	--	716	129	80	.2	.0	.40	904	544	35	2.5	.86	1,410	7.0	--	--
807	1,035	Nov. 12, 1942	Twi,Tc	--	--	--	--	--	--	490	50	23	--	--	--	--	--	--	--	--	--	--	--	--
810	--	Aug. 1, 1963	Qfpa	21	7.4	185	34	87	--	694	146	49	.3	.0	.36	864	602	24	1.5	.00	1,220	7.2	20.5	69
815	63	July 16, 1963	Qfpa	26	7.0	162	39	98	--	800	71	34	.3	.0	.36	824	564	27	1.8	1.82	1,280	6.8	21.0	70
831	70?	July 17, 1970	Qfpa	--	1.7 1/	184	44	--	--	624	179	12	--	--	.21	--	640	--	--	.00	1,210	7.0	21.0	70
902	56	June 27, 1963	Qfpa	18	4.0	156	31	336	--	596	131	440	.3	.0	.67	1,410	516	59	6.4	.00	2,350	7.0	21.0	70
903	61	July 17, 1970	Qfpa	17	.62 1/	100	17	166	--	442	77	169	.2	.0	.26	764	320	53	4.0	.85	1,320	7.1	21.0	69
907	64	June 27, 1963	Qfpa	22	13	212	43	144	--	766	190	137	.3	.0	.38	1,130	706	31	2.4	.00	1,720	6.8	21.0	70
907	64	July 17, 1970	Qfpa	23	--	254	56	64	--	804	92	173	.3	4.4	.32	1,060	864	14	.9	.00	2,050	7.2	--	--
908	68	July 16, 1964	Qfpa	22	8.7	182	43	61	3.4	656	155	49	.3	.2	.29	839	631	17	1.1	.00	1,290	6.7	22.0	72
9/ 920	292-412	Feb. 25, 1950	Ts	18	.15	1.2	.2	76.6	--	147	9.4	17	--	--	--	--	4	--	--	--	--	8.7	25.0	77
926	70?	July 17,1970	Qfpa	--	5.0 1/	130	32	--	--	562	88	37	--	--	.24	--	456	--	--	.09	1,070	7.1	21.0	70
932	470	July 22, 1970	Tqc	13	.00	1.7	.3	160	--	272	94	21	.2	2.7	.25	422	5	99	31	4.36	695	7.9	24.5	76
21-105	450	Dec. 1, 1969	Tqc	11	--	4.2	1.3	445	--	1,070	.0	69	1.6	6.6	--	1,060	16	98	48	17.22	1,700	7.9	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEAR-ING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CAL-CIUM (Ca)	MAG-NE-SIUM (Mg)	SO-DIUM (Na)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NI-TRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PER-CENT SO-DIUM	SODIUM ADSORP-TION RATIO (SAR)	RESI-DUAL SODIUM CAR-BONATE (RSC)	SPECIFIC CONDUC-TANCE (MICROM-HOS AT 25° C)	pH	WATER TEMPERATURE	
																							°C	°F
										BRAZOS COUNTY														
[10]BJ-59-21-201	389-479	July 8, 1947	Ts	26	0.56	2	1	71	--	164	4	18	0.1	< 0.4	--	192	9	--	--	--	--	8.2	--	--
[9] 202	2 514-2,904	Apr. 27, 1957	Twis	23	.12	3.8	.4	281.2	--	651.5	.0	62	--	--	--	--	11	--	--	--	1,126	8.1	--	--
[11] 202	2,514-2,904	June 1964	Twis	41	3.3	3	2	277	--	649	Trace	62	--	--	--	--	18	--	--	--	1,108	7.0	--	--
[10] 203	401-542	Sept. 1948	Ts	17	.44 [1]	5	1	65	--	125	3	21	.2	1.1	--	186	17	--	--	--	--	8.0	--	--
[10] 204	423-533	do.	Ts	23	.96 [1]	4	3	74	--	150	3	21	.2	1.6	--	224	23	--	--	--	--	8.0	--	--
205	2,480-2,860	June 10, 1964	Twis	22	.02 [1]	2.5	1.0	258	2.1	624	.4	53	.7	.0	0.4	647	10	98	35	10.0	1,070	8.0	46.0	115
[10] 205	2,480-2,860	June 6, 1966	Twis	--	--	3	1	258	--	620	< 4	57	.6	< .4	--	--	12	--	--	--	1,145	8.3	--	--
206	462-543	May 13, 1938	Ts	--	--	5.0	1.7	67	--	150	10	18	.3	.1	--	180	19	--	--	--	--	--	--	--
206	648-688	May 1938	Tqc	--	--	4.8	2.1	485	--	1,040	6.9	72	1.6	1.0	--	1,150	21	--	--	--	--	--	--	--
206	1,665-1,887	July 5, 1938	Twi,Tc	--	.12	5.8	1.9	1,270	--	1,660	> 1.0	885	3.2	--	--	3,090	22	--	--	--	--	--	--	--
206	462-543	July 21, 1938	Ts	--	--	> 4	--	--	--	136	> 5	17	.2	.0	--	153	--	--	--	--	--	--	--	--
206	462-543	July 30, 1938	Ts	--	--	> 4	--	--	--	134	5	16	--	--	--	149	--	--	--	--	--	--	--	--
206	462-543	Nov. 11, 1942	Ts	18	.05	1.0	.2	67	--	148	5.3	16	.1	.0	--	177	3	--	--	--	--	8.2	--	--
[12] 207	2,270	Mar. 28, 1968	Twis	18	12	7	1	277	--	480	93	94	--	--	--	961	21	--	--	--	1,230	8.5	--	--
[12] 207	2,590	do.	Twis	21	5.9	10	1	263	--	524	51	85	--	--	--	937	30	--	--	--	1,170	8.4	--	--
[12] 207	2,225-2,709	May 13, 1968	Twis	19	.08	4	0	226	--	523	0	51	--	--	--	813	10	--	--	--	917	8.5	--	--
207	2,225-2,709	Nov. 18, 1969	Twis	21	.00	4.0	6	212	1.9	502	.2	52	.3	.0	.29	539	12	96	27	7.98	891	8.1	--	--
[9] 208	2,320-2,814	Sept. 1964	Twis	--	.05	3.2	.9	231.4	--	531.9	0	54	.4	--	--	--	11.7	--	--	--	935	8.02	--	--
[10] 208	2,320-2,814	June 6, 1966	Twis	--	.06	4	1'	222	--	530	< 4	51	.3	< .4	--	--	14	--	--	--	995	8.4	--	--
208	2,320-2,814	July 29, 1967	Twis	--	.13	3	3	256	--	588	< 4	59	.6	2.0	--	--	19	--	--	--	1,112	8.6	--	--
302	435-523	Nov. 10, 1942	Ts	18	.04	2.0	.3	67	--	156	5.7	12	.2	.0	--	182	6	96	12	---	--	8.2	--	--
[9] 303	2,106-2,175	Mar. 1954	Twi	15	.07 [1]	9	1	187	--	438	Trace	46	--	--	--	695	27	--	--	--	--	8.6	--	--
[9] 303	2,706-2,721	do.	Twis	16	.15 [1]	4	1	318	--	731	2	72	--	--	--	1,146	--	--	--	--	--	8.3	--	--
[9] 303	2,915-2,925	Mar. 23, 1954	Twis	--	.1	4	1	314	--	719	0	74	--	--	--	1,128	14	--	--	--	--	8.25	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BRAZOS COUNTY														
[10] BJ-59-21-303	2,670-2,940	May 8, 1954	Twis	25	0.5	3	2	322	--	714	28	71	0.7	0.4?	--	1,120	16	--	--	--	--	8.1	--	--
[10] 303	2,670-2,940	July 29, 1967	Twis	--	< .02	3	1	301	--	710	< 4	68	.9	2.0	--	1,090	13	--	--	--	1,328	8.3	--	--
304	422-492	Nov. 10, 1942	Ts	16	.05	1.5	.2	71	--	163	2.4	16	.2	.0	--	188	4	--	--	--	--	8.2	--	--
305	391-600	do.	Ts	15	.25	2.1	.5	192	--	436	1.6	45	.3	.2	--	472	7	--	--	--	--	8.2	--	--
[9] 306	551-571	Sept. 13, 1952	Ts	18	--	14.1	3.0	--	--	289	.0	30	--	--	--	376	11	--	--	--	--	8.1	--	--
[9] 306	621-641	Sept. 17, 1952	Ts	16	--	4.4	1.8	--	--	241	.0	25	--	--	--	298	4	--	--	--	--	8.4	--	--
[9] 306	621-641	Sept. 18, 1952	Ts	20	--	5.7	3.6	--	--	262	.0	25	--	--	--	322	6	--	--	--	--	9.2	--	--
[9] 401	1,250-1,260	Oct. 16, 1952	Twi	--	3.0	3.8	.8	341	--	737	61	60	--	--	--	1,229	13	--	--	--	--	8.5	--	--
[9] 401	1,150-1,160	Oct. 23, 1952	Tc	--	1.1	3.7	1.1	322	--	744	0	72	--	--	--	1,189	14	--	--	--	--	8.5	26.0	79
[9] 401	539-549	Oct. 27, 1952	Tqc	--	2.25	4.6	1.0	345	--	829	0	59	--	--	--	1,276	16	--	--	--	--	8.5	28.0	82
[9] 401	439-449	Nov. 1, 1952	Tqc	--	3.0	4.9	1.5	488	--	1,084	0	134	--	--	--	1,719	19	--	--	--	--	8.5	--	--
[9] 401	269-279	Nov. 4, 1952	Ts	--	5.0	1.7	.5	222	--	450	16.5	70	--	--	--	791	6	--	--	--	--	8.9	26.0	79
[9] 402	1,120-1,330	Apr. 29, 1953	Twi,Tc	16	.4	2.2	.3	320	--	726	Trace	74	--	--	--	1,145	6.7	--	--	--	--	8.5	--	--
501	430-573	Aug. 23, 1943	Ts	19	.10	1.7	.2	69	--	159	1.5	16	.0	.0	--	186	5	--	--	--	280	8.1	--	--
[9] 502	420-440	Sept. 26, 1952	Ts	18	--	14	3.0	--	--	304	.0	28	--	--	--	--	11	--	--	--	--	8.5	--	--
[9] 502	420-440	Sept. 27, 1952	Ts	15	--	13	3.6	--	--	320	.0	28	--	--	--	392	11	--	--	--	--	8.5	--	--
[9] 502	540-560	Sept. 30, 1952	Ts	16	-- [1]	10	3.0	--	--	252	.0	25	--	--	--	318	8	--	--	--	--	8.3	--	--
507	451-471	July 24, 1970	Tcm	--	.03 [1]	3.1	.9	--	--	824	.0	214	--	--	--	--	11	--	--	13.3	1,850	7.7	--	--
508	246	do.	Ty	--	.06 [1]	4.4	1.3	--	--	752	63	210	--	--	--	--	16	--	--	12.0	1,820	7.8	--	--
701	710	Sept. 5, 1947	Tqc	--	--	3.4	1.2	355	--	623	204	44	--	.0	--	914	14	--	--	--	1,380	--	--	--
702	697	do.	Tqc	--	--	2.8	1.2	326	--	536	207	48	--	.0	--	849	12	--	--	--	1,380	--	--	--
[9] 704	366-473	Jan. 21, 1950	Ts	14	.15	1.5	.3	77	--	172	8.9	16	--	--	--	--	5	--	--	--	--	8.8	25.5	78
[10] 704	366-473	May 16, 1951	Ts	14	.1	1.1	.1	79	--	157	12	16	--	--	--	--	3	--	--	--	--	8.8	--	--
[9] 705	373-473	Apr. 18, 1950	Ts	15	.1	1.0	.2	113	--	218	21	34	--	--	--	--	3	--	--	--	--	8.7	26.0	79
[9] 705	373-473	May 16, 1951	Ts	14	.1	1.1	.1	111	--	211	23	33	--	--	--	--	3	--	--	--	--	8.5	--	--
[9] 706	400-503	May 10, 1950	Ts	14	--	1.4	.1	136	--	236	35	48	--	--	--	--	3	--	--	--	--	8.4	26.5	80
[9] 706	400-503	May 16, 1951	Ts	12	.1	1.3	.2	140	--	244	41	46	--	--	--	--	4	--	--	--	--	8.27	--	--
707	700?	Sept. 5, 1947	Tqc	--	--	3.6	1.1	315	--	556	164	50	--	--	--	808	14	--	--	--	1,390	--	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BRAZOS COUNTY														
BJ-59-21-710	840-1,040	July 24, 1970	Tqc	14	0.05 1/	2.1	0.6	428	--	976	16	84	1.6	0.0	--	--	3	99	107	15.9	1,680	8.1	--	--
6/ 711	190	Apr. 27, 1955	Tcm	--	--	24	4	370	--	630	85	195	--	--	--	--	78	--	--	--	--	--	--	--
6/ 712	24	Mar. 1955	Qt	--	--	208	37	128	--	342	52	436	--	--	--	--	676	--	--	--	--	--	--	--
713	394-602	Nov. 6, 1942	Ts	18	.02	3.1	1.2	193	--	310	49	89	--	.0	--	506	12	--	--	--	--	8.3	--	--
713	394-602	June 18, 1943	Ts	16	.07	3.1	.6	205	--	332	42	99	.5	.0	--	536	10	--	--	--	--	8.2	--	--
713	394-602	Sept. 5, 1947	Ts	15	.09	7.0	2.6	600	15	920	5.4	418	.8	.5	--	1,520	28	--	--	--	2,590	8.2	--	--
713	394-602	May 14, 1948	Ts	14	.6	2.5	1.6	210	--	338	44	102	.6	.0	--	556	12	--	--	--	966	7.6	28.0	82
713	394-602	Apr. 15, 1949	Ts	14	.19	2.0	.7	209	--	335	40	102	.6	.0	--	544	--	--	--	--	912	7.7	--	--
713	394-602	Feb. 10, 1950	Ts	13	.20	3.0	1.0	208	--	339	41	101	.4	.0	--	548	12	--	--	--	884	7.9	28.0	82
713	394-602	Oct. 27, 1950	Ts	14	.48	8.0	3.4	649	--	984	8.9	445	.8	.0	--	1,610	34	--	--	--	2,770	8.0	27.0	81
713	394-602	May 29, 1953	Ts	16	.10	.7	.2	108	--	204	25	30	.5	.2	--	288	3	--	--	--	473	8.1	26.5	80
9/ 714	2,741-2,989	Jan. 3, 1955	Twis	18	.1	7	2	247	--	572	11	56	--	--	--	913	26	--	--	--	--	--	--	--
714	2,741-2,989	Sept. 7, 1955	Twis	24	.16	2.6	.4	235	--	538	.2	55	.3	.0	--	583	8	--	--	--	961	8.1	48.0	118
714	2,741-2,989	July 31, 1956	Twis	24	.03	2.4	.5	235	--	536	.0	55	.5	.0	--	581	8	98	36	--	950	8.2	47.0	117
714	2,741-2,989	July 30, 1957	Twis	26	.36	2.7	.5	226	--	516	.2	54	.4	.0	--	564	8	--	--	--	950	7.6	--	--
715	498-588	Nov. 13, 1942	Ts	16	.04	18	7.6	106	--	245	44	41	.3	.2	--	354	76	--	--	--	--	8.2	--	--
715	498-588	June 18, 1943	Ts	15	.03	2.0	.4	124	--	217	40	40	.4	.0	--	336	6	--	--	--	--	8.3	--	--
716	400-500	June 29, 1954	Ts	15	.06	.0	.3	106	--	200	25	29	.5	.2	--	280	1	--	--	--	404	8.1	26.5	80
716	400-500	July 31, 1956	Ts	15	.03	.2	.1	107	--	202	24	30	.5	.0	--	276	1	99	47	--	457	8.5	26.5	80
716	400-500	June 27, 1955	Ts	15	.04	.0	.0	107	--	207	25	29	.4	.0	--	275	0	--	--	--	464	8.3	26.0	79
716	400-500	July 30, 1957	Ts	15	.07	.2	.2	103	--	191	24	30	.5	.2	--	270	1	99	37	--	459	7.5	27.0	81
717	401-487	Jan. 27, 1943	Ts	16	.07	1.5	1.0	113	--	215	27	33	.6	.0	--	297	8	--	--	--	--	8.3	--	--
717	401-487	June 22, 1943	Ts	14	.03	1.7	.4	110	--	212	26	31	.3	.0	--	293	6	--	--	--	--	8.3	--	--
717	401-487	Sept. 9, 1947	Ts	14	.09	.9	.3	109	3.2	208	26	34	.0	.2	--	290	4	--	--	--	465	8.0	--	--
717	401-487	May 14, 1948	Ts	12	9.4	1.2	.9	112	--	210	30	32	.0	1.0	--	298	8	--	--	--	492	8.4	27.0	81
717	401-487	Apr. 15, 1949	Ts	15	.14	.8	.2	110	--	207	27	31	.5	.0	--	291	3	--	--	--	483	8.5	--	--
717	401-487	Feb. 10, 1950	Ts	13	.08	.8	.2	109	--	206	27	30	.3	.0	--	291	3	--	--	--	461	8.1	27.0	81
717	401-487	Oct. 27, 1950	Ts	14	.16	.7	.3	109	--	206	26	30	.2	1.0	--	291	3	--	--	--	475	8.0	27.0	81
717	401-487	Dec. 13, 1951	Ts	14	.80	.6	.6	108	--	205	28	30	.1	.0	--	298	4	--	--	--	454	8.0	--	--
717	401-487	May 23, 1952	Ts	16	.30	.5	.1	108	--	203	26	29	.3	1.0	--	283	2	--	--	--	473	8.0	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BRAZOS COUNTY														
BJ-59-21-718	411-482	June 22, 1943	Ts	31	0.73	2.0	0.4	84	--	172	20	18	0.5	0.0	--	265	6	96	15	--	--	8.1	--	--
718	411-482	Sept. 5, 1947	Ts	14	.05	.5	.2	83	4.3	166	20	22	.0	.2	--	237	2	--	--	--	345	8.0	--	--
718	411-482	May 14, 1948	Ts	18	.2	1.2	1.0	81	--	164	24	17	.0	.8	--	224	7	--	--	--	358	7.6	26.5	80
718	411-482	Apr. 15, 1949	Ts	15	.18	.2	.2	83	--	167	19	17	.4	.0	--	219	1	--	--	--	360	8.4	--	--
718	411-482	Feb. 10, 1950	Ts	13	.12	.1	.2	84	--	167	19	18	.2	.0	--	221	1	--	--	--	364	8.3	26.5	80
718	411-482	Oct. 27, 1950	Ts	14	.16	.4	.4	81	--	166	18	16	.2	1.0	--	219	3	--	--	--	354	8.0	26.0	79
718	411-482	Dec. 14, 1951	Ts	15	.13	.6	.1	83	--	166	19	18	.1	1.0	--	221	2	--	--	--	339	8.2	--	--
718	411-482	May 23, 1952	Ts	15	.50	.0	.2	81	--	164	18	16	.4	1.5	--	213	1	--	--	--	353	8.0	28.0	82
718	411-482	May 29, 1953	Ts	18	.18	.2	.1	81	--	164	17	16	.5	.2	--	214	1	--	--	--	351	8.0	26.5	80
718	411-482	June 29, 1954	Ts	16	.06	.0	.2	82	--	164	18	18	.3	.8	--	218	1	--	--	--	349	7.7	28.0	82
718	411-482	June 23, 1955	Ts	15	.05	.0	.0	82	--	170	18	16	.4	.0	--	214	0	--	--	--	349	8.3	25.5	78
718	411-482	July 31, 1956	Ts	16	.04	.2	.1	81	--	165	17	16	.3	.0	--	212	1	99	35	--	345	8.6	26.5	80
718	411-482	July 30, 1957	Ts	16	.05	.2	.1	78	--	157	17	17	.4	.0	--	208	1	99	34	--	345	7.8	26.0	79
6/ 721	70	Apr. 1, 1958	Qt	--	--	84	5	15	--	325	17	--	--	--	--	--	227	--	--	--	--	--	--	--
6/ 722	30	Feb. 24, 1955	Qt	--	--	2	23	392	--	961	42	85	--	--	--	--	102	--	--	--	--	--	--	--
13/ 723	2,600-2,974	Oct. 14, 1960	Twis	25.3	.5	3.8	1.0	208	--	473	1	54	--	--	--	--	13.5	--	--	--	820	8.4	--	--
728	47	June 11, 1964	Qt	24	.60	109	14	96	--	408	131	44	.2	5.5	--	625	330	39	2.3	.10	973	6.9	21.5	71
801	34	July 22, 1970	Qt	--	.06 1/	42	3.3	--	--	140	6.2	4.6	--	--	--	--	118	--	--	.00	262	7.0	--	--
901	62	May 13, 1964	Ty	49	.10	60	15	102	--	158	36	188	.3	.2	--	528	211	51	3.0	.00	915	6.5	--	--
906	297-322	Dec. 8, 1969	Ty	28	.07 1/ 14/	12	2.3	159	--	217	47	110	.1	3.1	--	468	40	90	11	2.77	791	8.4	--	--
22-101	530-544	Nov. 13, 1969	Tcm	12	.06 1/ 5/	3.0	.9	391	--	744	.2	174	1.4	4.6	--	953	11	99	51	12.0	1,600	8.2	--	--
110	410	July 16, 1970	Tcm	--	.04 1/	4.7	1.2	--	--	530	187	152	.8	--	--	--	16	--	--	8.36	1,650	7.6	--	--
301	70-78	do.	Ty	70	2.7 1/	30	7.4	67	--	74	28	115	.2	.0	0.27	393	106	58	2.8	.00	578	6.4	22.0	71
15/ 401	1,563-1,950	Oct. 13, 1924	Tqc	21	6.2	5.0	3.4	704	--	751	--	667	--	--	--	1,777	26	--	--	--	--	--	--	--
401	1,563-1,950	Dec. 6, 1937	Tc,Twi	--	.06	4.2	2.6	1,030	--	1,770	3.5	568	.0	3.0	--	2,480	21	--	--	--	--	--	39.0	102
402	174-303	Dec. 7, 1937	Ty	--	1.5	32	9.3	84	--	90	48	125	.3	.0	--	344	118	--	--	--	--	--	24.5	76
403	232-870	do.	Ty,Ts	--	.02	7.0	3.1	669	--	939	4.1	502	1.1	.0	--	1,650	30	--	--	--	--	--	30.5	87
504	275-348	Nov. 20, 1969	Ty	16	.13 1/ 4/	2.2	.3	207	--	276	71	110	.0	2.2	--	545	6	99	37	4.39	912	7.7	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BRAZOS COUNTY																								
BJ-59-22-601	300	May 22, 1961	Ty	42	--	8.5	1.6	128	4.1	140	30	118	0.2	0.0	0.09	401	28	90	11	--	678	6.6	24.0	75
607	410	July 15, 1970	Ty	--	0.02 1/	2.0	.2	--	--	284	44	44	.2	--	--	--	6	--	--	4.53	668	8.1	--	--
23-101	328	Nov. 19, 1969	Ty	16	--	2.5	.6	208	--	340	70	76	.4	2.7	--	543	8	98	32	5.40	884	7.6	--	--
201	72	Dec. 12, 1969	Ty	--	1.9	9.7	1.4	--	--	436	5.6	98	--	--	--	--	30	--	--	6.55	959	8.2	20.0	68
403	1,180-1,210	Dec. 11, 1969	Ts	16	.15 1/ 4/	1.4	.6	438	--	1,090	.2	40	4.4	.4	--	1,040	6	99	78	17.7	1,740	8.5	--	--
404	--	July 15, 1970	Ty	--	.07 1/	8.2	1.0	--	--	374	41	145	--	--	--	--	24	--	--	5.64	1,120	7.7	--	--
703	550	Dec. 11, 1969	Ty	14	.08 1/ 4/	1.3	.2	253	--	468	85	56	.7	.3	--	642	4	99	55	7.61	1,060	8.8	25.5	78
29-206	63	July 20, 1970	Qfpa	20	1.2 1/	212	40	91	--	690	165	108	.2	.9	.26	978	694	22	1.5	.00	1,540	7.0	--	--
304	300?	do.	Ty	38	.06 1/	22	2.6	351	--	326	286	182	.4	7.5	--	1,050	66	92	19	4.03	1,670	7.5	--	--
305	274-315	July 21, 1970	Ty	--	.14 1/	10	1.0	--	--	336	273	129	--	--	--	--	29	--	--	4.93	1,500	7.6	--	--
307	462	July 22, 1970	Ty	--	--	1.8	.2	--	--	354	57	88	--	--	--	--	6	--	--	5.70	940	8.4	--	--
9/ 603	1,022-1,100	Sept. 19, 1966	Ts	14	.3	2.5	.4	338	--	732	36	72	.6	.10	--	840	8	--	--	--	1,382	8.3	--	--
603	1,022-1,100	Dec. 8, 1969	Ts	15	--	1.8	.6	359	--	786	22	82	.4	.9	--	869	7	99	59	12.8	1,410	8.8	--	--
30-101	771	Dec. 1, 1937	Ty	--	--	13	< 5	584	--	927	148	274	1.2	2.5	--	1,580	33	--	--	--	--	--	29.0	84
102	495	do.	Ty	--	--	11	< 5	313	--	378	195	138	--	< 20	--	843	27	--	--	--	--	--	--	--
6/ 103	960	Mar. 10, 1937	Ty	40	.2 1/	16	2.8	328	--	335	196	203	--	--	--	952	51	--	--	--	--	--	--	--
6/ 104	451	do.	Ty	20	.2 1/	4.0	1.7	578	--	916	223	206	--	--	--	1,485	17	--	--	--	--	--	--	--
301	360-445	Dec. 3, 1969	Ty	31	.03 1/ 5/	3.6	.4	315	--	484	166	86	.6	3.1	--	844	10	98	43	7.72	1,340	8.1	--	--
302	200	do.	Ty	32	--	80	8.0	920	--	436	1,200	438	--	12	--	2,900	232	90	26	2.50	4,100	7.8	--	--
402	410	July 20, 1970	Ty	--	.51 1/	31	3.0	--	--	382	436	315	--	--	--	--	90	--	--	4.46	2,450	7.4	--	--
704	700	Dec. 2, 1969	Ty	17	.11 1/ 14/	15	1.5	1,030	--	620	4.6	1,250	--	10	--	2,630	44	98	67	9.29	4,520	8.0	--	--
801	Spring	do.	Tj	--	.98 1/ 14/	21	3.6	--	--	36	20	97	--	--	--	--	67	--	--	--	456	5.7	21.0	70
805	1,147-1,177	July 22, 1970	Ty	18	.00	3.3	.6	547	--	1,000	.0	264	2.9	.0	--	1,330	10	99	75	16.2	2,240	8.1	--	--
806	1,125-1,155	do.	Ty	--	.00	3.0	.5	--	--	930	.0	197	--	--	--	--	10	--	--	15.0	1,930	8.1	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BRAZOS COUNTY														
BJ-59-30-807	1,115-1,155	July 22, 1970	Ty	--	0.03 1/	2.9	0.5	--	--	964	0.0	194	--	--	--	--	9	--	--	16	1,950	8.1	--	--
31-201	324-344	Dec. 11, 1969	Ty	--	.03 1/ 4/	14	1.2	--	--	642	.2	620	--	--	--	--	40	--	--	9.74	2,830	8.4	--	--
401	674	July 16, 1970	Ty	38	.04 1/	12	.9	710	--	770	.0	670	0.7	0.0	5.2	1,820	34	98	53	12.0	3,160	8.1	--	--
504	500?	Dec. 4, 1969	Ty	--	3.1 5/	116	6.8	--	--	430	1.6	3,100	--	--	--	--	318	--	--	.70	9,860	7.2	23.5	74
506	700?	Dec. 11, 1969	Ty	--	--	78	4.8	--	--	496	17	2,800	--	--	--	--	214	--	--	3.85	9,090	8.0	25.0	77
601	Spring	Aug. 9, 1948	Tj	48	--	22	3.7	540	--	478	103	528	--	--	--	1,480	70	--	--	--	2,600	--	22.0	72
601	Spring	July 16, 1970	Tj	--	.44 1/	24	1.6	--	--	524	94	518	--	--	--	--	66	--	--	7.26	2,540	7.4	--	--
701	287	Dec. 4, 1969	Tj	--	--	3.6	.4	--	--	952	.0	235	--	--	--	--	10	--	--	15.4	2,030	7.9	--	--
802	70-82	Dec. 3, 1969	Tj	--	--	60	6.0	--	--	220	190	420	--	--	--	--	174	--	--	.13	2,050	7.6	--	--
805	25	Dec. 17, 1969	Tj	--	--	46	8.8	--	--	176	92	198	--	--	--	--	151	--	--	.00	1,090	7.1	--	--
38-201	1,297?	Dec. 9, 1969	Ty	27	--	54	3.9	1,050	--	682	6.0	1,320	--	.1	--	2,800	150	94	37	8.18	4,720	8.3	--	--
606	70	July 24, 1964	Qfpa	30	7.3	142	23	38	3.4	556	27	36	.4	.0	.19	573	449	15	.8	.13	940	7.0	21.5	71
6/ 901	70	Aug. 15, 1957	Qfpa	--	--	167	45	195	--	933	21	170	--	--	--	1,531	599	--	--	--	--	--	--	--
901	70	July 16, 1970	Qfpa	28	4.1	176	66	561	--	660	115	900	--	.0	1.9	2,180	710	63	9.1	.00	3,820	7.2	--	--
6/ 902	73	Aug. 15, 1957	Qfpa	--	--	181	34	119	--	659	44	188	--	--	--	1,225	599	--	--	--	--	--	--	--
902	73	July 22, 1963	Qfpa	36	12	160	39	185	--	870	4.8	172	.3	.0	.59	1,030	560	42	3.4	3.07	1,690	6.9	21.0	70
6/ 903	73	June 21, 1956	Qfpa	--	--	121	33	120	--	475	71	167	--	--	--	957	438	--	--	--	--	--	--	--
903	73	July 16, 1970	Qfpa	59	.00 1/	146	24	110	--	496	93	140	.3	.0	.27	817	463	34	2.2	.00	1,300	7.0	21.0	69
6/ 904	66	Sept. 19, 1956	Qfpa	--	--	173	18	376	--	791	44	447	--	--	--	1,801	509	--	--	--	--	--	--	--
6/ 904	66	Aug. 15, 1957	Qfpa	--	--	151	42	476	--	1,177	28	418	--	--	--	2,292	547	--	--	--	--	--	--	--
909	65	Aug. 11, 1964	Qfpa	40	11	154	36	74	4.1	602	28	121	.4	.0	.34	754	532	23	1.4	.00	1,250	6.8	21.0	70
924	66	July 16, 1970	Qfpa	39	5.9	175	45	155	--	796	74	159	.4	4.0	.48	1,050	622	35	2.7	.62	1,710	7.0	--	--
925	480	do.	Ty	--	1.2	11	.3	--	--	478	.0	340	--	--	--	--	28	--	--	7.26	1,790	7.2	--	--
39-101	508-528	Jan. 7, 1943	Ty	--	--	15	1.9	873	--	1,490	2	940	.4	--	--	2,200	46	--	--	--	--	--	--	--
201	120	July 16, 1970	Tj	95	7.1	50	15	163	--	252	35	209	.3	2.7	--	701	186	--	--	--	1,130	6.6	--	--
401	125	Dec. 10, 1969	Tj	51	2.0 5/	36	3.3	55	--	226	12	17	.2	.2	--	286	103	54	2.4	1.64	420	6.7	--	--
404	280?	Jan. 20, 1970	Tj	47	.06	4.0	.1	125	--	269	7.2	36	1.3	.2	1.5	354	10	96	17	4.20	539	7.7	--	--
506	300?	July 21, 1970	Tj	--	.03 1	1.6	.0	--	--	120	12	20	--	--	--	--	4	--	--	1.89	283	7.6	22.0	72

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BRAZOS COUNTY																								
BJ-59-39-507	292	Dec. 10, 1970	Tj	76	--	0.7	0.0	71	--	142	12	18	0.5	1.0	--	249	2	99	22	2.29	325	7.8	--	--
606	61	July 9, 1963	Qfpa	24	2.7	152	29	95	--	652	54	80	.4	.0	0.48	756	498	29	1.9	.72	1,200	6.8	21.0	70
611	60	do.	Qfpa	28	4.3	200	34	152	--	752	90	184	.2	.0	.36	1,060	639	34	2.6	.00	1,690	7.1	21.0	70
611	60	July 21, 1970	Qfpa	28	--	257	41	151	--	744	124	282	.2	.0	.31	1,250	810	29	2.3	.00	2,070	7.1	21.0	70
613	258	July 16, 1970	Tj	--	.08 [1]	1.3	.0	--	--	144	11	16	--	--	--	--	3	--	--	2.30	318	7.3	--	--
614	400?	July 21, 1970	Tj	--	.13 [1]	1.5	.0	--	--	146	20	41	--	--	--	--	4	--	--	2.32	405	7.5	23.0	73
701	60	July 9, 1963	Qfpa	27	.06	218	51	164	--	764	160	225	.4	.0	.43	1,220	754	32	2.6	.00	1,910	6.9	21.0	70
705	73	do.	Qfpa	27	6.2	176	37	108	--	786	47	93	.4	.0	.38	876	591	28	1.9	1.06	1,400	6.9	21.0	70
705	73	July 24, 1964	Qfpa	27	6.4	161	36	97	3.9	736	33	85	.4	.0	.40	806	550	28	1.8	1.07	1,340	6.9	22.0	72
712	600?	Jan. 20, 1970	Ty	76	.65	167	12	309	--	734	.0	380	.2	.4	1.4	1,310	466	59	6.2	2.71	2,170	6.8	--	--
806	--	July 16, 1970	Qfpa	--	5.2	165	31	--	--	726	22	58	--	--	.24	--	539	--	--	1.12	1,210	7.1	--	--
807	1,000?	Dec. 18, 1969	Ty	--	.16 [1] [13]	8.4	.3	--	--	216	18	340	--	--	--	--	22	--	--	3.10	1,480	7.6	27.0	81
903	62	July 20, 1970	Qfpa	--	.35 [1]	132	26	--	--	536	28	57	--	--	.13	--	436	--	--	.06	992	7.0	21.0	70
907	70	July 23, 1964	Qfpa	24	.05	153	41	71	3.5	648	109	49	.3	.0	.30	770	550	22	1.3	.00	1,230	6.9	21.5	71
910	70	July 20, 1970	Qfpa	--	6.3	194	34	--	--	710	85	64	--	--	.19	--	624	--	--	--	1,310	7.2	21.0	70
915	1,050?	July 21, 1970	Ty	--	.04 [1]	1.8	.0	--	--	158	33	74	--	--	--	--	4	--	--	2.50	553	7.4	28.0	82
917	250?	July 20, 1970	Tcs	--	.10 [1]	26	1.0	--	--	792	.0	252	--	--	--	--	69	--	--	12.0	1,920	7.5	--	--
40-403	73	Dec. 18, 1969	Tcs	--	1.9 [1]	122	33	--	--	792	116	110	--	--	--	--	440	--	--	4.18	1,640	7.3	--	--
47-104	114	Nov. 4, 1970	Tcs	--	--	22	.7	--	--	720	.2	110	--	--	--	--	58	--	--	11.0	1,380	7.6	--	--
305	245	June 11, 1963	Tcs	41	.36 [1]	73	4.9	85	--	356	25	48	.3	.0	--	452	202	48	2.6	1.79	744	6.8	26.5	79
308	146	Jan. 20, 1970	Tcs	46	1.2	54	2.9	--	--	384	22	34	.3	--	--	--	146	--	--	3.36	703	7.3	--	--
BURLESON COUNTY																								
BS-59-18-901	58	Sept. 2, 1936	Tqc	--	--	--	--	--	--	43	20	39	--	--	--	124	--	--	--	--	--	--	--	--
903	315-357	Mar. 24, 1970	Tqc	--	17 [1]	62	6.0	--	--	182	50	54	--	--	--	--	179	--	--	.00	551	6.5	--	--
[16] 904	635	Oct. 1965	Twi,Tc	20	2	48	13	32	--	171	62	27	--	--	--	375	173	--	--	--	--	7.5	--	--
904	635	Mar. 24, 1970	Twi,Tc	12	.72 [1]	44	12	34	--	173	59	21	.1	.0	.06	268	159	32	1.2	.00	457	7.3	--	--
[16] 906	200	June 1964	Tqc	27	12	47	8	59	--	217	38	44	--	--	--	452	--	--	--	--	--	7.3	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BURLESON COUNTY																								
BS-59-19-401	66	Sept. 2, 1936	Tqc	--	--	--	--	--	--	85	28	216	--	--	--	447	--	--	--	--	--	--	--	--
601	15	Sept. 1, 1936	Tqc	--	--	--	--	--	--	49	< 10	27	--	--	--	82	--	--	--	--	--	--	--	--
603	58	do.	Tqc	--	--	22	16	84	--	6	142	106	--	--	--	373	120	--	--	--	--	--	--	--
604	301-334	Mar. 25, 1970	Tqc	--	53 1/	56	22	--	--	20	161	98	--	--	--	--	230	--	--	0.00	690	5.6	--	--
701	42	Sept. 2, 1936	Tqc	--	--	24	27	71	--	232	79	38	--	--	--	353	171	--	--	--	--	--	--	--
702	210-240	Apr. 14, 1970	Tqc	--	13 1/	72	17	--	--	194	53	80	--	--	--	--	250	--	--	.00	654	6.8	--	--
802	37	Sept. 2, 1936	Tqc	--	--	--	--	--	--	61	779	160	--	--	--	1,400	--	--	--	--	--	--	--	--
803	65	Nov. 23, 1936	Tqc	--	--	--	--	--	--	122	51	265	--	--	--	587	--	--	--	--	--	--	--	--
804	300?	Mar. 27, 1970	Tqc	--	--	43	12	--	--	182	42	18	--	--	0.10	--	157	--	--	.00	414	7.4	21.0	70
805	230	Mar. 31, 1970	Tqc	18	.42 1/	45	10	30	--	172	40	25	0.1	0.0	--	254	153	30	1.1	.00	424	7.7	--	--
806	62	Oct. 21, 1936	Tw	--	--	--	--	--	--	183	335	140	--	--	--	843	--	--	--	--	--	--	--	--
902	90-132	Mar. 26, 1970	Ts	--	.25 1/	76	31	--	--	236	145	76	--	--	.18	--	317	--	--	.00	847	7.2	--	--
903	163-205	do.	Ts	--	.11 1/	37	12	--	--	212	34	7.8	--	--	--	--	142	--	--	.64	412	7.3	--	--
20-116	22	May 14, 1964	Qt	46	.06	46	3.7	19	--	132	18	28	.2	6.0	--	232	130	24	.7	.00	357	7.0	21.0	70
120	950?	Nov. 27, 1936	Twi,Tc	--	--	30	7	46	--	153	50	19	--	--	--	227	105	--	--	--	--	--	--	--
120	950?	Feb. 1, 1971	Twi,Tc	16	.10 1/	10	2.6	110	--	196	73	23	.0	2.7	--	336	36	87	8.0	2.57	533	8.8	25.5	78
121	1,250	Mar. 25, 1970	Twi,Tc	17	.23 1/	1.6	.2	220	--	512	31	22	.3	.5	.34	545	5	99	43	8.29	910	8.2	--	--
122	700?	Nov. 27, 1936	Tqc	--	--	8	2	122	--	207	81	29	--	--	--	344	31	--	--	--	--	--	--	--
401	40	Sept. 22, 1936	Tw	--	--	94	99	540	--	238	303	925	--	--	--	2,170	641	--	--	--	--	--	--	--
402	500?	do.	Tqc	--	--	7	2	150	--	244	106	30	--	--	--	415	27	--	--	--	--	--	--	--
545	Spring	May 1964	Ts	--	--	--	--	--	--	380	94	135	--	--	--	--	444	--	--	.00	1,160	7.2	--	--
704	40	Mar. 26, 1970	Ts	38	4.0	44	14	46	--	24	11	167	.0	2.3	--	334	168	37	1.5	.00	621	5.1	--	--
25-501	362	July 16, 1964	Tc	--	--	--	--	--	--	136	28	16	--	--	.10	--	112	--	--	.00	328	7.0	23.5	74
503	171-211	Mar. 30, 1970	Tqc	--	62 1/	120	38	--	--	0 18/	396	140	--	--	--	--	456	--	--	.00	1,210	4.1	--	--
505	210-231	do.	Tqc	--	4.4	38	9.5	--	--	122	32	50	--	--	--	--	134	--	--	.00	406	6.5	--	--
901	315	do.	Tqc	--	2.2 1/	34	11	--	--	128	77	16	--	--	--	--	130	--	--	.00	402	7.2	22.0	72
903	270-310	do.	Tqc	--	38 1/	90	31	--	--	0 19/	297	105	--	--	--	--	352	--	--	.00	943	3.8	21.0	70

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	°F
										BURLESON COUNTY														
BS-59-26-202	350	Mar. 23, 1970	Tc	--	11	88	26	--	--	140	144	111	--	--	--	--	326	--	--	0.00	844	6.7	--	--
203	23	Sept. 4, 1936	Tqc	--	--	76	16	52	--	153	130	76	--	--	--	425	255	--	--	--	--	--	--	--
302	90	do.	Tqc	--	--	--	--	--	--	159	< 10	74	--	--	--	246	--	--	--	--	--	--	--	--
303	27	do.	Tqc	--	--	--	--	--	--	24	173	112	--	--	--	440	--	--	--	--	--	--	--	--
304	Spring	Sept. 16, 1936	Tqc	--	--	--	--	--	--	61	< 10	29	--	--	--	95	--	--	--	--	--	--	--	--
305	48	Oct. 1, 1936	Tqc	--	--	--	--	--	--	177	165	51	--	--	--	459	--	--	--	--	--	--	--	--
306	17	Sept. 11, 1936	Tqc	--	--	--	--	--	--	31	< 10	27	--	--	--	67	--	--	--	--	--	--	20.5	69
501	36	Sept. 15, 1936	Tqc	--	--	--	--	--	--	61	< 10	30	--	--	--	97	--	--	--	--	--	--	--	--
502	39	Sept. 12, 1936	Ts	--	--	--	--	--	--	43	< 10	36	--	--	--	91	--	--	--	--	--	--	--	--
601	42	Jan. 1, 1951	Tw	23	--	112	69	69	--	164	334	163	--	1.5	--	913	563	--	--	--	1,450	8.0	--	--
604	30	Oct. 9, 1936	Tqc	--	--	--	--	--	--	159	79	74	--	--	--	357	--	--	--	--	--	--	--	--
605	85	Sept. 12, 1936	Ts	--	--	26	16	20	--	24	< 10	109	--	--	--	183	130	--	--	--	--	--	--	--
606	Spring	Oct. 8, 1936	Ts	--	--	--	--	--	--	24	< 10	15	--	--	--	43	--	--	--	--	--	--	--	--
701	42	Sept. 22, 1936	Tqc	--	--	68	15	111	--	12	170	200	--	--	--	570	229	--	--	--	--	--	--	--
702	497-583	Mar. 27, 1970	Tc	18	.39 1/	20	3.0	31	--	120	24	4.5	0.1	.0	0.15	160	62	52	1.7	.72	262	6.8	20.0	68
703	542-563	do.	Tc	8.1	.07 1/	16	3.1	32	--	104	25	6.9	.1	.0	.08	142	53	57	1.9	.66	241	8.6	20.0	68
801	48	Sept. 3, 1936	Tw	--	--	234	--	90	--	128	236	305	--	--	--	928	585	--	--	--	--	--	--	--
802	606-648	Mar. 30, 1970	Tc	--	48 1/	47	19	--	--	48	144	60	--	--	--	--	196	--	--	.00	558	6.0	--	--
902	47	Oct. 10, 1936	Ts	--	--	18	9	95	--	37	138	80	--	--	--	358	80	--	--	--	--	--	--	--
27-201	167?	Apr. 14, 1970	Tqc	--	.46 1/	48	14	--	--	203	15	27	--	--	--	--	177	--	--	.00	430	7.6	20.5	69
202	227	Oct. 21, 1936	Ts	--	--	30	16	24	--	183	16	18	--	--	--	194	140	--	--	--	--	--	23.0	73
203	27	do.	Ts	--	--	2	9	7	--	49	< 10	11	--	--	--	53	40	--	--	--	--	--	--	--
204	163-205	Mar. 26, 1970	Ts	--	.00 1/	33	11	--	--	190	16	15	--	--	.11	--	128	--	--	.56	366	7.4	--	--
205	9	Oct. 21, 1936	Ts	--	--	--	--	--	--	31	< 10	53	--	--	--	108	--	--	--	--	--	--	--	--
303	350?	Apr. 1, 1970	Tqc	--	--	20	6.0	--	--	164	24	12	--	--	--	--	75	--	--	1.20	349	7.1	--	--
305	24	Nov. 2, 1936	Tcm	--	--	282	1	250	--	--	953	250	--	--	--	1,740	711	--	--	--	--	--	--	--
401	45	Nov. 13, 1936	Ts	--	--	--	--	--	--	79	20	13	--	--	--	114	--	--	--	--	--	--	--	--
501	32	Sept. 19, 1936	Tcm	--	--	--	--	--	--	12	213	396	--	--	--	931	--	--	--	--	--	--	--	--
502	1,030-1,070	Apr. 3, 1970	Tc	15	.19 1/	1.4	.3	136	--	260	59	18	.2	.4	.24	358	4	98	30	4.17	598	8.0	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	°F
BURLESON COUNTY																								
BS-59-27-504	19	Sept. 2, 1936	Ts	--	--	--	--	--	--	37	< 10	33	--	--	--	82	--	--	--	--	--	--	--	--
601	124	Sept. 21, 1936	Tcm	--	--	338	216	226	--	250	1,500	325	--	--	--	2,730	1,730	--	--	--	--	--	--	--
602	315	Sept. 19, 1936	Ts	--	--	14	9	18	--	79	< 10	32	--	--	--	112	70	--	--	--	--	--	--	--
603	518-560	Apr. 1, 1970	Tqc	17	0.31	29	6.9	46	--	186	36	6.9	0.0	0.9	0.10	234	101	50	2.0	1.03	389	7.2	--	--
605	330	do.	Tqc	--	3.9 1/	13	4.8	--	--	100	5.6	21	--	--	--	--	52	--	--	.60	235	6.3	--	--
606	600	do.	Tqc	--	2.5 1/	1.2	.1	--	--	88	.2	30	--	--	--	--	3	--	--	1.37	237	6.7	--	--
609	498-540	do.	Tqc	20	.19 1/	31	7.3	46	--	188	39	7.2	.0	2.7	--	245	107	48	1.9	.93	399	7.3	--	--
702	20	Oct. 8, 1936	Tcm	--	--	44	9	52	--	195	47	34	--	--	--	282	145	--	--	--	--	--	--	--
703	190	Mar. 24, 1970	Ts	--	--	1.7	.3	--	--	252	48	18	--	--	--	--	5	--	--	4.03	546	8.2	--	--
706	900?	Apr. 14, 1970	Tc	--	.16 1/	3.5	.9	--	--	266	61	20	--	--	.30	--	12	--	--	4.12	609	7.9	--	--
708	92	Sept. 25, 1936	Tcm	--	--	59	51	80	--	293	157	90	--	--	--	581	357	--	--	--	--	--	--	--
712	700?	May 8, 1970	Tqc	16	.05 1/	5.1	1.7	107	--	238	37	12	.1	1.2	.18	297	20	92	10	3.51	491	7.9	--	--
713	381-421	Apr. 14, 1970	Ts	--	.24 1/	55	20	--	--	288	39	7.6	--	--	--	--	220	--	--	.33	528	7.5	--	--
12/ 714	178-195	Jan. 7, 1964	Ts	21	.57 1/	3	2.6	15	--	27	3	18	.2	--	--	90	18	--	--	--	110	7.0	--	--
12/ 714	368-385	Jan. 9, 1964	Tqc	8	.51 1/	53	21	33	--	254	58	16	.2	--	--	443	220	--	--	--	510	8.2	--	--
12/ 714	1,102-1,119	Jan. 12, 1964	Tc	9	1.96	2	2	156	--	317	53	26	.5	--	--	565	13	--	--	--	640	8.2	--	--
12/ 714	1,260-1,272	Jan. 14, 1964	Twi	11	.52	.5	.6	119	--	239	42	17	.5	--	--	430	5	--	--	--	500	8.8	--	--
12/ 714	1,070-1,304	Feb. 1, 1964	Twi,Tc	11	.15	1	1	122	--	250	41	15	.8	--	--	429	6	--	--	--	520	8.9	--	--
12/ 714	1,070-1,304	Feb. 19, 1971	Twi,Tc	16	.11 1/	2.0	.4	130	0.8	260	49	16	.1	.4	.16	339	6	97	23	4.14	552	8.7	30.0	80
715	547	July 6, 1970	Tqc	25	1.2 1/	91	30	44	--	152	209	73	.1	.9	--	549	350	21	1.0	.00	837	6.7	--	--
801	140-160	Sept. 25, 1936	Ts	--	--	4	6	15	--	43	< 10	22	--	--	--	68	34	--	--	--	--	--	--	--
801	140-160	Dec. 15, 1939	Ts	--	3.95	5.4	2.6	16	--	26	8.0	21	--	.0	--	90	24	--	--	--	--	5.6	--	--
801	140-160	June 25, 1943	Ts	25	3.8	7.1	1.8	8.6	8.2	26	4	20	.2	.0	--	92	25	--	--	--	--	6.0	23.0	73
802	271	Sept. 25, 1936	Ts	--	--	7	5	22	--	67	< 10	22	--	--	--	89	38	--	--	--	--	--	23.0	73
802	271	Sept. 26, 1938	Ts	22	--	15	2.7	23	--	61	7.1	28	.4	.4	--	107	48	--	--	--	--	6.8	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
											BURLESON COUNTY													
BS-59-27-803	1,048-1,206	June 25, 1943	Twi,Tc	15	0.03	1.2	0.3	143	4.4	289	53	20	0.4	0.0	--	380	4	--	--	--	608	8.0	28.5	83
[12] 803	1,048-1,206	Jan. 14, 1964	Twi,Tc	11	.05	1	.4	147	--	295	53	19	--	--	--	523	4	--	--	--	620	8.7	--	--
804	1,036-1,134	Sept. 10, 1947	Twi,Tc	14	.19	2.0	.5	134	7.4	268	51	24	.0	1.8	--	367	7	--	--	--	576	8.0	--	--
804	1,036-1,134	Feb. 18, 1971	Twi,Tc	15	.03 [1]	2.2	.4	140	1.2	290	53	20	.2	1.8	0.21	377	7	97	23	4.62	618	8.5	--	--
805	275?	Feb. 2, 1971	Ts	27	1.2 [1]	4.2	1.4	15	--	24	5.0	16	.0	.5	.07	82	16	67	1.6	.07	106	6.7	21.0	70
806	351	Sept. 25, 1936	Ts	--	--	7	5	14	--	49	< 10	20	--	--	--	70	38	--	--	--	--	--	--	--
807	353	Dec. 15, 1939	Ts	--	3.5	--	--	19	--	28	15	30	--	.0	--	92	39	--	--	--	--	6.5	--	--
901	528-570	Apr. 3, 1970	Ts	--	7.8 [1]	11	4.7	--	--	84	.2	25	--	--	--	--	47	--	--	.44	219	6.6	--	--
[6] 28-201	51	July 6, 1957	Qfpa	--	--	154	41	67	--	488	58	170	--	--	--	978	567	--	--	--	--	--	--	--
202	1,200?	June 16, 1963	Tqc	17	.05	2.5	.7	207	1.3	404	72	42	.3	.8	.50	544	9	98	30	6.44	874	7.9	31.0	88
204	1,100?	Mar. 13, 1970	Tqc	14	.18	.8	.2	226	--	510	34	26	.8	3.5	--	556	3	99	57	7.77	898	8.5	29.0	84
206	1,475	Apr. 1, 1970	Twi,Tc	16	.25 [1]	2.8	.5	165	--	306	76	25	.2	1.5	.19	437	9	98	24	4.84	713	7.9	--	--
207	228	do.	Tqc	--	.96 [1]	66	25	--	--	216	374	98	--	--	--	--	268	--	--	.00	1,340	7.1	--	--
208	198-240	do.	Tqc	--	.02 [1]	52	12	--	--	206	454	112	--	--	--	--	179	--	--	.00	1,560	7.1	--	--
209	158-200	do.	Ts	--	.97 [1]	2.4	.8	--	--	126	14	29	--	--	.06	--	9	--	--	1.88	319	7.2	29.0	84
210	800?	Nov. 20, 1936	Tqc	--	--	--	--	--	--	323	96	22	--	--	--	435	--	--	--	--	--	--	--	--
312	79	June 27, 1963	Qfpa	21	.15	186	51	120	--	764	181	85	.3	.0	.46	1,020	674	28	2.0	.00	1,550	6.9	20.5	69
[6] 315	55	Aug. 23, 1956	Qfpa	--	--	44	29	381	--	534	131	340	--	--	--	--	230	--	--	--	--	--	--	--
316	61	June 27, 1963	Qfpa	20	2.7	232	66	124	--	788	243	155	.3	1.2	.52	1,230	850	24	1.8	.00	1,880	6.6	20.5	69
325	980	June 17. 1963	Tqc	14	.04	1.5	.1	258	1.6	396	184	40	.4	.0	.85	697	4	99	56	6.41	1,100	7.8	26.0	79
326	787	do.	Tqc	14	.07	1.5	.1	202	1.3	316	138	31	.2	.0	.58	545	4	99	44	5.10	870	7.8	24.0	75
327	--	June 27. 1963	Qfpa	20	7.5	133	28	56	--	636	8.8	27	.4	.0	.42	587	447	21	1.2	1.48	960	6.8	21.0	70
501	57	July 2, 1963	Qfpa	19	2.2	256	68	276	--	742	420	335	.4	.0	.36	1,740	918	40	3.9	.00	2,540	6.7	21.0	70
[6] 502	50	Oct. 1, 1956	Qfpa	--	--	173	108	139	--	897	137	213	--	--	--	--	885	--	--	--	--	--	--	--
503	1,000?	Aug. 8, 1963	Tqc	13	.14	1.5	.4	170	--	236	92	60	.3	.0	.28	454	5	99	33	3.77	758	7.8	27.0	81
[6] 601	58	Sept. 17, 1956	Qfpa	--	--	202	78	294	--	693	382	351	--	--	--	--	824	--	--	--	--	--	--	--
[6] 601	58	Oct. 16, 1956	Qfpa	--	--	180	119	280	--	786	400	379	--	--	--	--	935	--	--	--	--	--	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BURLESON COUNTY																								
BS-59-28-610	65	June 27, 1963	Qfpa	24	12	272	60	141	--	868	174	240	0.3	0.0	0.22	1,340	926	25	2.0	0.00	2,120	6.6	20.5	69
617	500?	Dec. 17, 1936	Ts	--	--	--	--	--	--	348	35	41	--	--	--	399	--	--	--	--	--	--	--	--
618	500?	do.	Ts	--	--	--	--	--	--	256	27	40	--	--	--	311	--	--	--	--	--	--	--	--
12/ 619	685-765	June 29, 1967	Ts	14	.18	.4	0	75	--	146	15	19	.3	.1	--	270	1	--	--	--	304	8.12	--	--
620	800?	Nov. 20, 1936	Ts	--	--	5	2	66	--	165	< 10	21	--	--	--	175	21	--	--	--	--	--	--	--
620	350?	Apr. 2, 1970	Tcm?	12	.64 1/	20	5.4	926	--	356	896	600	.4	2.8	1.6	2,630	72	97	47	4.39	4,150	7.9	23.0	73
701	553	do.	Ts	17	.30 1/	7.2	2.6	157	--	162	42	137	.1	.0	.21	443	28	92	13	2.09	776	7.4	--	--
702	456-498	do.	Ts	19	.04 1/	13	4.6	105	--	106	61	90	.1	1.8	.14	347	52	82	.6	.71	594	6.7	--	--
703	436-478	Apr. 3, 1970	Ts	20	.97 1/	8.1	2.8	141	--	130	83	101	.1	1.9	.17	423	32	91	11	1.50	732	6.8	--	--
801	58	Dec. 17, 1936	Ty	--	--	327	74	342	--	122	533	860	--	--	--	2,200	1,120	--	--	--	--	--	--	--
904	115	Sept. 23, 1936	Ty	--	--	116	31	454	--	220	413	565	--	--	--	1,690	419	--	--	--	--	--	--	--
905	1,560	Jan. 8. 1937	Tqc?	--	--	1	2	386	--	683	218	45	--	--	--	988	12	--	--	--	--	--	--	--
905	1,560	Oct. 29, 1970	Tqc?	--	.06 1/	30	.9	--	--	682	240	50	--	--	--	--	78	--	--	9.61	1,580	8.2	33.0	91
906	1,200?	Jan. 8, 1937	Tqc?	--	--	7	2	597	--	1,050	8	325	--	--	--	1,160	27	--	--	--	--	--	--	--
906	1,200?	Oct. 29, 1970	Tqc?	18	.04 1/	2.7	.9	570	--	1,010	.0	300	2.2	.0	1.9	1,390	10	99	78	16.4	2,360	8.1	39.0	102
907	239	Apr. 22, 1957	Ty	--	--	--	--	--	--	450	50	53	--	--	--	600	12	--	--	--	985	8.1	--	--
907	239	Oct. 29. 1970	Ty	14	.01 1/	3.9	.9	--	--	464	63	55	1.6	--	--	--	13	--	--	7.34	983	8.2	--	--
29-107	57	Aug. 5, 1964	Qfpa	18	.03	190	20	91	3.2	460	171	142	.1	6.5	.12	868	556	26	1.7	.00	1,380	7.0	20.5	69
109	56	June 27. 1963	Qfpa	20	7.3	142	43	139	--	636	144	115	.2	.0	.34	917	532	36	2.6	.00	1,450	6.9	21.0	70
112	--	do.	Qfpa	22	4.9	244	59	242	--	596	332	385	.2	.0	.37	1,580	852	38	3.6	.00	2,440	6.9	21.5	71
410	71	June 18, 1963	Qfpa	22	.81	178	73	175	--	654	276	212	.3	.0	.52	1,260	744	34	2.8	.00	1,880	7.1	22.0	72
426	55	Aug. 5, 1964	Qfpa	20	1.0	178	49	196	3.7	664	224	212	.2	1.2	.37	1,210	646	40	3.4	.00	1,890	7.2	20.5	69
433	59	June 27, 1963	Qfpa	23	15	188	39	79	--	812	2.4	94	.4	.0	.38	825	630	21	1.4	.72	1,380	6.8	21.0	70
450	108-134	May 5. 1970	Ty	--	.21 1/	24	3.7	--	--	812	.0	370	.6	--	8.4	--	75	--	--	11.8	2,290	7.6	--	--
451	661	do.	Ts?	--	.17 1/	7.9	1.5	--	--	588	23	190	.7	--	2.2	--	26	--	--	9.13	1,500	7.7	--	--
452	1,150-1,200	Oct. 29. 1970	Tqc	15	.01 1/	1.5	.6	380	--	726	160	50	1.5	.1	1.4	967	6	99	67	11.8	1,510	8.3	31.0	88
502	63	July 15, 1964	Qfpa	22	6.9	110	43	187	2.5	624	114	164	.5	.2	.84	951	452	47	3.8	1.20	1,540	7.3	21.5	70

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BURLESON COUNTY														
BS-59-29-509	55	June 18, 1963	Qfpa	24	9.3	178	47	141	--	900	27	125	0.3	0.0	0.52	986	638	32	2.4	2.00	1,640	6.9	20.5	69
509	55	July 6, 1964	Qfpa	26	9.0	179	46	148	3.9	890	28	143	.4	.0	.39	1,010	636	33	2.5	1.88	1,660	7.0	--	--
509	55	July 9, 1970	Qfpa	21	--	175	46	129	--	842	22	361	--	.0	.41	943	625	31	2.2	1.29	1,630	6.7	20.5	70
527	2,000?	do.	Tqc	--	.08 1/	1.7	.6	--	--	994	58	162	--	--	--	--	6	--	--	16.2	2,020	8.3	--	--
535	1,912	do.	Tqc	19	.02 1/	2.4	.9	748	--	1,450	.2	310	3.6	.0	3.6	1,800	10	99	103	23.6	2,900	8.2	34.5	94
6/ 703	57	June 9, 1955	Qfpa	--	--	288	73	292	--	723	339	502	--	--	--	--	1,019	--	--	--	--	--	--	--
6/ 705	48	Aug. 9, 1954	Qfpa	--	--	233	119	325	--	828	445	443	--	--	--	--	1,074	--	--	--	--	--	--	--
6/ 705	48	Sept. 2, 1954	Qfpa	--	--	296	95	213	--	738	437	372	--	--	--	--	1,131	--	--	--	--	--	--	--
709	--	June 18, 1963	Qfpa	21	7.4	200	51	152	--	768	156	175	.2	.0	.76	1,130	709	32	2.5	.00	1,800	6.9	22.0	72
730	890	Nov. 17, 1936	Ts	--	--	5	1	86	--	171	42	16	--	--	--	234	16	--	--	--	--	--	--	--
731	200	May 4, 1970	Ty	--	.03 1/	6.2	.9	--	--	672	182	400	2.4	--	--	--	--	--	--	10.6	2,580	7.9	--	--
803	51	July 9, 1970	Qfpa	24	--	141	40	138	--	790	35	94	--	.4	.55	861	516	37	2.6	2.62	1,430	7.3	--	--
809	57	July 13, 1964	Qfpa	21	5.2	132	49	124	3.0	600	55	184	.4	.2	.42	864	531	33	2.3	.00	1,470	7.1	21.0	69
815	1,000?	Nov. 3, 1970	Ts	17	.33 1/	2.5	.5	533	--	1,020	54	191	2.2	.4	--	1,300	8	99	82	16.6	2,140	8.2	--	--
916	64	July 8, 1970	Qfpa	20	--	155	61	192	--	594	254	215	--	1.3	.36	1,190	638	40	3.3	--	1,880	7.0	--	--
12/ 918	1,450-1,505	Jan. 17, 1967	Tqc	16	.22	1.5	.4	425	--	486	311	147	--	--	--	1,376	5	--	--	--	1,810	8.0	--	--
918	1,450-1,505	July 9, 1970	Tqc	17	.22 1/	1.3	.4	424	--	488	314	140	.6	.0	--	1,140	4	100	92	7.91	1,830	8.1	--	--
30-701	58	July 6, 1970	Qfpa	24	--	168	40	130	--	774	37	134	--	4.4	.42	919	584	33	2.3	1.02	1,570	7.2	--	--
702	1,400?	June 11, 1963	Tqc	17	--	1.5	.6	449	--	482	352	155	.7	.2	--	1,210	6	99	80	7.78	1,880	7.7	21.5	85
702	1,400?	July 9, 1970	Tqc	--	.52 1/	1.5	.5	--	--	500	340	158	--	--	--	--	6	--	--	8.09	1,910	8.4	--	--
703	1,500?	Nov. 10, 1969	Tqc	16	--	3.0	3.9	433	--	764	.2	235	1.9	2.3	--	1,070	24	98	38	12.0	1,820	8.1	27.0	81
34-103	25	Nov. 16, 1936	Tqc	--	--	--	--	--	--	232	74	114	--	--	--	473	--	--	--	--	--	--	--	--
104	28	do.	Tqc	--	--	--	--	--	--	360	< 10	16	--	--	--	320	--	--	--	--	--	--	--	--
201	260-300	Apr. 13, 1970	Tqc	--	1.0 1/	84	34	--	--	224	145	66	--	--	.24	--	350	--	--	.00	804	7.4	20.0	68
301	44	Apr. 24, 1970	Ts	--	.03 1/	86	9.6	77	2.8	328	9.2	70	.7	60	--	--	254	39	2.1	.30	838	7.2	--	--
302	465?	July 6, 1970	Tqc	--	15 1/	4.5	1.7	--	--	26	26	16	--	--	--	--	18	--	--	.06	110	5.5	--	--
402	340	Apr. 13, 1970	Tqc	--	5.6 1/	53	18	--	--	146	90	26	--	--	--	--	206	--	--	.00	524	6.8	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEAR-ING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CAL-CIUM (Ca)	MAG-NE-SIUM (Mg)	SO-DIUM (Na)	PO-TAS-SIUM (K)	BICAR-BONATE (HCO_3)	SUL-FATE (SO_4)	CHLO-RIDE (Cl)	FLUO-RIDE (F)	NI-TRATE (NO_3)	BORON (B)	DIS-SOLVED SOLIDS	HARD-NESS AS $CaCO_3$	PER-CENT SO-DIUM	SODIUM ADSORP-TION RATIO (SAR)	RESI-DUAL SODIUM CAR-BONATE (RSC)	SPECIFIC CONDUC-TANCE (MICROM-HOS AT 25° C)	pH	WATER TEMPERATURE °C	°F
								BURLESON COUNTY																
BS-59-34-403	66	Nov. 16, 1936	Tqc	--	--	--	--	--	--	384	143	360	--	--	--	1,080	--	--	--	--	--	--	--	--
501	33	Oct. 15, 1936	Tcm	--	--	--	--	--	--	55	283	720	--	--	--	1,570	--	--	--	--	--	--	--	--
505	21	Oct. 12, 1936	Ts	--	--	13	11	62	--	6	39	116	--	--	--	244	77	--	--	--	--	--	--	--
506	Spring	do.	Tw	--	--	413	265	734	--	--	1,300	2,070	--	--	--	4,970	2,120	--	--	--	--	--	--	--
510	59	Oct. 15, 1936	Ts,Tcm	--	--	191	4	169	--	85	405	260	--	--	--	1,070	492	--	--	--	--	--	--	--
511	80	Sept. 22, 1936	Ts	--	--	7	5	27	--	61	24	16	--	--	--	109	38	--	--	--	--	--	--	--
512	194-240	Apr. 13, 1970	Tqc	--	0.22 1/	36	17	--	--	294	80	7.9	--	--	--	--	160	--	--	1.62	625	7.5	--	--
1/ 601	734-784	Jan. 30, 1967	Tqc	--	.1	14.4	5.4	91.1	--	238	40	13	--	0.9	--	389	58	--	--	--	400	8.7	--	--
601	734-784	May 8, 1970	Tqc	15	--	18	5.6	75	4.1	230	35	6.0	0.1	4.9	0.18	277	68	69	4.0	2.41	450	7.6	--	--
602	420	Dec. 11, 1936	Ts	--	--	28	10	36	--	85	58	41	--	--	--	215	111	--	--	--	--	--	--	--
603	150	Oct. 13, 1936	Tcm	--	--	202	56	227	--	110	512	430	--	--	--	1,480	735	--	--	--	--	--	--	--
604	509-572	Apr. 20, 1970	Tqc	--	.00	27	9.6	--	--	216	61	8.3	--	--	.26	--	107	--	--	1.40	490	7.2	--	--
606	149	Oct. 13, 1936	Tcm	--	--	74	40	220	--	98	409	228	--	--	--	1,020	350	--	--	--	--	--	--	--
904	438	Apr. 20, 1970	Ts	20	1.1 1/	2.6	1.2	55	--	96	13	27	.1	.0	.04	167	11	91	7.2	1.34	278	7.0	22.5	72
35-101	150	Aug. 3, 1957	Tcm	--	--	--	--	226	--	197	624	295	--	--	--	1,650	735	40	--	--	2,310	7.4	--	--
104	277	Oct. 1, 1936	Ts	--	--	26	15	76	--	140	87	60	--	--	--	353	124	--	--	--	--	--	--	--
104	277	Oct. 30, 1970	Ts	15	.39 1/	82	20	99	--	140	210	120	.1	.0	--	615	290	43	2.5	--	979	7.5	--	--
201	493-535	Apr. 17, 1970	Tqc	--	--	55	16	--	--	266	66	6.6	--	--	.24	--	203	--	--	.30	559	7.3	--	--
207	49	Oct. 1, 1936	Tcm	--	--	--	--	--	--	85	567	320	--	--	--	1,370	--	--	--	--	--	--	--	--
302	17	Oct. 14, 1936	Ty	--	--	44	30	77	--	37	138	162	--	--	--	469	234	--	--	--	--	--	--	--
303	Spring	Sept. 24, 1936	Ty	--	--	25	11	23	--	49	24	65	--	--	--	172	107	--	--	--	--	--	--	--
304	54	Oct. 14, 1936	Ty	--	--	--	--	--	--	73	394	455	--	--	--	1,330	--	--	--	--	--	--	--	--
401	430	Oct. 13, 1936	Ts	--	--	--	11	38	--	134	35	44	--	--	--	227	127	--	--	--	--	--	--	--
401	430?	Apr. 17, 1970	Tcm?	--	4.1 1/	172	77	--	--	242	596	248	--	--	--	--	746	--	--	.00	2,100	7.0	--	--
502	22	Nov. 6, 1936	Ty	--	--	--	--	--	--	128	1,470	172	--	--	--	2,460	--	--	--	--	--	--	--	--
503	604-646	Apr. 17, 1970	Ts	--	.00 1/	7.7	2.0	--	--	202	49	29	--	--	.20	--	27	--	--	2.77	527	7.4	--	--
601	438-480	July 6, 1970	Tcm	--	.20 1/	19	4.0	--	--	334	622	302	--	--	--	--	64	--	--	4.19	3,070	7.4	--	--
603	180-192	Apr. 21, 1970	Ty	16	.02 1/	10	1.7	282	--	400	153	108	.2	4.9	.52	773	32	95	22	5.92	1,270	7.5	--	--
604	43	Oct. 14, 1936	Ty	--	--	--	--	--	--	67	165	680	--	--	--	1,350	--	--	--	--	--	--	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	°F
BURLESON COUNTY																								
BS-59-35-802	263-305	Apr. 16, 1970	Ty	--	0.01 1/	22	2.8	--	--	342	174	147	--	--	--	--	66	--	--	4.28	1,350	7.7	--	--
803	61	Dec. 11, 1936	Ty	--	--	426	90	724	--	--	1,030	1,420	--	--	--	3,690	1,440	--	--	--	--	--	--	--
901	393-435	Apr. 16, 1970	Ty	--	.03 1/	17	2.1	--	--	356	172	171	--	--	0.80	--	51	--	--	4.81	1,590	7.6	--	--
902	107	Nov. 12, 1936	Ty	--	--	--	--	--	--	98	< 10	26	--	--	--	121	--	--	--	--	--	--	--	--
36-202	392	Apr. 15, 1970	Ty	47	.68 1/	16	4.0	129	--	148	24	134	0.2	1.4	.14	429	56	83	7.5	1.30	725	6.9	--	--
205	785-825	May 4, 1970	Ts	15	.00 1/	.7	.1	72	--	156	13	12	.2	.4	.12	191	2	99	22	2.52	314	8.3	--	--
207	848-882	do.	Ts	15	.02 1/	.6	.1	68	--	141	12	14	.2	.8	--	180	2	99	21	2.28	294	8.3	--	--
301	74	Dec. 17, 1936	Ty	--	--	--	--	--	--	73	27	79	--	--	--	222	--	--	--	--	--	--	--	--
602	273-315	Apr. 15, 1970	Ty	--	.04 1/	22	2.8	--	--	168	23	190	--	--	.24	--	66	--	--	1.42	935	7.1	--	--
701	243-277	July 6, 1970	Ty	--	.15 1/	25	2.2	--	--	316	206	162	--	--	--	--	72	--	--	3.75	1,410	7.4	--	--
704	288-330	Apr. 22, 1970	Ty	--	.06 1/	14	.7	--	--	418	278	125	--	--	1.6	--	38	--	--	6.09	1,590	7.7	--	--
801	340-397	Nov. 3, 1939	Ty	--	4.4	62	11	457	--	370	284	420	.6	.0	--	1,420	200	--	--	--	--	7.5	39.0	102
12/ 802	1,513-1,573	Sept. 26, 1963	Ts	12	.34	.5	.1	148	--	312	24	30	--	--	--	405	2	--	--	--	620	8.7	--	--
10/ 802	1,513-1,573	Nov. 14, 1963	Ts	--	.79	1.0	1	148	--	312	26	30	.7	< .4	--	410	5	--	--	--	645	8.6	--	--
802	1,513-1,573	July 6, 1970	Ts	18	.39 1/	.4	.1	154	0.9	326	24	33	.6	1.3	.55	393	2	99	47	5.31	649	8.1	--	--
804	479	do.	Ty	--	.12	23	2.6	--	--	482	270	638	--	--	--	--	68	--	--	6.54	3,200	7.4	--	--
902	140	Oct. 22, 1936	Ty	--	--	60	22	582	--	140	307	760	--	--	--	1,800	239	--	--	--	--	--	--	-
903	27	do.	Ty	--	--	--	--	--	--	183	295	232	--	--	--	931	--	--	--	--	--	--	--	--
904	400	Apr. 15, 1970	Ty	--	.16 1/	18	1.1	--	--	464	370	370	--	--	--	--	50	--	--	6.61	2,580	7.6	--	--
37-101	1,620	Nov. 5, 1936	Ts	--	--	--	--	--	--	262	51	38	--	--	--	347	--	--	--	--	--	--	--	--
101	1,620	Nov. 2, 1939	Ts	--	.07 1/	1.0	.4	121	--	205	45	36	.4	--	--	327	4	--	--	--	--	--	--	--
102	1,267	Nov. 17, 1936	Ty	--	--	6	--	633	--	1,440	< 10	150	--	--	--	1,500	15	--	--	--	--	--	--	--
102	1,267	Nov. 2, 1939	Ty	--	.05 1/	3.4	1.2	649	--	1,480	1	144	2.5	.0	--	1,530	13	--	--	--	--	--	--	--
104	1,341-1,381	July 8, 1970	Ts	17	.03 1/	2.5	1.1	275	1.9	594	26	70	.9	.4	.26	687	10	98	38	9.53	1,190	7.8	--	--
6/ 105	24	May 6, 1955	Qt	--	--	126	11	40	--	470	49	316	--	--	--	--	360	--	--	--	--	--	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BURLESON COUNTY																								
BS-59-37-107	30	May 15, 1964	Qt	42	0.02	135	16	211	--	408	82	282	0.4	54	--	1,020	403	53	4.6	0.00	1,700	6.8	--	--
108	1,550	Dec. 2, 1937	Tqc	--	--	5	< 5	454	--	793	137	146	1.0	< 20	--	1,130	12	--	--	--	--	--	39.0	102
108	1,550	May 4, 1970	Tqc	--	.27 [1]	1.9	.4	--	--	796	148	144	--	--	--	--	6	--	--	12.9	1,890	8.1	--	--
110	31	Dec. 5, 1936	Ty	--	--	--	--	--	--	317	110	295	--	--	--	877	--	--	--	--	--	--	--	--
111	73	do.	Ty	--	--	100	16	64	--	49	39	265	--	--	--	508	315	--	--	--	--	--	--	--
209	255-295	May 6, 1970	Ty	--	.05 [1]	2.4	.2	--	--	252	109	80	.6	--	--	--	7	--	--	3.99	876	7.7	--	--
213	30-42	do.	Qt	--	.00 [1]	50	3.4	--	--	160	15	29	.2	--	0.08	--	139	--	--	.00	400	7.2	--	--
301	57	June 18, 1963	Qfpa	23	9.4	338	92	276	--	698	445	550	--	1.2	.11	2,070	1,220	33	3.4	.00	3,120	6.6	21.0	70
307	54	July 13, 1964	Qfpa	22	6.0	205	73	189	5.0	716	232	280	.4	1.8	.38	1,360	812	33	2.9	.00	2,120	7.0	21.5	71
601	61	June 26, 1963	Qfpa	24	5.0	118	38	76	--	530	80	69	.4	.0	.30	667	451	27	1.6	.00	1,080	6.9	21.0	70
602	217-259	June 5, 1963	Tj	39	--	39	2.1	428	--	350	359	265	.5	1.0	--	1,310	106	90	18	3.62	2,020	7.0	23.0	73
607	236	do.	Tj?	38	--	40	1.5	479	--	400	369	305	.5	4.9	--	1,430	106	91	20	4.44	2,180	7.1	26.0	79
608	1,032	Dec. 14, 1936	Ty	--	--	26	4	1,600	--	1,340	8	1,740	--	--	--	4,040	80	--	--	--	--	--	31.5	89
610	35	do.	Qt	--	--	--	--	--	--	305	326	134	--	--	--	921	--	--	--	--	--	--	--	--
611	177-240	July 9, 1970	Tj	--	.66 [1]	37	1.8	--	--	584	198	518	--	--	--	--	--	--	--	7.57	2,780	7.7	--	--
802	330-372	May 7, 1970	Ty	--	.00 [1]	59	2.0	--	--	498	324	645	.8	--	5.6	--	155	--	--	5.06	3,300	7.4	--	--
38-102	58	July 13, 1964	Qfpa	19	4.2	208	54	187	2.8	596	283	252	.3	3.0	.30	1,300	741	35	3.0	.00	1,980	6.8	--	--
108	49	July 7, 1970	Qfpa	21	--	114	47	120	--	608	139	60	--	13	.37	813	478	35	2.4	.41	1,300	7.1	21.0	70
403	57	June 26, 1963	Qfpa	20	3.3	153	46	76	--	576	84	124	.4	.0	.34	787	570	22	1.4	.00	1,300	6.8	--	--
404	61	do.	Qfpa	23	5.7	208	62	197	--	628	300	265	.4	.0	.22	1,360	774	36	3.1	.00	2,100	6.8	20.5	69
404	61	July 7, 1970	Qfpa	21	--	204	68	213	--	616	322	292	--	.0	.32	1,420	788	37	3.3	.00	2,230	6.9	--	--
407	80	do.	Qfpa	20	--	241	92	290	--	638	446	442	.4	.9	.37	1,850	980	39	4.0	.00	2,860	6.9	21.0	69
410	54	June 26, 1963	Qfpa	21	3.0	138	47	127	--	592	128	138	.4	.0	.32	891	538	34	2.4	.00	1,450	6.8	21.0	69
410	54	July 7, 1970	Qfpa	20	--	138	46	134	--	574	150	140	.3	1.3	.23	912	534	35	2.5	.00	1,460	7.0	--	--
413	25	Dec. 21, 1936	Qfpa	--	--	73	51	359	--	756	270	192	--	--	--	1,320	392	--	--	--	--	--	--	--
414	20	do.	Qfpa	--	--	--	--	--	--	293	58	49	--	--	--	399	--	--	--	--	--	--	--	--
417	700±	Oct. 29, 1970	Ty	--	--	28	1.8	--	--	1,200	6.2	1,400	--	--	--	--	78	--	--	18.1	5,550	7.7	26.0	79
[6] 501	56	Oct. 11, 1954	Qfpa	--	--	218	74	137	--	540	259	1,100	--	--	--	--	848	--	--	--	--	--	--	--
[6] 501	56	Aug. 1, 1956	Qfpa	--	--	160	78	126	--	500	243	234	--	--	--	--	720	--	--	--	--	--	--	--
[6] 501	56	do.	Qfpa	--	--	104	63	189	--	122	296	369	--	--	--	--	517	--	--	--	--	--	--	--

See footnotes at end of table.

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
BURLESON COUNTY																								
BS-59-38-707	Spring	Dec. 21, 1936	Qt	--	--	5	4	94	--	55	16	110	--	--	--	256	27	--	--	--	--	--	--	--
709	553	May 5, 1970	Ty	41	0.00 1/	46	.8	533	17	716	.0	512	1.2	0.0	7.4	1,510	118	89	21	9.37	2,590	7.6	--	--
711	Spring	Dec. 21, 1936	Qt	--	--	34	9	59	--	37	39	126	--	--	--	285	120	--	--	--	--	--	--	--
713	688	do.	Ty	--	--	--	--	--	--	702	8	415	--	--	--	1,240	--	--	--	--	--	--	--	--
6/ 801	55	Jan. 5, 1955	Qfpa	--	--	29	24	465	--	708	9	415	--	--	--	--	173	--	--	--	--	--	--	--
6/ 802	56	Mar. 28, 1955	Qfpa	--	--	92	76	64	--	414	96	170	--	--	--	--	541	--	--	--	--	--	--	--
804	1,200?	May 5, 1970	Ty	--	.00 1/	28	.5	--	--	692	.0	405	1.5	--	--	--	72	--	--	9.90	2,250	7.6	--	--
6/ 905	79	Jan. 5, 1955	Qfpa	--	--	110	44	46	--	558	42	110	--	--	--	--	455	--	--	--	--	--	--	--
42-302	620	Apr. 20, 1970	Ts	14	.01 1/	.9	.2	83	--	164	22	17	.2	1.2	.16	220	3	98	21	2.63	358	8.0	25.0	77
43-101	88	Nov. 12, 1936	Ty	--	--	--	--	--	--	299	185	230	--	--	--	866	--	--	--	--	--	--	--	--
202	71	do.	Ty	--	--	--	--	--	--	31	< 10	29	--	--	--	70	--	--	--	--	--	--	--	--
203	278	Apr. 21, 1970	Ty	--	.01 1/	18	2.2	--	--	360	316	114	--	--	--	--	54	--	--	4.82	1,560	7.5	--	--
204	87	Nov. 12, 1936	Ty	--	--	72	33	129	--	98	47	330	--	--	--	659	315	--	--	--	--	--	--	--
501	2,154-2,202	Nov. 11, 1959	Twi	18	--	4.5	.9	652	3.8	702	2.4	620	--	.2	1.6	1,650	14	99	76	--	2,880	8.0	40.0	104
501	2,154-3,838	July 30, 1965	Twi, Twis	26	--	2.8	.7	565	--	1,020	.4	280	2.5	.0	1.6	1,380	10	99	78	16.5	2,340	7.8	56.0	132
601	438	Apr. 23, 1970	Ty	--	--	48	1.8	--	--	468	224	610	--	--	--	--	128	--	--	5.12	3,070	7.4	--	--
602	59	do.	Tj	--	.03 1/	18	4.6	--	--	98	104	91	--	--	--	--	64	--	--	.33	696	6.6	--	--
603	299	Feb. 2, 1971	Tj	2.9	.15 1/	55	2.1	590	--	502	440	390	.9	.0	--	1,750	150	90	21	5.32	2,760	8.1	--	--
44-101	91	Sept. 24, 1936	Tj	--	--	542	23	1,210	--	323	1,750	1,410	--	--	--	5,090	1,450	--	--	--	--	--	--	--
102	660	Apr. 22, 1970	Ty	35	.02 1/	51	1.7	670	--	462	262	665	.5	.0	4.0	1,920	134	92	25	4.89	3,220	7.4	--	--
104	17	Oct. 22, 1936	Tj	--	--	--	--	--	--	165	1,730	1,540	--	--	--	5,000	--	--	--	--	--	--	--	--
106	--	July 7, 1970	Ty	25	.05 1/	43	1.6	722	--	458	308	700	--	.0	--	2,020	114	93	29	5.23	3,390	7.4	--	--
201	37	Oct. 22, 1936	Tj	--	--	--	--	--	--	183	598	170	--	--	--	1,260	--	--	--	--	--	--	--	--
301	775-815	Jan. 5, 1936	Ty	--	--	21	2	643	--	634	151	555	--	--	--	1,680	62	--	--	--	--	--	--	--
301	775-815	Nov. 2, 1939	Ty	--	.02 1/	19	2.3	635	--	644	98	570	1.4	.0	--	1,720	57	--	--	--	--	8.7	--	--
301	775-815	July 8, 1970	Ty	25	--	16	1.8	521	--	478	384	275	.6	.9	1.4	1,460	48	96	33	6.88	2,310	7.5	--	--
303	178-198	Jan. 5, 1936	Tj	--	--	63	4	599	--	500	243	575	--	--	--	1,730	172	--	--	--	--	--	--	--

See footnotes at end of table.

Table 17.--Chemical Analyses of Water from Wells and Springs--Continued

WELL	WELL DEPTH OR PRODUCING INTERVAL (FT)	DATE OF COLLECTION	WATER BEARING UNIT	SILICA (SiO_2)	IRON (Fe) (TOTAL)	CALCIUM (Ca)	MAGNESIUM (Mg)	SODIUM (Na)	POTASSIUM (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	WATER TEMPERATURE °C	WATER TEMPERATURE °F
										BURLESON COUNTY														
BS-59-44-303	178-198	Nov. 2, 1939	Tj	--	2.5	69	3.5	587	--	492	222	585	0.5	3.6	--	1.810	187	--	--	--	--	7.9	--	--
10/ 304	166-201	May 9, 1951	Tj	34	.25	70	14	576	--	519	21	582	.5	< .4	--	--	232	--	--	--	--	--	--	--
10/ 304	166-201	July 18, 1966	Tj	32	.06	64	3	505	--	525	19	588	.8	--	--	1.736	172	--	--	--	--	8.1	--	--
9/ 305	1.880-2.010	Nov. 3, 1954	Ts	--	.3	2	1	493	--	512	405	166	--	--	--	--	9	--	--	--	--	--	--	--
10/ 305	1.880-2.010	Apr. 15. 1968	Ts	--	.08	2	1	489	--	477	404	181	.8	< .4	--	1.550	11	--	--	--	2.384	8.1	--	--
307	280	Apr. 15. 1970	Ty	--	2.0 1/	77	3.3	--	--	450	632	408	--	--	--	--	206	--	--	3.27	3.110	7.3	--	--
10/ 402	240	Mar. 25. 1970	Tj	--	< .02	62	3	520	9	440	378	415	.7	< .4	--	1.820	169	--	--	--	3,045	8.5	--	--
402	240	Feb. 2. 1971	Tj	35	--	63	2.0	550	--	450	380	430	.3	.0	--	1,680	160	88	19	4.09	2.680	8.4	--	--
10/ 501	160	Mar. 4. 1970	Tj	--	< .02	90	4	486	--	387	329	453	.4	< .4	--	1.750	241	--	--	--	3.045	8.3	--	--
601	10	Sept. 24. 1936	Tj	--	--	--	--	--	--	146	157	144	--	--	--	568	--	--	--	--	--	--	--	--
45-203	103	July 8, 1970	Tj	42	.08 1/	16	.6	296	--	262	204	181	1.3	.0	3.3	873	42	94	20	3.44	1,410	7.4	--	--
204	Spring	Dec. 16, 1936	Tj	--	--	--	--	--	--	24	20	10	--	--	--	64	--	--	--	--	--	--	--	--

1/ Fe dissolved.
2/ Iron sample collected July 13, 1970.
3/ Boron sample collected July 13. 1970.
4/ Iron sample collected July 15. 1970.
5/ Iron sample collected July 16, 1970.
6/ Analyzed by Texas A&M University.
7/ Iron sample collected July 17, 1970.
8/ Iron sample collected July 22. 1970.
9/ Analyzed by Curtis Laboratories.
10/ Analyzed by Texas State Department of Health.
11/ Analyzed by Aquatrol, Inc.
12/ Analyzed by Microbiology Service Laboratories.
13/ Analyzed by Maintenance Engineering Corporation.
14/ Iron sample collected July 20. 1970.
15/ Analyzed by Allied Chemical Company.
16/ Analyzed by Jordan Laboratories.
17/ Analyzed by The Pope Testing Laboratories.
18/ Sample contains 2.0 mg/l total acidity as H^{+1}.
19/ Sample contains 1.1 mg/l total acidity as H^{+1}.

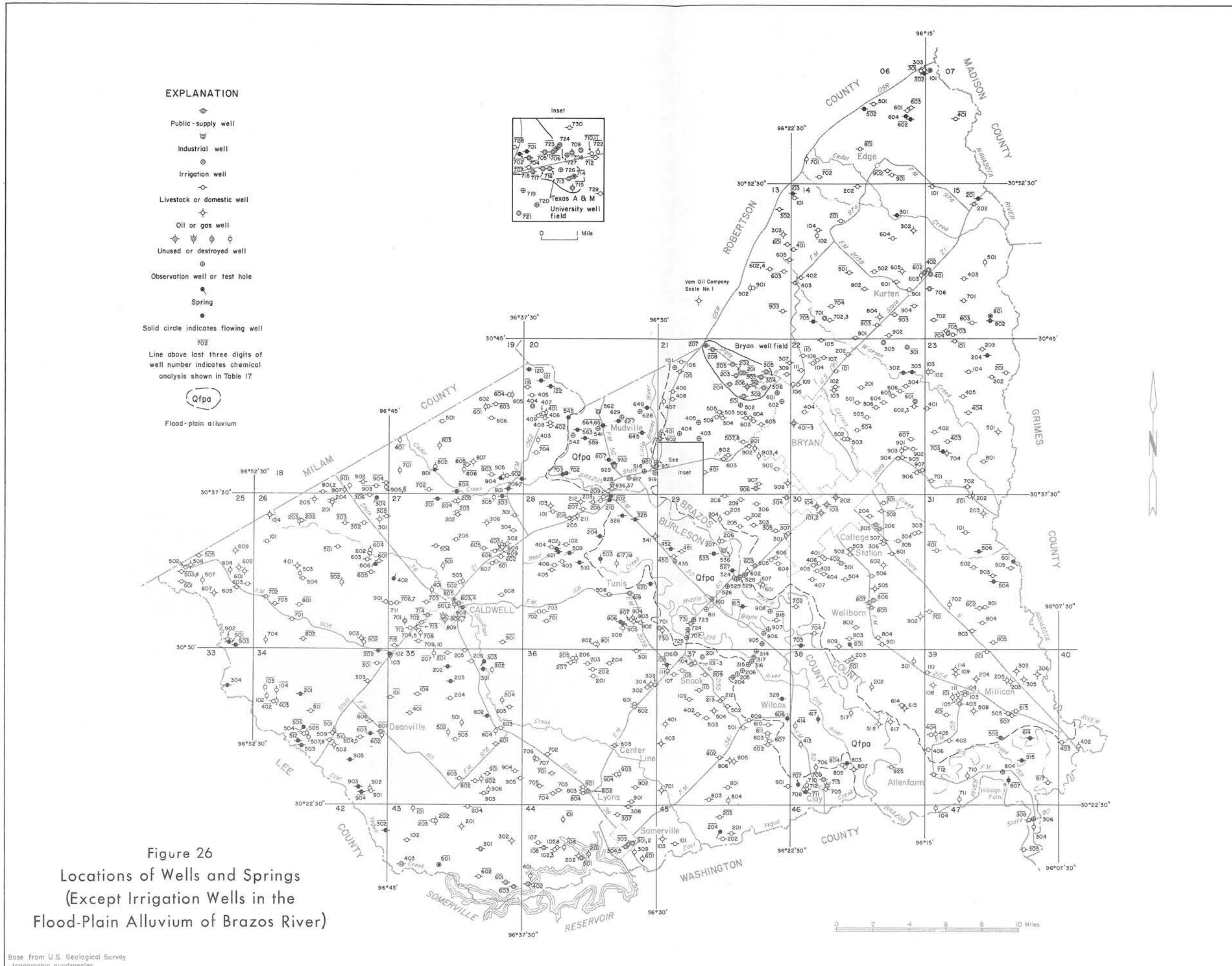

Figure 26
Locations of Wells and Springs
(Except Irrigation Wells in the
Flood-Plain Alluvium of Brazos River)

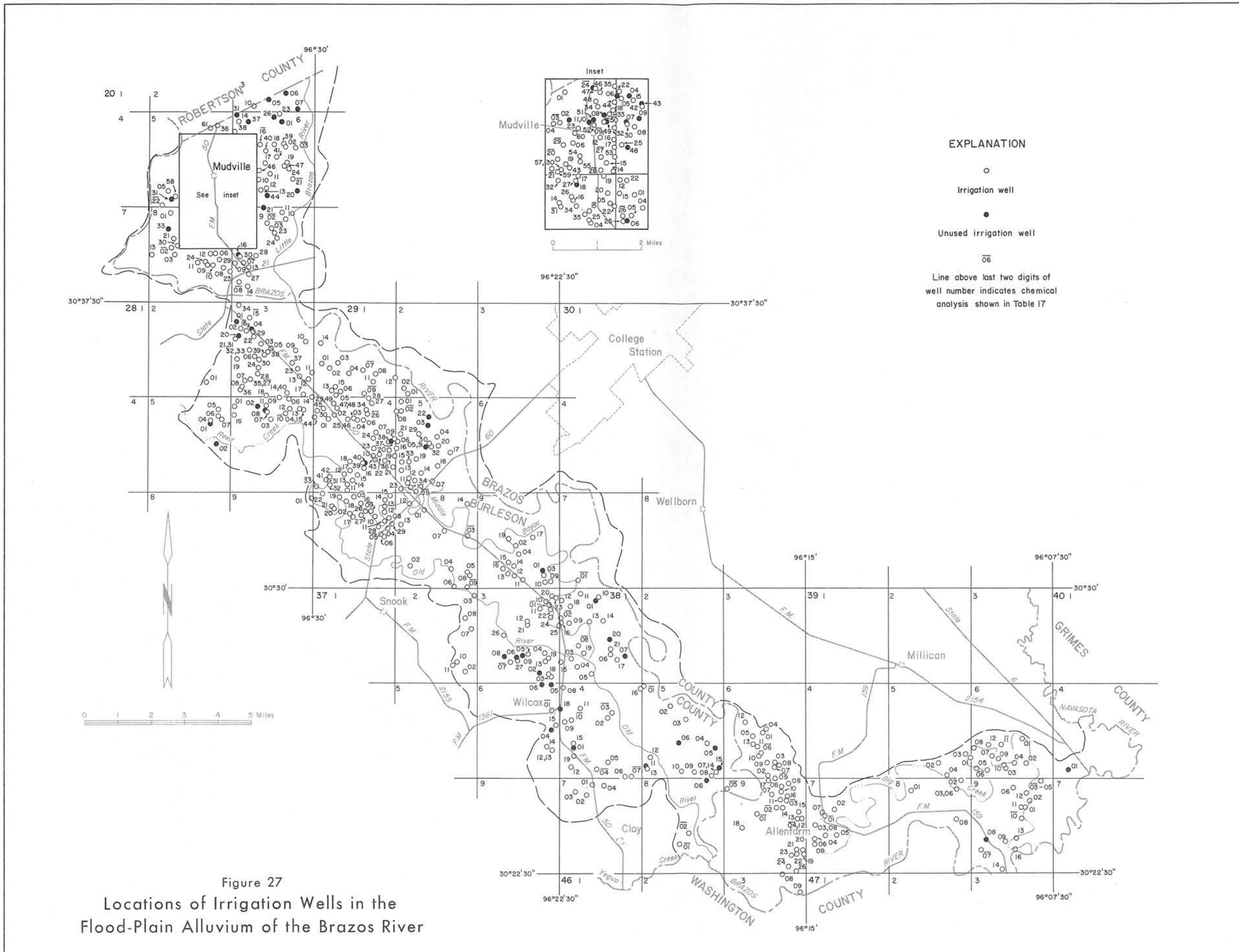

Figure 27

Locations of Irrigation Wells in the Flood-Plain Alluvium of the Brazos River

Base from U.S. Geological Survey topographic quadrangles