UNITED STATES DEPARTMENT OF THE INTERIOR

GROUND-WATER RESOURCES OF THE HOUSTON DISTRICT, TEXAS

Prepared in cooperation with the
TEXAS BOARD OF WATER ENGINEERS
AND THE CITY OF HOUSTON

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 889-C

UNITED STATES DEPARTMENT OF THE INTERIOR
Harold L. Ickes, Secretary

GEOLOGICAL SURVEY
W. E. Wrather, Director

Water-Supply Paper 889-C

GROUND-WATER RESOURCES OF THE HOUSTON DISTRICT, TEXAS

BY

W. N. WHITE, N. A. ROSE, AND W. F. GUYTON

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ABSTRACT

This report covers the current phase of an investigation of the supply of ground water available for the Houston district and adjacent region, Texas, that has been in progress during the past 10 years. The field operations included routine inventories of pumpage, measurements of water levels in observation wells and collection of other hydrologic data, pumping tests on 21 city-owned wells to determine coefficients of permeability and storage, and the drilling of 13 deep test wells in unexplored parts of the district. Considerable attention has been given to studies of the location of areas or beds of sand that contain salt water.

The ground water occurs in beds of sand, sandstone, and gravel of Miocene, Pliocene, and Pleistocene age. These formations crop out in belts that dip southeastward from their outcrop areas and are encountered by wells at progressively greater depths toward the southeast. The beds throughout the section are lithologically similar, and there is little agreement among geologists as to their correlation. In this investigation, however, the sediments penetrated by the wells are separated into six zones, chiefly on the basis of electrical logs. Most of the water occurs in zone 3, which ranges in thickness from 800 to 1,200 feet.

Large quantities of ground water are pumped in three areas in the Houston district, as follows: The Houston pumping area, which includes Houston and the areas immediately adjacent; the Pasadena pumping area, which includes the industrial section extending along the ship channel from the Houston city limits eastward to Deer Park; and the Katy pumping area, an irregular-shaped area of several hundred square miles, which is roughly centered around the town of Katy, 30 miles west of Houston. In 1930 the total combined withdrawal of ground water in the Houston and Pasadena pumping areas averaged about 50 million gallons a day. It declined somewhat during 1932 and 1933 and then gradually increased, until in 1935 the total pumpage was about the same as it was in 1930. About March 1, 1937, the pumpage was increased by about 40 percent when new wells near Pasadena were put into operation. During 1940 it is estimated that the total pumpage in the Houston and Pasadena areas averaged about 79 million gallons a day, an increase of about 65 percent over the pumpage in 1935. About 25 million gallons of this increase has occurred in the Pasadena area. In the Katy rice-growing area the pumpage in 1935 was about 14 million gallons a day; in 1937 it was about 30 million gallons a day; in 1939 about 40 million gallons a day; and in 1940 about 45 million gallons a day. In 1940 the estimated total pumpage from the Houston, Pasadena, and Katy pumping areas was about 124 million gallons a day, or twice as much as it was in 1935.

The increase in pumping at Pasadena in the spring of 1937 caused the water levels in wells in the Houston and Pasadena areas, which had not varied materially for about 7 years, to decline at a rapid rate. Further increases in the pumping

both at Houston and Pasadena in 1939 and 1940 has caused further substantial decline. The water levels in wells in the Katy rice-growing area also declined materially. The evidence points to the probability that in all parts of the Houston district, except the Katy rice-growing area, the rainfall is recharging the aquifers at a rate greater than that at which the water is transmitted down the dip. In the Katy area the recharge is insufficient to balance the joint discharge by transmission down the dip and withdrawal from rice-irrigating wells. The average coefficient of transmissibility was calculated as 160,000 gallons a day. On the basis of these estimates the inflow in February 1940 across the artesian contour 10 feet below sea level (see pl. 10) was computed as 72 million gallons a day. The amount of water taken out of artesian storage in the 300-square mile area within the —10 contour during the period February 1939 to February 1940 was calculated as about 3½ million gallons a day, or somewhat less than 5 percent of the pumpage. A quantity of water was also drawn from artesian storage outside the —10 foot where considerable declines in the artesian head have taken place, but the available data are not sufficient to permit estimates of the amount. The decline in water levels in the Katy area involves unwatering by lowering of the water table, as well as removal of water yielded by compression. Hence, although the water levels in the Katy wells have declined less than in the Houston and Pasadena areas, the decline represents more water taken from storage.

The test wells put down in the course of the exploratory well-drilling program show that there is an average of 600 feet of water-bearing sands between the surface and a depth of 1,500 feet along the line of test wells from the western city limits of Houston to Clodine and that a supply of water suitable for domestic and industrial uses exists north of Houston in deep sands that are practically untouched by existing water wells.

If the present rate of pumping in the Houston and Pasadena areas is continued, the artesian head will continue to decline for several years, although at a diminishing rate. If it is desired to maintain the water levels at or near the present altitudes, the present rate of pumping should be reduced and a supplementary supply of water should be developed. Wells west of Houston in the direction of Clodine are now less promising as a source of additional supplies for the city of Houston because of the large increase in pumpage for rice irrigation. Additional test drilling may show that a supplementary supply of ground water may be obtained in the area north of Houston from sands that lie stratigraphically deeper than the heavily pumped sands of the Houston and Pasadena areas.

INTRODUCTION

LOCATION OF THE AREA

The Houston district, as the term is used in this report, comprises an area between the Trinity and Brazos Rivers in Harris County, Tex., and parts of Montgomery, Waller, and Fort Bend Counties. (See pl. 8.) In this district there are three areas in which large quantities of ground water are pumped. The Houston pumping area, which includes Houston and the areas immediately adjacent, except those to the east; the Pasadena pumping area, which includes the industrial section that extends along the ship channel from the Houston city limits eastward to Deer Park; and the Katy pumping area, which is an irregular-shaped area of several hundred square miles in which water is pumped from wells for the irrigation of rice in Harris, Waller, and Fort Bend Counties, roughly centered around the town

of Katy, 30 miles west of Houston. The present report does not cover the pumping areas in the vicinities of Baytown, Goose Creek, Alta Loma, and Texas City.

HISTORY OF INVESTIGATION AND PREVIOUS REPORTS

An investigation of the supply of ground water available for the Houston district has been in progress since December 1930, when available funds have permitted, as part of a survey of the ground-water resources of Texas by the United States Geological Survey in cooperation with the Texas State Board of Water Engineers. This investigation is under the general direction of O. E. Meinzer, geologist in charge of the division of ground water in the Geological Survey. The results of this investigation have been summarized in five mimeographed reports, the first of which was released to the public in October 1932, and the last in March 1939. These reports, with illustrations and records of several thousand wells, were bound together and released by the State Board of Water Engineers in 1939 under the title "Ground-water resources of the Houston-Galveston area and adjacent region, Texas." All periodic water-level measurements made before December 31, 1941, have been published by the Geological Survey.[1]

In the first report it was shown that the beds of sand that yield water to wells in the Houston district have an extensive outcrop area, that there is good evidence that the recharge to the water-bearing formations by penetration of the rain that falls on this area is heavy, that the sands have a large aggregate capacity to transmit water, and that under the conditions of pumping which existed at that time the artesian pressures in the Houston district were in a state of essential equilibrium. It was suggested, however, that new supply wells drilled by the city of Houston should be located at a considerable distance from any of the existing centers of pumpage.

The most significant fact brought out in the second report, released December 29, 1933, was that there was a rise in the artesian head from the spring of 1931 to the spring of 1933 as a result of a moderate decrease in the rate of withdrawal from wells.

In the third report, released March 1, 1937, the total pumpage and results of measurements of water levels in observation wells in the region were discussed in detail and the following conclusion was reached:

> No large increase in pumping over the volume of water pumped in 1936 should be made within the city limits or along the ship channel between the city limits and Baytown. Any large increase in ground-water withdrawals in or near the existing deep depressions in artesian pressure in downtown Houston and in the east Houston-Pasadena district would be especially undesirable. New wells involving heavy withdrawals of water should be located at distances of several miles from these depressions.

[1] Water levels and artesian pressure in observation wells in the United States in the years 1935, 1937, 1938, 1939, 1940, and 1941, U. S. Geol. Survey Water-Supply Papers 777, 840, 845, 886, 909, and 939.

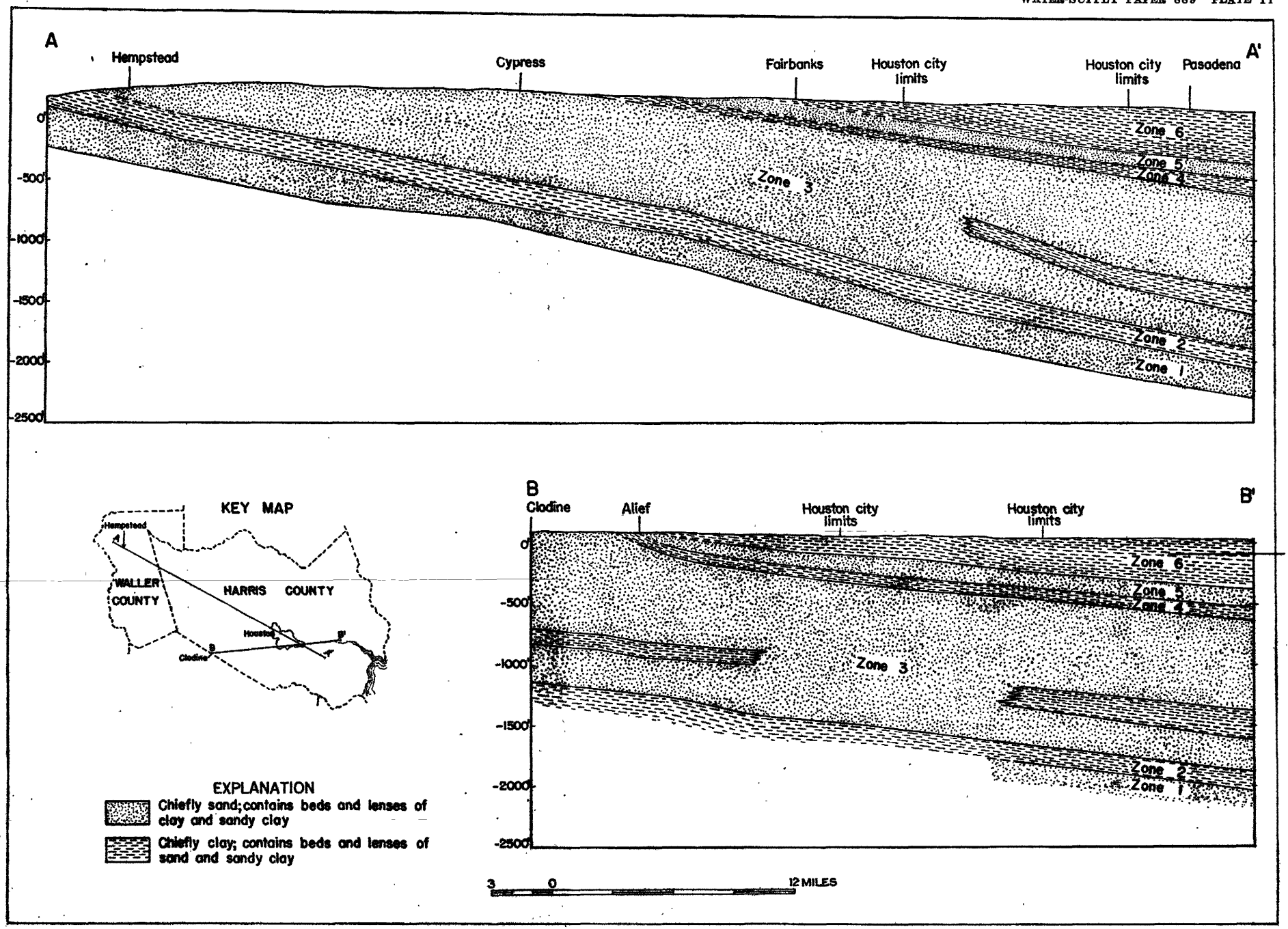
The fourth and fifth reports, dated, respectively, July 1, 1938, and March 1, 1939, were devoted mostly to discussions of pumpage and of the decline in water levels that resulted from an increase of about 40 percent in the aggregate annual pumpage of the Houston and Pasadena areas about March 1, 1937, due to the development of a new industrial water supply at Pasadena.

The current phase of the investigation was begun in the fall of 1938, when $5,000 was allocated by the City of Houston for the investigation and was matched by Federal funds. Another allocation of $5,000 was made in the spring of 1940 and was also matched by Federal funds. The report that follows is chiefly a discussion of results of the investigations made in 1939 and 1940. The authors are indebted to A. N. Sayre, of the Geological Survey, for his assistance in the compilation and critical review of the report.

FIELD OPERATIONS

The field operations carried on in the Houston district from 1930 to 1938 have been described in previous reports. Since November 1938 periodic water-level measurements have been made in about 185 observation wells throughout the Houston district at intervals ranging from 1 to 3 months (See pls. 8 and 9.) About 30 of the wells are in the outcrop area along the Houston-Hempstead and Houston-Conroe highways; 40 are in the Katy pumping area; and 115, including 24 Houston municipal wells, are in the Houston and Pasadena pumping areas. Automatic water-stage recorders are being maintained on 7 of these wells. A map showing the approximate altitude of water levels in wells drawing from the most heavily pumped sands of the district, based on the water-level measurements, has been prepared. (See pl. 10.) Data have been collected on pumpage from wells throughout the district. Samples of water have been taken from selected wells about twice a year and analyzed. Records of approximately 300 wells and electrical logs of about 200 oil tests have been collected. These logs, together with other information, have been used in the preparation of geologic sections.

Twenty-one pumping tests have been made on Houston city-owned wells to determine coefficients of permeability and storage. By using average values obtained from these tests, computations have been made of theoretical water-level fluctuations that would result from various assumed pumping conditions. Forty-six shallow test wells, in groups of two to six wells each, have been put down since June 1940, at various places on the outcrop area and are being measured regularly in connection with studies of the recharge. Five of these groups of wells are along the Hempstead road, three in the Katy rice-growing area, two near Tomball, and two on the Conroe road.



GENERALIZED GEOLOGIC SECTIONS IN WALLER AND HARRIS COUNTIES.

As part of the investigation, 13 deep test wells have been put down by the city of Houston in unexplored parts of the district west, north, and southeast of Houston (see pls. 8 and 9) to obtain additional data concerning water-bearing sands and the quality of water they contain. Selected drill cores and drill-stem sand samples from the test wells have been tested for permeability, porosity, and mechanical composition; and water obtained from the drill-stem tests has been analyzed.

Considerable attention has been given to studies of the location of areas or beds of sand that contain salt water.

GEOLOGY

The Houston district lies within the West Gulf Coastal Plain. The Hockley escarpment, about 6 miles southeast of Hockley, is the most prominent of a series of southeast-facing escarpments. It extends in a southwesterly direction across southern Montgomery County, northwestern Harris County, and central Waller County and divides the Coastal Plain in this district into two parts. The area south of the escarpment is a smooth, nearly featureless plain that rises from sea level on the Gulf of Mexico to an altitude of about 165 feet near the foot of the escarpment, which is nearly 80 miles inland—an average slope of about 2 feet to the mile. The area west and northwest of the escarpment rises at an average rate of about 8 feet to the mile, and its surface is gently rolling. The district is bounded on the east by the Trinity River and on the west by the Brazos River. It is crossed by the San Jacinto River, Spring Creek, and a few other perennial streams. The smaller streams generally carry water only during and immediately after heavy rains. The tides reach inland from the Gulf to Houston through Galveston Bay and the Houston ship channel.

Formations of Miocene, Pliocene, and Pleistocene age underlie the Houston district. They consist of beds of relatively impervious clay, shale, and gumbo interbedded with beds of permeable sand, sandstone, and gravel that yield large quantities of water. As shown by sec. A–A′, plate 11, the formations dip southeastward, so that successively younger formations crop out from the northwest to the southeast. Likewise, the formations are encountered by wells at progressively greater depths toward the southeast. In the section shown the older formations dip about 35 feet to the mile and the younger formations about 20 feet to the mile. There is, therefore, considerable thickening of the formations down the dip. In the area southeast of Houston the dips of all of the formations become considerably less. In or near the outcrop area sand predominates, and the clays generally are lenticular; but toward the Gulf the beds of sand become thinner, and the clay beds thicken and persist over large areas.

These formations were deposited during several cycles of marine and continental deposition and consist of zones that are predominantly clay alternating with zones that contain some clay but are predominantly sand. Because the sediments come from the same areas the beds in one zone are lithologically similar to those of adjacent zones. Thus far no fauna or flora of diagnostic value has been found in these sediments in the Houston district. Hence, if the section is to be subdivided it must be with the aid of other criteria, such as the electrical logs, the drillers' logs, the dip of the beds, and other less easily discernible characteristics. Although the geology of the area has been studied by several men and the outcrop areas of the formations have been mapped, [2] there is little agreement as to the correlation of formations down the dip. There has not been sufficient opportunity for the study of these formations during the present phase of the investigation to permit their correlation from the outcrop to the wells. However, it has been found possible to separate the sediments penetrated by the wells into six zones. The separation of these zones is based chiefly on electrical logs of oil tests and water wells. Correlation of the zones was made along two lines, shown in plate 11. Line *A*—*A*′ extends approximately in the direction of the regional dip from a point 4 miles northwest of Hempstead, in Waller County, southeastward through Houston to a point 3 miles southeast of Pasadena. Line *B*—*B*′ extends from the town of Clodine, on the Fort Bend—Harris county line, eastward through Houston to a point about 10 miles east of the city limits. A brief description of the zones in the order of the deposition of the sediments is given below.

Zone 1 ranges from 150 to 400 feet in thickness and consists dominantly of beds of sand, although it contains some relatively thick beds and lenses of clay. At the outcrop the sand is generally cross-bedded, lenticular, and slightly cemented. In the northern part of the district the beds of sand in this zone yield water to shallow wells. In Houston the beds in the upper part of the zone yield potable water to several of the deep wells, but the beds in the lower part contain water with too much chloride for most uses. In the section along line *B*—*B*′ this zone has been recognized only in wells east of the city.

Zone 2 is a thick bed of clay that is persistent over a wide area, although in most places it contains thin lenses of sand. It can generally be distinguished easily from the overlying and underlying zones of sand and therefore is an excellent key bed. It ranges in thickness

[2] Geologic map of Texas: U. S. Geol. Survey, 1937. Deussen, Alexander, Geology and underground waters of the southeastern part of the Texas coastal plain: U. S. Geol. Survey Water-Supply Paper 335, pp. 72–84, 1914. White, W. N., Livingston, Penn, and Turner, S. F., Ground-water resources of the Houston-Galveston area, Tex.: U. S. Geol. Survey Memorandum for the Press, Oct. 17, 1932, pp. 4–7. Doering, John, Post-Fleming surface formations of coastal southeast Texas and south Louisiana: Am. Assoc. Petroleum Geologists Bull., vol. 19, pp. 651–688, 1935. Metcalf, R. J., Deposition of Lissie and Beaumont formations of Gulf coast of Texas: Am. Assoc. Petroleum Geologists Bull., vol. 24, pp. 693–700, 1940.

from 150 to 225 feet. In section *B*—*B'* the lower part of this zone grades into the underlying beds and no contact can be drawn.

Zone 3 includes the most productive water-bearing beds in the Houston, Pasadena, and Katy pumping areas. It ranges in thickness from 800 to 1,200 feet and is made up chiefly of fine to coarse-grained sand but contains varying amounts of interbedded clayey sand, sandy clay, clay, silt, and gravel. These interbedded layers and lenses grade into one another laterally or vertically in short distances, and the thinner beds in many places change character entirely or pinch out within a few hundred feet; but some beds of clay and sandy clay as much as 250 feet thick may be traced for a considerable distance.

Zone 4 is a series of clay and sandy-clay beds that contain numerous thin lenses and beds of sand. It has an average thickness of about 100 feet. A few logs show a predominance of sand in this zone, but it is unimportant as a source of ground water.

Zone 5 consists chiefly of thick beds of fine- to medium-grained sand and thin beds and lenses of clay. Recent shells were fairly common in drill cuttings obtained from this zone. It ranges in thickness from 50 to 150 feet and is the principal water-bearing zone in Alta Loma, Baytown, and Texas City. Shallow domestic and industrial wells in the Houston and Pasadena pumping areas also draw water from it.

Zone 6 consists predominantly of calcareous clay containing numerous lime concretions and thin lenses and stringers of sand and sandy clay. The beds of sand supply water to shallow domestic wells at Houston.

PUMPAGE

SOURCE AND QUANTITY OF WATER

The water supplies of the Houston district are obtained almost entirely from wells. The estimated average quantities of water, in millions of gallons a day, pumped in the Houston, Pasadena, and Katy pumping areas in 1930, 1935, 1937, 1939, and 1940 are given in the following table:

Estimated average daily pumpage in the Houston, Pasadena, and Katy pumping areas

[Million gallons a day [1]]

	1930	1935	1937	1939	1940
Houston Water Department (from city records)	25.8	24.5	25.2	27.2	28.8
Houston independent public water supplies and industrial wells	14	14	16	16	17
Pasadena industrial wells	10	10	29	29	33
Total in the Houston and Pasadena pumping areas	50	49	70	72	79
Katy pumping area	18	14	30	40	45
Total	68	63	100	112	124

[1] For convenience in compiling, all figures are given as daily averages throughout the year.

HOUSTON AND PASADENA PUMPING AREAS

Nearly all the water supply of the Houston and Pasadena pumping areas comes from approximately 225 wells (see pls. 8 and 9), for which pumpage records covering several years are available. Of these wells, 24 are operated by the Houston Water Department and 22 by suburban communities. Industrial requirements for water are supplied in large part from privately owned wells. The heaviest industrial consumers are oil refineries, breweries, ice plants, railroads, laundries, and a large paper mill.

In 1930 the total combined withdrawals of ground water in the Houston and Pasadena pumping areas averaged about 50,000,000 gallons a day. In 1931–33, as the financial depression grew, the rate of pumping both from city and privately owned wells gradually declined, reaching a minimum in 1933, but the decline amounted to only 10 or 12 percent of the total pumpage in 1930. During the next three years the rate of withdrawal of ground water gradually increased, and in 1936 the total pumpage was approximately the same as it was in 1930. About March 1, 1937, a battery of new wells (Nos. 1129 to 1133, 1135 to 1137, and 1142) was brought into operation by an industrial organization near Pasadena and pumped during the remainder of that year at an average rate of about 19,000,000 gallons a day. This represented an increase of about 40 percent over the average daily pumpage in the Houston and Pasadena pumping areas in 1936. In 1938 the average rate of withdrawal from the new wells at Pasadena was about 16,000,000 gallons a day, about 16 percent less than the average in 1937, and the total pumpage in the Houston and Pasadena areas was somewhat less than in 1937. In 1939 the total pumpage in these areas was slightly more than in 1937. In the late fall of 1939 and spring and summer of 1940, the demands by industries of Pasadena and by patrons of the Houston City Water Department increased materially, and the pumpage for the entire year 1940 is estimated at about 79,000,000 gallons a day. This represents an increase of about 30,000,000 gallons a day, approximately 60 percent, over the pumpage in 1935. Of this increase, about 23,000,000 gallons was in the Pasadena area.

KATY PUMPING AREA

The records of the American Rice Growers Cooperative Association show that in the Katy area about 9,400 acres of rice was planted in 1930, 8,000 acres in 1935, 13,750 acres in 1937, 16,370 acres in 1938, 19,950 acres in 1939, and 24,200 acres in 1940. All this land was irrigated with water pumped from wells.

The wells are pumped during the rice-growing season, which begins about the first of May and lasts about 130 days. The pumps are not operated continuously but only as water is needed. Hence the number of days of pumping varies from season to season, depending on the rainfall, and averages about 100 days each year, during the period May 1 to September 15. In order that direct comparisons may be made of pumpage in this area with pumpage in the Houston and Pasadena areas, the pumpage in the Katy area is calculated, in gallons a day, as though it were continuous during the entire year. In 1930, according to an inventory made in connection with the cooperative ground-water investigation, the total pumpage in the Katy area, with about 45 wells in operation, amounted to about 20,000 acre-feet, the equivalent of a continuous draft of about 18,000,000 gallons a day. The estimates of pumpage since 1930 are based on records of the Rice Growers Association and the Houston Lighting & Power Co., on the results of measurements of discharge of water from the individual wells, and on records of the rainfall at Houston. The pumpage in 1935, with approximately 40 wells in operation, was about 14,000,000 gallons a day. In 1937 it was about 30,000,000 gallons a day, from 61 wells; in 1938, about 25,000,000 gallons a day, from 71 wells; in 1939, about 40,000,000 gallons a day, from 78 wells; and in 1940, about 45,000,000 gallons a day, from 88 wells. (See pl. 8.)

It is significant that the consumption in 1940 was more than three times that of 1935 and nearly twice that of 1938.

DECLINE OF WATER LEVELS IN WELLS

GENERAL CONDITIONS

In the early days of Houston flowing wells could be obtained by drilling practically anywhere within the Houston district. The artesian pressure in some localities was sufficient to raise the water 15 to 30 feet above the surface. In 1931, however, the artesian head in the greater part of the Houston and Pasadena areas, as shown by water levels in unused wells, was between 50 and 80 feet below the surface, or from about sea level to 30 feet below sea level (see figs. 5–9), the decline in head having averaged about 4 feet a year during the period 1920 to 1930. As a result of a decrease in the rate of pumping in these areas from 1931 to 1933, the maximum observed water levels in the observation wells of the area showed a rise, on the average, of about 3¾ feet from the spring of 1931 to the spring of 1933. As the rate of pumping gradually increased during the period 1933 to 1936 the maximum levels gradually declined, the average decline amounting to a little more than 5 feet.

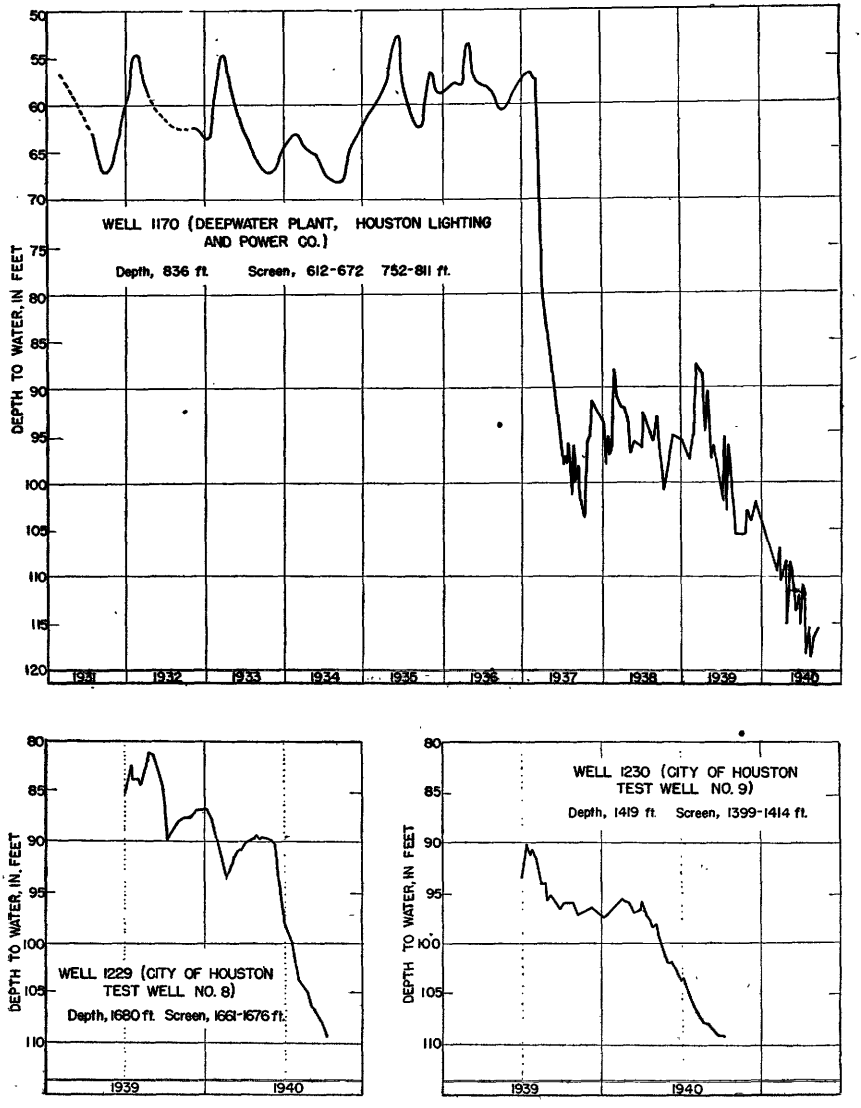


FIGURE 5.—Fluctuations of water levels in wells in the Pasadena area.

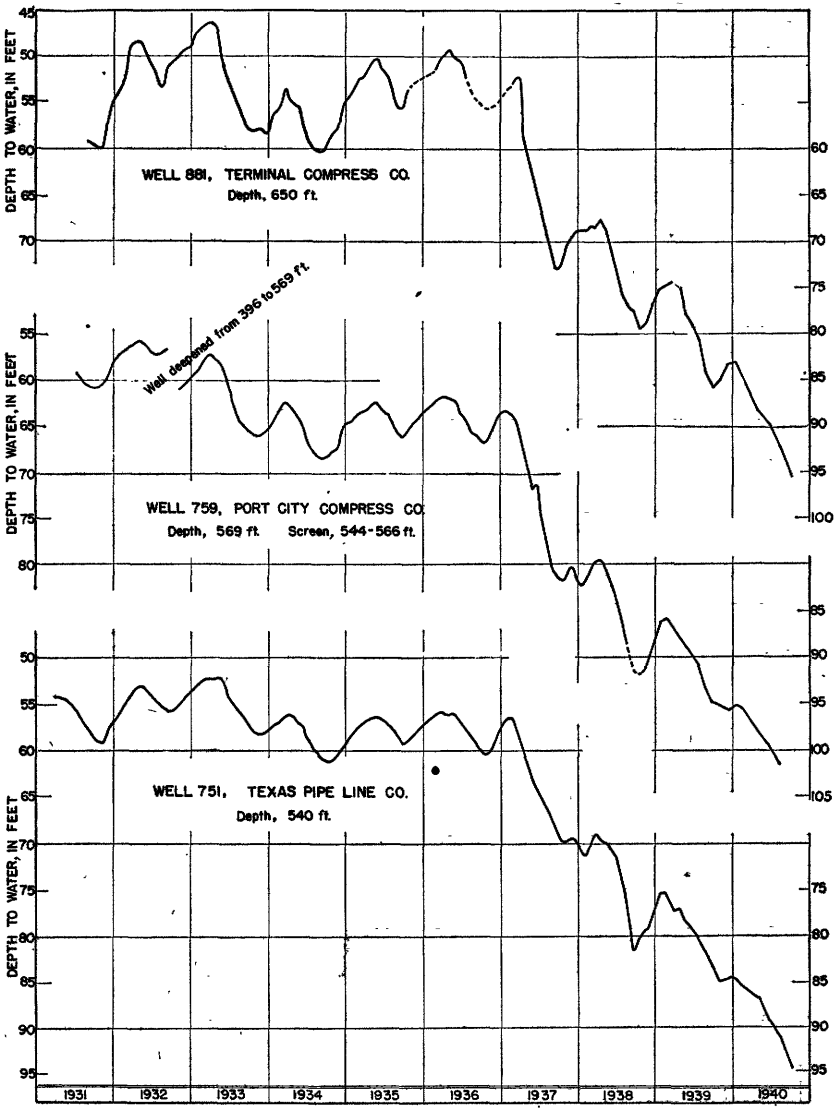


FIGURE 6.—Fluctuations of water levels in wells in eastern Houston.

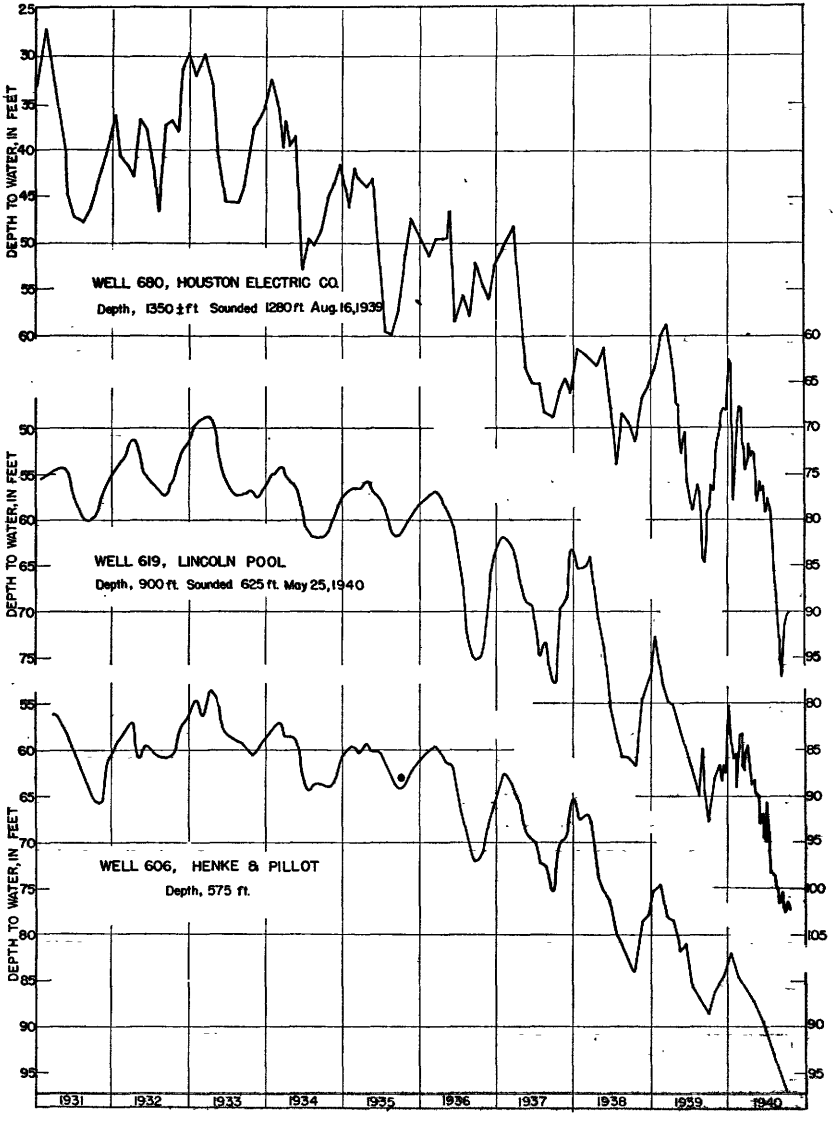


FIGURE 7.—Fluctuations of water levels in wells in central Houston.

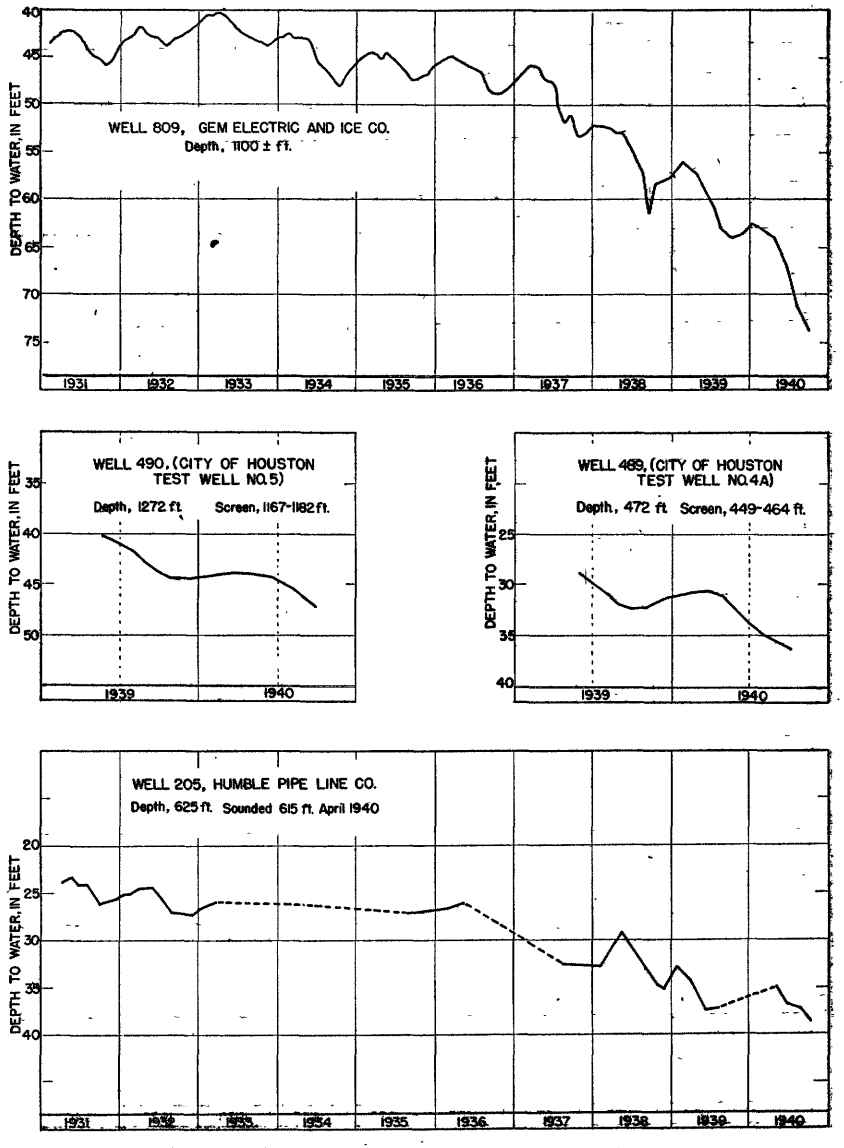


FIGURE 8.—Fluctuations of water levels in wells west of Houston.

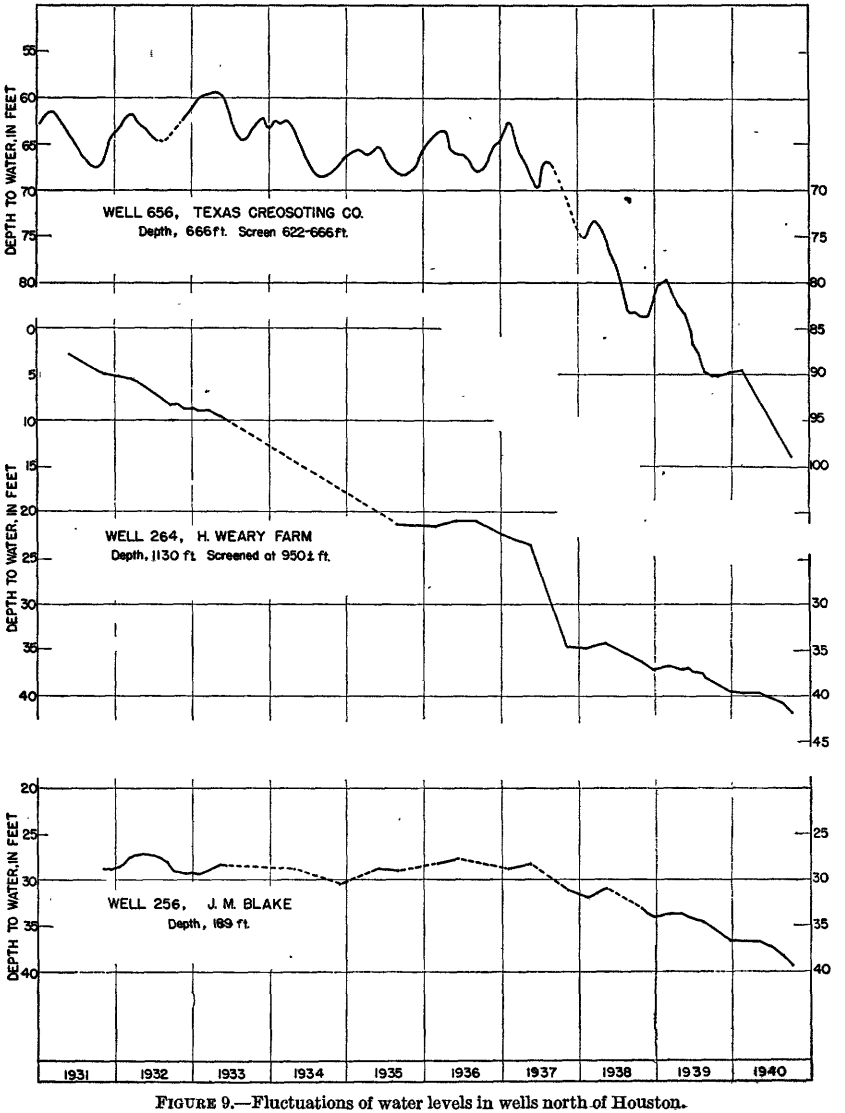


FIGURE 9.—Fluctuations of water levels in wells north of Houston.

When additional pumping at the rate of 19,000,000 gallons a day was started at Pasadena about March 1, 1937, the levels began to decline almost immediately in observation wells near Pasadena. By October 1, 1937, the water levels near Pasadena had dropped about 45 feet in two of the observation wells (see fig. 5, well 1170) and 35 feet in another. In more distant wells the water levels declined less rapidly, the magnitude of the decline in most wells and the lag in its transmission depending on the distance from the center of pumping at Pasadena. In some wells in the central and western parts of Houston and elsewhere several months elapsed before the decline resulting from this new pumpage was noticeable. From the later part of 1937 to the corresponding period in 1938 the water levels in the observation wells near Pasadena remained constant or rose slightly This was due to a decrease in local pumping. In observation wells at Houston and west and north of the city, however, the decline continued during 1938 and in some wells was greater than in 1937. During 1939 and 1940 the rate of pumping at Pasadena again increased, and the water levels there declined rapidly and persistently. In the wells in eastern and northern Houston and in the area north of Houston the decline in 1939 was greater than in 1938, and the rate of decline increased in 1940. In central and western Houston and the area west of the city the average decline in 1939 was about the same as in 1938, but the rate of decline increased in 1940. A part of the increase in the rate of decline in Houston in 1940 was due to increased pumpage from the municipal wells and a few privately owned industrial wells in Houston. The trend of water levels in different parts of the Houston district from 1931 to the fall of 1940 is shown in the hydrographs of selected observation wells in figures 5 to 9. For a large part of the district the approximate altitudes of water levels in wells that draw from the most heavily pumped sands are shown by contours in plate 10.

DECLINE IN HOUSTON, PASADENA, AND ADJACENT LOCALITIES, 1937 TO 1940

PRIVATE WELLS THAT DRAW FROM THE HEAVILY PUMPED SANDS

The decline of water levels from 1937 to 1940 in privately owned observation wells that have screens opposite the more heavily pumped sands in Houston, Pasadena and adjacent localities, based on the highest observed levels from January to May, together with the decline from August 1939 to August 1940, is shown in the table following. The wells are described in the well tables and are shown on plates 8 and 9.

Decline of water levels, in feet, in wells screened opposite the heavily pumped sands in Houston, Pasadena, and adjacent localities, 1937–40

Well	Distance (in miles) and direction from Pasadena	Depth (feet)	Spring measurements				August measurements
			1937–38	1938–39	1939–40	1937–40	1939–40
Vicinity of Pasadena							
1182	½ W	685					15.10
1187	1 W	800±		[1] +0.13	18.93		15.37
1231	1 W	800±		+1.47	19.34		14.64
1176	2 NW	1,134	28.99	2.90	+1.48	30.41	4.91
1170	2 W	836	31	+0.5	19.5	50.0	13.0
1161	2½ W	1,228	25	3.5	10	38.5	18.35
1150	2½ NW	680				37	11.51
883	3½ W	841			11.24		13.08
1229	4 S	1,680					23.77
1230	4 S	1,419					13.70
890	4½ W	1,284	22.12			38.61	
1302	6½ S	832	18	4.5	4.79	27.5	6.65
933	7 N	850					7.38
Eastern Houston							
881	5 W	650	15.90	6.00	8.92	30.82	8.08
878	5 W	905	24.64	4.54	8.63	37.81	
913	5½ W	900±		6.38	7.17		8.54
759	5½ NW	569	16.49	5.99	9.83	32.31	8.41
876	6½ W			5.57	9.65		4.85
757	6½ NW	676	13.2	6.57	9.91	29.7	8.1
751	7 NW	540	12.56	6.62	9.88	29.06	9.16
748	7½ NW	721					9.53
Northern Houston							
662	10 NW	834	12.20	7.21	15.65	35.06	
663	10 NW	740					4.85
656	11½ NW	665	10.79	6.13	10.11	27.03	7.18
585	12½ NW	950			9.27		
Central and western Houston							
680	9½ NW	1,280	13.20	+2.57	3.88	14.51	11.44
790	10½ W	606	+1.12	10.29	6.18	15.35	5.27
619	10½ NW	625	2.18	8.71	7.51	18.40	10.83
788	11 W	1,416			3.90		
623	11 NW	900±			5.97		3.57
620	11½ W	1,379			2.52		5.94
787	12 W	700±			4.63		3.08
779	12 W	584			4.82		
780	12 W	732			4.57		7.72
606	12 NW	575	4.56	7.67	7.57	19.80	7.54
609	12 NW	825			7.09		8.46
602	13½ W	1,038	7.69	5.83	6.25	19.75	9.71
Locality west of Houston							
804	14½ W	650±	6.20	6.15	5.09	17.44	
783	15½ W	350±	2.67	5.17	4.34	12.18	4.75
809	16 W	1,100±	6.37	3.88	6.61	16.86	8.55
840	16 W	827			5.07		7.13
473	18½ W	416			3.94		3.93
498	19½ W	787			3.72		
472	20 W	365			3.68		3.72
490	23½ W	1,272					3.52
489	25½ W	472					4.36
Locality north of Houston							
650	14 NW	468			5.84		5.13
649	16 NW	367			4.84		4.44
302	18 N	1,000–			2.66		
256	21 NW	189	2.70	2.57	3.14	8.41	3.75
264	21 NW	900±	11.78	2.47	2.92	17.17	2.89
225	23½ NW	616			2.54		5.22
268	24½ N	815					2.29
221	24½ NW	208			2.63		4.86

[1] Plus sign preceding a measurement indicates a rise in the water level.

The outstanding facts revealed by this table are as follows:

In 6 observation wells near Pasadena for which comparable records are available the decline in water levels from 1937 to 1940 ranged from 27.5 to 50.0 feet and averaged 37.0 feet. The decline from August 1939 to August 1940 in 12 wells ranged from 4.91 to 23.77 feet and averaged 13.1 feet. (See fig. 5.)

In 5 observation wells in eastern Houston the decline from 1937 to 1940 ranged from 29.06 to 37.81 feet and averaged 32.0 feet. The decline from August 1939 to August 1940 in 7 wells ranged from 4.85 to 9.53 feet and averaged 8.1 feet. (See fig. 6.)

In 2 wells in northern Houston the decline was 27.03 and 35.06 feet from 1937 to 1940 and in 2 it was 4.85 and 7.18 feet from August 1939 to August 1940. (See fig. 9, well 656.)

Observations in 5 wells in central and western Houston showed a decline from 1937 to 1940 ranging from 14.51 to 19.80 feet and averaging 17.5 feet and in 10 wells a decline from August 1939 to August 1940 ranging from 3.08 to 11.44 feet and averaging 7.4 feet. (For hydrographs of wells in central Houston see fig. 7.)

West of Houston the decline in 3 wells from 1937 to 1940 ranged from 12.18 to 17.44 feet and averaged 15.5 feet, and the decline in 7 wells in 1939 and 1940 ranged from 3.52 to 8.55 feet, and averaged 5.1 feet. (See fig. 8, wells 809, 489, and 490.)

North of Houston the decline in 2 wells from 1937 to 1940 was 8.41 and 17.17 feet, and the decline in 7 wells in 1939 and 1940 ranged from 2.29 to 5.22 feet and averaged 4.1 feet. (See fig. 9, wells 264 and 256.)

WELLS THAT DRAW FROM THE LIGHTLY PUMPED SANDS

Records showing the decline of water levels in observation wells that in general are considerably shallower than the wells listed in the preceding table and draw water from the more lightly pumped sands are given in the table that follows.

Decline in water levels, in feet, in wells screened opposite the lightly pumped sands in Houston, Pasadena, and adjacent localities, 1937–40

Well	Distance (miles) and direction from Pasadena	Depth (feet)	Spring measurements				August measurements
			1937–38	1938–39	1939–40	1937–40	1939–40
1209	4½ S	650+	6.49	4.22	2.33	13.04	3.12
886	5 W	540	6.58	1.19	5.38	13.15	4.96
738	8½ NW	205	3.03	.40	2.06	5.49	2.42
778	11½ W	404			3.78		
820	11½ NW	310	.60	3.89	2.43	6.92	2.80
608	12 NW	350			4.40		4.82
604	12½ NW	340	.57	[1] +1.02	4.93	4.48	

[1] Plus sign preceding a measurement indicates rise in the water levels.

The decline in 5 of these wells from 1937 to 1940 ranged from 4.48 to 13.15 feet and averaged 8.6 feet, and the decline between August 1939 and August 1940 in 5 wells ranged from 2.42 to 4.82 feet and averaged

3.6 feet. This decline is less than the decline in the deeper wells but has almost exactly the same trend. This indicates that, although clay beds of considerable thickness separate the shallow and deep water-bearing zones, a connection exists between them that permits some flow of water from one to the other.

HOUSTON MUNICIPAL WELLS

In the next succeeding table the differences are shown between water-level measurements made in the Houston municipal wells during the winter and spring of 1939 and measurements made during the corresponding period in 1940. With each measurement is given the length of time the pump on the well was idle before the measurement was made.

Decline of water levels in Houston municipal wells, 1939–40

Plant	Well	Plant No.	1939			1940			Decline from 1939 to 1940
			Date	Depth to water (feet)	Duration of shutdown [1]	Date	Depth to water (feet)	Duration of shutdown [1]	
Central	617	F-1	Feb. 25	93.30	30 min	Feb. 27	103.89	30 min	10.59
Do	616	F-5	Feb. 25	93.08	30 min	Feb. 8	100.91	5½ days	7.83
Do	618	F-10	Feb. 25	83.22	3 days	Feb. 8	93.26	8½ days	10.04
Do	624	F-11	Jan. 16	86.0	45 min	Feb. 27	93.0	30 min	7.0
Do	625	F-12	Feb. 25	84.65	30 min	Feb. 27	96.25	30 min	11.60
Do	688	C-16	Jan. 16	97.83	30 min	Feb. 27	102.33	30 min	4.50
Do	689	D-17	Feb. 25	87.50	11 days	Feb. 27	101.03	120 min	13.53
East End	895	1	Feb. 24	97.54	30 min	Feb. 27	105.82	30 min	8.28
Heights	1410	6	Feb. 24	78.49	25 days	Feb. 28	87.41	29 days	8.92
Do	1412	7	Mar. 21	89.31	30 min	Feb. 28	96.96	30 min	7.65
Do	1411	8	Mar. 21	91.92	30 min	Feb. 28	98.0	30 min	6.08
Magnolia Park	879	2	Feb. 24	83.49	20+ days	Feb. 27	90.41	21 days	6.92
Northeast	744	1	Feb. 24	49.90	10 days	Feb. 27	62.89	60 days	12.99
Do	1395	2	May 25	92.88	30 min	May 9	102.1	30 min	9.22
Scott Street	856	1	Feb. 24	102.51	90+ days	Feb. 27	116.54	90+ days	14.03
Do	855	2	Feb. 24	94.87	30 min	Feb. 27	112.41	30 min	17.54
Do	857	3	Feb. 25	98.31	30 min	Feb. 27	116.97	30 min	18.66
Do	858	4	Feb. 25	93.46	30 min	Feb. 27	107.66	30 min	14.20
Do	767	5	Feb. 24	97.36	30 min	Feb. 27	111.84	1 day	14.48
South End	795	2	[2] Dec. 14	82.07	30 min	Feb. 28	87.23	35 min	5.16
Do	794	4	[2] Dec. 14	79.04	30 min	Feb. 28	82.16	30 min	3.12
Do	793	5	[2] Dec. 14	114.19	33 min	Feb. 28	116.71	33 min	2.52

[1] Length of time pump was idle before measurement was taken.
[2] Dec. 14, 1938.

Most of the water-level measurements in the foregoing table do not reflect the true static levels, because the wells were not allowed to remain unpumped long enough to permit the water levels to become static before the measurements were made and because no control was exercised over the rate or time of pumping of other wells in the fields. Hence the water levels measured in the same well at two different times are not strictly comparable. However, if the measurements of all the wells at a plant are considered, the individual discrepancies tend to be equalized and the average of the individual declines gives the approximate magnitude of the decline at that plant. The average decline at each plant from 1939 to 1940 was as

follows: Central, 9.3 feet; East End, 8.3 feet; Heights, 7.6 feet; Magnolia Park, 6.9 feet; Northeast, 11.1 feet; Scott Street, 15.8 feet; and South End, 3.6 feet.

DECLINE IN THE KATY PUMPING AREA

The irrigation wells in the Katy area range in depth from about 150 feet to about 900 feet. Nearly all of them are gravel-walled and so screened as to draw from all the water-bearing beds penetrated, including those near the surface, in which the water is unconfined and there is a water table. According to a statement by Mr. John Cope, a rice grower in the area, the average decline in water levels between 1903 and 1931, was about 5 feet. As shown in the following table, the decline in 14 observation wells between March 1931 and March 1940 ranged from 4.5 to 14.0 feet and averaged 8.6 feet. Between March 1939 and March 1940 the decline in 31 wells ranged from 1.5 to 4.7 feet and averaged 2.6 feet. (See fig. 8, well 205.)

Decline of water levels in wells in the Katy pumping area

Well No.	Depth of well	March 1931 to March 1940	March 1939 to March 1940	Well No.	Depth of well	March 1931 to March 1940	March 1939 to March 1940
Harris County:	*Feet*	*Feet*	*Feet*		*Feet*	*Feet*	*Feet*
134	274		3.8	384	505	[1] 7.8	2.8
136	138	14.0	4.7	385	359	[1] 5.1	2.3
139	134	[1] 10.2	4.0	399	326		1.8
140	359		3.9	400	258		1.9
146	250		4.0	Waller County:			
182	239		2.8	223	767	8.5	2.0
183	284	7.2	2.2	235		12.3	3.5
186	628	9.3	2.5	247	641		2.0
205	615	11.2		Fort Bend County:			
206	450±	7.6	3.6	7	337	5.2	2.0
352	470		3.5	11	170	[1] 4.7	2.3
357		7.5	1.7	15	172	7.6	2.2
362	500	10.9	3.1	19	545	7.5	2.0
367	535		2.5	20	250	[1] 4.6	2.3
370	625		2.2	21		4.5	2.0
381	95+	7.0	1.5	26	657		2.0
382	185		2.8	33	346		1.7

[1] Decline from 1933 to 1940.

FLUCTUATION IN SHALLOW WELLS ALONG THE HEMPSTEAD AND CONROE HIGHWAYS

Measurements of depths to water in about 70 shallow wells along the Hempstead and Conroe highways were made periodically during 1931 and 1932, and in about 30 of these wells measurements have been made at intervals since 1932. The water levels in 9 wells are affected directly by changes in the levels of the perched water, which occurs nearly everywhere in the outcrop area. They decline markedly during dry periods and rise quickly during and immediately after heavy rains, especially in winter. On the other hand, in the wells that tap

only the ground water below the true water table, the water levels fluctuate less with the rainfall but are likely to be considerably affected by heavy pumping of wells in the outcrop area.

No decline of the water table since 1931 has been found in 10 water-table wells along the Conroe highway, or in 2 wells near Houston and 2 wells northwest of Hockley along the Hempstead highway. There has been a decline, however, in 7 wells along the Hempstead highway, near the northern part of the Katy pumping area. Practically all of this decline has occurred during the past 2 years. The water levels dropped considerably during the summer of 1939 and failed to rise as much during the winter of 1939–40 as during the winter of 1938–39. They declined considerably during the summer of 1940 and at the time this report was prepared had not risen to the level reached at the corresponding time in the winter of 1939–40. The decline ranged from 1 to 5 feet, with an average of about 2½ feet, and is apparently caused by pumpage from new rice-irrigation wells near the Hempstead highway and by increased pumpage from wells already in use in other parts of the rice-growing area.

CHEMICAL CHARACTER OF THE GROUND WATER

The character and quantity of dissolved mineral matter in a water supply largely determine the value of the supply for public and industrial uses and for irrigation. A large number of analyses of water from wells in the Houston district made by the Geological Survey, the city of Houston, and commercial laboratories show that most of the water pumped from wells in this area is of good quality and compares favorably with other public, industrial, and irrigation supplies in the United States. (See tables of analyses, pp. 277–288.) Many of these analyses have already been presented in the earlier reports on the district issued in mimeographed form.

In the Houston district water of good quality is generally found in all aquifers to relatively great depths, but water of objectionably high mineral content has been encountered in many of the deepest wells and oil tests. The higher mineral content of these deeper waters is due largely to increased amounts of sodium chloride. Samples of water with moderate mineral content and low chloride content have been collected from sands penetrated by wells at depths of about 2,000 feet in Houston; about 1,900 feet in Pasadena; 1,850 feet in test well 8 put down by the city of Houston 12 miles southeast of Houston, near South Houston; and about 1,700 feet in test well 6 put down by the city of Houston near Clodine. However, samples of water having sufficient chloride to be objectionable were collected from sands penetrated by wells at 2,100 feet in Houston; at about 1,000 feet near Webster, 25 miles southeast of Houston; at about 1,000 feet at Baytown, 20 miles east of Houston; and at about 2,000

feet in test well 6, near Clodine. In test wells 8 and 9, near South Houston, water with low chloride content was found to a depth of nearly 1,400 feet; but the water at depths from 1,399 to 1,414 feet contained 208 parts per million of chloride; that from 1,506 to 1,526 feet contained 645 parts per million of chloride; and that from 1,666 to 1,706 feet contained 268 parts per million of chloride. At 1,832 to 1,850 feet in well 8, however, the chloride was only 82 parts per million, which is only slightly higher than the average of the Houston-Pasadena area. The electrical logs of oil tests that have been studied indicate that highly mineralized water occurs below 2,100 feet near Pasadena; 1,500 feet about 18 miles southeast of Houston; 1,800 feet about 11 miles south of Houston; 2,000 feet near South Houston; 2,200 feet near Aldine, 12 miles north of Houston; and 2,500 feet near Westfield, 20 miles north of Houston. These data show that water of low chloride content is likely to be found in the beds of sand from the surface to depths as great as 2,100 feet in Houston and to even greater depths in the area north of Houston, but that toward the south and southeast the depth at which water of low chloride content can be found becomes progressively less. They also tend to show that the deeper sands, which supply fresh water in Houston, contain water that is too highly mineralized for public and industrial uses and irrigation a comparatively short distance southeast of Houston. In localized areas near salt domes, such as Pierce Junction, Fairbanks, Eureka, and South Houston, highly mineralized water with high chloride content is probably present at comparatively shallow depths. It is believed, however, that there is little likelihood of this highly mineralized water spreading into adjacent areas in which there is fresh water.

The possibility of salt-water encroachment has been discussed in previous reports. Since 1931 samples taken at regular intervals from selected widely spaced wells in the district have been analyzed to determine whether there has been any increase in chloride content. According to these analyses, including the latest, made in May 1940, there has been no significant change in the composition of the ground water in the formations from which the Houston district obtains its supply. It is possible, however, that there has been some encroachment of salt water in areas to the south or east of the Houston and Pasadena pumping areas, where there are as yet no wells drawing from the sands in which the encroachment may be occurring.

RESULTS OF EXPLORATORY WELL DRILLING

In the program of exploratory drilling carried out by the city of Houston during the summer of 1939, 9 test wells were put down west of Houston along the Houston-Clodine road, 2 about 15 miles north of the city limits, at Westfield, and 2 southeast of the city limits on

the South Houston-La Porte highway, about 3 miles east of the town of South Houston. (See pls. 8 and 9.) The main objects of the drilling program were as follows: (1) West of Houston, to determine the thickness and character of the water-bearing sands, the chemical character of the water in them, and the artesian pressure in the sands to a maximum depth of 2,000 feet. (2) North of Houston, to determine the artesian pressure; to obtain observation wells, both in the sands at moderate depths, which are believed to correlate with the heavly pumped sands at Houston, and in the deep sands, which are undeveloped or very lightly drawn upon in Houston; and to determine the quality of the water. (3) Southeast of Houston, to determine the artesian pressure in sands containing fresh water and the position and thickness of sands containing salty or brackish water; and by using the test wells as observation wells, to endeavor to obtain advance information on the possible encroachment of salt water from the direction of the Gulf of Mexico.

The test wells were put down with a rotary drill. They were 5½ inches in diameter and ranged in depth from 360 to 2,000 feet. The combined drilling footage of all the wells amounted to 16,646 feet, and the average depth of the wells to 1,280 feet. All wells were electrically logged as soon as possible after the drilling was completed. Samples of cuttings were taken from the drilling mud after each 20 feet of drilling, and in 6 of the wells cores of the sand were obtained in selected beds. In 8 of the wells samples of sand and water were obtained by the drill-stem method; altogether, 15 such samples were collected. Selected sand samples were analyzed and tested for permeability and porosity in a field laboratory. Six of the test holes were finished as observation wells by casing them with 3½-inch (inside diameter) casing and setting screens opposite selected beds of sand. Periodic water-level observations are made in them, and the quality of the water is tested from time to time.

The test wells show that there is an average of 600 feet of water-bearing sands between the surface and a depth of 1,500 feet along the line of wells stretching from the western city limits of Houston to Clodine. A supply of water exists north of Houston in deep sands that are practically untouched by existing wells. The water contained in these sands at Westfield and Spring is well suited for domestic and industrial uses. The occurrence of fresh water in the deep sands in the vicinity of South Houston tends to show that salt-water encroachment from down dip through the sands tapped by wells in the heavily pumped area may not be very serious so far as the immediate future is concerned, but more information is needed before a definite conclusion can be reached. Further details regarding the results of the test drilling are given in another report.[3]

[3] Rose, N. A., White, W. N., and Livingston, Penn: Exploratory water-well drilling in the Houston district, Tex.: U. S. Geol. Survey Water Supply Paper 889-D, pp. 304-314, 1944.

TRANSMISSIBILITY AND STORAGE CAPACITY OF THE WATER-BEARING BEDS

The amount of water that can be withdrawn from the water-bearing beds depends upon the amount of rainfall that percolates into them in their outcrop areas, the capacity of the beds to transmit the water to the pumped areas, and the amount of water that is withdrawn from storage in the beds when the head declines. In all parts of the Houston district except the Katy area the water levels in the outcrops of the water-bearing sands are high enough so that some of the ground water is discharged by springs and seeps. It is evident therefore that the rainfall recharges the aquifers at a rate greater than the water is transmitted down the dip. In the Katy area the water levels have declined below the levels of the stream channels, and none of the recharge returns to the surface as springs or seeps except possibly during or immediately after periods of heavy rainfall.

The rate at which water is transmitted depends on the thickness and permeability of the sands and the hydraulic gradient. The amount of water that is released from storage in an artesian aquifer depends on the elasticity of the water and the compressibility of the sands and their associated confining clays; in a nonartesian aquifer it depends on the effective porosity, or specific yield, of the aquifer. With comparable decline in head, the amount of water released from storage by the lowering of the water table in the nonartesian aquifers is usually from 50 to 200 times as much as is released by the compression of the artesian aquifers.

TRANSMISSIBILITY

The coefficient of permeability of a given water-bearing material, as the term is used by the Geological Survey, is the rate of flow of water, in gallons a day, through a cross-sectional area of 1 square foot, under a hydraulic gradient of 100 percent, at a temperature of 60° Fahrenheit. The coefficient of transmissibility of a given aquifer is the product of the thickness of the aquifer, in feet, multiplied by the average coefficient of permeability, corrected for the prevailing temperature of the water.

The average thickness of the beds of sand which furnish most of the supply for Houston and Pasadena has been estimated from drillers' logs and electrical logs as about 600 feet.

The coefficient of permeability of samples obtained from drill-stem tests during the exploratory test-well drilling ranged from 40 to 800 and averaged about 275.[4]

In the fall of 1939 C. E. Jacob, of the Geological Survey, conducted 16 pumping tests at the Houston municipal well fields and 5 tests on

[4] Rose, W. N., White, N. A., and Livingston, Penn, op. cit., pp. 305.

the city-owned observation wells. Each test consisted of pumping a well a given length of time, then stopping the pump and observing the rate of the recovery of the water level within the well. In many wells it was also possible to observe the interference in the recovery produced by stopping and starting pumps on nearby wells screened in the same sands. Jacob analyzed the results of these tests by means of the following formula developed by Theis: [5]

$$s=\frac{114.6Q}{Pm}\int_u^\infty \frac{e^{-u}du}{u}, \text{ in which } u=\frac{1.87r^2S}{Pmt}.$$

In this formula s is the drawdown, in feet, at any point in the vicinity of a well pumped at a uniform rate; Q is the discharge of the well, in gallons a minute; P is the coefficient of permeability of the material in the aquifer; m is the thickness of the aquifer, in feet; r is the distance from the pumped well to the point of observation, in feet; S is the coefficient of storage; and t is the time the well has been pumped, in days. The average coefficient of permeability of the sand in the aquifers at the Central, Heights, and Scott Street plants was calculated to be approximately 300. At the Northeast plant the permeability was computed as 240. In the observation wells put down by the city near Westfield, South Houston, and Alief the coefficients were found to be 150, 325, and 500, respectively. With an average coefficient of permeability of 300, as computed from these tests, and an average thickness of water-bearing beds of 600 feet, the coefficient of transmissibility, corrected for temperature, is computed to be 180,000 gallons a day.

Values for the coefficient of transmissibility of all the heavily pumped water-bearing beds have been obtained by the application of the Theis equation to the drawdown in 8 selected wells over a period of 2 years, created by the increase in pumpage of 19,000,000 gallons a day at Pasadena in 1937. They range from 112,000 to 196,000 gallons a day and average 140,000 gallons a day.

The hydraulic gradient in the artesian beds in February 1940 was determined from the map showing altitude of water levels. (See pl. 10.) Water moves through the water-bearing beds in the direction of the hydraulic gradient, at right angles to the contours. The rate of inflow into the heavily pumped area was calculated in accordance with Darcy's law, which states that the rate of flow of water through a given cross-sectional area of sand is directly proportional to the hydraulic gradient and the permeability. The contour 10 feet below sea level was chosen as the line along which the rate of inflow could be most readily and accurately determined. The length of this line was estimated as 45 miles, the average hydraulic gradient across this

[5] Theis, C. V., The relation between the lowering of the piezometric surface and the rate and duration of discharge of a well using ground-water storage: Am. Geophys. Union Trans., pp. 519–524, 1935.

contour as 10 feet to the mile, and the average coefficient of transmissibility as 160,000 gallons a day (the average of the coefficients of transmissibility as computed from Jacob's permeability results, the 2-year drawdown curves, and laboratory tests of samples of sand obtained during the test drilling by the city). On the basis of these estimates the inflow in February 1940 across the —10 contour was computed as 72,000,000 gallons a day.

STORAGE CAPACITY

The amount of water that is released from storage when the head in an artesian aquifer declines has been called the coefficient of storage. It has been defined as the amount of water, in cubic feet, that will be released from storage in each vertical column of the aquifer having a base 1 foot square when the artesian head is lowered 1 foot.[6]

Using the Theis formula, Jacob obtained values for the coefficient of storage in 16 interference pumping tests. In 14 of the tests the values ranged from 0.000165 to 0.00108 and averaged about 0.0005 for thicknesses of sand from 157 to 400 feet. The other two tests were made on sets of wells that are screened chiefly opposite different beds of sand and therefore are not included in the average. The average thickness of the sands that were screened in the 14 tests was about 300 feet, or only about half the total thickness of the aquifers. As the coefficient of storage is considered approximately proportional to the thickness of the aquifer, a coefficient of 0.0005 for a thickness of 300 feet is equivalent to 0.001 for a thickness of 600 feet, the approximate combined thickness of the heavily pumped sands in the Houston and Pasadena areas.

Values for the coefficient of storage obtained by the application of the Theis equation to the 2-year drawdowns in 8 wells, mentioned on page 164, range from 0.0019 to 0.0054 and average 0.0033 for all the heavily pumped water-bearing beds. It should be noted that in these wells the head was lowered for the first time and the decline took place over a period of 2 years. Therefore, the average coefficient of storage calculated from these data should be larger than that calculated from data obtained from the short tests made in the thoroughly developed Houston well fields, where the head has fluctuated many times through the range recorded in the tests.

Assuming that the average coefficient of storage lies between the values obtained from the pumping tests and those obtained from the 2-year drawdowns and is about 0.002, and assuming, also, that the average decline during a period of 1 year from February 1939 to February 1940 was 10 feet over an area of about 300 square miles within the —10 contour shown in plate 10, the amount of water taken out

[6] Theis, C. V., The significance and nature of the cone of depression in ground-water bodies: Econ. Geol. vol. 33, No. 8, p. 894, Dec. 1938.

of artesian storage in this area of 300 square miles during the 1-year period was calculated to be about 3½ million gallons a day, or somewhat less than 5 percent of the pumpage.

A large quantity of water was also drawn from artesian storage outside of the —10 contour, where considerable declines have taken place. The available data are not sufficient, however, to permit estimates of the amount.

The decline in water levels in the Katy area involves unwatering by the lowering of the water table as well as by removal of water yielded by compression. Hence, although the water levels in the wells have declined less than in the Houston and Pasadena areas, the decline represents more water taken from storage. The data indicate that a large part of the water that has been pumped has come from natural storage, but these data are insufficient to permit estimates of the amount.

VALUE OF THE COMPUTED COEFFICIENTS

The tests that have been made give a wide range in the computed coefficients of permeability and storage, partly because of differences in the character and thickness of the different beds and of the same bed from place to place, and partly because of the imperfect conditions under which the tests were made and the inadequacy of the information as to the beds tapped by the pumped wells and the observation wells. The range in computed coefficients of storage is caused largely by the differences in the length of time covered by the different tests. In an area such as the Houston district, where the clays and sands are closely interbedded and lenticular and where sedimentation occurred under varied conditions, it is practically impossible to obtain the average coefficient of permeability or the average coefficient of storage for the many aquifers drawn upon or for all parts of any one aquifer. Therefore, average values for the coefficients of permeability and storage as computed from the data available should be accepted as not more than approximately in the correct order of magnitude.

USE OF COEFFICIENTS IN COMPUTING FUTURE DECLINE OF WATER TABLE

If the extent of the water-bearing beds and the coefficients of transmissibility and storage are known, estimates can be made of the future decline of the water level that will result from increases in the rate of pumping. Although the available data are insufficient to permit a comprehensive analysis, the curves shown in figure 10, which have been computed according to the Theis formula, afford a simple approach to the problem. They show the drawdown that would occur at various distances from a pumped well after pumping 1, 3, and 10 years if the well taps an artesian aquifer of infinite areal extent

having a coefficient of transmissibility of 160,000 gallons a day and a coefficient of storage of 0.002 if pumped at a constant rate of 1 million gallons a day.

The curves show that the decline in head in the aquifers near a pumping development begins immediately after pumping is started and is relatively large, the rate being rapid at first but gradually decreasing with time; whereas, the decline at a considerable distance from the development is smaller and does not begin for some time after pumping has been started.

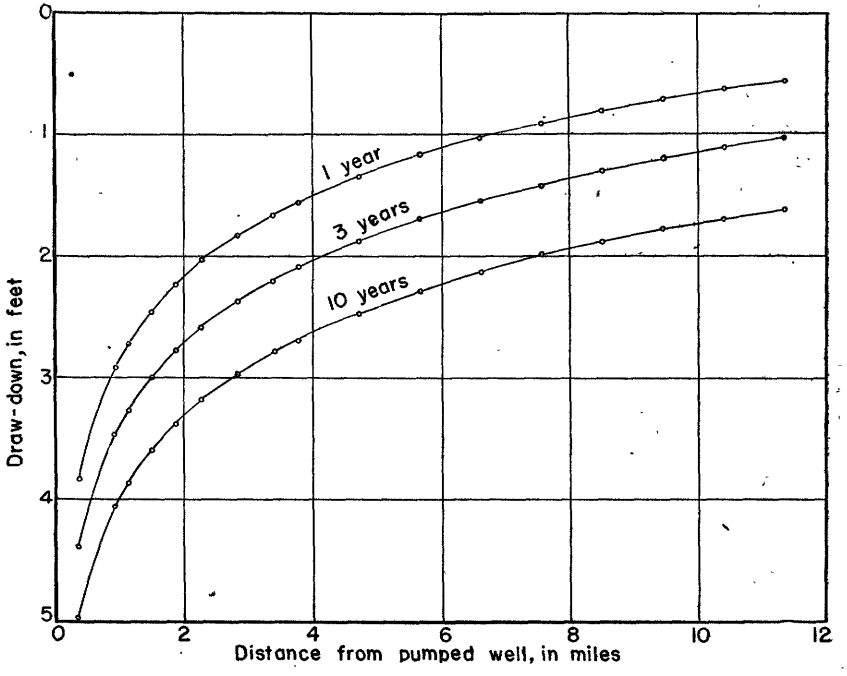


FIGURE 10.—Graph showing theoretical draw-down, according to the Theis formula, due to pumping a well at a constant rate of 1,000,000 gallons a day, the aquifer having a coefficient of transmissibility of 160,000 gallons a day and a coefficient of storage of 0.002.

SUMMARY

The aggregate annual pumpage in the Houston and Pasadena areas was nearly constant from 1930 to 1936, but it increased about 60 percent from 1937 to 1940. In the Katy area the annual pumpage decreased slightly from 1930 to 1935 but increased about 200 percent between 1936 and 1940. The total annual pumpage in the Houston district nearly doubled in the 5-year period.

From 1930 to 1937 the water levels in the Houston and Pasadena areas remained practically constant, indicating that essential equilibrium in water levels had been reached for the amount of water

pumped. As was to be expected, the increased pumpage in 1937 caused a marked decline in water levels, an increased hydraulic gradient, an expansion of the cone of depression, and the removal of water from artesian storage. Further increases in pumpage in 1939 and 1940 caused further decline and depletion. Since 1937 the head in the artesian aquifers has declined over a wide area, perhaps to the outcrop area. A part of the water that is pumped is taken from artesian storage in the pumping areas, but most of it is being drawn into these areas through the aquifers. The water that is drawn into these areas is replenished in large part by recharge on the outcrop area, but a substantial part of it is also drawn from storage in the artesian aquifers outside of the pumping areas.. The evidence obtained to date indicates that the pumping has not yet drawn water from storage in the outcrop area.

In the Katy area, the decline in water levels has been less than in the Houston and Pasadena areas, but it represents in part an unwatering of the beds, and hence a larger proportion of water derived from storage. If the present rate of pumping in the Katy area is continued the local ground-water reservoir will be seriously depleted.

If pumping in the Houston and Pasadena areas is continued at the present rate of 79,000,000 gallons a day the artesian head will continue to decline for some years, although at a diminishing rate. If the rate of pumping is substantially decreased, the water levels will rise, but they will probably not return to the altitudes at which they stood when a similar pumping rate was maintained at an earlier time. Any increase over the present rate of pumping will cause further decline in water levels, withdrawal of additional water from artesian storage, further steepening of the hydraulic gradient, and increased flow of ground water into the pumping areas. The question as to further increase in the rate of pumping is partly a question of the maximum depth from which water can be economically pumped, but it also involves the further depletion of the storage in the ground-water reservoir, the possibility of withdrawing water at a more rapid rate than it can be replaced from rainfall in the outcrop areas, and the possibility of increasing the danger of encroachment of salt water. If it is desired to maintain the water levels at or near their present altitudes the present rate of pumping should be reduced and a supplementary supply of water developed.

Analyses of water samples taken periodically since 1931 from selected wells in the area have not given any evidence thus far of intrusion of salt water from down dip or from underlying salt-water sands into the sands that yield the fresh water. However, intrusion of salt water may be occurring beyond the limits of observation wells. Further lowering of the head in the beds that contain fresh water will increase the possibility of intrusion.

Previous reports have indicated that additional supplies for the city of Houston could be obtained from wells west of Houston in the direction of Clodine. The prospect of obtaining an additional supply from this area is now less good because of the large increase in pumpage in the nearby Katy area, with the resulting large withdrawal of water from storage. Although the information at hand indicates that a supplementary supply of ground water may be obtained in the area north of Houston, including the Aldine-Westfield locality, from sands that lie stratigraphically deeper than the heavily pumped sands of the Houston and Pasadena areas, the information is insufficient to allow estimates to be made of the quantity and quality of the water. Additional test drilling would serve to show the character and extent of these sands and the quality of the water in them.

560113—44——3

ADDENDUM

ADDENDUM

June 1, 1943

Since the foregoing report was written the periodic measurements of water levels in observation wells have been continued and records of pumpage have been collected and compiled for 1941 and 1942.

In the Houston and Pasadena areas, although the number of ground-water developments was increased, the average daily pumpage in 1941 was only 77,000,000 gallons, or 2,000,000 gallons a day less than it was in 1940. This decrease in consumption was caused by unusually heavy rainfall and frequency of showers during the summer, which reduced the requirements for watering lawns and gardens and for industrial cooling. In 1942 the average daily pumpage in the two areas was 85,000,000 gallons, or 7,000,000 gallons a day more than it was in 1941. This increase occurred partly as a result of an increase in the number of ground-water developments by war industries and municipalities and partly because the rainfall was less than it was in 1941.

The general decline of water levels in the Houston and Pasadena areas which began in 1937 continued during 1941, but at a decreasing rate. The average decline in the observation wells of these areas between the springs of 1941 and 1942 was 2.5 feet, as compared with 5.3 feet for the preceding year. In 1942 the large increase in the rate of pumping caused an acceleration in the decline of the water levels throughout the areas. The average decline in the observation wells between the springs of 1942 and 1943 was 6.9 feet, nearly three times that of the corresponding period in 1941–42 and about one and one-third times that in 1940–41.

In the Katy rice-irrigation area about 27,350 acres of rice was planted in 1941 and was irrigated with water pumped from 95 wells, as compared with 24,200 acres and 88 wells in 1940. The pumpage was the equivalent of about 23,000,000 gallons a day throughout the year or about one-half the pumpage during 1940. This decrease in pumpage was due to abnormally heavy rainfall. During 1942 about 30,400 acres of rice was planted and 105 wells were pumped. The pumpage was the equivalent of about 38,000,000 gallons a day throughout the year. Although the total pumpage was about 65 percent

more than that of 1941, the amount of water pumped per acre was still below normal, the rainfall during the growing season again being above the average although less than it was in 1941.

As a result of the relatively small pumpage in 1941 the gradual decline of water levels in the Katy area that had persisted since 1931 gave place to a general rise of the water levels between the springs of 1941 and 1942, the average rise of the water levels in 44 wells amounting to 2.1 feet. This rise continued between the springs of 1942 and 1943 but amounted to an average in 39 wells of only 0.1 foot. This stabilization of water levels was caused by the increase in 1942 in the quantity of water pumped to an amount between the small pumpage of 1941 and the large pumpage of 1940.

The periodic analyses in 1941, 1942, and 1943 of water samples from 60 selected observation wells in the Houston District, like those of former years, show no change in the chemical character of the ground water.

TABLES OF WELL RECORDS, WELL LOGS, AND WATER ANALYSES

The tables following contain a description of 1,018 wells (pp. 175 to 263), of which 935 are in Harris County and 83 in adjoining areas in Fort Bend and Waller Counties. The information includes the location and depth of the well, the name of the owner, the length and size of the casing, the position of the screen, the depth to the water level on given dates, the method of lift, and the use of the water. The results of chemical analyses of water from 240 wells (pp. 277–283) are given, together with the results of a series of partial analyses of water from 49 quality-of-water observation wells (pp. 284–287). These observation wells have been sampled and the water tested periodically since 1931 to determine whether the chloride in the water has increased. The tables also contain chemical analyses of 21 samples of water obtained from test wells (p. 288) during the program of exploratory drilling carried out by the city of Houston in 1939. Drillers' logs of 47 wells are included. Approximately 400 of the well records were obtained during the period 1931 to 1933 by Penn Livingston and S. F. Turner. The remaining records were obtained and about 250 of the earlier records were brought up to date during the period 1939 to 1942 by N. A. Rose, W. F. Guyton, C. R. Follett, and L. G. Davis.

Plates 8 and 9 show the location of all the wells tabulated, each well being given a number on the map corresponding to the number assigned to it in the tables.

WELL RECORDS

Records of wells in Harris County

[All wells are drilled unless otherwise stated under "Remarks." Chemical analyses of water from these wells are shown in the tables of analyses on pp. 277–282.]

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [2]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
3	13¾ miles northwest of Cypress.	T. W. Ray		1870?	71	24,8	2.0	50.6	Nov. 6, 1931	None	N	Casing, 40 feet of 24-inch and 31 feet of 8-inch.
4	14¼ miles northwest of Cypress.	B. F. Quinn		1931	20	3	.5	4.0	May 13, 1931	None	N	Test well formerly used for water-level measurements.
7	In Waller	Bob Robinson	H. H. Strickland	1931	124					C, W	D, S	Dug to 20 feet; remainder drilled.
9	13¾ miles northwest of Cypress.	J. E. Ellison	—— Phillips	1911	120±	5				C, W	D, S	
10	12 miles northwest of Cypress.	J. A. Hafner		1931	21	3				None	N	Test well formerly used for water-level measurements.
11	11¾ miles northwest of Cypress.	do	Hiram Bennett	1905	70	6	1.0	44.8	Jan. 23, 1942	C, W	S	
12	do	do	H. H. Strickland	1900	61	6	1.6	48.0	do	C, W	D, S	
14	12¾ miles northwest of Cypress.	do	do	1926	122	4	2.0	52.7	do	None	N	
15	16¼ miles northwest of Cypress.	W. P. Castle	W. Weaver	1925	90	4				C, W	S	
31	10½ miles northwest of Cypress.	R. L. Burton	Layne-Texas Co.	1928	297	6,4	.5	40.5	Jan. 23, 1942	C, E, ¾	D, S	Casing, 188 feet of 6-inch and 58 feet of 14-inch. Screen from 246 to 289 feet. See log.
33	In Hockley	W. G. Neeley		1910?	61	10	0	20.2	do	None	N	Tile casing.
34	8 miles northwest of Cypress.	O. M. Taylor	H. H. Strickland	1928	55	8				C, G, 2	D, S	Screen from 46 to 55 feet.
35	do	do	do	Old	35	14	2.5	16.6	Jan. 23, 1942	B, H	D	Tile casing.
36	do	do		1931	22	2	0	12.8	do	None	N	Test well used for water-level measurements.
38	10½ miles northwest of Cypress.	Louis Hegar			75±	6¾				C, W	D, S	
39	8½ miles northwest of Cypress.	Mrs. Joe Blake	Joe Blake	1898	38	30				C, W	D, S	Dug well.
40	9 miles northwest of Cypress.	Ira Southard	Ira Southard	1940	497	18,12	1.2	42.3	Jan. 23, 1942	T, E, 60	Irr	Slotted casing, 400 feet. Yield, 1,840 gallons a minute, with a drawdown of 44 feet when drilled.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [3]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
41	8½ miles northwest of Cypress.	R. J. Niehouse	S. Eisen	1940	60	4				T, E	D, S	Screen from 50 to 60 feet.
42	do	W. J. Fish	B. E. Petry	1939	57	4	1.2	32.3	June 10, 1941	C, W	D, S	Measured depth.
43	8 miles northwest of Cypress.	Louis Hager Estate.			35	10	1.5	31.5	Oct. 3, 1939	B, H	D, S	Tile casing.
44	7½ miles northwest of Cypress.	B. Ray Woods	Delta-Shurwell, Inc.	1941	730	20, 13, 10¾				T, D, 130	Irr	Casing, 187 feet of 20-inch; 183 feet of 18-inch; and 357 feet of 10-inch. Yield, 3,000 gallons a minute when drilled. Irrigated 450 acres of rice in 1941. Owner's No. 4.
45	5½ miles northwest of Cypress.	Unknown	B. E. Petry	1941	73±	4	1.5	34.0	May 23, 1941	C, W	S	
46	7¼ miles northwest of Cypress.	G. E. Lloyd	do	1937	83	4				C, W	D, S	Screen from 75 to 83 feet.
47	7½ miles northwest of Cypress.	do		1915?	83	4	1.0	31.0	May 23, 1941	None	N	
48	8¾ miles west of Cypress.	Warren estate	J. H. Bennett	1932	210	6				C, E	D	Screen from 150 to 210 feet. Supplies water for domestic use at Hockley salt mine.
49	8¼ miles west of Cypress.	do	B. E. Petry	1940	108	6				A	Ind	Water has sulfur taste. Supplies water for cooling purposes at Hockley salt mine.
50	6¾ miles north of Cypress.	E. C. Seidel		1924	30	2				C, W	D, S	
51	7¾ miles northwest of Cypress.	H. C. Nichols		1894?	64	42				C, W	D, S	Dug well.
52	7½ miles north of Cypress.	J. Hirsh		1907	37	42				C, W	D, S	Do.
53	8 miles northeast of Cypress.	E. Schultz	E. Schultz	1913	33	6, 1¼				C, H	D, S	
55	do	Fritz Treichel	Fritz Treichel	1922	21	10				C, H	D, S	
57	8¼ miles northeast of Cypress.	Humble Oil & Refining Co.	L. Patterson	1933	226	6				None	N	Screen from 203 to 226 feet. Supplied water for drilling oil tests.
58	7½ miles northeast of Cypress.	do	A. E. Fawcett, Sr.	1933	156	6	0	4 25	June 1933	None	N	Screen from 131 to 156 feet. Supplied water for drilling oil tests.

59	7¾ miles northeast of Cypress.	do	L. Patterson	1933	284	6				None	N	Screen from 263 to 284 feet. Supplied water for drilling oil tests.
60	7¼ miles northeast of Cypress.	do	A. E. Fawcett, Sr	1933	234	6	0	[4] 24	June 1933	None	N	Screen from 195 to 234 feet. Supplied water for drilling oil tests.
61	7½ miles northeast of Cypress.	do	L. Patterson	1933	182	6				None	N	Screen from 159 to 182 feet. Supplied water for drilling oil tests.
62	8 miles northeast of Cypress.	do	do	1933	864	13⅜, 10¾	0	[4] 60	July 1933	T, E, 25	D, Ind	Screen at 761 to 788 and 810 to 838 feet. Yield, 325 gallons a minute with a draw-down of 120 feet when drilled. Supplies Tomball Camp.
63	8¼ miles northeast of Cypress.	do	do	1937	293	8				Ng	Ind	Screen from 251 to 293 feet, Supplies oil refinery.
64	9¼ miles northeast of Cypress.	Amerada Petroleum Corporation.	Homer Wright	1933	280	4				C, E, 3½	D	Screen from 168 to 280 feet. Supplies Tomball Camp.
65	In Tomball	City of Tomball	L. Patterson	1937	303	8				T, E, 10	P	Screen from 248 to 293 feet. Yield, 200 gallons a minute when drilled.
66	8¼ miles northeast of Cypress.	Cecil Faris	B. E. Petry	1933	185	6				Ng	D, S	Screen from 163 to 185 feet.
67	8½ miles northeast of Cypress.	Humble Pipe Line Co.	do	1933	281	6				C, E, 2	D, Ind	Screen from 185 to 205 feet.
68	5¼ miles north of Cypress.	Fritz Benignus	Fritz Benignus	1917	40	36				H	D, S	Dug well.
71	12 miles northeast of Cypress.	Stanolind Pipe Line Co.	N. B. Anderson	1923	65	6, 4	0	[4] 36	March 1933	C, E, 1	D, Ind	Screen from 57 to 65 feet.
74	8¼ miles northeast of Cypress.	M. F. Michel	M. F. Michel	1917	23	36	2.5	16.3	Aug. 4, 1933	C, W	D, S	Dug well.
75	7¾ miles northeast of Cypress.	T. J. Kuehn	T. J. Kuehn	1885	30	60	2.0	21.7	do	C, G,	D, S	Do.
76	7¼ miles northeast of Cypress.	W. M. Buvinghausen.	N. B. Anderson	1916	96	4				C, H	D, S	
77	6½ miles northeast of Cypress.	L. C. Hassell	A. Buvinghausen	1931	26	36	1.0	8.2	Mar. 27, 1941	None	N	Do.
78	7 miles northeast of Cypress.	S. Bloom	S. Bloom	1896?	30±	48	1.5	22.0	do	C, H	D, S	Do.
79	5¾ miles northeast of Cypress.	H. M. Weston		1939	58	4				C, H	D	
80	9 miles northeast of Cypress.	R. H. Jackson	E. Middlestead	1938	170	3				C, E	S	
81	11¼ miles northeast of Cypress.	Harris County	do		108	3				C, E, ½	P	Screen from 98 to 108 feet. Supplies Klein School.
82	13½ miles northeast of Cypress.	A. E. Hildebrandt	A. E. Hildebrandt	1933	105	2½				A, G	D	Screen from 90 to 105 feet.
83	6½ miles northeast of Cypress.	L. C. Hassell			105	4	.5	24.7	Mar. 27, 1941	C, E	D, S	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
89	13 miles northwest of Humble.	W. Houde	E. Middlestead	1940	105	3				C, G	D, S	Screen from 99 to 105 feet.
90	do	C. M. Aves	L. Patterson	1940	136	4				T, E, 2	D, S	Screen from 116 to 136 feet.
92	12¼ miles northwest of Humble.	E. N. Wunsche			35	36	2.5	22.8	June 1 1931	B, H	D, S	Dug well.
93	In Spring	Missouri Pacific Lines.		Old	1,070	8		+		Flows	P, RR	Estimated flow, 50 gallons a minute in 1931. Supplies locomotives and city of Spring. Temperature 82° F. See log.
95	10¾ miles northwest of Humble.	H. C. Middlestead.		1890?	32	72	2.0	19.0	Jan. 22, 1942	None	N	Dug well.
96	do	do			30	6				C, H	D, S	
97	11 miles northwest of Humble.	do		1931	17	2	.2	7.9	Jan. 22, 1942	None	N	Test well used for water-level measurements.
98	12¾ miles west of Humble.	R. W. Houk	H. L. Wilson	1925	137	4				C, E, 5	D, S	
99	12½ miles west of Humble.	do	do	1925	556	6	4.0	24.3	Sept. 28, 1932	A, G, 15	Irr	Screens at 174 to 204 and 516 to 556 feet.
101	12 miles west of Humble.	C. B. Bammel	A. E. Fawcett, Sr	1929	142	4, 3, 2	1.0	24.4	Mar. 27, 1931	C, G	D, S	Casing, 40 feet of 4-inch; 92 feet of 3-inch and 10 feet of 2-inch. Screen from 132 to 142 feet.
102	10 miles west of Humble.	C. P. Addison		1926	19	48	2.0 1.4	10.2 10.4	Dec. 27, 1931 Dec. 26, 1941	None	N	Dug well.
103	do	do			45	6	2.0	18.4 21.3	Nov. 9, 1931 Oct. 4, 1940	C, E	D, S	Measured depth 29 feet.
104	do	do		1931	155	4½				C, E	D, S	
105	In Westfield	Marshall Elzy		Old	20	36	2.0	18.7	Nov. 18, 1931	C, H	D, S	Dug well.
106	10 miles west of Humble.	Steve Pamuk		Old	17	36	1.0	14.0	Nov. 9, 1931	C, H	D, S	Do.
131	10½ miles northeast of Katy.	C. E. House	J. H. Bennett	1914	92	4				C, W	D, S	
132	do	do	I. W. Lawson	1905	139	28, 10	1.5	23.3	Oct. 28, 1931	None	N	Casing, 62 feet of 28-inch and 77 feet of 9⅝-inch. Formerly used for rice irrigation.
134	7¼ miles north of Katy	Ira Southard	Ira Southard	1931	274	24, 10	0 1.0	[4] 32 51.1	Feb. 1931 Jan. 21, 1942	None	N	Casing, 80 feet of 24-inch and 194 feet of 10-inch. Slotted casing, 115 feet. Formerly used for rice irrigation. Owner's No. 1.

135	....do....	....do....	....do....	1920	85	4	1.0	57.3	May 23, 1941	C, W	D, S	
136	6½ miles north of Katy	J. Freeman	J. Freeman	1925	138	24, 10	.5	36.3 51.3	Mar. 24, 1931 Jan. 20, 1942	None	N	Irrigated 200 acres of rice in 1940. Owner's No. 1.
137	7 miles northeast of Katy.	W. E. Freeman	Layne-Texas Co	1928	207	24, 12	1.5	47.5	Jan. 21, 1942	T, E, 50	Irr	Casing, 80 feet of 24-inch and 127 feet of 12-inch. Irrigated 300 acres of rice in 1941. Owner's No. 2.
138	7¼ miles northeast of Katy.	....do....	I. W. Lawson	1909	137	24, 11⅝	.....	.....	.....	None	N	Casing, 64 feet of 24-inch and 73 feet of 11⅝-inch. Screen from 69 to 127 feet. Irrigated 160 acres of rice in 1939. Owner's No. 1.
139	7½ miles northeast of Katy.	Oscar Kemp	J. H. Bennett	1927	134	24, 12	1.0	47.0	Jan. 15, 1942	None	N	Casing, 70 feet of 24-inch and 64 feet of 12-inch. Formerly used for irrigating rice. Owner's No. 1.
140	....do....	....do....	Layne-Texas Co	1931	359	18, 12	1.0	46.7	....do....	T, E, 30	Irr	Casing, 121 feet of 18-inch and 238 feet of 12-inch. Irrigated 115 acres of rice in 1941. Owner's No. 2.
141	7¼ miles north of Katy.	Ira Southard	Ira Southard	1935?	270±	18, 10	.5	50.3	Jan. 21, 1942	T, E	Irr	Estimated yield about 500 gallons a minute in 1940. Used for irrigating rice. Owner's No. 3.
142	9 miles northeast of Katy.	J. Freeman	Delta-Shurwell, Inc.	1937	528	24, 12, 8	.5	38.1	Jan. 15, 1942	T, E, 50	Irr	Casing, 90 feet of 24-inch; 200 feet of 12-inch; and 238 feet of 8-inch. Irrigated 300 acres of rice in 1940. Owner's No. 1.
143	9¼ miles northeast of Katy.	F. L. Rogers	Ira Southard	1939	570	20, 12	1.5	35.0	Jan. 21, 1942	T, D, 65	Irr	Yield, 2,300 gallons a minute when drilled. Irrigated 300 acres of rice in 1941.
144	8 miles northeast of Katy.	F. L. Rogers and Oscar Kemp.	Layne-Texas Co	1937	434	18⅝, 13	0	41.5	....do....	T, E	Irr	Casing slotted from 104 to 135, 137 to 198, 220 to 240, and 320 to 420 feet. Measured yield, 1,535 gallons a minute in 1940. Irrigated 300 acres of rice in 1941.
145	8¼ miles northeast of Katy.	C. E. Freeman	....do....	1936	255	24, 16	0	33.4	....do....	T, E, 50	Irr	Casing slotted from 66 to 91 and 115 to 157 feet. Irrigated 275 acres of rice in 1941.
146	6 miles northeast of Katy.	E. W. Peek	Ira Southard	1937	260	16, 14	2.3	49.0	Jan. 15, 1942	T, E, 40	Irr	Slotted casing, 150 feet. Measured yield 1,010 gallons a minute in 1940. Irrigated 250 acres of rice in 1941.
147	....do....	....do....	.....	Old	74	4	.5	46.1	May 28, 1941	None	N	
148	6¾ miles north of Katy	J. Freeman	Delta-Shurwell, Inc.	1941	284	24, 10¾	.....	.....	.....	T, E, 40	Irr	Casing, 97 feet of 24-inch; 187 feet of 10¾-inch; slotted opposite all sands below 75 feet. Used for irrigating rice in 1941. Owner's No. 13.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
149	8 miles north of Katy	G. P. Nelson			106	4	2.5	47.2	Aug. 15, 1940	C W	S	Measured depth, 63 feet.
150	5 miles north of Katy	Miss —— Frazier	I. W. Lawson	1929	100±	4				C, W	D, S	
154	7½ miles north of Katy	M. L. Longenbaugh.	H. J. Longenbaugh	1938	350	20, 14	1.0	53.2	Jan. 15, 1942	T, E, 50	Irr	Casing, 140 feet of 20-inch; 210 feet of 14-inch; and 180 feet of slotted casing. Yield, 1,700 gallons a minute when drilled. Irrigated 290 acres of rice in 1941.
155	7¼ miles northwest of Katy.	E. B. Longenbaugh.	Layne-Texas Co	1934	514	21, 12	0.5	48.2	Jan. 21, 1942	T, E, 75	Irr	Casing, 120 feet of 24-inch; 394 feet of 12-inch; slotted from 100 to 120, 178 to 197, 318 to 341, 392 to 432, and 470 to 509 feet. Yield, 1,900 gallons a minute in 1940. Irrigated 360 acres of rice in 1941. See log.
156	8½ miles north of Katy	G. P. Nelson	Delta-Shurwell, Inc	1937	471	16, 12	0	43.5	do	T, E, 60	Irr	Casing, 213 feet of 16-inch and 258 feet of 12-inch; slotted from 68 to 133, 178 to 211, 254 to 276, 387 to 429, and 445 to 464 feet. Measured yield, 1,420 gallons a minute in 1940. Irrigated 380 acres of rice in 1940. Owner's No. 1.
157	10 miles northeast of Katy.	H. J. Longenbaugh.	H. J. Longenbaugh	1939	532	20, 10, 8	1.5	36.3	Oct. 29, 1941	T, D	Irr	Slotted casing, 285 feet. Yield, 2,400 gallons a minute when drilled. Irrigated 420 acres of rice in 1940. Owner's No. 2.
158	9¾ miles north of Katy	do	Delta-Shurwell, Inc	1938	805	20, 12, 8				T, D, 80	Irr	Slotted casing, 300 feet. Yield, 2,050 gallons a minute when drilled. Irrigated 415 acres of rice in 1940. Owner's No. 1.
159	11¾ miles northeast of Katy.	G. E. Longenbaugh.	H. J. Longenbaugh	1938	500	22, 12	1.0	20.8	Jan. 21, 1942	T, E, 50	Irr	Slotted casing, 300 feet. Yield, 2,000 gallons a minute when drilled. Irrigated 290 acres of rice in 1941.

160	2¾ miles northwest of Cypress.	Ben Pugh	H. J. Longenbaugh	1938	499	22, 14	1.0	11.0	Jan. 23, 1942	T, E, 75	Irr	Casing, 150 feet of 22-inch and 349 feet of 14-inch; slotted opposite all sands below 75 feet. Measured yield, 2,580 gallons a minute in 1940. Irrigated 400 acres of rice in 1941.
165	1 mile northeast of Cypress.	P. H. Skinner			1,717	6	0	+	Apr. 4, 1931	Flows	S	Oil test. Flow in 1931 about 1 gallon a minute with gas.
166	1½ miles northwest of Cypress.	E. C. Smith		1931	21	2	.6	2.5	Dec. 19, 1941	None	N	Test well used for water-level observations.
167	1¾ miles northwest of Cypress.	do	Layne-Texas Co	1928	158	6	2.0	10.3	do	C, W	S	Screen from 134 to 158 feet.
169	1¼ miles northwest of Cypress.	Southern Pacific Co.			400	8	1.0	18.8	May 23, 1941	T, E	RR	Dug to 35 feet, 8-inch drilled hole from 35 feet to bottom. Supplies locomotives.
170	In Cypress	E. H. Juergen	J. H. Bennett	1915	102	4				C, G, 6	D, S	
171	do	do			72	3	2.0	9.4	Jan. 21, 1942	None	N	
173	1½ miles southeast of Cypress.	Hot Wells Health Resort.		1931	110	4	1.0	5.7 9.2	Apr. 3, 1931 May 10, 1938	C, E, 1	D, S	Owner's No. 1.
174	do	do	Layne-Bowler Co	1907	2,830		0	+	Apr. 3, 1931	Flows	P	Estimated flow, 50 gallons a minute in 1931. Supplies water for hot baths. Temperature 104° F. Owner's No. 2.
177	5 miles southeast of Cypress.	K. P. Black	J. H. Black	1929	65	3	1.2	2.9	do	C, E	D, S	Cased to 40 feet.
178	do	do		Old	40	3	.3	2.5	Jan. 21, 1942	None	N	
182	11½ miles northeast of Katy.	Joel Schmidt	Joel Schmidt	1930	239	[1]24	3.5	30.5	Jan. 21, 1942	T, D, 80	Irr	Irrigated 135 acres of rice in 1941.
183	10¾ miles northeast of Katy.	M. O. Lowery	—— Linley	1926	284	24, 8	0	24.0 28.6	Mar. 12, 1931 Jan. 21, 1942	None	N	Irrigated 160 acres of rice in 1940. Owner's No. 1.
186	9¼ miles northeast of Katy.	T. B. Tucker	Layne-Texas Co	1931	628	18, 12½, 10, 8	0	20.6 29.8	Mar. 12, 1931 Jan. 15, 1942	T, E, 75	Irr	Casing slotted from 100 to 140, 142 to 163, 175 to 195, 207 to 228, 277 to 282, 318 to 328, 418 to 448, and 591 to 619 feet. Measured yield, 2,025 gallons a minute in 1940. Irrigated 460 acres of rice in 1940. Owner's No. 3.
187	11¼ miles northeast of Katy.	J. Schmidt		Old	32	4	2.3	23.5	Dec. 18, 1941	C, H	N	
188	do	M. O. Lowery	Delta-Shurwell, Inc	1941	308	18⅝, 13	0	[1]32	Apr. 2, 1941	T, E, 60	Irr	Casing, 130 feet of 12⅝-inch and 178 feet of 13-inch; 206 feet slotted. Irrigated 400 acres of rice in 1941. Owner's No. 2.
189	3¾ miles northwest of Cypress.	Ridgeview Land			94	4	1.7	34.8	Apr. 3, 1940	C, W	S	
190	2¾ miles northwest of Cypress.	Ben Pugh			125	4				C, H	D, S	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
191	2 miles north of Cypress.	A. H. Kalbow	H. Tanner	1920	73	4, 2				C, E	D, S	
192	1¼ miles southeast of Cypress.	Hot Wells Health Resort.	McMasters & Pomeroy.	1938	729	12				T, E, 50	P	Yield, 1,000 gallons a minute when drilled. Supplies swimming pool. Owner's No. 3.
193	3 miles southeast of Cypress.	Julius Lieder	B. E. Petry	1940	85	4				C, H	D, S	Screen from 79 to 85 feet.
194	3¼ miles southeast of Cypress.	Harris County	do	1938	169	4				C, G	P	Screen from 163 to 169 feet. Supplies new Cypress High School.
195	do	do	J. H. Bennett	1936	250	6				C, E	P	Screen from 242 to 250 feet. Supplies old Cypress High School.
196	6½ miles southeast of Cypress.	Humble Pipe Line Co.	Layne-Texas Co	1940	333	6, 4	0.7	[4] 31. 5	Mar. 1, 1940	T, E, 20	Ind	Casing, 201 feet of 6-inch and 132 feet of 4-inch. Screen at 200 to 222, 242 to 263, and 283 to 307 feet. Yield, 165 gallons a minute when drilled. Owner's No. 3.
197	7 miles southeast of Cypress.	L. M. Sanders	do	1939	132	4½	0	[4] 32	Aug. 23, 1939	J, E, ¾	D, S	Screen from 116 to 126 feet. Yield, 12 gallons a minute when drilled.
198	9 miles southeast of Cypress	F & M Jersey Ranch.	A. E. Fawcett, Sr	1940	119	6				J, E, 2	D, S	Screen from 104 to 119 feet. Owner's No. 1.
199	do	do	Robert Lowery	1941	95	4				J, E, 2	D, S	Owner's No. 2.
202	6 miles southeast of Cypress.	R. H. Richards	H. Tanner	1928	48	6	1. 5	9. 4	May 19, 1931	C, W	D, S	
204	6¼ miles southeast of Cypress.	Humble Pipe Line Co.		Old	100	6				None	N	Owner's No. 1.
205	do	do		Old	625	6	1.0	23. 9 34. 7	Apr. 2, 1931 Jan. 21, 1942	None	N	Owner's No. 2.
206	6½ miles southeast of Cypress.	R. B. Tucker	Layne-Bowler Co	Old	450±	[5] 24	0	25. 7	Jan. 23, 1942	C, G, W	D, S	Formerly used for rice irrigation.
210	7½ miles southeast of Cypress.			Old	67	4	1.0	11. 4 17. 6	Apr. 2, 1931 Jan. 23, 1942	None	N	
212	8 miles southeast of Cypress.	H. & T. C. R. R.	H. Tanner	1924	56	6				C, W, H	RR	

217	7¾ miles east of Cypress.	H. I. Mooney	H. I. Mooney	1928	40	6	.3	[6].5	Mar. 28, 1931	C, H	D, S	
219	8 miles east of Cypress.	Tom Franklin	Tom Franklin	1926	19	18				C, H	D, S	
220	8¾ miles east of Cypress.	Mrs. L. Hargrove		1931	28	3½				C, H	D, S	
221	10¼ miles east of Cypress.	S. Terpstra	H. L. Wilson	1929	208	4	.4	34.0	Jan. 22, 1942	None	N	Screen from 186 to 208 feet.
222	10½ miles southeast of Cypress.	do	do	1928	194	3				C, W	D, S	
223	10¾ miles southeast of Cypress.	G. Terpstra	do	1930	238	4				C, G, 3	D, S	Deepened from 94 to 238 feet in 1932.
224	12¼ miles southeast of Cypress.	Ed Schoenfield	H. Tanner		65	3				C, H	D, S	
225	11⅓ miles southeast of Cypress.	Burlington-Rock Island R. R.	McMaster & Pomeroy.	1923	616	10, 8	0	35.6	Jan. 22, 1942	C, D	RR	Casing, 576 feet of 10-inch and 40 feet of 8-inch. Screen from 576 to 616 feet. See log.
226	6 miles east of Cypress.	Frazer & Lapham	Delta-Shurwell, Inc.	1940	740	20, 10	1.5	32.5	May 23, 1941	T, D, 60	Irr	Casing, 142 feet of 20-inch and 598 feet of 10-inch; slotted at 104 to 119, 132 to 140, 148 to 169, 185 to 205, 221 to 231, 238 to 245, 265 to 302, 326 to 350, 445 to 485, 525 to 540, 580 to 603, 630 to 652, 659 to 718, and 724 to 734 feet. Yield, 2,900 gallons a minute when drilled. Irrigated 400 acres of rice in 1941. See log.
227	5¼ miles southeast of Cypress.	E. S. Hamilton	Layne-Texas Co.	1937	565	24, 12⅜, 8⅝	1.0	27.2	Jan. 15, 1942	T, D, 80	Irr	Casing, 127 feet of 24-inch; 163 feet of 12⅜-inch, and 258 feet of 8⅝-inch. Screen at 146 to 186 and 249 to 289 feet. Casing slotted at 95 to 115, 228 to 249 470 to 509, and 525 to 542 feet. Gravel-walled. Yield, 1,970 gallons a minute when drilled. Irrigated 300 acres of rice in 1941. Owner's No. 2. See log.
228	6¼ miles southeast of Cypress.	do	do	1935	286	24, 12	0	[4] 28.5	Sept. 18, 1935	T, D, 60	Irr	Screens at 90 to 100, and 102 to 143, 155 to 174, 183 to 205, and 264 to 286 feet. Yield, 1,800 gallons a minute when drilled. Irrigated 300 acres in 1941. Owner's No. 1.
232	9 miles northwest Houston Courthouse.	A. Wilke	—— Ruth	1935	50	2	1.2	8.0	Jan. 22, 1942	C, E	D, S	
233	5¾ miles northeast of Houston Courthouse.	Dodson's Lake	Layne-Texas Co.	1936	518	8, 6	0	[4] 56	Apr. 4, 1936	T, E, 20	P	Casing, 426 feet of 8-inch and 92 feet of 6-inch. Screen from 462 to 515 feet. Supplies swimming pool.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
234	6½ miles north of Houston Courthouse.	H. C. Meyers	A. B. Kelly, et al	------	2,266±	6	3.0	0.2	Nov. 9, 1938	None	N	Oil test.
235	7 miles north of Houston Courthouse.	Gayhart Galny	------	1935?	600	6	1.8	59.4	June 10, 1939	None	N	Supplied water for oil tests.
236	----do----	----do----	------	1935?	------	15, 10	.5	58.0	----do----	None	N	Oil test.
237	7¼ miles north of Houston Courthouse.	C. R. Follett	N. J. Swinehart	1939	49	2	------	------	------	C, H	D	Cased to 46 feet.
238	7¾ miles north of Houston Courthouse.	I. Ilo	Layne-Texas Co	1934	403	6, 4	------	------	------	T, E, 8	D, S	Screen from 360 to 402 feet. Yield, 125 gallons a minute when drilled.
239	12½ miles northwest of Houston Courthouse.	Warren Petroleum Co.	------	1940	250	6	------	------	------	Ng	D, Ind	
240	----do----	----do----	------	1940	250	6	------	------	------	Ng	D, Ind	
244	12¼ miles northwest of Houston Courthouse.	J. W. White	H. Klores	1929	44	3	------	------	------	C, H	D, S	
246	12 miles northwest of Houston Courthouse.	S. H. Hilderbranna.	------	------	48	4	------	------	------	C, H	D, S	
247	11½ miles northwest of Houston Courthouse.	W. H. Wood	Geo. Walker	------	54±	4	------	------	------	C, H	D, S	
248	10¾ miles northwest of Houston Courthouse.	E. E. Radenz	E. E. Radenz	------	45±	4	------	------	------	C, W	D, S	
250	11½ miles northwest of Houston Courthouse.	A. Swanke	------	------	33	3	------	------	------	C, H	D, S	
252	9½ miles northwest of Houston Courthouse.	Joe Polk	------	------	80	4	------	------	------	C, H	D	
255	13¾ miles northwest of Houston Courthouse.	J. M. Blake	------	------	41	60	2.0	10.8	Dec. 16, 1941	C, W	D, S	Dug well.
256	----do----	----do----	H. L. Wilson	1927	189	6, 4	1.0	26.5 38.3	Mar. 27, 1931 Aug. 20, 1940	None	N	Screen from 149 to 189 feet.

257	14½ miles northwest of Houston Courthouse.	M. C. Oldham		1927	80	6				C, G, 1½	D, S	
259	10½ miles west of Humble.	O. J. Spears		1930	35					C, H	D, S	
260	11 miles west of Humble.	Steve Pamuk	—— Hardy	1923	112	6				C, H, G	D, S	
261	11¼ miles west of Humble.	N. O. Alford	H. L. Wilson		200±	5				C, E, ¼	D, S	
262	10 miles west of Humble.	John Williamson	John Logan	1927	174	6				C, W	D, S	
263	8 miles west of Humble.	O. D. Heath	O. D. Heath		45	6, 3	1.0	7.1	June 1, 1931	C, W	D, S	
264	do	H. Weary	P. S. Griffith	Old	1,610	6	1.0 0 0	3.0 21.0 40.9	May 29, 1931 June 3, 1936 June 28, 1940	None	N	Oil test. Measured depth, 1,130 feet. Screen at 900±. Flowed until 1930.
265	8¼ miles southwest of Humble.	do		Old	1,700±	4	0	1.0 1.0	May 29, 1931 Dec. 5, 1940	None	N	Oil test.
266	9¼ miles southwest of Humble.	M. C. Oldham		1927	80	6, 4				C, W	D, S	Casing, 40 feet of 6-inch and 40 feet of 4-inch.
268	In Westfield	City of Houston	Core Drilling Co	1939	793	3½	4.5	28.0 30.1	Aug. 31, 1939 Aug. 15, 1941	None	N	Screen from 757 to 772 feet. Owner's test well No. 10-A.
269	do	do	do	1939	1,049	3½	0	+22.6	May 31, 1939	Flows	D, S	Screen from 1,037 to 1,052 feet. Flows 15 gallons a minute. Owner's test well No. 7.
270	7 miles northwest of Humble.	W. M. McGill	J. Petrosky	1937	54	2				C, H	D, S	
271	6 miles northwest of Humble.	T. A. Johnson	E. Middlestead	1937	156	3, 2				C, G, ½	D, S	Screen from 148 to 156 feet.
280	9 miles southeast of Humble.	Pan-American Pipe Line Co.	McMasters & Pomeroy.	1940	390	6	0	[1]61	Nov. 29, 1940	T, E, 3	D, Ind	Screen from 361 to 382 feet. Yield, 120 gallons a minute when drilled.
281	6¼ miles west of Humble.	M. P. Hodges	M. P. Hodges	1931	27	6	0	5.7	May 29, 1931	None	N	
282	10½ miles northeast of Houston Courthouse.	L. M. Breno	L. M. Breno	1929	38±	2	0	5.37	May 28, 1931	C, H	D, S	
284	9¼ miles northeast of Houston Courthouse.	H. Ritter	H. Ritter		50	6	0	[1]16	1930	C, H	D, S	
285	9½ miles northeast of Houston Courthouse.	Orange Grove Subdivision.	McMasters & Pomeroy.	1936	387	6, 4	0	[1]42	1936	T, E	P	Screen from 365 to 387 feet. Yield, 100 gallons a minute with drawdown of 33 feet when drilled.
286	10 miles northeast of Houston Courthouse.	Jack Frazier Drilling Co.	A. E. Fawcett, Sr	1940	250	4	0	[1]51	July 1940	Ng	O	Screen from 230 to 250 feet. Supplies oil tests.
287	10¼ miles northeast of Houston Courthouse.	do	do	1941	355	4	0	[1]56	May 1941	Ng	O	Screen from 335 to 355 feet. Supplies oil tests.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
288	9½ miles northeast of Houston Courthouse.	Harris County		1936	250±	4				C, E, 1	P	Supplies Walter G. Smiley School.
289	7¼ miles southwest of Humble.	Harris County	McMasters & Pomeroy.	1940	214	6, 4	0	4 40	Aug. 22, 1940	T, E, 3	P	Screen from 184 to 214 feet. Yield, 130 gallons a minute with drawdown of 40 feet when drilled. Supplies Aldine School.
290	4¾ miles southwest of Humble.	J. C. Townes	A. E. Fawcett, Sr.	1929	296	4				C, E, 1	D, S	Screen from 276 to 296 feet.
291	4½ miles south of Humble.	A. T. McDannald	do	1931	1,308	4	0	4 15	1931	A, E, 1	D, S	Screen from 1,268 to 1,308 feet. Yield, 150 gallons a minute when drilled.
292	3½ miles southwest of Humble.	P. C. Cezeaux	P. C. Cezeaux	1940	440	6, 4	0	4 60	1940	C, E, 1	D, S	Casing, 300 feet of 6-inch and 140 feet of 4-inch. Screen from 420 to 440 feet.
293	2¾ miles south of Humble.	W. T. Sutter	M. R. Pretty	1937	130	2				C, E	Irr	Supplies Rosewood Cemetery.
294	2¼ miles southeast of Humble.	Fred Rudy	Fred Rudy	1937	150	4	.5	2.9	Mar. 14, 1939	C, H	D, S	
295	In Humble	City of Humble		1934	1,140		0	+	1934	Flows T, E, 15	P	Screen from 1,085 to 1,140 feet. Flow, about 20 gallons a minute in 1941. Pumped 140 gallons a minute in 1941. Owner's No. 1.
296	do	do	Texas Water Supply Co.	1941	377	10, 6	0	4 48	Sept. 1941	T, E, 15	P	Screen from 317 to 377 feet. Yield, 400 gallons a minute when drilled. Owner's No. 3.
297	do	do		1934?	740	8⅝, 6⅝	0	4 31	May 21, 1938	T, E, 15	P	Liner installed and screen set at 630 to 650 and 710 to 740 feet by Layne-Texas Co. in in 1938. Yield, 240 gallons a minute in 1941. Owner's No. 2.
298	do	T. W. Horn	T. W. Horn	1916	860	6	0	+	Jan. 1942	Flows	O	Produced oil and salt water until 1918, when leak developed in casing at about 625 feet. Since 1918 has flowed fresh water with some gas. Owner's No. 1.

299	....do....	....do....	....do....	1930	810	6	0	+	....do....	Flows	O	Produced oil and salt water until 1933, when leak developed in casing between 500 and 600 feet. Since 1933 has flowed fresh water with some gas. Owner's No. 2.
300	2½ miles southeast of Humble.	Humble Oil & Refining Co.	Humble Oil & Refining Co.	1932	648	6	----	----	----	T, E, 3	Ind	Supplied oil tests. Water has sulfur taste.
301	4¾ miles southeast of Humble.	J. H. Powell	Ralph C. Ely, et al	----	2,108	----	----	----	----	None	N	Oil test. See log.
302	2½ miles southeast of Humble.	Rebel Oil Co	Cullen & West	1928	1,000±	7	2.0	37.9 42.0	Sept. 1, 1939 Sept. 3, 1941	A, E	O	Converted oil well.
303	2¼ miles east of Humble.	Wynn Crosby Drilling Co.	M. R. Pretty	1936	1,134	6	0	+	Sept. 4, 1940	Flows	O	Converted oil well. Casing perforated and screen set from 1,114 to 1,134 feet. Flow in 1936 about 25 gallons a minute, with some gas.
304	3¼ miles northeast of Humble.	The Texas Co	The Texas Co	1928	743	6	0	+	Oct. 15, 1941	Flows T, E, 5	O	Converted oil well. Casing perforated and screen set from 721 to 743 feet. Supplies Humble camp and oil tests.
309	17 miles southeast of Humble.	D. R. Lang	----	----	90	3	2.0	7.2	June 27, 1939	C, H	S	
310	15¼ miles southeast of Humble.	....do....	T. E. Reidland	1938	276	4	----	----	----	C, W	D, S	Screen from 246 to 276 feet.
311	16 miles southeast of Humble.	R. Sralla	....do....	----	298±	3	----	----	----	C, E	D, S	
312	16½ miles southeast of Humble.	....do....	....do....	1933	98	3, 1¼	0	[4] 20	1933	C, H	D, S	Casing, 24 feet of 3-inch and 74 feet of 1½-inch. Screen from 91 to 98 feet.
313	15 miles southeast of Humble.	Bud Chapman	J. W. Evans	1940	277	3, 2	0	[4] 62	1940	C, E, ¾	D, S	Screen from 271 to 276 feet.
314	11½ miles southeast of Humble.	Mrs. J. W. Pate	C. E. Pate	1938	218	2	----	----	----	A, G	D, S	Screen from 212 to 218 feet.
315	11¼ miles southeast of Humble.	H. P. Guinn	A. E. Fawcett, Sr	1931	227	2	----	----	----	C, H, G, 1½	D, S	Screen from 220 to 227 feet.
316	11½ miles southeast of Humble.	....do....	....do....	1931	227	2	----	----	----	C, H, G	P	Screen from 220 to 227 feet. Supplies Magnolia Gardens.
317	13¾ miles southeast of Humble.	T. E. Reidland	T. E. Reidland	1923	220	3, 1½	----	----	----	C, E, ½	D	Screen from 210 to 220 feet.
318	In Crosby	Crosby Water Works.	....do....	1937	226	6, 4, 3	0	[4] 53	1941	C, G, E, 10	P	Screen from 206 to 226 feet. Supplies City of Crosby.
319	....do....	....do....	....do....	1937	226	6, 4, 3	0	[4] 53	1941	C, G, E, 10	P	Do.
320	12½ miles southeast of Humble.	J. J. Oberpriller	....do....	1941	225	3, 1½	----	----	----	J, E, ¾	D	Screen from 217 to 225 feet.
325	13¾ miles southeast of Humble.	Highway Cafe	....do....	1931	276	3, 1½	----	----	----	C, E, ½	D, P	Screen from 266 to 276 feet.
326	14 miles southeast of Humble.	Gulf Pipe Line Co.	Layne-Bowler Co	1916	533	6	1.0	22.9	Oct. 29, 1931	C, W	D, S	Screen from 463 to 523 feet. See log.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[2]	Remarks
327	13¾ miles southeast of Humble.	J. A. Jager	T. E. Reidland	1930	240	3, 1½	0	12.7	Oct. 29, 1931	C, E, ½	D, S	Screen from 230 to 240 feet.
328	do	J. Bennett	do	1931	86±	2				A, G, 2	D, S	
329	15¼ miles east of Humble.	Sam Sampson	Sam Sampson	1928	25	36	0	12.8	Oct. 30, 1931	B, H	D, S	Dug well.
331	8¼ miles east of Humble.	Unknown				6	1.5	2.8	Sept. 3, 1941	None	N	Black Cat oil test. Flowed ½ gallon a minute in February 1939.
332	9¾ miles east of Humble.	Mrs. Howard Dunks.	T. E. Reidland	1930	176	3, 1½				C, W	D, S	Screen from 166 to 176 feet.
333	10½ miles northeast of Humble.	E. M. Dunks	do	1923	175	4, 2, 1½				C, W	S	Screen from 165 to 175 feet.
334	10¼ miles northeast of Humble	do	do	1923	165	4, 2, 1½				J, E, ⅛	D	Screen from 155 to 165 feet.
335	10½ miles northeast of Humble.	do	do	1923	125	3, 2, 1½				C, H	D, S	Screen from 115 to 125 feet.
336	10¾ miles northeast of Humble.	Sinclair Refining Co.		1922	580	10				Cf, E, 3	D, Ind	Screen at bottom. Formerly flowed. Supplies pipe line station and camp.
337	6¾ miles east of Katy	A. S. Crutcher	T. J. Petrosky	1940	71	6	2.0	31.3	May 26, 1941	C, W	S	
338	6½ miles east of Katy	do		1939	116	3	.5	29.8	do	C, H	N	Screen from 96 to 116 feet.
339	do	do	A. E. Fawcett, Sr.	1934	103	3	0	28.8	do	None	N	Screen from 83 to 103 feet.
340	4½ miles east of Katy	R. Hoffpauir	J. H. Bennett	1937	141	4				J, E	D, S	Screen from 126 to 141 feet.
341	2¾ miles east of Katy	W. H. Dial	do	1940	139	4	.5	55.0	May 26, 1941	J, E, ¾	D, S	
342	2 miles east of Katy	Mrs. Rose B. Ernstes.		Old	142	4, 3				C, G, W	D, S	Casing, 70 feet of 4-inch and 62 feet of 3-inch.
343	In Katy	R. Roberison			111	4	0.5	57.1	May 28, 1941	C, W	D	
344	3 miles northeast of Katy.	C. E. Morton	Charles Peck	1941	140	4	0	[4]38	1941	J, E, ¾	D, S	Screen from 130 to 140 feet.
345	2½ miles northeast of Katy.	J. T. Martin	J. H. Bennett	1920	101	3				C, H	D, S	
346	2 miles north of Katy	T. D. Tucker	do	Old	97	3	1.0	57.9	May 28, 1941	C	N	
348	4¼ miles northeast of Katy.	P. V. Cook	Delta-Shurwell, Inc.	1940	269	18, 12¾				T, D, 80	Irr	Casing slotted from 78 to 104, 107 to 114, 128 to 212, and 220 to 267 feet. Irrigated 285 acres of rice in 1941. Owner's No. 5.

349	3 miles northeast of Katy.	C. E. Morton	do	1937	298	12				T, E, 40	Irr	Measured yield, 980 gallons a minute in 1940. Irrigated 175 acres of rice in 1941.
350	5¾ miles northeast of Katy.	W. C. Stockdick	do	1940	659	20, 12¾, 10¾				T, E, 50	Irr	Casing, 131 feet of 20-inch; 367 feet of 12¾-inch; and 161 feet of 10¾-inch; slotted from 88 to 102, 145 to 183, 193 to 207, 216 to 224, 230 to 295, 308 to 340, 348 to 369, 446 to 468, 488 to 496, and 509 to 529 feet. Yield, 2,000 gallons a minute when drilled. Irrigated 360 acres of rice in 1941. See log.
352	5½ miles north of Katy.	A. E. Thompson	I. W. Lawson	1909	470	24, 11⅝, 8¼	0	54.4	Jan. 15, 1942	T, E, 35	Irr	Casing, 68 feet of 24-inch; 126 feet of 11⅝-inch; and 256 feet of 8¼-inch. Screen at 68 to 180 and 392 to 450 feet. Irrigated 120 acres of rice in 1941.
353	5¼ miles north of Katy.	do	do	1905	1,602	6	0	+	Jan. 5, 1939	Flows	N	Screen at 753 to 796, 834 to 853, 984 to 1,028, 1,193 to 1,217, 1,237 to 1,259, and 1,364 to 1,385 feet. Estimated flow, ¼ gallon a minute in 1939. See log.
354	5 miles north of Katy	do	Layne-Bowler Co	1906	442	9⅝				None	N	Screen from 402 to 442 feet. Formerly used for rice irrigation.
356	4 miles north of Katy	Dewey Peek	do	1910	152	24, 9⅝	2.5	53.4	Aug. 17, 1932	T, G	Irr	Casing; 50 feet of 24-inch and 102 feet of 9⅝-inch. Estimated yield, 700 gallons a minute in 1940. Irrigated 190 acres of rice in 1941.
357	4¼ miles northeast of Katy.	P. V. Cook	J. H. Bennett			[5] 30	1.5	35.6 51.8	Mar. 24, 1931 Jan. 15, 1942	None	N	Irrigated 230 acres of rice in 1939. Owner's No. 2.
360	4½ mies northeast of Katy.	E. G. Stockdick	E. G. Stockdick	1907	180	72, 26, 24, 12, 9⅝, 7				T, E, 20	Irr	Irrigated 75 acres of rice in 1941. Owner's No. 1.
361	6¼ miles northeast of Katy.	Acme Planting & Developing Co.	A. T. Jones	1929	368	12	0	29.2	Mar. 12, 1931	T, E, 50	Irr	Irrigated 275 acres of rice in 1941.
362	4 miles northeast of Katy.	E. G. Stockdick		1930	500	24, 12½	1.0	32.8 44.2	Mar. 12, 1931 Jan. 15, 1942	T, E, 40	Irr	Measured yield, 1,160 gallons a minute in 1940. Irrigated 205 acres of rice in 1941. Owner's No. 2.
363	3¼ miles northeast of Katy.	C. E. Morton	I. W. Lawson	1930	188	18, 12	.4	44.0	Jan. 15, 1942	T, E, 20	Irr	Casing, 90 feet of 18-inch and 98 feet of 12-inch. Irrigated 80 acres of rice in 1941. Owner's No. 1.
364	1½ miles northeast of Katy.	John Cope	Lawson & Hardin	1925	789	24, 12	.1	50.9	Jan. 20, 1942	T, E, 75	Irr	Casing, 90 feet of 24-inch and 699 feet of 12-inch. Measured yield, 840 gallons a minute in 1940. Irrigated 250 acres of rice in 1941.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
365	In Katy	M. K. & T. R. R.		1900	202	120, 6				C, E, 5	RR	Dug to 55 feet; two 6-inch wells drilled in bottom to depths of 162 and 202 feet.
366	1½ miles southeast of Katy.	H. C. Lamb			180	12	0.5	37.2	Mar. 12, 1931	None	N	Formerly used for rice irrigation.
367	3½ miles east of Katy	W. C. Hickman	Layne-Texas Co	1930	535	16, 10	0 1.5	4 36 44.8	May 1930 Jan. 15, 1942	T, E, 60	Irr	Casing, 150 feet of 16-inch; 163 feet of 12-inch; and 11 feet of 10-inch. Screen at 110 to 125, 195 to 232, 318 to 358, and 377 to 407 feet. Irrigated 250 acres of rice in 1940.
369	3 miles east of Katy	J. M. Johnson	do	1929	110	4, 3	0	4 28	Mar. 1, 1929	C, G	D, S	Casing, 42 feet of 4-inch and 68 feet of 3-inch. Screen from 104 to 110 feet.
370	3¼ miles east of Katy	do	do	1929	609	18, 16, 12, 10	0	36.3 44.0	Mar. 12, 1931 Feb. 6, 1942	None	N	Casing, 120 feet of 18-inch; 44 feet of 16-inch; 176 feet of 12-inch; and 269 feet of 10-inch. Screen at 119 to 129, 177 to 218, 299 to 320, 408 to 418, and 539 to 600 feet. Irrigated 275 acres of rice in 1939. Owner's No. 1. See log.
371	3½ miles southeast of Katy.	L. E. Morrison	I. W. Lawson	1925	374	24, 10, 8	.5	42.2	Jan. 20, 1942	T, E, 50	Irr	Casing, 70 feet of 24-inch; 130 feet of 10-inch; and 174 feet of 8-inch. Measured yield, 1,230 gallons a minute in 1940. Irrigated 240 acres in 1941. Owner's No. 1.
372	½ mile southeast of Katy.	T. B. Tucker	Delta-Shurwell, Inc.	1936	570	12, 8	0	4 47	January 1936	T, E, 40	Irr	Casing, 186 feet of 12-inch and 384 feet of 8-inch; slotted from 106 to 184 feet. Screen at 204 to 225, 235 to 245, 265 to 296, 307 to 327, 388 to 403, and 519 to 563 feet. Irrigated about 200 acres of rice in 1941. Owner's No. 4.

373	2½ miles east of Katy	J. M. Johnson	do	1939	608	18, 13	.5	49.0	Jan. 22, 1941	T, D	Irr	Casing, 142 feet of 18-inch and 476 feet of 13-inch; slotted from 90 to 149, 155 to 177, 187 to 195, 213 to 294, 340 to 361, 388 to 400, 410 to 433, 513 to 532, and 562 to 608 feet. Measured yield, 2,100 gallons a minute in 1940. Irrigated 280 acres of rice in 1941. Owner's No. 2.
374	3¾ miles east of Katy	R. Hoffpauir	Layne-Texas Co	1937	650	20, 12				T, D, 80	Irr	Slotted casing, 240 feet, opposite all sands below 100 feet. Measured yield, 1,850 gallons a minute in 1940. Irrigated 400 acres of rice in 1941. Owner's No. 2.
375	3¾ miles north of Katy	E. W. Peek	Delta-Shurwell, Inc	1941	275	18⅝, 10¾	0	[4] 56	Apr. 10, 1941	T, G, 60	Irr	Casing, 128 feet of 18⅝-inch and 147 feet of 10¾-inch; slotted opposite all sands below 128 feet. Irrigated 250 acres of rice in 1941.
376	4 miles northeast of Katy	M. D. Freeman	W. E. Freeman	1937	200	[5] 16				T, E, 50	Irr	Irrigated 305 acres of rice in 1941.
377	4¼ miles northeast of Katy	P. V. Cook			97	3	1.0	57.4	May 28, 1941	C, W	D, S	
378	6¼ miles northeast of Katy	C. L. Peek	J. H. Bennett	1937	84	3				C, E, ⅛	D, S	
379	7 miles northeast of Katy	W. H. Hegar		1940	30	8	0	10.4	May 28, 1941	C, W	D, S	Tile casing.
380	8¼ miles northeast of Katy	do			55±	4	1.0	25.4	Jan. 20, 1942	None	N	
381	7¾ miles northeast of Katy	do			95	8	2.5	25.6 32.5	Mar. 12, 1931 Jan. 15, 1942	None	N	
382	6 miles northeast of Katy	W. C. Stockdick		1919	185	24, 12	0	40.5	Jan. 21, 1942	None	N	Casing, 100 feet of 24-inch and 85 feet of 12-inch. Formerly used for rice irrigation.
383	do	do	Lawson and Hardin	1925	380	24, 10, 6	1.0	38.5	Mar. 10, 1939	None	N	Casing, 65 feet of 24-inch 185 feet of 10-inch; and 130 feet of 6-inch. Irrigated 260 acres of rice in 1939. Abandoned in 1940.
384	5¾ miles northeast of Katy	A. J. Jordens	I. W. Lawson	1930	505	18, 12, 8, 6	1.0	34.7 43.5	Mar. 17, 1933 Jan. 15, 1942	None	N	Casing, 100 feet of 18-inch; 100 feet of 12-inch; 100 feet of 8-inch; and 205 feet of 6-inch. Formerly used for rice irrigation.
385	do	do	Layne-Texas Co	1931	359	18, 12½	1.7	37.4 42.0	Mar. 17, 1933 Jan. 15, 1942	T, D, 60	Irr	Casing, 125 feet of 18-inch and 234 feet of 12½-inch. Screen at 60 to 80, 160 to 178, 185 to 216, 294 to 314, and 336 to 356 feet. Gravel-walled. Irrigated 230 acres of rice in 1941.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [3]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
386	5¾ miles east of Katy	J. W. Ward	Layne-Bowler Co	1898	254	24, 11⅝	0	37.3	Jan. 19, 1942	C,W	S	Irrigated 150 acres of rice in 1940. Windmill installed in 1941.
393	8¼ miles east of Katy	—— Paddock	J. A. Matzke	1932	72	3				C,H	S	
395	7¼ miles northeast of Katy.	A. J. Jordens	Chas. Schultz	1917	120	3				C,W	D,S	
396	8 miles northeast of Katy.	H. Speckmaier	do	1914	94	3				C,W	D,S	
399	9¾ miles northeast of Katy.	J. I. Brubaker	I. W. Lawson	1906	280	30, 11⅝	2.0	32.5	Jan. 15, 1942	T,D,80	Irr	Casing, 63 feet of 3-inch and 217 feet of 11⅝-inch. Screen at 79 to 143, 165 to 172, 183 to 193, 234 to 262, and 269 to 279 feet. Yield, 1,700 gallons a minute 1940. Irrigated 285 acres in 1941.
400	11 miles northeast of Katy.	Henry Schmidt	Schmidt Bros	1926	258	12, 8, 6	3.5	26.4	do	T,G	Irr	Casing, 60 feet of 12-inch; 160 feet of 8-inch; and 38 feet of 6-inch. Estimated yield, 500 gallons a minute in 1940. Irrigated 70 acres of rice in 1941.
401	12¼ miles northeast of Katy.	W. H. Grisbee	W. H. Grisbee	1921	45	4				C,G,2½	D,S	
402	11¼ miles northeast of Katy	W. M. Druesedow	Chas. Schultz		52	4				C,W	D,S	
403	10¾ miles east of Katy	O. Beckendorf	O. Beckendorf		27	1¼				C,W	D,S	
404	do	Bear Creek Gun Club.			100+	3				C,H	D	
406	do	Harris County			105	3	.5	16.7	Sept. 3, 1931	C,E,⅛	P	Supplies Addicks School.
407	19¼ miles west of Houston Courthouse.	A. G. George	H. W. Weller	1938	165	4	.5	27.0	Feb. 13, 1939	C,E	D,S	
408	18½ miles west of Houston Courthouse.	J. I. Brubaker	J. I. Brubaker	1933	77	2				C	D,S	Cased to 71 feet. Small supply.
409	16½ miles west of Houston Courthouse.	Joe Schiller	Joe Schiller		184	2				C,H	D,S	

410	16¾ miles west of Houston Courthouse.	E. A. Winkelman		1918	112±	3	.5	21.0	Feb. 13, 1939	C,H	D,S	Supplies cotton gin.
411	15¼ miles west of Houston Courthouse.	F. H. Liestman	T. J. Petrosky	1934	75	2	2.5	22.2	Feb. 9, 1939	None	N	Cased to 70 feet.
412	13 miles west of Houston Courthouse.	S. P. Brown	M. R. Pretty	1939	386	6,4				T,E	D	Casing, 330 feet of 6-inch and 36 feet of 4-inch. Screen from 330 to 370 feet. Yield, 80 gallons a minute when drilled.
413	14¼ miles southwest of Houston Courthouse.	Walter Krenek	T. J. Petrosky	1938	74	2½	0	17	August 1938	C,H,E	D,S	
414	12¾ miles southwest of Houston Courthouse.	J. C. Hastings	J. C. Hastings	1912	80	2				C,H	D,S	Cased to 79 feet.
415	13½ miles southwest of Houston Courthouse.	—— Owens			80±	2	1.8	9.5	Feb. 9, 1939	C,H	D,S	
416	15 miles southwest of Houston Courthouse.	Houston Pet Cemetery.		1938	65	2	.5	11.5	Feb. 15, 1939	C,E	D,Irr	
417	13½ miles southwest of Houston Courthouse.	F. H. Liestman	L. N. Liestman	1919	125	2	.5	21.2	Jan. 28, 1942	None	N	Cased to 120 feet.
418	12¾ miles west of Houston Courthouse.	Mrs. Nellie E. Rogers.	W. F. Schnieder	1915	100	2	3.5	25.1	Feb. 13, 1939	C,H	N	
419	12¼ miles west of Houston Courthouse.	do	Layne-Texas Co	1913?	100	1¼				C,H	D,S	
420	10¾ miles west of Houston Courthouse.	E. A. Showers	M. R. Pretty	1938	231					C,E	S	
421	15¾ miles northwest of Houston Courthouse.	Frank Edwards	Frank Edwards		70	1½				C,H	D,S	
423	15¾ miles west of Houston Courthouse.	—— Koehn	Chas. Schultz		107	4				C,H	D,S	Cased to 105 feet.
425	14½ miles west of Houston Courthouse.	J. J. Settegast, Jr.			80±	4				C,H	D,S	Supplies dipping vat.
426	12¾ miles west of Houston Courthouse.	F. L. Sheckels	O. Luckenmeyer		42	3				C,H	D	
427	13 miles northwest of Houston Courthouse.	G. C. Cox			53	4				C,H	D	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[2]	Remarks
428	13½ miles northwest of Houston Courthouse.	H. A. Soathoff	H. A. Soathoff		20	3				C,W	S	
431	13 miles northwest of Houston Courthouse.	G. E. Wilkins	I. W. Lawson	1923?	2,000±	6	0	+	November 1938.	Flows	S	Oil test. Estimated flow, 50 gallons a minute in November 1938. Temperature 87° F.
434	14 miles northwest of Houston Courthouse.	L. Z. Pledger	H. Tanner	1930	58	4				C,E,½	D,S	
435	13¾ miles northwest of Houston Courthouse.	R. C. Peters	do	1928	45	4	1.0	6.3	May 14, 1931	C,E,½	D,S	
436	13 miles northwest of Houston Courthouse.	G. F. Brown	Carl Schultz	1930	49	4				C,E,½	D	
445	11¾ miles northwest of Houston Courthouse.	H. Collett	H. Collett	1923	72	4				C,H	D,S	
446	11½ miles northwest of Houston Courthouse.	C. W. Hahl Co	H. Tanner	1930	60	4	1.0	3.5	Apr. 9, 1931	C,H	D,S	
450	11¾ miles northwest of Houston Courthouse.	do			95	12	0	10.9	Nov. 9, 1937	None	N	
454	11½ miles northwest of Houston Courthouse.	H. & T. C. R. R.		Old	124	6	2.0	4.5	Apr. 2, 1931	C,G,6	D,S	Dug to 29 feet; remainder drilled.
456	11 miles northwest of Houston Courthouse.	Frank Willborg	Layne-Texas Co	1930	230	6,4	.3	30.0 41.2	Apr. 2, 1931 Jan. 21, 1942	None	N	Casing, 194 feet of 6-inch and 36 feet of 4-inch. Screen from 198 to 220 feet.
457	do	do	H. Tanner	1930	75±	4	1.5	3.2 13.5	Apr. 2, 1931 Dec. 2, 1939	A,E,—	D,S	Measured depth 37 feet.
458	9¾ miles northwest of Houston Courthouse.	R. D. Wirt	— Wright	1900	300±	3				A, G	D, S	Ceased flowing about 1910.
460	11 miles northwest of Houston Courthouse.	T. Rauh	M. R. Pretty	1932	138	4				A, G	S,Irr	Screen from 118 to 138 feet. Yield, 75 gallons a minute when drilled.

462	10 miles northwest of Houston Courthouse.	J. L. Sampson	Henry Sauer	1931	60±	3				C, G	D, S	
471	9½ miles west of Houston Courthouse.	C. N. Ogden	Layne-Texas Co		183	3				C, G, 1½	D, S	Screen from 177 to 183 feet.
472	10½ miles west of Houston Courthouse.	R. A. Harvey	L. Patterson	1930	365	4	2.0	41.9	Jan. 3, 1942	A, G	D, S	Screen from 340 to 365 feet. Supplies swimming pool.
473	8½ miles west of Houston Courthouse.	H. W. Rasmussen	M. R. Pretty	1938	416	6	.5	31.1 38.0	Feb. 10, 1939 Jan. 28, 1942	T, E	D, S	Screen from 386 to 416 feet. Yield, 200 gallons a minute when drilled.
474	9¾ miles west of Houston Courthouse.	Drew Roberts	McMasters & Pomeroy.	1941	383	4				T, E, 3	D	Screen from 361 to 383 feet. Yield, 125 gallons a minute when drilled.
475	do	Gibbs Meador	Layne-Texas Co	1938	192	4½, 2½	0	[4] 27	March 1938	C	D	Screen from 167 to 188 feet.
476	10¼ miles west of Houston Courthouse.	Boy Scouts of America.	Failing Drilling Co	1939	400	6				T, E, 7½	P	Screen from 380 to 400 feet. Supplies Camp Hudson.
477	10¾ miles west of Houston Courthouse.	J. A. Rush	L. Patterson	1932	399	8, 7	0	[4] 22	1932	T, G	D, S	Screen from 314 to 399 feet.
478	do	P. M. Archer	McMasters & Pomeroy.	1941	545	4	0	[4] 41	June 23, 1941	T, E, 3	D	Screen from 523 to 545 feet. Yield, 150 gallons a minute when drilled.
479	11½ miles west of Houston Courthouse.	J. A. Bammel		1930	150					C, W	S	
480	19¼ miles west of Houston Courthouse.	John Pillot	Delta-Shurwell, Inc	1940	512	20, 14, 12¾	4.5	32.1	Jan. 19, 1942	T, D, 135	Irr	Casing, 130 feet of 20-inch; 295 feet of 14-inch; and 81 feet of 12¾-inch; 300 feet slotted opposite all sands below 107 feet. Yield, 3,500 gallons a minute when drilled. Irrigated 400 acres of rice in 1941. See log.
481	19¾ miles west of Houston Courthouse.	Chris Pillot	Ed Beeler	1912	102	3				C, W, G	D, S	
482	17¼ miles west of Houston Courthouse.	T. Gasaway	T. Gasaway	1921	50	2				C, W	S	
483	16 miles west of Houston Courthouse.	V. Foster	V. Foster	1925	126	3				C, H	D	
484	17¼ miles west of Houston Courthouse.	Tim Miles	W. F. Schneider	1930	152	3	.3	23.6	Feb. 10, 1939	C, E	D, S	
485	14½ miles west of Houston Courthouse.	C. R. Hastings			72	2, 1¼				C, H	D, S	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
486	13½ miles west of Houston Courthouse.	Clifford Mooers	L. Patterson	1938	595	6				T, E, 15	D, S	Screen from 544 to 593 feet. Yield, 175 gallons a minute when drilled.
587	7½ miles west of Houston Courthouse.	E. G. Pearson	M. R. Pretty	1939	356	4	0	[4] 33	September 1939	T, E	D	Screen from 322 to 335 feet. Yield, 75 gallons a minute when drilled.
488	10½ miles west of Houston Courthouse.	J. W. Small	A. E. Fawcett, Sr	1937	313	3.2				C, E, ¾	D	Screen from 301 to 313 feet.
489	16¼ miles west of Houston Courthouse.	City of Houston	Core Drilling Co	1939	470	3½	2.8	29.6 31.6	May 29, 1939 Jan. 28, 1942	None	N	Screen from 449 to 464 feet. Owner's test well No. 4A.
490	14 miles southwest of Houston Courthouse.	City of Houston	Core Drilling Co	1939	1,188	3½	4.2	40.2 49.1	May 29, 1939 Jan. 28, 1942	None	N	Screen from 1,167 to 1,182 feet. Owner's test well No. 5.
491	13¼ miles west of Houston Courthouse.	W. F. Schneider	W. F. Schneider	1912	113	2				C, H	D, S	Cased to 111 feet.
492	10 miles southwest of Houston Courthouse.	G. H. & S. A. R. R	G. C. Warniecke	Old	220	9⅝				None	N	Screen from 191 to 220 feet.
493	12½ miles southwest of Houston Courthouse.	T. X. Schuchert	—— Nichols	1931	37	2				C, E	D, S	
494	do	Sam Navarro	Layne-Texas Co	1928	334	6.4	0	34.3	June 3, 1941	None	N	Casing, 296 feet of 6-inch and 38 feet of 4-inch. Screen from 228 to 310 feet.
495	12¼ miles southwest of Houston Courthouse.	E. C. McDonald	J. Hobbs	1931	327	2	0	[4] 25	May 28, 1931	C, H	D	
496	13¼ miles southwest of Houston Courthouse.	Diamond "L" Ranch.	Layne-Texas Co	1928	315	6,4	1.5	34.5	Jan. 27, 1942	C, G	D, S	Casing, 65 feet of 6-inch and 150 feet of 4-inch. Screen from 299 to 315 feet.
497	12¾ miles southwest of Houston Courthouse.	Westwood Country Club.	do	1929	590	10,6	3.5	34.6	Dec. 13, 1938	T, E, 20	P, Irr	Casing, 120 feet of 10-inch and 470 feet of 6-inch. Estimated yield, about 200 gallons a minute in 1941. Supplies golf course.

498	11¼ miles southwest of Houston Courthouse.	Brae Burn Country Club.	do	1937	707	10¾, 8⅝, 6¾	3.0	41.4	Jan. 27, 1942	T, E, 15	P, Irr	Casing, 203 feet of 10¾-inch, 312 feet of 8⅝-inch; and 195 feet of 6⅝-inch. Screen from 573 to 699 feet. Yield, 500 gallons a minute in 1941. Supplies swimming pool.
499	11½ miles southwest of Houston Courthouse.	do	L. Patterson & Layne-Texas Co.	1932	701	10, 8⅝				T, E, 25	P, Irr	Casing, 120 feet of 10-inch and 581 feet of 8⅝-inch. Screen from 588 to 701 feet. Estimated yield, 400 gallons a minute in 1941. Supplies golf course.
500	13 miles west of Houston Courthouse.	Mike Alvanese	M. R. Pretty	1937	228	4	1.8	28.2	Feb. 10, 1939	A, G	Irr	Screen from 208 to 228 feet. Yield, 60 gallons a minute when drilled.
501	10½ miles northwest of Houston Courthouse.	F. Christoph	F. Christoph		28	2				C, G, 2	D, S	Supplies dairy.
502	9½ miles northwest of Houston Courthouse.	J. A. Grein	J. A. Grein	1930	27	1½				C, G, 1½	D, S	
503	do	B. E. Eisman			105	4				C, W	D, S	Supplies dairy.
507	do	Otto Adams	Chas. Schultz		175	3				C, G, 3	D, S	
511	9¼ miles northwest of Houston Courthouse.	Henry Koehler	H. Tanner	1929	52	6				C, G, 3½	Irr	
512	8½ miles northwest of Houston Courthouse.	Joe Kowis		1927	50	6	.5	4.9	Dec. 19, 1941	A, E	D, S	
515	7¼ miles northwest of Houston Courthouse.	Melrose Stock Farm			65	4				C, W, G, 2	D, S	Supplies dairy.
519	6¾ miles northwest of Houston Courthouse.	F. M. Myers	H. Tanner	1930	52	4				C, E	D, S	
520	7½ miles northwest of Houston Courthouse.	Woodlawn Cemetery.	J. W. Kanaly	1932	158±	3				A, G, 5	D, S, Irr	
522	6 miles northwest of Houston Courthouse.	Bethel Cemetery	Simon Lewis	1930	40	2				C, G	D, S, Irr	
524	6¼ miles northwest of Houston Courthouse.	W. T. Carter, Jr.	Layne-Texas Co.	1929	293	6, 3				T, E, 5	D, S	Casing, 225 feet of 6-inch and 68 feet of 3-inch. Screen at 225 to 247 and 255 to 274 feet.
528	6¼ miles west of Houston Courthouse.	Judge T. M. Kennerly.	A. E. Fawcett, Sr.	1932	250	4				C, E, 3	D, S	Screen at bottom.
530	7 miles west of Houston Courthouse.	Allen and Leavens	L. Patterson	1939	616	6	0	49	October 1939	T, E, 5	D	Screen from 576 to 616 feet. Yield, 175 gallons a minute when drilled.
531	do	Wayne R. Lawler	do	1940	632	6				T, E, 5	D	Screen from 594 to 632 feet.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
532	6¾ miles west of Houston Courthouse.	W. T. Carter	McMasters & Pomeroy.	1940	492	6	0	[4] 50	April 1940	T, E, 5	D	Screen from 427 to 467 feet. Yield, 150 gallons a minute when drilled.
533	6¼ miles west of Houston Courthouse.	R. W. Gillette	L. Patterson	1938	403	6	0	[4] 35	June 1938	T, E, 5	P	Screen from 368 to 403 feet. Yield, 200 gallons a minute in 1942. Supplies West Oak Addition. Owner's No. 1.
534	do	R. H. Goodrich	A. E. Fawcett, Sr	1932	186	4				J, E, 1	D	Screen from 166 to 186 feet. Owner's No. 1.
535	do	do	do	1934	1,996	6,4	0	[4] ±35 [4] 0 1.5	April 1934 Aug. 15, 1941. November 1941.	None	N	Screen at 1,825 to 1,863 and 1,983 to 1,996 feet. Original flow 20 gallons a minute. Flowed 2½ gallons a minute in December 1936. Ceased flowing August 15, 1941. Owner's No. 3.
536	6 miles west of Houston Courthouse.	J. O. Winston, Jr	Layne-Texas Co	1939	337	6⅝, 4½	0	[4] 44	Feb. 23, 1939.	T. E, 5	D	Screen from 286 to 337 feet. Yield, 112 gallons a minute with draw-down of 14 feet when drilled.
537	5¾ miles west of Houston Courthouse.	H. C. Weiss	do	1936	355	8⅝, 6	0	[4] 39	Feb. 23, 1936.	J, E, 1½	D	Casing, 236 feet of 8⅝-inch and 119 feet of 6-inch. Screen at 250 to 271 and 302 to 341 feet. Yield, 200 gallons a minute with draw-down of 12 feet when drilled. Owner's No. 2.
538	5¾ miles northwest of Houston Courthouse.	Bayou Club	do	1939	481	8⅝, 6⅝	0	[4] 53	July 30, 1940.	T, E, 20	D	Well deepened from 371 to 481 feet in July 1940. Screen at 278 to 298, 344 to 365, and 455 to 475, feet. Yield, 320 gallons a minute with draw-down of 28 feet in 1940.
539	6 miles west of Houston Courthouse.	Dudley Sharp	McMasters & Pomeroy.	1939	492	8, 6	0	[4] 48	February 1939.	T, E, 15	D, S	Screen from 449 to 492 feet. Yield, 225 gallons a minute with draw-down of 23 feet when drilled.
540	5¾ miles west of Houston Courthouse.	Memorial Park Stables.	Layne-Texas Co	1933	195	4, 2½				J, E	D, S	Screen on 1½-inch liner from 179 to 194 feet. Gravel-walled.

541	----do----	R. W. Gillette	L. Patterson	1940	400	6	----	----	----	T, E, 15	P	Screen from 360 to 400 feet. Yield, 150 gallons a minute when drilled. Supplies West Oaks Addition. Owner's No. 3.
542	6 miles west of Houston Courthouse.	----do----	----do----	1939	701	6	----	----	----	T, E, 15	P	Screen from 645 to 697 feet. Yield, 200 gallons a minute when drilled. Supplies West Oaks Addition. Owner's No. 2.
543	----do----	Jack's Store	A. E. Fawcett, Sr.	1937	196	4, 2	0	[4] 37.5	1937	C, W	D, S	Casing, 61 feet of 4-inch and 135 feet of 2-inch. Screen from 184 to 196 feet.
544	2¼ miles west of Houston Courthouse.	Harris Cream Top Dairy.	Layne-Texas Co.	1933	514	8, 6	0	[4] 48.9	April 1933	T, E, 10	Ind	Screen from 462 to 504 feet. Yield, 120 gallons a minute, with draw-down of 20 feet when drilled. Temperature 72° F.
545	2 miles west of Houston Courthouse.	Samuel Bingham & Son Manufacturing Corporation.	Texas Water Supply Co.	1940	450	6, 4	----	----	----	T, E, 5	Ind	Casing, 165 feet of 6-inch and 285 feet of 4-inch.
546	5¼ miles west of Houston Courthouse.	M. S. McCorquodale.	M. R. Pretty	1940	236	4	0	[4] 50	Sept. 4, 1940	J, E, 1½	D	Screen from 215 to 236 feet. Yield, 50 gallons a minute when drilled.
547	----do----	A. M. Parsons	Layne-Texas Co.	1941	437	6⅝, 4½	0	[4] 58	Jan. 18, 1941	T, E, 5	D	Screen at 386 to 392 and 412 to 434 feet. Yield, 100 gallons a minute when drilled.
548	5 miles west of Houston Courthouse.	T. D. Anderson	----do----	1941	398	6⅝, 4½	0	[4] 57	Apr. 14, 1941	T, E, 5	D	Casing, 171 feet of 6⅝-inch and 227 feet of 4½-inch. Screen from 372 to 382 feet. Yield, 100 gallons a minute with draw-down of 32 feet when drilled.
549	----do----	J. P. Schumacher	----do----	1940	424	6⅝, 4½	0	[4] 57	Mar. 9, 1940	T, E, 5	D	Screen at 359 to 380 and 398 to 408 feet. Yield, 130 gallons a minute with draw-down of 29 feet when drilled.
550	----do----	Ray Smith	----do----	1939	445	8⅝, 6⅝, 5	0	[4] 55	Sept. 29, 1939.	T, E	D	Screen at 361 to 390 and 414 to 435 feet. Yield, 130 gallons a minute with draw-down of 42 feet when drilled.
551	4¾ miles west of Houston Courthouse.	S. H. Davis	Layne-Texas Co.	1939	425	6⅝, 4½	0	[4] 52	Dec. 2, 1939	T, E	D	Screen from 391 to 423 feet. Yield, 82 gallons a minute with draw-down of 36 feet when drilled.
552	----do----	Eldon Young	M. R. Pretty	1939	441	6, 4	----	----	----	J, E, 3	D	Casing, 396 feet of 6-inch and 45 feet of 4-inch. Screen from 396 to 436 feet.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
553	4 miles west of Houston Courthouse.	River Oaks Country Club.	Layne-Texas Co.	1935	924	10, 6	0	[4] 56	Dec. 17, 1935	T, E, 25	P	Casing, 391 feet of 10-inch and 533 feet of 6-inch. Screen at 634 to 669 and 803 to 875 feet. Yield, 525 gallons a minute with draw-down of 28 feet when drilled. Supplies swimming pool. Owner's No. 2. See log.
554	do	H. R. Cullen	do	1935	1,084	10, 7	0	[4] 53	May 10, 1935	T, E	D	Casing, 763 feet of 10-inch and 321 feet of 7-inch. Screen at 810 to 834, 857 to 876, 947 to 969, and 1,059 to 1,083 feet. Yield, 270 gallons a minute with draw-down of 35 feet when drilled. Owner's No. 2.
555	4 miles southwest of Houston Courthouse.	Claude B. Hamill	do	1939	938	8⅝, 6⅝	0	[4] 70. 5	February 1939.	T, E	D	Screen at 809 to 830, 851 to 872, and 894 to 914 feet. Yield, 120 gallons a minute with draw-down of 19 feet when drilled.
556	4¼ miles southwest of Houston Courthouse.	W. J. Goldston	Pat O'Day	1938	938	8	------	------	------	T, E, 15	D	Yield, 55 gallons a minute.
557	3¾ miles west of Houston Courthouse.	S. P. Farish	McMasters & Pomeroy.	1938	525	6, 5	0	[4] 64	May 1938	T, E, 5	D	Casing, 422 feet of 6-inch and 103 feet of 5-inch. Screen at 450 to 472 and 482 to 525 feet.
558	3½ miles west of Houston Courthouse.	D. J. Harrison	L. Patterson	1939	860±	8	------	------	------	T, E, 15	D	
559	2¾ miles west of Houston Courthouse.	Sanitary Farms Dairy.	McMasters & Pomeroy.	1935	590	8, 6	------	------	------	T, E, 20	Ind	Screen from 520 to 580 feet. Estimated yield, 150 gallons a minute in 1940.
562	5¾ miles west of Houston Courthouse.	C. V. Wiseman	Fred Powell	1932	118±	4	------	------	------	A, G	D, S	
563	5¼ miles west of Houston Courthouse.	Tall Timber Stables.	------	------	500±	3	1. 1	31. 4	Oct. 29, 1938	A, G, 1½	D, S	
566	5 miles northwest of Houston Courthouse.	Ida Zohn	M. R. Pretty	1932	204	4, 2	------	------	------	C, W	D, S	Casing, 60 feet of 4-inch and 144 feet of 2-inch. Screen from 194 to 204 feet.

573	6 miles northwest of Houston Courthouse.	C. A. Beinhorn	A. E. Fawcett, Sr.	1931	255	2				A, G	D, Irr	
580	6¾ miles northwest of Houston Courthouse.	V. McVaney	H. L. Wilson	1931	136	4				C, H	D, S	
582	5½ miles northwet of Houston Courthouse.	C. Torregrossa	A. E. Fawsett, Sr.	1928	145	3				A, E, 5	D, S Irr	
584	5¾ miles northwest of Houston Courthouse.	J. C. Lawton		1925	45	4				C, E, ¼	D, S	
585	4 miles northwest of Houston Courthouse.	Houston Textile Mills Inc.	Taylor & Roberts	1924?	950	12	1.6	54.6 35.3	Mar. 21, 1931 Feb. 16, 1941	A, E, 15	D, Ind	
586	4¼ miles northwest of Houston Courthouse.	Heights Ice Co.	McMasters & Pomeroy.	1927	312	10				T, E, 7½	Ind	
588	do	Oriental Textile Mills.	Taylor & Roberts	1909	300	6				A, S	D, Ind	Estimated yield, 20 gallons a minute in 1940.
589	4 miles northwest of Houston Courthouse.	City of Houston	Layne-Texas Co.	1931	1,858	24, 12¼, 7	1.0	88.6	Nov. 14, 1938	T, E, 200	P	Casing, 300 feet of 24-inch; 1,242 feet of 12¼-inch; and 316 feet of 7-inch. Screen at 410 to 429, 451 to 471, 641 to 660, 689 to 726, 868 to 890, 1,332 to 1,354 1,616 to 1,669, 1,692 to 1,716, 1,795 to 1,815, and 1,839 to 1,855 feet. Gravel-walled. Flowed when drilled. Yield, 2,150 gallons a minute in January 1942. Owner's No. Heights 5. See log.
591	4 miles northwest of Houston Courthouse.	City of Houston	Layne-Texas Co.	1924	1,989	24, 12	1.0	88.6 98.2 110.7	Aug. 25, 1938 July 25, 1939 Aug. 23, 1940	None	N	Casing, 98 feet of 24-inch and 941 feet of 12-inch. Screen at 314 to 364, 379 to 678, 691 to 740, 883 to 925, and 969 to 1,034 feet; 4-inch liner set from surface to top of 12-inch casing March 1940. Owner's No. Heights 3.
593	2¾ miles northwest of Houston Courthouse.	Burress & Rogers	do	1927	313	10	0	55	Aug. 8, 1927	T, E, 15	Ind	Screen at 163 to 216 and 279 to 309 feet. Estimated yield, 275 gallons a minute in 1941. Supplies ice plant.
594	do	Creamix Corporation.	McMasters & Pomeroy.	1927	250	8	0	46.3	Mar. 3, 1931	T, E, 10	Ind	Screen at 173 to 203, 207 to 215, and 220 to 250 feet. Estimated yield, 35 gallons a minute in 1941. Supplies ice plant.
595	3½ miles northwest of Houston Courthouse.	Fidelity Chemical Corporation.		1917	465	8	2.4	66.4	Jan. 28, 1931	A, S	Ind	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
596	3 miles northwest of Houston Courthouse.	Swift & Company	Layne-Bowler Co.	1917	670	10,8	2.0	47.8	Jan. 23, 1931	A, S	Ind	Casing, 500 feet of 10-inch and 170 feet of 8-inch. Screen at 500 to 520 and 630 to 670 feet.
597	do	Houston Cotton Oil Co.	G. C. Warniecke	1893	540		1.0	49.7	Jan. 11, 1931	None	N	Abandoned in 1940.
599	3¼ miles northwest of Houston Courthouse.	Houston Ice & Cold Storage Co.	Layne-Bowler Co.	1922	583	12,6				T, E	Ind	Casing, 79 feet of 12-inch and 504 feet of 6-inch. Screen at 178 to 220, 299 to 319, and 540 to 561 feet. Supplies Paragon ice plant.
602	4 miles west of Houston Courthouse.	River Oaks Country Club.	Layne-Texas Co.	Old	887	10,8	1.5	48.5 45.8 71.8	Jan. 19, 1931 Mar. 14, 1936 Jan. 28, 1942	T, E, 30	P, Irr	Casing, 736 feet of 10-inch and 151 feet of 8-inch. Screen at 675 to 715 and 755 to 864 feet. Deepened from 776 to 887 feet in July 1929. Supplies golf course. Owner's No. 1.
604	2¼ miles northwest of Houston Courthouse.	Horlock Ice Co.	J. A. Walling	1925	340	8	1.1	75.9	Jan. 24, 1942	A	Ind	Supplies West End ice plant.
606	2 miles northwest of Houston Courthouse.	Henke and Pillot	G. C. Warniecke	Old	575	6	.5	58.5 68.6 89.0	Jan. 22, 1931 May 19, 1937 Jan. 24, 1942	None	N	
607	do	do	McMasters & Pomeroy.	1929	571	6	.8	75.7	Jan. 22, 1931	None	N	Screen from 511 to 571 feet. Abandoned in 1940.
608	do	Fidelity Products Co.	Layne-Bowler Co.	1906	350	6	3.0	69.4 84.4	Jan. 25, 1931 Jan. 24, 1942	None	N	Screen from 315 to 350 feet.
609	do	do		1920?	825	8	3.0	80.3 92.4	Jan. 23, 1931 Jan. 24, 1942	None	N	
610	2 miles west of Houston Courthouse.	Standard Rice Co. Inc.	Layne-Bowler Co.	1908	853	6	1.0	54.0 86.2	Jan. 25, 1931 Nov. 7, 1938	A	Ind	Liner set in 8¼-inch casing by Layne-Texas Co. in January 1925. Screen from 806 to 848 feet. Yield, 106 gallons a minute in 1940. See log.
612	1½ miles northwest of Houston Courthouse.	Pfeffer Rice Milling Co.	G. C. Warniecke	1905?	580	6,4	2.0	64.3	Jan. 22, 1931	A	Ind	Deepened from 427 to 580 feet in October 1932 by Layne-Texas Co. Screen at 504 to 537 and 549 to 578 feet. Estimated yield, 75 gallons a minute in 1941.

614	1¼ miles northwest of Houston Courthouse.	Liquid Carbonic Corporation.		Old	600	8				T, E, 20	Ind	Estimated yield, 325 gallons a minute. Supplies ice plant.
616	1¼ miles west of Houston Courthouse.	City of Houston	Layne-Texas Co.	1927	1,456	24, 12	0 1.5	47 71 101.1 107.2	May 21, 1927 May 18, 1928 May 26, 1939 May 21, 1941	T, E, 125	P	Casing, 249 feet of 24-inch and 1,207 feet of 12-inch. Screen at 894 to 914, 1,150 to 1,190, 1,149 to 1,402, and 1,417 to 1,438 feet. Estimated yield, 1,800 gallons a minute in January 1942. Owner's No. Central F-5.
617	1 mile west of Houston Courthouse.	do	do	1927	1,540	24, 12	0 1.0	28 76 101.3 108.2	April 1927 July 23, 1931 May 26, 1939 May 21, 1941	T, E, 125	P	Casing, 254 feet of 24-inch and 1,286 feet of 12-inch. Screen at 893 to 929, 1,159 to 1,194, 1,235 to 1,296, 1,318 to 1,460, and 1,439 to 1,499 feet. Yield 1,810 gallons a minute in January 1942. Owner's No. Central F-1.
618	do	do	do	1927	1,320	24, 12	0 1.0	28 67 95.2 101.5	April 4, 1927 July 23, 1931 May 26, 1939 May 21, 1941	T, E, 125	P	Casing, 250 feet of 24-inch and 1,107 feet of 12-inch. Screen at 889 to 911, 932 to 953, 1,139 to 1,179, and 1,249 to 1,320 feet. Yield, 800 gallons in January 1942. Owner's No. Central F-10.
619	do	do		Old	900	6	2.0	55.5 56.9 88.3	June 30, 1931 Mar. 16, 1936 Jan. 24, 1942	None	N	Supplied Lincoln swimming pool. Measured depth, 625 feet.
620	1½ miles southwest of Houston Courthouse.	Public Laundries	Layne-Texas Co.	1927	1,379	6, 4	0	54 120.8	April 1927 May 25, 1941	T, E, 15	Ind	Casing, 1,288 feet of 6-inch and 91 feet of 4-inch. Screen from 1,310 to 1,377 feet. Yield, 150 gallons a minute in 1938 with draw-down of 66 feet.
621	do	Horlock Ice Co.	J. A. Walling	1924	560	11	2.0	71.3	Jan. 19, 1931	A	Ind	Screen at 220 to 240 and 480 to 500 feet. Supplied South End ice plant; abandoned in 1941. Owner's No. 1.
622	do	do	do	1929	360	8¾	13. 12	81.2	do	A	Ind	Screen from 224 to 250 feet. Supplies South End ice plant. Owner's No. 2.
623	1½ miles northwest of Houston Courthouse.	Houston Foundry & Machine Co.	G. C. Warniecke	1900?	900	6	2.5	89.6	Jan. 24, 1942	None	N	Abandoned October 1938.
624	1 mile west of Houston Courthouse.	City of Houston	Layne-Texas Co.	1935	953	24, 12½	0 2.9	85 92.0 103.0	July 30, 1935 July 27, 1939 Sept. 9, 1941	T, E, 200	P	Casing, 301 feet of 24-inch and 652 feet of 12½-inch. Screen at 463 to 526, 562 to 605, 712 to 775, 836 to 875, and 896 to 938 feet. Gravel-walled. Yield, 1,150 gallons a minute in January 1942. Owner's No. Central F-11.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
625	1 mile west of Houston Courthouse.	City of Houston	Layne-Texas Co.	1935	2,041	24, 12½	0 2.0	55 88.0 106.0	Sept. 11, 1935. Nov. 23, 1939. Sept. 9, 1941.	T, E, 200	P	Casing, 300 feet of 24-inch and 1,741 feet of 11¾-inch. Screen at 1,154 to 1,214, 1,274 to 1,295, 1,316 to 1,377, 1,398 to 1,420, 1,441 to 1,505, 1,589 to 1,610, 1,758 to 1,780, 1,887 to 1,931, and 1,983 to 2,025 feet. Gravel-walled. Yield, 1,880 gallons a minute in January 1942. Owner's No. Central F-12.
626	1 mile northwest of Houston Courthouse.	Dairyland Inc.	H. L. Wilson	1923	435	12				A	Ind	Supplies ice plant.
627	1¾ miles northwest of Houston Courthouse.	Cook Paint & Varnish Co.	McMasters & Pomeroy.	1940	200	6				T, E, 10	Ind	Screen from 180 to 200 feet.
628	do	Earthen Products Co.	L. Patterson	1936	374	6				T, E, 15	Ind	Screen at 90 to 110 and 350 to 370 feet. Estimated yield, 75 gallons a minute in 1941.
629	do	Washington Laundry.	McMasters & Pomeroy.	1936	493	6				T, E, 5	Ind	Screen from 453 to 493 feet. Yield, 80 gallons a minute when drilled.
630	1½ miles northwest of Houston Courthouse.	Crescent Laundry	Layne-Texas Co.	1936	207	6, 5	0	59	Mar. 12, 1936.	T, E, 5	Ind	Casing, 160 feet of 6-inch and 47 feet of 5-inch. Screen from 182 to 206 feet. Estimated yield, 20 gallons a minute in 1941.
631	¾ mile north of Houston Courthouse.	Mid-Continental Mud Co.	do	1939	525	8⅝				T, E, 25	Ind	Screen at 188 to 250, 327 to 349, 438 to 456, and 471 to 525 feet.
632	¾ mile northeast of Houston Courthouse.	Southern Pacific Co.	do	1937	932	12¾	0	86	Nov. 18, 1937.	T, S	RR	Screen at 523 to 553, 576 to 599, 662 to 684, 826 to 849, and 900 to 921 feet. Yield, 700 gallons a minute in July 1940. Supplies T. & N. O. shops. Owner's No. 3.

633	1 mile northeast of Houston Courthouse.	----do----	----do----	1941	971	13⅜, 7	0	105	May 8, 1941	T, E, 75	RR	Screen at 564 to 583, 603 to 623, 772 to 793, and 832 to 895 feet. Yield, 700 gallons a minute with draw-down of 62 feet when drilled. Supplies T. & N. O. shops. Owner's No. 4.
634	¼ mile northwest of Houston Courthouse.	Houston Ice & Cold Storage Co.	----do----	1941	354	13⅜, 7	8	[4]78	Apr. 9, 1941	T, E, 40	Ind	Screen at 166 to 227, 250 to 273, and 290 to 351 feet. Yield, 550 gallons a minute when drilled. Supplies Henke ice plant.
635	½ mile northeast of Houston Courthouse.	Houston Lighting & Power Co.	----do----	1939	887	10¾	0	95	Mar. 7, 1939	T, E, 75	Ind	Casing, 633 feet of 18¾-inch and 254 feet of 10¾-inch. Screen at 747 to 759, 762 to 785, 808 to 822, 834-844, and 846 to 873 feet. Gravel-walled. Yield, 750 gallons a minute with drawn-down of 63 feet when drilled. Supplies Gable Street plant. Owner's No. 2.
636	½ mile east of Houston Courthouse.	National Biscuit Co.	Southern Engine & Pump Co.	1910	1,380	8	----	----	----	A, D, 20	Ind	Estimated yield, 35 gallons a minute in 1941.
637	1 mile east of Houston Courthouse.	Dedman Foundry & Machine Co.	I. H. Mowery	1941	250	6	----	----	----	T, E, 5	Ind	Screen from 236 to 250 feet.
638	½ mile southwest of Houston Courthouse.	Humble Building	Layne-Texas Co	1938	932	10¾, 8⅝	0	[4]93	June 13, 1938	T, E, 15	P	Screen at 767 to 806, 876 to 887, and 910 to 920 feet. Yield, 260 gallons a minute with draw-down of 23 feet when drilled. Owner's No. 2.
639	¾ mile southwest of Houston Courthouse.	Phenix Dairy	---do----	1936	534	8, 6	0	[4]69	May 26, 1936	T, E, 15	Ind	Casing, 162 feet of 8-inch and 372 feet of 6-inch. Screen from 445 to 535 feet. Yield, 260 gallons a minute with draw-down of 44 feet when drilled.
640	½ mile southwest of Houston Courthouse.	Oil & Gas Building.	Texas Water Supply Corporation.	1939	986	8	0	[4]94	Apr. 19, 1939	T, E, 10	P	Screen from 903 to 966 feet. Yield, 200 gallons a minute when drilled.
641	½ mile west of Houston Courthouse.	Rice Hotel Laundry.	Layne-Texas Co	1926	1,592	10, 8, 6	0	[4]90	July 23, 1936	T, E, 30	Ind	Casing, 221 feet of 10-inch; 942 feet of 8-inch; and 339 feet of 6-inch. Screen at 1,317 to 1,395 and 1,416 to 1,456 feet. Yield, 650 gallons a minute when drilled. See log.
642	½ mile southwest of Houston Courthouse.	Commerce Building.	----do----	1939	900	16, 8⅝	0	[4]118	October 1939	T, E, 40	P	Casing, 672 feet of 16-inch and 228 feet of 8⅝-inch. Screen at 752 to 803, 826 to 836, and 847 to 882 feet. Yield, 800 gallons a minute when drilled.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
643	¼ mile southwest of Houston Courthouse.	Sakowitz Bros.	Texas Water Supply Corp.	1936	887	10, 6	------	------	----------	T, E, 40	P	Deepened from 550 to 887 feet in 1939. Yield 600 gallons a minute in 1941. Supplies Gulf Bldg.
644	do	Niels Esperson Building.	do	1940	900	8, 6	------	------	----------	T, E, 15	P	Screen from 825 to 885 feet. Yield, 315 gallons a minute when drilled.
645	⅛ mile west of Houston Courthouse.	Uptown Theater	Layne-Texas Co	1935	392	16, 8	0	4 68	Oct. 7, 1935	T, E, 60	P	Casing, 210 feet of 16-inch and 182 feet of 8-inch. Screen from 295 to 364 feet. Yield, 640 gallons a minute with draw-down of 50 feet when drilled.
646	¼ mile northwest of Houston Courthouse.	Model Laundry	South Engine & Pump Co.	1909	1, 875	8	−8.0	94.3	Mar. 29, 1941	A, S	Ind	Screen from 1,625 to 1,875 feet. Ceased to flow in 1920.
647	⅛ mile northeast of Houston Courthouse.	Swift Packing Co.	G. C. Warniecke	1906	860	8, 6	------	------	----------	A	Ind	
648	9 miles north of Houston Courthouse.	J. W. Follis	----------	1931	300	4	1.5	46.6 55.2	Dec. 8, 1939 Dec. 12, 1941	A	D, S, Irr	
649	9 miles northwest of Houston Courthouse.	A. Wilke	—— Morton	1925	367	4	1.8	54.2 63.2	Dec. 17, 1938 Dec. 16, 1941	None	N	Screen from 343 to 367 feet.
650	8 miles north of Houston Courthouse.	----------	----------	------	468	6	1.0	57.8 68.8	Dec. 8, 1938 Dec. 16, 1941	None	N	Formerly used for irrigation.
652	9 miles north of Houston Courthouse.	I. Ilo	Layne-Texas Co	1934	403	6	0	4 40	1938	T, G	D, S, Irr	Screen at 360 to 402 feet. Yield, 100 gallons a minute with draw-down of 68 feet in 1938.
654	5¼ miles north of Houston Courthouse.	H. A. Burden	H. A. Burden	1929	58	3	2.0	10.0	May 28, 1931	A, G, 2	D, S	
656	4¼ miles north of Houston Courthouse.	Texas Creosoting Co.	McMasters & Pomeroy.	------	666	8, 6	5.0	62.7 63.6 96.5	Jan. 9, 1931 Mar. 19, 1936 Jan. 26, 1942	A	Ind	Casing, 622 feet of 8-inch and 44 feet of 6-inch. Screen from 622 to 666 feet.

657	3¾ miles north of Houston Courthouse.	Harris County Water Control District No. 2.	do	1925	856	8, 5½	0	1 70	Feb. 11, 1938	T, E, 20	P	Casing, 636 feet of 8-inch and 220 feet of 5½-inch. Screen at 624 to 659, 730 to 772, 793 to 814, and 835 to 845 feet. Yield, 400 gallons a minute in 1938. Deepened from 672 to 856 feet in 1938. Supplies Lindale Park. Owner's No. 1.
662	2½ miles northeast of Houston Courthouse.	South Texas Cotton Oil Co.	Layne-Texas Co	1928	834	24, 10, 8	0	62. 9 65. 9 98. 2	Jan. 14, 1931 May 19, 1937 Jan. 26, 1942	T, E, 50	Ind	Casing, 118 feet of 24-inch, 463 feet of 10-inch; and 153 feet of 8-inch. Screen at 485 to 526, 702 to 740, 755 to 776, and 783 to 824 feet. Yield, 525 gallons a minute with draw-down of 50 feet when drilled. Owner's No. 2.
663	do	do	do	1924	740	24, 10	3.3	56. 3 64. 0 76. 5	Jan. 14, 1931 Jan. 20, 1939 Jan. 26, 1942	T, E	N	Casing, 108 feet of 24-inch and 372 feet of 12-inch. Screen at 371 to 392, 472 to 513, 664 to 699, and 707 to 736 feet. Owner's No. 1.
665	2½ miles northeast of Houston Courthouse.	Wood Preserving Corporation.	Taylor & Roberts	1912	552	10	1.0	56. 2 73. 4	Jan. 14, 1931 Jan. 26, 1942	None	N	Abandoned in 1941.
667	¾ mile north of Houston Courthouse.	Sunshine Laundry	McMasters & Pomeroy.	1929	602	8, 6				T, E, 7½	Ind	Deepened from 300 to 602 feet in 1934. Screen from 562 to 602 feet.
668	1 mile north of Houston Courthouse.	Horlock Ice Co	Layne-Texas Co	1928	354	8	.5	79. 6	Jan. 14, 1931	A	Ind	Screen at 200 to 241 and 303 to 344 feet. Supplies North Side ice plant.
669	1 mile northwest of Houston Courthouse.	Willborg's Laundry.	do	1932	958	6, 4½				T, E, 7½	Ind	Casing, 891 feet of 6-inch and 67 feet of 4½-inch. Screen from 903 to 936 feet. Yield, 150 gallons a minute with draw-down of 40 feet when drilled.
670	do	Southern Pacific Co.	Layne-Bowler Co	1913	774	8, 6	0	1 91	Aug. 24, 1937	A, S	RR	Casing, 722 feet of 8-inch and 52 feet of 6-inch. Screen from 722 to 774 feet. Yield, 385 gallons a minute in 1937. Supplies H. & T. C. R. R. roundhouse.
671	¼ mile northwest of Houston Courthouse.	Burress & Rogers		300	6, 4	.5	65. 8	Jan. 12, 1931	A	Ind	Casing perforated and liner set by Layne-Texas Co. in 1932. Screen at 205 to 246 and 281 to 300 feet. Supplies ice plant. Owner's No. 1.
672	do	do	Layne-Bowler Co	1922	603	8	0	1 44. 5	Dec. 16, 1925	A	Ind	Screen at 197 to 243, 288 to 332, 491 to 514, and 539 to 581 feet. Yield, 900 gallons a minute when drilled. Supplies ice plant. Owner's No. 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
674	1 mile northeast of Houston Courthouse.	Southern Pacific Co.	Layne-Bowler Co.	1913	978	12, 8, 6				A, S	RR	Casing, 90 feet of 12-inch and 888 feet of 8-inch; 950 feet of 6-inch liner set in 1934. Screen from 938 to 978 feet. Estimated yield, 150 gallons a minute in 1942. Supplies T. & N. O. R. R. shops. Owner's No. 1.
675	do	do	do	1913	562	12, 8, 6				A, S	RR	Casing, 90 feet of 12-inch; 432 feet of 8-inch; and 40 feet of 6-inch. Screen from 522 to 562 feet. Supplies T. & N. O. R. R. shops. Owner's No. 2.
677	½ mile northeast of Houston Courthouse.	Houston Lighting & Power Co.	Taylor & Roberts	1922	873	8, 6	0	73.1	Jan. 29, 1931	None	N	Casing, 798 feet of 8-inch and 75 feet of 6-inch. Screen at 741 to 796 and 818 to 873 feet. Owner's No. 1.
680	¼ mile northeast of Houston Courthouse.	Houston Electric Co.		1910?	1,279	8	0	33.3 49.7 94.5	Jan. 8, 1931 Mar. 18, 1936 Jan. 23, 1942	None	N	Flowed when drilled.
682	¼ mile northwest of Houston Courthouse.	Southern Pacific Co.	Taylor & Roberts	1923	862	8, 6				A	P	Casing, 791 feet of 8-inch and 70 feet of 6-inch. Screen at 626 to 664 and 802 to 861 feet. Supplies Southern Pacific Bldg.
683	do	Houston Ice & Cold Storage Co.	J. A. Walling	1915?	825	8?				None	N	Supplied Henke ice plant. Abandoned in 1938.
684	do	do	do	1915	720	6	0	52.3	Jan. 7, 1931	A	Ind	Original depth 745 feet.
688	½ mile northwest of Houston Courthouse.	City of Houston	Layne-Texas Co.	1925	1,535	24, 10	0 1.5	48 111.2 119.2	July 10, 1925 July 27, 1939 Sept. 9, 1941	T, E, 75	P	Casing, 151 feet of 24-inch and 1,384 feet of 10-inch. Screen at 1,179 to 1,199, 1,279 to 1,356, and 1,411 to 1,512 feet. Liner, 154 feet of 10-inch and 1,384 feet of 8-inch. Yield, 1,110 gallons a minute January 1942. Owner's No. Central C–16.

689	½ mile northwest of Houston Courthouse.	do	do	1925	980	24, 10	0 2.0	50 108. 3 113. 7	July 19, 1925 July 27, 1939 Sept. 9, 1941	T, E, 50	P	Casing, 151 feet of 24-inch and 829 feet of 10-inch. Screen at 708 to 720, 836 to 848, and 898 to 978 feet. Liner, 154 feet of 10-inch and 829 feet of 8-inch. Estimated yield, 420 gallons a minute in January 1942. Owner's No. Central D-17.
692	⅛ mile northwest of Houston Courthouse.	Union National Bank Building.	Taylor & Roberts	1910	1, 600	6				T, E, 5	P	
695	do	First National Bank Building.	Layne-Bowler Co	1923	363	8, 4				A, E, 20	P	Casing, 252 feet of 6-inch and 111 feet of 4-inch. Screen at 206 to 248 and 322 to 363 feet. Estimated yield, 100 gallons a minute in 1941.
697	⅛ mile southwest of Houston Courthouse.	Stewart Building	G. C. Warniecke	1905	600	6	−6.0	59. 5	Feb. 4, 1931	A	P	
698	⅛ mile west of Houston Courthouse.	Scanlon Building	Taylor & Roberts	1909	808	4				A	P	Screen from 786 to 808 feet. Diameter of original casing, 6 inches.
700	¼ mile west of Houston Courthouse.	Rice Hotel	Layne-Bowler Co	1913	1, 395	8, 4½				A	P	Casing, 1,221 feet of 8-inch and 174 feet of 4½-inch. Screen from 1,308 to 1,383 feet. Liner installed by Layne-Texas Co. in 1931. Owner's No. 1.
701	do	do	J. A. Walling	1926	896	13, 12, 10, 7				T, E, 20	P	Estimated yield, 350 gallons a minute in 1941.
704	½ mile west of Houston Courthouse.	Ineeda Laundry	Taylor & Roberts	1910	975	4				A, E, 50	Ind	Diameter of original casing, 8 inches.
706	¼ mile southwest of Houston Courthouse.	Texan Theater	do	1924	515	12, 8, 6				T, E	P	Casing, 240 feet of 12-inch; 220 feet of 8-inch; and 55 feet of 6-inch. Screen at 240 to 280, 320 to 335, and 460 to 515 feet. Stand-by for well 645.
707	do	Bankers Mortgage Building.	J. A. Walling	1921	925	6				A	P	Estimated yield, 150 gallons a minute in 1941.
709	do	Second National Bank Building.	Taylor & Roberts	1910	927	8, 6, 4	−1.5	69 87. 5	July 24, 1926 Feb. 3, 1931	A	P	Deepened from 858 to 927 feet in 1930. Estimated yield, 100 gallons a minute in 1941.
710	do	Niels Esperson Building.	Layne-Texas Co	1925	895	8, 6	4-11. 8	86. 8	Feb. 18, 1931	A	P	Casing, 825 feet of 8-inch and 70 feet of 6-inch. Screen from 844 to 894 feet. Standby for well 644.
711	do	San Jacinto Hotel	Taylor & Roberts	1909	884	8, 4	−10	125	Sept. 14, 1940	None	N	Screen from 824 to 884 feet.
712	½ mile southwest of Houston Courthouse.	Lamar Hotel	do	1927	934		8—2.0	81. 8	Feb. 5, 1931	T, E, 15	P	Deepened from 708 to 934 feet by McMasters & Pomeroy in 1930. Original diameter of casing, 8 inches. Reported yield, 130 gallons a minute in 1941.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [2]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
713	½ mile southwest of Houston Courthouse.	Humble Bldg.	J. A. Walling	1921	856	8				A	P	Stand-by for well 638.
714	do	Y. M. C. A.	G. C. Warniecke	1907	500	4				A	P	Diameter of original casing, inches.
715	¼ mile southwest of Houston Courthouse.	Ambassador Apartments.	Layne-Bowler Co.	1910	888	8, 6				A	P	Casing, 755 feet of 8-inch and 133 feet of 6-inch. Screen from 813 to 873 feet.
716	do	West Building	J. A. Walling	1913	495	6				A	P	
717	do	Cotton Hotel	do	1913	888	4	−8.0	84.1	Jan 28, 1931	A	P	Diameter of original casing, 6 inches.
720	do	Kress Building	Taylor & Roberts	1913	542	8	−2.0	66.8	Feb. 1, 1931	T, E, 15	P	Old casing pulled and new casing installed by McMasters & Pomeroy in 1931. Screen from 500 to 540 feet.
721	¼ mile southwest of Houston Courthouse.	Texas State Hotel	Layne-Texas Co.	1930	745	8, 6				T, E, 15	P	Casing, 213 feet of 8-inch and 532 feet of 6-inch. Screen at 434 to 456, 459 to 559, and 653 to 694 feet. Yield, 245 gallons a minute in 1935. Liner set in 1935 to 745 feet; original depth, 792 feet.
722	do	The Texas Co. Building.	J. E. Roberts	1915	1,335	8, 4½	10.0	50.0	Jan. 31, 1931	A	N	Screen from 1,258 to 1,323 feet. Abandoned in 1940.
723	do	Shell Building	J. A. Walling	1926	900	4				A	P	Diameter of original casing, 6 inches.
724	¼ mile south of Houston Courthouse.	Petroleum Building.	Layne-Texas Co.	1926	690	6				A	P	
726	¼ mile southeast of Houston Courthouse.	Houston Belt & Terminal R. R.	McMasters & Pomeroy.	1931	708	10, 8	3.0	75.1	Jan. 7, 1931	T, E, 25	P	Casing, 325 feet of 10-inch and 383 feet of 8-inch. Screen at 220 to 240, 619 to 661, and 685 to 708 feet. Supplies Union R. R. station.
728	do	Burkhart Laundry.	do	1931	1,402	8, 6				T, E, 20	Ind	Casing, 1,311 feet of 8-inch and 91 feet of 6-inch. Screen from 1,358 to 1,402 feet. Estimated yield, 200 gallons a minute in 1941. Temperature, 80° F. See log.

729	½ mile southeast of Houston Courthouse.	Independent Electric Ice Co.	Taylor & Roberts	1921?	380	6				A, E, 10	Ind	
730	do	do	do	1927	308	8	2.0	63 73.9	April 1929 Jan. 29, 1931	A, E, 10	Ind	
731	¾ mile southeast of Houston Courthouse.	Missouri Pacific Lines.	Layne-Bowler Co	1907	1,390	8				T, E, 25	RR	Screen at 1,276 to 1,330 and 1,350 to 1,390 feet. Yield, 285 gallons a minute in 1941. Supplies L. & G. N. R. R. yards.
732	1 mile southeast of Houston Courthouse.	Gould Wet Wash Laundry.	Layne-Texas Co	1924	1,391	6,4				T, E, 15	Ind	Casing, 1,341 feet of 6-inch and 50 feet of 4-inch. Screen from 1,347 to 1,391 feet. Estimated yield, 150 gallons a minute in 1940.
733	1 mile east of Houston Courthouse.	Zero Ice Co	Layne-Bowler Co	1923	881	16, 10¾	0	56	Feb. 23, 1938	T, E, 30	Ind	Casing, 145 feet of 16-inch and 736 feet of 10-inch. Screen at 149 to 229, 370 to 390, 474 to 513, and 652 to 693 feet. Estimated yield, 375 gallons a minute in 1938. Owner's No. 2.
734	do	do	do	1923	646	24, 10				None	N	Casing, 86 feet of 24-inch and 560 feet of 10-inch. Screen at 320 to 355, 457 to 516, and 616 to 646 feet. Owner's No. 1.
735	1¼ miles east of Houston Courthouse.	Pritchard Rice Milling Co.	G. C. Warniecke	1907	494	6,3				A	Ind	Screen from 452 to 494 feet. Liner set by Layne-Texas Co. in 1940. Yield, 50 gallons a minute in 1940.
736	1½ miles east of Houston Courthouse.	Houston Packing Co.	do	1907	1,618	6⅝, 5	0	72	February 1938	A	Ind	Deepened from 1,308 to 1,618 feet in January 1938 by Layne-Texas Co. Casing, 945 feet of 6⅝-inch and 673 feet of 5-inch. Screen from 1,537 to 1,617 feet. Estimated yield, 270 gallons a minute in 1940. Owner's No. 1.
737	do	do	Layne-Texas Co	1930	619	12, 8	0	54	May 1930	T, E, 25	Ind	Casing, 133 feet of 12-inch and 486 feet of 8-inch. Screen at 235 to 256, 339 to 362, 522 to 546, and 578 to 611 feet. Estimated yield, 270 gallons a minute in 1941. Owner's No. 3.
738	do	do	McMasters & Pomeroy.	1918	417	8	2.0	62.4 76.2	Jan. 8, 1931 Sept. 29, 1941	None	N	Screen at 243 to 264 and 354 to 416 feet. Owner's No. 2.
739	1½ miles southeast of Houston Courthouse.	Trinity Portland Cement Co.	J. G. Taylor	1927	848	10, 8	0	87.5	January 1931	A	Ind	Casing, 532 feet of 10-inch and 316 feet of 8-inch. Screen at 631 to 672 and 804 to 848 feet. Yield, 90 gallons a minute in 1939.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
744	2½ miles northeast of Houston Courthouse.	City of Houston	McMasters & Pomeroy.	1931	1,876	24, 12½	2.5	73.5 84.2 95.8	Mar. 17, 1938 Aug. 23, 1940 Sept. 10, 1941	T, E, 200	P	Casing, 300 feet of 24-inch and 1,576 feet of 12½-inch. Screen at 1,015 to 1,035, 1,115 to 1,160, 1,225 to 1,245, 1,325 to 1,345, 1,370 to 1,390, 1,570 to 1,615, 1,735 to 1,830, and 1,850 to 1,870 feet. Gravel-walled. Yield, 2,260 gallons a minute in January 1942. Owner's No. Northeast 1. See log.
747	3 miles northeast of Houston Courthouse.	Southern Pacific Co.	J. W. Jackson	1925	948	8, 6	0	30	May 1925	A	Ind	Casing, 806 feet of 8-inch and 142 feet of 6-inch. Screen at 739 to 758, 781 to 803, 847 to 868, and 927 to 947 feet. Supplies T. & N. O. Creosoting Plant.
748	4¾ miles northeast of Houston Courthouse.	Gulf Pipe Line Co.	Layne-Bowler Co	1911	720	6	.4	+4.0 48.1 84.9	Nov. 1911 Jan. 14, 1931 Jan. 26, 1942	None	N	Screen at 539 to 579 and 697 to 714 feet. Original flow, 40 gallons a minute.
749	5¾ miles northeast of Houston Courthouse.	H. Jaschke	A. E. Fawcett, Sr	1930	179	3, 2				C, E, ¼	D, S	
750	5 miles northeast of Houston Courthouse.	Texas Pipe Line Co.	McMasters & Pomeroy.	1919	897	6				C, E	D	Screen at 857 to 897 feet.
751	do	do	J. A. Walling	1915	540	6	3.7	52.3 61.0 94.3	Mar. 19, 1931 May 19, 1937 June 26, 1942	None	N	Flowed until 1918.
757	4 miles east of Houston Courthouse.	Layne-Bowler Co.	Layne-Texas Co	1929	676	10	0	57.6 58.1 97.5	Feb. 25, 1931 Mar. 16, 1936 Jan. 26, 1942	T, E, 15	Ind	Screen at 577 to 635 and 649 to 670 feet. Gravel-walled. Yield, 660 gallons a minute with draw-down of 46 feet when drilled.
759	4¾ miles east of Houston Courthouse.	Port City Compress & Warehouse Co.	W. W. Morton		569	4	1.5	56.9 61.8 106.1	Feb. 26, 1931 Mar. 16, 1936 Jan. 26, 1942	A, E, 15	D	Deepened from 396 to 569 feet by Layne-Texas Co. in 1930. Screen from 544 to 566 feet.
760	do	Houston Oil Terminal Co.	McMasters & Pomeroy.	1920	732	6, 4				T, E, 5	D, Ind	Casing perforated from 440 to 500 feet. Screen from 672 to 732 feet.

761	3¼ miles southeast of Houston Courthouse.	Reed Roller Bit Co.	do	1930	520	8	0	490	1939	T, E	Ind	Screen at 258 to 278, 387 to 408, and 459 to 480 feet. Yield 275 gallons a minute in 1939. Owner's No. 1.
762	1½ miles east of Houston Courthouse.	Houston Packing Co.	Layne-Texas Co	1936	424	13¾, 8	0	471	Dec. 23, 1936	T, E, 40	Ind	Casing, 259 feet of 13¾-inch and 165 feet of 8-inch. Screen at 339 to 368 and 381 to 420 feet. Gravel-walled. Yield, 556 gallons a minute with drawdown of 43 feet when drilled. Owner's No. 4.
763	1 mile southeast of Houston Courthouse.	Farmers & Merchants Creamery Co.	A. E. Fawcett, Sr	1933	260	6				T, E, 5	Ind	Yield, 90 gallons a minute when drilled.
764	do	Coca Cola Bottling Co.	Layne-Texas Co	1933	824	6	0	470.4	August 1933	T, E, 30	Ind	Deepened from 556 to 824 feet in 1940. Screen at 524 to 561, 640 to 661, 705 to 726, and 789 to 810 feet. Yield, 425 gallons a minute with drawdown of 23 feet in 1940.
765	1 mile south of Houston Courthouse	Seven-up Bottling Co.	Layne-Texas Co	1937	388	7, 5	0	466	Mar. 7, 1937	T, E, 10	Ind	Casing, 298 feet of 7-inch and 91 feet of 5-inch. Screen from 340 to 386 feet. Yield, 85 gallons a minute with drawdown of 26 feet when drilled.
766	2 miles southeast of Houston Courthouse.	Nehi Bottling Co	Failing Drilling Co	1934	565	6				T, E, 10	Ind	Screen from 543 to 565 feet. Estimated yield, 90 gallons a minute in 1941.
767	2¼ miles southeast of Houston Courthouse.	City of Houston	Layne-Texas Co	1938	957	21½, 12¾	0 2.5	490 106.8 121.8	Apr. 28, 1938 Sept. 21, 1939 May 20, 1941	T, E, 150	P	Casing, 473 feet of 21½-inch and 434 feet of 12¾-inch. Screen at 470 to 481, 510 to 522, 537 to 596, 650 to 670, 695 to 715, 735 to 766, and 814 to 945 feet. Gravel-walled. Yield, 1,670 gallons a minute January 1942 Owner's No. Scott Street 5.
768	3¼ miles south of Houston Courthouse.	Ben Coyle	Texas Water Supply Corporation.	1939	500	6				T, E, 7½	D	Screen from 460 to 500 feet.
769	do	Barnard Sakowitz	do	1940	285	6				T, E, 7½	D	Screen from 265 to 285 feet.
770	do	C. W. Edwards	McMasters & Pomeroy.	1938	555	6				T, E, 7½	D	Screen at 470 to 491 and 525 to 545 feet. Yield, 165 gallons a minute when drilled.
771	do	Ben Taub	Texas Water Supply Corporation.	1940	295	6				T, E, 7½	D	Screen from 265 to 295 feet. Yield, 100 gallons a minute when drilled.
772	3 miles southwest of Houston Courthouse.	Albert Plummer	do	1936	745	6, 7				T, E	D	Screen from 685 to 745 feet.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[3]	Remarks
773	3¼ miles southwest of Houston Courthouse.	Herman Hospital	Layne-Texas Co	1937	417	10¾, 5	0	[4] 56	August 1937	T, E, 10	P	Casing, 292 feet of 10¾-inch and 25 feet of 5-inch. Screen from 366 to 415 feet. Gravel-walled. Yield, 260 gallons a minute with draw-down of 36 feet when drilled.
774	3 miles southwest of Houston Courthouse.	Parklane Apartments.	Texas Water Supply Corporation.	1939	490	8, 6	------	------	----------	T, E, 5	P	Screen from 450 to 490 feet. Yield, 125 gallons a minute when drilled.
775	3¼ miles southwest of Houston Courthouse.	City of Houston	Layne-Texas Co	1935	1,796	24, 12½, 8⅝, 7	0	[4] 96	July 4, 1926	T, E, 250	P	Casing, 300 feet of 24-inch and 496 feet of 12½-inch. Screen at 1,089 to 1,132, 1,171 to 1,193, 1,288 to 1,310, 1,351 to 1,410, 1,475 to 1,580, and 1,661 to 1,756 feet. Gravel-walled. Liner, 8-inch from 1,410 to 1,598 feet and 7-inch from 1,598 to 1,756 feet. Yield, 1,730 gallons a minute in January 1942. Owner's No. South End 6.
776	1¼ miles southwest of Houston Courthouse.	Ideal Laundry	J. W. Jackson	------	300±	6	------	------	----------	T, E, 7½	Ind	
777	3 miles southwest of Houston Courthouse.	Wilshire Village Apartments.	Texas Water Supply Corporation.	1939	526	8, 6	------	------	----------	T, E, 7½	P	Screen from 506 to 526 feet; also 20 feet of screen between 400 and 500 feet. Yield, 150 gallons a minute when drilled.
778	3½ miles southwest of Houston Courthouse.	H. C. Weiss	Layne-Texas Co	1936	404	6, 4	1.0	80.9	Jan. 27, 1942	T, E	D	Casing, 349 feet of 6-inch and 64 feet of 4-inch. Screen from 360 to 402 feet. Yield, 60 gallons a minute when drilled.
779	2¾ miles southwest of Houston Courthouse.	American Service Co.	McMasters & Pomeroy.	1937	584	10	1.8	81.6	Jan. 28, 1942	T, E, 30	Ind	Screen at 334 to 355, 382 to 421, and 534 to 584 feet. Yield, 550 gallons a minute when drilled. Supplies ice plant. Owner's No. 2.
780	3 miles southwest of Houston Courthouse.	Hollyfield Laundry.	Layne-Texas Co	1936	727	8, 6	2.5	78.8	May 21, 1941	T, E, 10	Ind	Casing, 205 feet of 8-inch and 522 feet of 6-inch. Screen from 686 to 724 feet. Yield, 175 gallons a minute with-draw-down of 20 feet when drilled.

783	6 miles southwest of Houston Courthouse.	Houston Riding & Polo Club..	----------	1927?	350±	4	.5	39.1 56.2	Mar. 14, 1936 Jan. 28, 1942	A, G, 5	D, S	
784	5½ miles southwest of Houston Courthouse.	Houston Gun Club	----------	1930	360±	----------	----------	----------	----------	C, E	D, S	
787	2¾ miles southwest of Houston Courthouse.	American Service Co.	—— Taylor	1926	701	10	3.0	73.4	Jan. 28, 1942	None	N	Owner's No. 1.
788	1½ miles southwest of Houston Courthouse.	Shepherd Laundries.	McMasters & Pomeroy.	1930	1,416	8, 6	0 1.8	80 120.2	July 1930 May 25, 1941	T, E, 15	Ind	Casing, 1,274 feet of 8-inch and 142 feet of 6-inch. Screen at 1,336 to 1,377 and 1,395 to 1,416 feet. See log.
789	1½ miles southwest of Houston Courthouse.	Henke & Pillot	J. A. Walling	1923	565	6, 4	----------	----------	----------	T, E, 5	Ind	Screen from 494 to 560 feet.
790	2¼ miles southwest of Houston Courthouse.	Southern United Ice Co.	Layne-Texas Co	1926	602	16, 10	1.5	57.0 85.3	Jan. 17, 1931 Jan. 28, 1942	T, E, 5	Ind	Casing, 115 feet of 16-inch and 487 feet of 10-inch. Screen at 365 to 386, 420 to 458, 539 to 560, and 579 to 597 feet. Yield, 75 gallons a minute in 1941.
791	3 miles southwest of Houston Courthouse.	Warwick Hotel	McMasters & Pomeroy.	1932	576	10	0	57.9	July 7, 1932	T, E, 7½	P	Screen at 408 to 430, 464 to 482, and 556 to 566 feet. Yield, 150 gallons a minute when drilled.
793	3¼ miles southwest of Houston Courthouse.	City of Houston	Layne-Texas Co	1931	1,618	24, 12	0 1.5	70 107.6	1931 Mar. 4, 1941	T, E, 200	P	Casing, 300 feet of 24-inch and 1,318 feet of 12-inch. Screen at 1,275 to 1,299, 1,333 to 1,433, and 1,455 to 1,594 feet. Gravel-walled. Yield, 1,880 gallons a minute in January 1942. Owner's No. South End 5. See log.
794	do	do	Layne-Bowler Co	1919	777	24, 10	2.0 2.0	79.0 86.2	May 26, 1939 May 21, 1941	T, E, 75	P	Casing, 94 feet of 24-inch and 683 feet of 10-inch. Screen at 260 to 282, 347 to 409, 442 to 464, 501 to 514, 526 to 547, 590 to 611, 686 to 704, and 719 to 776 feet. Liner, 94 feet of 10-inch and 683 feet of 8-inch. Yield, 800 gallons a minute in January 1942. Owner's No. South End 4.
795	do	do	do	1917	830	24, 12, 10, 8	0 2.5	29 85.6	1917 June 9, 1941	T, E, 75	P	Casing, 119 feet of 24-inch and 711 feet of 12-inch. Screen at 489 to 509 and 644 to 824 feet. Liner, 308 feet of 10-inch and 522 feet of 8-inch. Yield, 730 gallons a minute. Owner's No. South End 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
797	3¾ miles southwest of Houston Courthouse.	Rice Institute	Layne-Bowler Co.	1910	910	6	1.5	68.4	Jan. 24, 1931	None	N	Screen from 847 to 903 feet.
798	do	do	do	1916	900	6	0	71.9	Jan. 27, 1942	None	N	
808	6¾ miles southwest of Houston Courthouse.	Gem Electric Co.	McMasters & Pomeroy.	1929	233	8¾	0	[1] 21	April 1929	None	N	Screen from 204 to 232 feet.
809	do	do		Old	1,100±	4½	4.0	43.6 43.8 70.8	Feb. 16, 1931 May 19, 1937 Jan. 27, 1942	None	N	Flowed when drilled.
811	7¾ miles southwest of Houston Courthouse.	Harris County	McMasters & Pomeroy.	1931	385	6	1.0	33.1	Apr. 17, 1931	T, E, 5	P	Supplies swimming pool at Bellaire School for Girls.
815	5 miles southwest of Houston Courthouse.	Greenwood Sanitarium.	Layne-Bowler Co.	1912	892	6				A, E, 5	P	Screen from 818 to 880 feet. See log.
820	5¼ miles southwest of Houston Courthouse.	Institute Place	Layne-Texas Co.	1928	309	8, 6	.4	40.2	June 3, 1941	None	N	Casing, 100 feet of 8-inch and 209 feet of 6-inch. Screen from 277 to 300 feet.
821	6¼ miles southwest of Houston Courthouse.	Houston Gulf Gas Co.		1929	211	3				C, E	D	
823	7¼ miles southwest of Houston Courthouse.	Moody corporation.		1912	275	4				A, E, 15	D	
825	do	Navarro Oil Co.	Humble Oil & Refining Co.	1921	385	4				A, E, 15	D, Ind	
832	8 miles southwest of Houston Courthouse.	Burt Taylor	—— Tiller	1930	100	4				C, E, ¾	D, S	
834	do	Navarro Oil Co.	Navarro Oil Co.		380	4½				C, E	D	
837	8¾ miles southwest of Houston Courthouse.	C. W. Mowery	C. L. Mowery	1922	260	4				C, W	D, S	
839	8 miles southwest of Houston Courthouse.	L. N. Lieman	Layne-Texas Co.	1931	234	2	0	[1] 33	September 1931.	A, E	D, S	
840	7½ miles southwest Houston Courthouse.	City of Bellaire	do	1937	827	10¾, 5	1.5	56.6	Jan. 28, 1942	T, E, 15	P	Casing, 614 feet of 10¾-inch and 213 feet of 5-inch. Screen from 651 to 708 feet. Yield, 260 gallons a minute when drilled.
841	3¾ miles southeast of Houston Courthouse.	Houston Country Club.	do	1934	899	10, 6	0	[1] 45	March 1934	T, E, 5	P, Irr	Casing, 334 feet of 10-inch and 565 feet of 6-inch. Screen at 401 to 423, 467 to 488, and 861 to 897 feet. Supplies swimming pool. Owner's No. 2. See log.

842	....do....	....do....	....do....	1939	1,131	13⅜, 7	0	87	June 9, 1939	T,E,50	P,Irr	Screen from 1,030 to 1,131 feet. Yield, 300 gallons a minute with drawdown of 6½ feet when drilled. Supplies Golf course. Owner's No. 3.
843	3½ miles southeast of Houston Courthouse.	J. R. Baier	....do....	1934	309	6, 4	0	62	October 1934	T, E	D	Screen from 280 to 292 feet. Gravel-walled. Yield, 60 gallons a minute when drilled.
844	....do....	Mrs. E. F. Sims	McMasters & Pomeroy	1940	590	5, 4		87	May 20, 1940	A	D	Casing, 196 feet of 5-inch and 394 feet of 4-inch. Screen at 542 to 566 and 574 to 584 feet. Yield 140 gallons a minute when drilled. Owner's No. 4.
845	3 miles southeast of Houston Courthouse.	Gulf Brewing Co.	Layne-Texas Co	1934	1,123	24, 10				T, E, 75	Ind	Casing, 205 feet of 24-inch and 918 feet of 10-inch. Screen at 853 to 876, 897 to 928, 969 to 1,000, and 1,081 to 1,103 feet. Gravel-walled. Owner's No. 3.
846	2 miles southeast of Houston Courthouse.	Gulf Concrete Pipe Co.	I. H. Mowery	1941	276	4½, 2½				J, E, 3	Ind	Screen from 256 to 276 feet.
847	1½ miles southeast of Houston Courthouse.	Houston Belt & Terminal R. R.	McMasters & Pomeroy	1927	872	10				T, E, 30	RR	Screen from 812 to 872 feet. Estimated yield, 375 gallons a minute in 1941. Supplies H. B. & T. R. R. roundhouse. Owner's No. 2.
848	1¼ miles southeast of Houston Courthouse.	Houston Electric	Layne-Texas Co	1939	583	6, 4	0	94	Dec. 27, 1939	T, E, 5	Ind	Casing, 499 feet of 6-inch and 90 feet of 4-inch. Screen at 515 to 529 and 548 to 570 feet. Estimated yield, 200 gallons a minute in 1941.
849	2¼ miles southeast of Houston Courthouse.	J. Weingarten, Inc.	Texas Water Supply Corporation.	1939	915	8, 6				T, E, 15	Ind	Screen from 855 to 916 feet. Yield, 150 gallons a minute when drilled. Supplies bakery and warehouse.
850	2¼ miles southeast of Houston Courthouse.	Reed Roller Bit Co.	McMasters & Pomeroy	1937	847	8				T, E, 30	Ind	Screen at 632 to 675, 762 to 783, and 805 to 825 feet. Yield, 300 gallons a minute when drilled. Owner's No. 2. See log.
851	1½ miles south of Houston Courthouse.	Polar Wave Ice Co.	Taylor & Roberts	1924	386	12	30.0	91.7	Jan. 17, 1931.	A	Ind	Screen at 163 to 182, 222 to 264, and 364 to 386 feet. Stand-by for well 852.
852	....do....	....do....	....do....	1927	660	12				T, E, 15	Ind	Estimated yield, 250 gallons a minute in 1941. Temperature, 76° F.
853	1 mile southeast of Houston Courthouse.	Houston Ice & Cold Storage Co.			650±	6	.5	71.3 97.3	January 8 1931. January 23 1942.	None	N	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
854	1 mile southeast of Houston Courthouse.	Houston Ice & Cold Storage Co.	Layne-Texas Co.	1925	854	16, 10, 6	0	46 108.1	July 1, 1935. July 8, 1941.	None	N	Casing, 99 feet of 16-inch, 445 feet of 10-inch; and 310 feet of 6 inch. Screen at 224 to 266, 366 to 388, 421 to 442, 542 to 564, 704 to 764, and 831 to 853 feet. Abandoned in 1940.
855	2¼ miles southeast of Houston Courthouse.	City of Houston	do	1926	1,521	24, 16, 8	0	22 73.3 112.9	Jan. 11, 1926. May 23, 1933. Oct. 11, 1939.	T,E,100	P	Casing, 140 feet of 24-inch, 1,110 feet of 16-inch; and 271 feet of 8-inch. Screen from 1,323 to 1,521 feet. Gravel-walled. Yields 1,150 gallons a minute in January 1942. Owner's No. Scott Street 2.
856	do	do	do	1925	866	24, 18, 10	0	49 77.9 88.6 107.5 119.6	June 5, 1925. May 23, 1933. Apr. 23, 1938. Apr. 25, 1939. May 20, 1941.	T,E, 75	N	Casing, 155 feet of 24-inch; 455 feet of 18-inch and 256 feet of 10-inch. Screen at 651 to 705, 728 to 792, and 834 to 866 feet. Liner, 300 feet of 12-inch and 566 feet of 6-inch. Abandoned in 1940. Owner's No. Scott Street 1.
857	2½ miles southeast of Houston Courthouse.	do	do	1928	1,350	24, 16, 12	0.5	62 112.6	Aug. 4, 1928. Aug. 21, 1939.	T,E,150	P	Casing, 250 feet of 24-inch; 410 feet of 16-inch; and 690 feet of 12-inch. Screen at 558 to 576, 638 to 661, 703 to 723, 756 to 777, and 816 to 919 feet. Gravel-walled. Yield, 1,390 gallons a minute in January 1942. Owner's No. Scott Street 3.
858	do	do	do	1931	1,756	24, 12½	0	58 102.9	May 19, 1931. Apr. 25, 1939.	T,E,150	P	Casing, 300 feet of 24-inch and 1,456 feet of 12½-inch. Screen at 1,030 to 1,045, 1,061 to 1,082, 1,108 to 1,151, 1,344 to 1,366, 1,409 to 1,425, 1,472 to 1,513, 1,535 to 1,556, 1,586 to 1,607 and 1,688 to 1,750 feet. Gravel-walled. Yield, 2,320 gallons a minute in January 1942. Owner's No. Scott Street 4.

860	1¼ miles southeast of Houston Courthouse.	Henke and Pillot	do	1931	908	8, 6, 4	2.0	72.1 [4] 88	Aug. 12, 1931 Sept. 17, 1936	T,E, 10	Ind	Deepened from 608 to 908 feet in 1936. Casing, 451 feet of 8-inch; 38 feet of 6-inch; and 419 feet of 4-inch. Screen from 839 to 903 feet. Yield, 150 gallons a minute with draw-down of 14 feet in 1936. Supplies East End store. See log.
861	do	Arctic Ice Co	Layne-Bowler Co	1923	595	8				T,E, 3	Ind	Yield, 30 gallons a minute in 1940.
862	1½ miles southeast of Houston Courthouse.	Houston Belt & Terminal R. R.	McMasters & Pomeroy	1924	832	8				A	RR	Stand-by for well 847 at H. B. & T. R. R. roundhouse. Owner's No. 1.
863	2¼ miles southeast of Houston Courthouse.	Standard Ice Co	do	1929	960	10				T,E, 25	Ind	Screen at 632 to 653, 823 to 865, and 903 to 960 feet. Yield, 350 gallons a minute when drilled.
864	do	do	do	1929	550	8, 6				T,E 10	Ind	Deepened from 403 to 550 feet in 1936. Screen at 240 to 261, 343 to 404, and 527 to 550 feet. Yield, 175 gallons a minute in 1936.
865	do	Texas Ice & Fuel Co.	do	1928	272	5				A,E, 30	Ind	Screen from 252 to 272 feet. Estimated yield, 50 gallons a minute in 1941. Owner's No. 1.
866	do	do	do	1928	401	10				A,E, 30	Ind	Screen at 252 to 272 and 357 to 401 feet. Estimated yield, 200 gallons a minute in 1941. Owner's No. 2.
867	3 miles southeast of Houston Courthouse.	Texas Ice & Fuel Co.	Taylor & Roberts	1922	870	10	0 12.0	[4] 25.5 72.9	1921 Jan. 16, 1931	A	Ind	Screen at 251 to 288, 374 to 415, 553 to 573, 682 to 720, and 830 to 870 feet.
868	do	Hughes Tool Co	Layne-Texas Co	1923	694	16, 10	1.0	50.3 73.0	Jan. 8, 1931 Jan. 23, 1942	None	N	Casing, 85 feet of 16-inch and 609 feet of 10-inch. Screen at 369 to 389, 520 to 562, and 655 to 694 feet. Owner's No. 1.
869	do	do	do	1926	1,096	24, 18, 10	0	[4] 32 62.6	May 3, 1926 Jan. 8, 1931	T, E	Ind	Casing, 162 feet of 24-inch and 934 feet of 10-inch. Screen at 838 to 877, 959 to 1,040, and 1,057 to 1,096 feet. Estimated yield, 865 gallons a minute in 1940. Owner's No. 2.
870	2¾ miles southeast of Houston Courthouse.	Hygeia Ice Co	McMasters & Pomeroy.	1928	728	10, 8	1.5	60.6	Jan. 16, 1931	T, E, 15	Ind	Screen at 197 to 254, 390 to 414, 459 to 484, 646 to 659, and 680 to 708 feet. Yield, 300 gallons a minute in 1940.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)	Water level: Date of measurement	Method of lift	Use of water	Remarks
872	4¼ miles southeast of Houston Courthouse.	Houston Belt & Terminal R. R.	McMasters & Pomeroy.	1924	824	8, 6	0	27	July 1924	T,E,10	RR	Casing, 777 feet of 8-inch and 47 feet of 6-inch. Screen from 777 to 812 feet. Yield, 125 gallons a minute in 1941. Stand-by for well 919. Owner's No. 1.
876	3¾ miles southeast of Houston Courthouse.	Houston Country Club.	Layne-Bowler Co.	Old		24	.5	51.4 87.0	Jan. 16, 1931 Jan. 23, 1942	None	N	
877	3½ miles southeast of Houston Courthouse.	Marshall Ice Co.	McMasters & Pomeroy.	1928	508	10	0	82	June 1941	T, E, 7½	Ind	Screen at 266 to 288, 309 to 325, 392 to 419, and 464 to 486 feet. Estimated yield, 125 gallons a minute in 1941.
878	4¾ miles southeast of Houston Courthouse	Houston Compress Co.	Layne-Texas Co.	1929	905	15½, 8	.5	48. 3 58. 2 96. 3	Jan. 21, 1931 May 20, 1937 Dec. 19, 1941	T, E	Ind	Casing, 162 feet of 15½-inch and 743 feet of 8-inch. Screen at 713 to 754, 796 to 847, and 870 to 898 feet. Yield, 365 gallons a minute when drilled.
879	4¼ miles southeast of Houston Courthouse.	City of Houston	do	1925	1,033	24, 12	0 2.0 2.0	40 84. 4 94. 6	June 5, 1925 Mar. 21, 1939 May 21, 1941	T, E, 75	P	Casing, 125 feet of 24-inch and 908 feet of 12-inch. Screen at 475 to 496, 514 to 533, 556 to 586, 685 to 705, 746 to 767, 787 to 806, 869 to 888, and 987 to 1,025 feet. Estimated yield, 1,100 gallons a minute in January 1942. Owner's No. Magnolia Park 2.
881	5¼ miles southeast of Houston Courthouse.	Terminal Warehouse Co.		1911?	650	6, 4	3.5	54. 4 61. 9 95. 7	Jan. 21, 1931 May 19, 1937 Jan. 26, 1942	None	N	
883	6½ miles southeast of Houston Courthouse	Carnegie - Illinois Steel Corporation.	McMasters & Pomeroy.	1927	841	6	15.0	100. 2 124. 8	Nov. 21, 1938 Nov. 18, 1941	A	Ind	Screen at 592 to 655 and 787 to 841 feet.
887	5¼ miles southeast of Houston Courthouse.	Eastern States Petroleum Co.	do	1919	1, 350	8				T, E, 15	Ind	Estimated yield, 200 gallons a minute in 1941. Supplies oil refinery. Owner's No. 1.
888	6 miles southeast of Houston Courthouse.	do	do	1922	950	6				A	Ind	Estimated yield, 150 gallons a minute in 1941. Supplies oil refinery. Owner's No. 2.

890	do	Consolidated Chemical Co.	Layne-Texas Co.	1926	1,150	24, 10, 7	0	146.6 August 1926 81.0 May 19, 1937 112.4 Mar. 28, 1941	T, E	Ind	Casing, 140 feet of 24-inch and 1,010 feet of 10-inch; 7-inch liner installed in 1937. Screen at 605 to 628, 752 to 809, 1,062 to 1,106, and 1,127 to 1,147 feet. Yield, 700 gallons a minute in 1937. Owner's No. 2. See log.
892	do	Lone Star Cement Co.	Layne-Bowler Co.	1921	1,283	12, 8, 6	2.5	40 May 25, 1928 72.3 Jan. 21, 1931	T, E, 50	Ind	Casing, 99 feet of 12-inch; 930 feet of 8-inch; and 254 feet of 6-inch. Screen at 767 to 808, 945 to 1,044, 1,050 to 1,090, 1,150 to 1,171, and 1,237 to 1,280 feet. Flowed when drilled. Yield, 84 gallons a minute in 1941.
894	do	Southern Pacific Co.		1906	627		8		None	N	Screen from 607 to 627 feet. Flowed approximately 10 gallons a minute when drilled. Ceased flowing in 1917. Abandoned June 1941.
895	6½ miles southeast of Houston Courthouse.	City of Houston	Layne-Texas Co.	1930	1,637	24, 12½	0 3.5 3.5	49 Oct. 28, 1930 108.4 Aug. 21, 1939 126.9 Sept. 10, 1941	T, E, 160	P	Casing, 300 feet of 24-inch and 1,337 feet of 12¼-inch. Screen at 1,027 to 1,034, 1,128 to 1,158, 1,176 to 1,195, 1,239 to 1,259, 1,526 to 1,566, and 1,585 to 1,637 feet. Gravel-walled. Yield, 1,670 gallons a minute in January 1942. Owner's No. East End 1. See log.
897	8¼ miles southeast of Houston Courthouse.	East End Water Works.	L. Patterson	1926	670	6	0	25.0 June 16, 1926	A, E, 15	P	Screen from 626 to 670 feet. Estimated yield, 375 gallons a minute in 1939. Auxiliary supply for Meadowbrook Addition. Owner's No. 1.
903	4¾ miles south of Houston Courthouse.	M. E. Foster	J. W. Jackson	1928	288	6, 3			T, E, 7½	P	Supplies Forster Place Subdivision. Owner's No. 3.
905	7¼ miles southeast of Houston Courthouse.	City Prison Farm			1,900±		0	15.9 Apr. 9, 1931 33.7 Aug. 30, 1940	None	N	
906	7¾ miles southeast of Houston Courthouse.	Garden Villas subdivision.	Layne-Texas Co.	1929	908	8, 5	0	31 June 1929 62 May 20, 1939	T, E, 15	P	Deepened from 875 to 908 feet in 1939 and 5-inch liner installed. Screen at 643 to 662, 838 to 858, and 859 to 905 feet. Estimated yield, 275 gallons a minute in 1939. Owner's No. 2. See log.
907	do	do	—— Williams	1923	897	8, 6			T, E, 15	P	Casing, 753 feet of 8-inch and 144 feet of 6-inch. Screen from 797 to 897 feet. Estimated yield, 250 gallons a minute in 1939. Owner's No. 1.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
909	9¼ miles southeast of Houston Courthouse.	J. W. Madden			900±	8	1.3	20.3 41.5	Apr. 9, 1931 Jan. 27, 1942	C, E	D, S	Measured depth, 342 feet. Flowed when drilled. Formerly used for irrigating rice.
910	9¾ miles southeast of Houston Courthouse.	O'Donald estate			550±	[5] 30	1.5	9.6 12.8	Apr. 9, 1931 May 10, 1939	C, W	D, S	Flowed when drilled. Formerly used for irrigating rice.
911	9 miles southeast of Houston Courthouse.	do			500±	[5] 30	0	33.8 8.3	Apr. 9, 1931 May 10, 1937	None	N	Formerly used for irrigating rice.
912	9¼ miles south of Houston Courthouse.	Geo. A. Swengel	Layne-Bowler Co	1913	653	24,13,12,10	0	[4] 4	Apr. 9, 1913	T	N	Screen from 564 to 642 feet. Formerly used for irrigating rice.
913	6¾ miles southeast of Houston Courthouse.	Allen estate	McMasters & Pomeroy.	1924	876	8, 6	1.5	64.3 94.4	May 27, 1937 Jan. 26, 1942	None	N	Screened from 834 to 876 feet.
914	3½ miles southeast of Houston Courthouse.	R. J. Levy	W. J. Swinehart	1939	633	6, 4	0	[4] 70	1939	T, E, 7½	D	Casing, 150 feet of 6-inch and 480 feet of 4-inch. Screen from 603 to 633 feet. Yield, 120 gallons a minute when drilled.
915	3¼ miles southeast of Houston Courthouse.	J. A. Fite	Layne-Texas Co	1928	486	4, 2½	0	[4] 32	Mar. 5, 1928	T, E	N	Screen from 466 to 486 feet. Abandoned in 1940.
916	do	Port City Packing Co.	Pat O'Day	1936	630	8				T, E, 15	Ind	Screen from 590 to 630 feet. Yield, 75 gallons a minute when drilled.
917	do	do	do	1939	830	8				T, E, 15	Ind	Screen from 750 to 830 feet. Yield, 175 gallons a minute when drilled.
918	do	Dixon Packing Co.	R. D. Cantwell	1939	622	6				T, E, 10	Ind	Yield, 100 gallons a minute when drilled.
919	3½ miles southeast of Houston Courthouse.	Houston Belt & Terminal R. R.	McMasters & Pomeroy.	1941	860	8				T, E, 15	RR	Screen from 800 to 860 feet. Yield, 175 gallons a minute when drilled. Supplies H. B. & T. R. R., south yards. Owner's No. 2.

920	1 mile southeast of Houston Courthouse.	Houston Ice & Cold Storage Co.	Layne-Texas Co.	1940	396	16, 7	0	96	May 5, 1940	T, E, 30	Ind	Casing, 199 feet of 16-inch and 197 feet of 7-inch. Screen at 244 to 267, 282 to 304, and 323 to 392 feet. Gravel-walled. Yield, 500 gallons a minute with draw-down of 65 feet when drilled. Supplies Rio Grande ice plant. Owner's No. 2.
922	8 miles northeast of Houston Courthouse.	Harris County	McMasters & Pomeroy.	1921	585	8, 6	1.5	36.6	Mar. 31, 1931	T, E, 5	D, S	Screen from 545 to 585 feet. Yield, 50 gallons a minute in 1939. Supplies Harris County Home for the Aged.
924	8¾ miles northeast of Houston Courthouse.	F. P. Schalies		1920	130	2	1.5	29.0	do	None	N	
926	7 miles east of Houston Courthouse.	George Merritt	A. E. Fawcett, Sr.	1930	490	6				T, E, 3	P	Auxiliary supply for Industrial Addition. Owner's No. 1.
932	15¾ miles northeast of Houston Courthouse.	B. N. Garrett	do	1926	234	4, 2½				C, W	D, S	Screen from 214 to 234 feet.
933	9¼ miles northeast of Houston Courthouse.	Champion Paper & Fiber Co.	Layne-Texas Co.	1938	850	3	1.8	57.4 72.6	May 3, 1939 Jan. 26, 1942	None	N	Screen from 841 to 850 feet.
934	do	do	do	1938	135	4	.6	46.7 57.2	May 3, 1939 Jan. 26, 1942	None	N	Screen from 126 to 135 feet.
935	10¾ miles northeast of Houston Courthouse.	W. H. Taylor	do	1935	202	3				C, E	D, S	Screen from 183 to 202 feet.
936	9¼ miles northeast of Houston Courthouse.	The Texas Co.	do	1941	619	10¾, 5	0	84	July 10, 1940	T, E, 10	D, Irr	Screen from 568 to 615 feet. Yield, 160 gallons a minute with draw-down of 38 feet when drilled. Supplies Camp Beaty. Owner's No. 2.
937	13½ miles east of Houston Courthouse.	W. H. Taylor	do	1939	247	7, 4½, 2				C, E	D, S	Screen from 219 to 247 feet.
938	14 miles east of Houston Courthouse.	Harris County, Fresh Water Supply District No. 6.	McMasters & Pomeroy.	1940	640	8, 6				T, E, 10	P	Screen from 600 to 640 feet. Yield, 200 gallons a minute when drilled. Supplies Channelview Addition.
939	do	San Jacinto Ordnance Depot.	Layne-Texas Co.	1941	449	8⅝, 6⅝	0	95	Aug. 10, 1941	T, E, 20	Ind	Casing, 372 feet of 8⅝-inch and 77 feet of 6⅝-inch. Screen from 397 to 447 feet. Yield, 210 gallons a minute with draw-down of 12 feet when drilled. Owner's No. 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
940	8¼ miles west of Goose Creek.	San Jacinto Ordnance Depot.	Layne-Texas Co	1941	451	8⅝, 6⅝	0	95	Aug. 18, 1941	T, E, 20	Ind	Casing, 374 feet of 8⅝-inch and 17 feet of 6⅝-inch. Screen from 399 to 449 feet. Yield, 210 gallons a minute with draw-down of 12 feet when drilled. Owner's No. 1.
941	6½ miles northwest of Goose Creek.	W. H. Gilbert	T. E. Reidland	1924	128	3, 1½				C, E, 1	D	Screen from 118 to 128 feet.
943	do	Gulf Pipe Line Co.	Layne-Texas Co	1929	434	6				A	D, Ind	Screen from 328 to 415 feet.
944	8½ miles northwest of Goose Creek.	J. McDonald	J. W. Evans	1941	228	3, 2	0	76	Sept. 1941	C, E, 1	D, S	Screen from 222 to 228 feet.
945	7¾ miles northwest of Goose Creek.	Harris County Water Control & Improvement District No. 1.	McMasters & Pomeroy.	1949	606	8, 7, 6	0	80	April 1949	T, E, 25	P	Screen at 417 to 479, 508 to 521, and 569 to 589 feet. Yield, 500 gallons a minute with draw-down of 92 feet when drilled. Supplies Highland Subdivision. Owner's No. 2.
946	do	do	Layne-Texas Co	1931	537	8, 6, 4				T, E, 15	P	Screen from 502 to 537 feet. Yield, 100 gallons a minute when drilled. Supplies Highland Subdivision. Owner's No. 1.
947	11 miles northwest of Goose Creek.	Leon J. Vetrano	do	1940	312	12¾, 7	0	65	Feb. 9, 1940	T, E	P	Screen at 201 to 209 and 225 to 291 feet. Gravel-walled. Yield, 600 gallons a minute when drilled. Supplies Lyondell Park.
948	6 miles northwest of Goose Creek.	Harris County Fresh Water Supply District No. 1.	J. H. Morton	1935	500	4				T, E, 10	P	Screen from 460 to 500 feet. Owner's No. 1.
949	6½ miles northwest of Goose Creek.	U. S. Farm Security Administration.	U. S. Farm Security Administration.	1940	308	4				T, E, 3½	D, S	Screen from 286 to 308 feet. Yield, 70 gallons a minute when drilled. Supplies Sam Houston Farms Project.

950	8½ miles north of Goose Creek.	Jerry Ulrich	T. E. Reidland	1931	91	3, 1½				C, H	D, S	Screen from 81 to 91 feet.
952	8 miles north of Goose Creek.	A. F. Ulrich	do	1927	88	2	0	4 10	Jan. 22, 1932	C, E, ¼	D	
953	7¾ miles north of Goose Creek.	Frank Casino	do	1928	97	4, 2	0	4 41	Jan. 14, 1928	C, H	D	Casing, 40 feet of 4-inch and 57 feet of 2-inch.
957	6 miles north of Goose Creek.	J. W. Plummer			100	4, 2½	0	4 10	Jan. 22, 1932	C, W	D	Casing, 20 feet of 4-inch and 80 feet of 2½-inch. Temperature, 71° F.
960	6½ miles northeast of Goose Creek.	J. M. Johnson	Amos Jennische		344	4, 3	0	4 34	1932	C, W	D	
961	5¼ miles north of Goose Creek.	J. W. Wilson		1929	94	4, 2½	0	4 10	1932	C, H	D	
962	2¾ miles north of Goose Creek.	C. Spenser	T. E. Reidland	1930	102	4, 1¼	0	4 16	1930	C, W	D	Casing, 20 feet of 4-inch and 82 feet of 1¼-inch.
965	4 miles northeast of Goose Creek.	C. Thompkins	C. Thompkins	1931	344	4, 2	0	4 20	1932	C, H	D, S	Casing, 20 feet of 4-inch and 324 feet of 2-inch.
968	3½ miles northeast of Goose Creek.	Mrs. L. Terry	Amos Jennische	1924	365	4, 2				C, G, 2½	D, S	Casing, 200 feet of 4-inch and 165 feet of 2-inch.
974	2¼ miles northeast of Goose Creek.	J. B. Gurley	do		480	2				None	N	Flowed when drilled.
975	do	Harris County	do	1931	315	4	0	4 15	1932	C, W	P	Supplies Cedar Bayou School.
981	4¾ miles northwest of Goose Creek.	—— Golden	J. W. Evans	1940	338	3, 2				C, E, 1	D	Screen from 328 to 338 feet.
982	3¾ miles northwest of Goose Creek.	Baytown Ordnance Works Station No. 1364.	Texas Water Supply Corporation.	1941	521	24, 12				T, E, 350	Ind	Yield, 2,500 gallons a minute when drilled. Owner's No. 30.
983	3¼ miles northwest of Goose Creek.	Humble Oil & Refining Co.	Layne-Texas Co	1938	905	6⅝, 2½	0	4 60	July 1938	None	N	Test well. Casing, 206 feet of 6⅝-inch and 699 feet of 2½-inch. Screen from 883 to 905 feet. Owner's No. 24.
984	3½ miles northwest of Goose Creek.	Baytown Ordnance Works Station No. 1364.	Texas Water Supply Corporation.	1941	509	24, 12				T, E, 350	Ind	Casing, 274 feet of 24-inch and 235 feet of 12-inch. Yield, 2,500 gallons a minute when drilled. Owner's No. 29.
985	5¾ miles northwest of Goose Creek.	Harris County Fresh Water District No. 1.	C. A. Williams	1939	480	6				T, E, 10	P	Screen from 440 to 480 feet. Owner's No. 2.
986	2½ miles north of Goose Creek.	Twin Gables Club	J. W. Evans	1939	320	3, 2	0	4 50	1939	C, E, ¾	D, P	Screen from 310 to 320 feet.
987	2¾ miles northeast of Goose Creek.	Humble Oil & Refining Co.	Layne-Texas Co	1941	616	6, 2	0	4 70	June 1941	None	N	Test well. Casing, 130 feet of 6-inch and 486 feet of 2-inch. Screen from 494 to 504 feet. Owner's No. 32.
988	7¼ miles north of Goose Creek.	C. E. Johnson	Amos Jennische	1939	96	4				C, E, ¼	D	Screen from 86 to 96 feet.
988	do	do	—— Dolquist	1893	64	8				C, W	S	Wood casing, perforated at bottom.
990	3½ miles northeast of Goose Creek.	J. G. Wolf	J. W. Evans		360	4, 2				J, E	D	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[2]	Remarks
991	2 miles west of Goose Creek	Humble Oil & Refining Co.	Humble Oil & Refining Co.	1920?	573	6				A	D	Screen from 531 to 573 feet. Supplies Goose Creek Camp.
992	1½ miles southwest of Goose Creek.	Grace Oil Co	J. W. Evans	1940	424	5, 4, 3				A	O	Screen from 394 to 424 feet.
993	1¼ miles southwest of Goose Creek.	Sun Oil Co	Sun Oil Co		549	6				A	D	Screen from 509 to 549 feet. Supplies Goose Creek Camp.
994	In Goose Creek	City of Goose Creek.	Layne-Texas Co	1927	838	10, 6				T, E, 15	P	Screen from 735 to 834 feet. Estimated yield, 250 gallons a minute in 1941. Owner's No. 1.
995	do	do	Humble Oil & Refining Co.	1927?	970	8, 6				T, E, 15	P	Casing, 370 feet of 8-inch and 600 feet of 6-inch. Estimated yield, 225 gallons a minute in 1941. Owner's No. 2.
996	do	do	Texas Water Supply Corporation.	1939	485	13⅜, 6				T, E, 30	P	Casing, 360 feet of 13-inch and 125 feet of 6-inch. Screen from 385 to 485 feet. Estimated yield, 500 gallons a minute in 1941. Owner's No. 3.
997	2¼ miles northeast of Goose Creek.	W. H. Barkuloo	Amos Jennische	1933	315	4, 2				C, W	D, S	Screen from 305 to 315 feet.
998	2¾ miles northeast of Goose Creek.	J. L. Woods	do	1938	340	4, 2				C, W	D, S	Screen from 330 to 340 feet.
999	do	J. Jennings	do	1935	360	4, 2				C, E	D	Screen from 350 to 360 feet.
1000	2¼ miles northeast of Goose Creek.	F. W. Smith	do	1935	318	2				A	D	Screen from 308 to 318 feet.
1001	1¾ miles northwest of Goose Creek.	Bush Terrace Water Co.		1930	437	3	0	40	Nov. 11, 1931	A, G, 1½		Owner's No. 1.
1002	do	do			437	4, 2				C, W	P	Casing, 80 feet of 4-inch and 357 feet of 2-inch. Screen from 417 to 437 feet. Owner's No. 2.
1005	1½ miles southwest of Goose Creek.	——Bollstein	Gulf Production Co		640	4				C, H	D	Screen from 620 to 640 feet. Owner's No. 1.
1007	1¾ miles southwest of Goose Creek.	Crown Oil Co	Arch Parker	1916	575	8, 6				A	D, O	

1009	In Pelly	City of Pelly	——Riggs	1928	408	6					T, E, 15	P	Yield, 150 gallons a minute when drilled.
1011	2 miles northeast of Goose Creek.	J. L. Sims	Amos Jennische	1918	325	4	0	40	Jan. 1932		A, G	D	
1014	2¼ miles northeast of Goose Creek.	M. George	do	1913	515	2	0	30	1930		A, E	D	
1015	do	Mrs. L. Shepherd	do	1926	365	2					A, G, 3½	D	Screen from 345 to 365 feet.
1016	1¾ miles east of Goose Creek.	John Kilgore	do		490	2½					A, G 1½	D	
1018	1¾ miles east of Goose Creek.	W. Wright	do	1930	85	4, 2	0	8	Jan. 1932		C, W	D	Casing, 40 feet of 4-inch and 45 feet of 2-inch.
1019	3¾ miles south of Goose Creek.	Capt. Charles Crotty.		1906?	450	2, 1¼	1.1	64.7 77.2	Jan. 18, 1939 Jan. 26, 1942		A	D	
1020	do	U. S. Corps of Engineers.	——Bucholtz	1914	450±	4	0	61.6 76.1	Jan. 18, 1939 Jan. 26, 1942		None	N	
1021	do	do		1902?	450±	2					A	D	
1022	4 miles southwest of Goose Creek.	Standard Oil Co. of Texas.	McMasters & Pomeroy.	1938	934	8	0	75	Dec. 1938		T, E	D, Ind	Screen at 474 to 524 and 862 to 912 feet. Yield, 415 gallons a minute with drawdown of 45 feet when drilled.
1051	3 miles northwest of Goose Creek.	Humble Oil & Refining Co.	Layne-Texas Co	1925	562	24, 16, 8	0	66.6	Oct. 1931		T, E, 125	Ind	Casing, 145 feet of 24-inch; 297 feet of 16-inch; and 120 feet of 8-inch. Screen from 385 to 535 feet. Owner's No. 12. Temperature, 78° F.
1053	3¼ miles northwest of Goose Creek.	do	do	1929	974	24, 12	0	74.5	do		T, E, 150	Ind	Casing, 415 feet of 24-inch and 559 feet of 12-inch. Screen at 427 to 448, 467 to 530, 751 772, 833 to 874, 916 to 936, and 953 to 974 feet. Owner's No. 19.
1054	2¾ miles northwest of Goose Creek.	do	do	1926	572	24, 18, 12, 8.	0	61.5	do		T, E, 125	Ind	Casing, 310 feet of 24-inch; 64 feet of 18-inch; 94 feet of 12-inch; and to 104 feet of 8-inch. Screen at 310 to 349 and 451 to 571 feet. Owner's No. 15. Temperature, 74° F.
1057	2¼ miles northwest of Goose Creek.	do	do	1923	515	24, 18	0	59.8	do		T, E, 200	Ind	Casing, 325 feet of 24-inch and 190 feet of 18-inch. Screen from 354 to 505 feet. Owner's No. 7. Temperature 76° F.
1058	do	do	do	1925	542	24, 16, 10	0	65.1	do		T, E, 125	Ind	Casing, 145 feet of 24-inch; 259 feet of 16-inch; and 138 feet of 10-inch. Screen from 406 to 509 feet. Owner's No. 13. Temperature, 77° F.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
1067	3 miles east of Goose Creek.	Humble Oil & Refining Co.	Layne-Texas Co.	1925	545	24, 16, 8	0	50.3	Oct. 1931	T, E, 100	Ind	Casing, 126 feet of 24-inch; 172 feet of 16-inch; and 247 feet of 8-inch. Screen at 338 to 378 and 443 to 543 feet. Owner's No. 10. Temperature, 76° F.
1068	3 miles northwest of Goose Creek.	do	do	1937	998	20, 10¾	0	58	May 1937	T, E, 125	Ind	Casing, 588 feet of 20-inch and 410 feet of 10¾-inch. Screen at 598 to 612, 645 to 667, 709 815, 872 to 917, 928 to 941, and 968 to 988 feet. Yield, 900 gallons a minute in September 1941. Owner's No. 22.
1069	3¼ miles northwest of Goose Creek.	do	do	1939	297	8⅝	0	60	February, 1939.	None	N	Test well. Screen at 91 to 103, 113 to 136, 182 to 204, and 214 to 247 feet. Owner's No. 26.
1070	3 miles northwest of Goose Creek.	do	do	1939	268	6⅝, 2	0	71	do	None	N	Test well. Screen at 134 to 145 and 235 to 246 feet. Owner's No. 26.
1071	do	do	do	1939	282	6⅝	0	17	May 1939	T, E, 15	N	Screen at 23 to 45, 85 to 95, 102 to 124, and 218 to 250 feet. Owner's No 28.
1072	2¼ miles west of Goose Creek.	do	do	1935	516	24, 12½	0	114	February 1935.	T, E, 200	Ind	Casing, 365 feet of 24-inch and 151 feet of 12½-inch. Screen from 364 to 506 feet. Yield, 1,400 gallons a minute in September 1941. Owner's No. 20.
1073	2 miles northwest of	do	do	1936	568	26, 16	0	126	August 1936	T, E, 350	Ind	Casing, 350 feet of 26-inch and 218 feet of 16-inch. Screen at 345 to 385 and 525 to 565 minute in September 1941. Owner's No. 21.
1074	3½ miles northwest of Goose Creek.	do	do	1937	525	8, 2	0	80	July 1937	None	N	Test well. Casing, 161 feet of 8-inch and 364 feet of 2-inch. Screen at 424 to 444, 465 to 486, and 506 to 525 feet. Owner's No. 23.

1075	In Wooster	Q. G. Barber	do	1938	520	8⅝, 6⅝	0	103	Mar. 31, 1938	T, E		Screen from 466 to 516 feet. Yield, 200 gallons a minute with draw-down of 9 feet when drilled.
1076	5 miles northwest of Goose Creek.	Brownwood Addition.	McMasters & Pomeroy.	1938	453	6	0	75	Oct. 1938	T, E	P	Screen from 421 to 453 feet. Yield, 175 gallons a minute with draw-down of 35 feet when drilled.
1077	In Baytown	Community Laundry.	Layne-Texas Co	1940	450	6⅝, 3½	0	98	Feb. 9, 1940	T, E	Ind	Screen from 414 to 429 feet. Yield, 60 gallons a minute with draw-down of 61 feet when drilled.
1078	do	C. Ptocek	J. A. Walling	1930	430	8				T, E, 7½	D	Screen from 390 to 430 feet. Yield, 55 gallons a minute when drilled.
1079	do	Leger Water Works.	A. E. Fawcett, Sr	1937	442	6	0	93	1937	T, E, 5	P	Screen from 422 to 442 feet. Yield, 180 gallons a minute when drilled.
1080	4¼ miles southwest of Goose Creek.	Mrs. H. S. Mitchell.	Layne-Bowler Co	Old	1,374					A	D	Screen at 915 to 956, 1,103 to 1,125, 1,220 to 1,250, and 1,272 to 1,294 feet.
1081	4½ miles southwest of Goose Creek.	Mrs. A. Griffith	A. E. Fawcett, Sr	1940	557	3	0	81	Dec. 1940	J, E, 1½	D	Screen from 537 to 557 feet.
1082	do	A. S. Vandervoort.	Layne-Texas Co	1936	494	4, 3, 2	0	64	July 3, 1936	T, E	D	Screen from 479 to 494 feet. Yield, 45 gallons a minute when drilled.
1083	6½ miles southwest of Goose Creek.	C. M. Blume	M. R. Pretty	1939	400	2½	0	58	May 1939	C, E, 1	D	Screen from 376 to 396 feet.
1084	7 miles southwest of Goose Creek.	W. B. Weems	I. H. Mowery	1934†	600	4				C, E	D	
1085	7¼ miles southwest of Goose Creek.	Paul Kayser	G. Hamilton	1928†	515	4	3.0	65.†	May 31, 1940	A	D	
1086	7½ miles southwest of Goose Creek.	L. Sandel	I. H. Mowery	1939†	559	4				C, E	D, P	
1087	7¾ miles southwest of Goose Creek.	Mrs. John Martin	Pete Bucholtz	1934†	478	3	3.5	64.5	May 31, 1940	A, E, 5	D, P	Screen from 470 to 478 feet. Estimated yield, 80 gallons a minute in 1940. Supplies Pine Bluff Addition.
1088	8 miles southwest of Goose Creek.	Bay Oaks Addition.		1905	520	4					P	
1089	8¼ miles southwest of Goose Creek.	Shore Acres		1925	600+	6	1.6	57.2	July 12, 1940	A, E, 10	P	
1090	do	W. Ralston	L. Burns	1939	500	4				C, W	D, S	
1091	do	Houston Yacht Club.	I. H. Mowery	1941	590	6, 4				T, E, 5	D, P	Casing, 186 feet of 6 inch and 404 feet of 4 inch. Screen from 550 to 590 feet. Yield, 70 gallons a minute when drilled.
1092	8½ miles south of Goose Creek.	Red Bluff Addition.	—— Ellis		520	4	4.0	65.0	June 7, 1940	A, E	P	
1093	8¾ miles south of Goose Creek.	Mrs. M. K. Kennedy.			600	2	2.0	62.0	May 31, 1940	A, E, 3	D, P	Supplies El Jardin Subdivision.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)	Water level: Date of measurement	Method of lift	Use of water	Remarks
1094	9½ miles southwest of Goose Creek.	—— Sabu			500+	6	1.0	16.4	June 5, 1940	C, W	S	
1095	10¼ miles south of Goose Creek.	—— Scott		1925?	505	3, 2	0	56.4	May 31, 1940	C, E	D	
1096	10½ miles south of Goose Creek.	O. C. Sheer	L. Burns	1936	550	2	0	[1] 50	1940	A	D	
1097	10¾ miles south of Goose Creek.	Allen Saint	Wallie Burns		510	4	0	[1] 60	1938	A	D	
1098	7 miles west of Goose Creek.	San Jacinto Monument.	Layne-Texas Co	1938	499	13⅜, 7	0	[1] 80	May 1938	T, E	P	Screen at 340 to 370 and 422 to 461 feet. Gravel walled. Yield, 380 gallons a minute when drilled.
1099	5½ miles southwest of Goose Creek.	Dan Japhet	M. R. Pretty	1937	589	3				A, E, ½	D	Screen from 568 to 589 feet.
1100	8 miles west of Goose Creek.	M. M. Graves Estate.	McMasters & Pomeroy.	1934	900	12, 10	1.0	56.0 107.0	Apr. 2, 1931 Jan. 26, 1942	T, D	Irr	Casing, 300 feet of 12 inch and 600 feet of 10 inch. Yield, 1,100 gallons a minute when drilled. Irrigated 160 acres of rice in 1939.
1103	5¼ miles southwest of Goose Creek.	Southern Pacific Co.		1909	770	10	0	[1] 78	June 14, 1941	T, E, 5	R, R	Estimated yield, 50 gallons a minute in 1941. Supplies Strang Station.
1104	In La Porte	City of La Porte	J. G. Taylor	1925	570	10	1.0	95.0	Dec. 30, 1941	A, E	P	Screen from 500 to 570 feet. Owner's No. 1.
1105	do	A. A. Womack	Allen Brothers	1892	300±	6	1.6	61.0	Feb. 19, 1941	None	N	
1107	do	City of La Porte	J. W. Jackson	1933	585	10, 8	0	83.3	Aug. 8, 1940	T, E, 20	P	Casing, 510 feet of 10 inch and 75 feet of 8 inch. Screen at 425 to 510 and 545 to 585 feet. Yield, 300 gallons a minute when drilled. Owner's No. 2.
1108	10½ miles southwest of Goose Creek.	T. Schmitt	Pete Buchoitz	1927	520	4	0	[1] 20	1927	C, W	D	Screen from 514 to 520 feet.
1109	10⅔ miles southwest of Goose Creek.	—— Schwander	Wallie Burns		500+	6				A, E	D	
1110	11¼ miles southwest of Goose Creek.	Mrs. C. K. Lockart.	do	1922	485	2	2.0	50.3	June 5, 1940	A	D	

1111	11½ miles southwest of Goose Creek.	Todd Estate	M. R. Pretty	1938	390	2				C, E	D	Screen from 370 to 390 feet.
1112	11¾ miles southwest of Goose Creek.	Dr. —— Williams	C. C. Ellis	1940	406	3					D	Screen from 400 to 406 feet.
1113	12 miles southwest of Goose Creek.	John McCalahan	J. L. Burns	1930	512	4,2					D	Screen from 498 to 512 feet.
1114	12½ miles southwest of Goose Creek.	E. D. Mills	Wallie Burns	1922	655	4	1.0	41.9	June 7, 1940	A, E	D	
1115	In Seabrook	John Chapman	do	1920	660±	2				C, E	D	
1116	do	Harris County	L. Burns		342	2	0	50	Oct. 16, 1939	A, E	P	Supplies Seabrook School.
1117	16¾ miles southeast of Houston Courthouse.	Stanolind Oil and Gas Co.	A. T. McDannald	1938	526	4	3.0	70.2	June 5, 1940	Ng	Ind	Screen from 505 to 526 feet. Supplies Hastings Field Camp.
1118	17½ miles southeast of Houston Courthouse.	Humble Oil & Refining Co.	Layne-Bowler Co	Old	807	26, 10	0	20	Apr. 1940		Ind	Screen at 80 to 98 and 717 to 807 feet. Formerly used for irrigation. Supplies Five Points Camp.
1119	do	M. D. Ray			525						D	
1120	17 miles southeast of Goose Creek.	Jasmine Farm Dairy.		1932	247					A	D, S	
1121	16¾ miles southeast of of Goose Creek.	W. R. McClendon don.			580	4	3.0	83.6	July 11, 1940	A, G	D	
1122	12½ miles southeast of Goose Creek.	Gordon Ellis Cafe	—— Petrosky	1939	480	4	0	86	July 1939	C, E	D, P	
1123	14¼ miles southeast of Houston Courthouse.	Shell Oil Co., Inc.	Layne-Texas Co	1941	533	24, 16, 10¾	0	95	Mar. 4, 1941	T, E	Ind	Screen at 334 to 383, 388 to 406, 430 to 452, and 475 to 505 feet. Yield 1,200 gallons a minute with drawdown of 30 feet when drilled. Supplies rubber plant.
1124	14 miles east of Houston Courthouse.	do	do	1935	1,329	16, 10	0	71	Sept. 13, 1935	T, E, 150	Ind	Screen at 648 to 688, 727 to 749, 769 to 791, 813 to 834, 1,178 to 1,199, aud 1.240 to 1,316 feet. Gravel-walled. Yield, 1,700 gallons a minute with drawdown of 43 feet when drilled; 1,200 gallons a minute in 1941. Supplies oil refinery. Owner's No. 6.
125	13¼ miles east of Houston Courthouse.	do	do	1938	913	18⅝, 10¾	0	110	October 1941	T, E, 75	Ind	Screen at 633 to 644, 666 to 677, 694 to 704, 740 to 786, 803 to 823, 845 to 863, and 893 to 911. Gravel-walled. Yield, 1,300 gallons a minute with drawdown of 59 feet when drilled; 1,000 gallons a minute in 1941. Supplies oil refinery Owner's No. 5.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
1126	13¼ miles east of Houston Courthouse.	Shell Oil Co., Inc.	Layne Texas Co.	1939	509	21½, 13⅜, 10¾	0	116	October 1941	T, E, 100	Ind	Screen at 342 to 369 and 409 to 502 feet. Gravel-walled. Yield, 1,165 gallons a minute with draw-down of 38 feet when drilled; 1,300 gallons a minute in 1941. Supplies oil refinery. Owner's No. 7.
1127	11 miles east of Houston Courthouse.	Houston Ship-Building Corporation.	McMasters & Pomeroy.	1941	620	8, 5½	0	90	Apr. 15, 1941	T, E, 40	D, Ind	Casing, 298 feet of 8-inch and 322 feet of 5½-inch. Screen at 321 to 377, 563 to 573 and 584 to 608 feet. Yield, 435 gallons a minute with draw-down of 22 feet when drilled. Owner's No. 2.
1128	do	do	do	1941	780	8, 5½	0	94	do	T, E, 40	D, Ind	Casing, 418 feet of 8-inch and 362 feet of 5½-inch. Screen at 620 to 685, 705 to 714, and 752 to 762 feet. Yield, 370 gallons a minute with draw-down of 71 feet when drilled. Owner's No. 1.
1129	10½ miles southeast of Houston Courthouse.	Champion Paper and Fiber Co.	Layne-Texas Co.	1937	515	16, 12¾	0	75	Aug. 11, 1937	T, E, 250	Ind	Screen from 316 to 496 feet. Gravel-walled. Yield, 1,565 gallons a minute with draw-down of 191 feet when drilled; 1,965 gallons a minute in March 1941. Owner's No D-1. N
1130	do	do	do	1937	1,631	20, 12¾				T, E, 250	Ind	Screen at 1,000 to 1,091, 1,104 to 1,185, 1,227 to 1,247, 1,281 to 1,303, 1,315 to 1,325, 1,342 to 1,363 and 1,422 to 1,458 feet. Gravel-walled. Yield, 2,550 gallons a minute when drilled; 3,135 gallons a minute in March 1941. Owner's No. D-2.

1131	9¾ miles southeast of Houston, Courthouse.	do	do	1937	960	20, 12¾	0	67	Feb. 5, 1937	T, E, 250	Ind	Screen at 640 to 752, 774 to 835, and 873 to 955 feet. Gravel-walled. Yield, 2,170 gallons a minute with draw-down of 115 feet when drilled. 2,310 gallons a minute in March 1941. Owner's No. B–1.
1132	do	do	do	1937	1,840	20, 12¾	0	70	Feb. 6, 1937	T, E, 250	Ind	Screen at 1,399 to 1,497, 1,512 to 1,633, 1,670 to 1,712, and 1,762 to 1,835 feet, Gravel-walled. Yield, 3,100 gallons a minute with draw-down of 118 feet when drilled; 3,150 gallons a minute in March 1941. Owner's No. B–2.
1133	do	do	do	1937	1,399	20, 12¾				T, E, 250	Ind	Screen at 1,009 to 1,049, 1,086 to 1,151, 1,184 to 1,318, 1,336 to 1,358, and 1,375 to 1,395. Gravel-walled. Yield, 2,475 gallons a minute when drilled; 2,365 gallons a minute in March 1941. Owner's No. B–3.
1134	9¼ miles southeast of Houston Courthouse.	City of Pasadena	McMasters & Pomeroy.	1941	350	8	2.5	84	July 15, 1941	T, E, 15	P	Screen from 300 to 350 feet. Yield, 250 gallons a minute when drilled. Owner's No. 3.
1135	9 miles southeast of Houston Courthouse.	Champion Paper and Fiber Co.	Layne-Texas Co	1937	974	16, 10¾	0	63	Jan. 26, 1937	T, E, 150	Ind	Screen at 642 to 709, 781 to 835, and 872 to 970 feet. Gravel-walled. Yield, 1,730 gallons a minute with draw-down of 72 feet when drilled. 1,675 gallons a minute in March 1941. Owner's No. A–1.
1136	9 miles southeast of Houston Courthouse.	Champion Paper and Fiber Co.	Layne-Texas Co	1937	1,275	20, 12¾	0	56.1	Jan. 18, 1937	T, E, 250	Ind	Screen at 998 to 1,054 and 1,090 to 1,251 feet. Gravel-walled. Yield, 2,870 gallons a minute with draw-down of 116 feet when drilled; 2,580 gallons a minute in March 1941. Owner's No. A–2.
1137	do	do	do	1937	1,927	20, 12¾	0	41.8	Jan. 17, 1937	T, E, 250	Ind	Screen at 1,393 to 1,454, 1,514 to 1,569, 1,587 to 1,609, 1,648 to 1,685, 1,722 to 1,801, and 1,824 to 1,923 feet. Gravel-walled. Yield, 3,030 gallons a minute with drawn-down of 119 feet when drilled; 3,100 gallons a minute in March 1941. Owner's No. A–3.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[3]	Remarks
1138	8½ miles southeast of Houston Courthouse.	Houston Pipe Line Co.	A. E. Fawcett, Sr.	1937	310	4	0	52	1937	C, E, 1½	Ind	Screen from 290 to 310 feet. Yield, 50 gallons a minute when drilled.
1139	7½ miles southeast of Houston Courthouse.	Sinclair Refining Co.	Layne-Texas Co.	1940	1,192	20, 10	0	123.5	June 2, 1940	T, E, 200	Ind	Casing, 783 feet of 20-inch and 409 feet of 10-inch. Screen at 899 to 939, 961 to 983, 1,017 to 1,051, 1,071 to 1,125, and 1,158 to 1,186 feet. Gravel-walled. Yield, 1,785 gallons a minute with a draw-down of 84 feet when drilled. Supplies oil refinery. Owner's No. 9.
1140	8¼ miles southeast of Houston Courthouse.	do	do	1934	1,701	24, 12	0	52.8 106	Sept. 1934 Jan. 29, 1940	T, E, 150	Ind	Casing, 215 feet of 24-inch and 1,486 feet of 12-inch. Screen at 1,358 to 1,423, 1,488 to 1,531, and 1,573 to 1,697 feet. Gravel-walled. Yield, 1,525 gallons a minute in February 1940. Supplies oil refinery. Owner's No. 8. See log.
1141	8 miles southeast of Houston Courthouse.	Houston Lighting & Power Co.	do	1941	809	16, 9⅝	0	113	Feb. 1941	T, E, 50	Ind	Casing, 491 feet of 16-inch and 318 feet of 9⅝-inch. Screen at 656 to 670, 698 to 730, 762 to 768, and 789 to 805 feet. Yield, 555 gallons a minute with a draw-down of 61 feet when drilled. Supplies Deepwater plant. Owner's No. 4.
1142	9 miles southeast of Houston Courthouse.	Champion Paper & Fiber Co.	do	1937	330	12	------	------	------	T, E	D, Ind	Screen at 215 to 240 and 285 to 329 feet. Yield, 420 gallons a minute in 1941. Owner's No. A–4.
1143	9¼ miles southeast of Houston Courthouse.	Phillips Petroleum Co.	McMasters & Pomeroy.	1936	757	6	0	67	Apr. 25, 1936	T, E, 5	Ind	Screen from 717 to 757 feet. Yield, 100 gallons a minute with a draw-down of 21 feet when drilled. Owner's No. 2.

1144	9¼ miles east of Houston Courthouse.	Horton & Horton	Layne-Texas Co	1937	374	8⅝	0	4 80	Jan. 12, 1938	T, E	Ind	Screen from 302 to 372 feet. Yield, 195 gallons a minute when drilled.
1145	9¾ miles east of Houston Courthouse.	American Petroleum Corporation.	McMasters & Pomeroy.	1937	896	----------	0	4 89	Feb. 27, 1940	T, E, 20	Ind	Screen from 816 to 896 feet. Supplies oil refinery. Owner's No. 3.
1146	8¼ miles southeast of Houston Courthouse.	General American Storage.	J. A. Walling	1935	701	8, 6	------	------	----------	T, E, 7½	Ind	Casing, 200 feet of 8-inch and 501 feet of 6-inch. Screen from 685 to 701 feet.
1147	6¾ miles southeast of Houston Courthouse.	R. E. King	McMasters & Pomeroy.	1941	640	6	0	4 86	Aug. 22, 1941	T, E, 20	P	Screen at 307 to 328, 406 to 426, and 599 to 618 feet. Yield, 125 gallons a minute with a draw-down of 25 feet when drilled. Supplies housing project.
1148	do	Humble Oil & Refining Co.	Layne-Texas Co	1940	706	6⅝, 4	0	4 105	Sept. 25, 1940	T, E	Ind	Screen from 662 to 693 feet. Yield, 100 gallons a minute with a draw-down of 18 feet when drilled. Supplies Houston Northside Terminal. Owner's No. 2.
1149	6¾ miles southeast of Houston Courthouse.	Gulf Portland Cement Co.	do	1941	655	8⅝, 6⅝	0	4 100	Feb. 1941	T, E, 20	Ind	Casing, 559 feet of 8⅝-inch and 96 feet of 6⅝-inch. Screen from 606 to 653 feet. Yield, 130 gallons a minute with a draw-down of 50 feet when drilled.
1150	7¼ miles southeast of Houston Courthouse.	City of Galena Park.	do	1936	680	13⅜, 6	1.0	100.4 120.8	June 30, 1939 July 7, 1941	T, E, 30	P	Casing, 462 feet of 13⅜-inch and 218 feet of 6-inch. Screen from 593 to 677 feet. Yield, 475 gallons a minute when drilled.
1151	6¾ miles southeast of Houston Courthouse.	Southern Pacific Co.	J. W. Jackson	1925	773	8, 6	0	4 19	July 1925	A, E	Ind	Casing, 713 feet of 8-inch and 60 feet of 6-inch. Screen at 643 to 703 and 731 to 771 feet. Yield, 500 gallons a minute with a draw-down of 54 feet when drilled.
1154	7¾ miles southeast of Houston Courthouse.	Universal Water Co.	----------	------	720±	8	3	85.0	Jan. 26, 1942	A, E, 10	P	Supplies small subdivision.
1155	7½ miles southeast of Houston Courthouse	Gulf Oil Corporation.	Layne-Bowler Co.	1922	752	24, 8	0	61.2	Mar. 27, 1931	T, E	D, Ind	Casing, 93 feet of 24-inch and 671 feet of 6-inch Screen at 499 to 543, 594 to 657, and 701 to 747 feet.
1159	7¾ miles southeast of Houston Courthouse.	Manchester Terminal.	Layne-Texas Co	1932	658	10, 8	0	4 51	1932	T, E, 25	P, Ind	Screen from 615 to 658 feet. Yield, 26 gallons a minute in July 1941.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[3]	Remarks
1161	8¼ miles southeast of Houston Courthouse.	Sinclair Refining Co.	Layne Texas Co.	1924	1,228	24, 12, 8	1.0	131 192.0 125.3	October 1924 May 18, 1937. Mar. 28, 1941	None	N	Casing, 156 feet of 24-inch; 962 feet of 12-inch and 110 feet of 8-inch. Screen at 741 to 781, 925 to 965, and 1,118 to 1,228 feet. Owner's No. 6.
1162	8 miles southeast of Houston Courthouse.	do	do	1924	1,223	24, 12, 8				None	N	Casing, 162 feet of 24-inch; 951 feet of 12-inch; and 210 feet of 8-inch. Screen at 658 to 697, 718 to 758, 1,099 to 1,119, and 1,139 to 1,223 feet. Owner's No. 5.
1163	8¼ miles southeast of Houston Courthouse.	do	do	1931	1,260	24, 12				T, E, 150	Ind	Casing, 193 feet of 24-inch and 1,067 feet of 12-inch. Screen at 893 to 936, 991 to 1,029, 1,158 to 1,219, and 1,235 to 1,256 feet. Yield, 1,350 gallons a minute in 1942. Supplies oil refinery. Owner's No. 7.
1165	8 miles southeast of Houston Courthouse.	do	Layne Bowler Co.	1920	1,105	12, 8, 6				T, E, 75	Ind	Casing, 113 feet of 12-inch; 809 feet of 8-inch; and 283 feet of 6-inch. Screen at 965 to 1,009, 1,027 to 1,042, 1,054 to 1,072, and 1,081 to 1,099 feet. Yield, 300 gallons a minute in 1942. Supplies oil refinery. Owner's No. 3.
1166	8¼ miles southeast of Houston Courthouse.	do	do	1920	974	16, 8, 6				None	N	Casing, 253 feet of 16-inch; 571 feet of 8-inch; and 150 feet of 6-inch. Screen from 887 to 968 feet. Owner's No. 4.
1168	do	Houston Lighting & Power Co.	Southern Well Drilling Co.	1923	826	12, 10	0	158.3 119.5	Nov. 4, 1936. Dec. 11, 1941.	T, E, 15	Ind	Casing, 318 feet of 12-inch and 508 feet of 10-inch. Screen at 630 to 670, 705 to 725, and 744 to 805 feet. Yield, 350 gallons a minute in July 1941. Supplies Deepwater plant. Owner's No. 1.

1169	do	do	Layne-Texas Co	1924	823	12, 10				A	Ind	Casing, 310 feet of 12-inch and 513 feet of 10-inch. Screen at 624 to 661 and 723 to 805 feet. Yield, 500 gallons a minute in 1937. Supplies Deepwater plant. Owner's No. 2.
1170	do	do	do	1929	836	16, 10	0	56.8	Feb. 25, 1931	T, E, 75	Ind	Casing, 145 feet of 16-inch and 691 feet of 10-inch. Screen at 612 to 672 and 732 to 811 feet. Yield, 500 gallons a minute in 1939. Supplies Deepwater plant. Owner's No. 3.
1172	do	The Texas Co	do	1929	1,376	24, 16, 12, 8	.5	40.1	Mar. 25, 1931	T, E, 100	Ind	Casing, 250 feet of 24-inch; 644 feet of 12-inch; and 482 feet of 8-inch. Screen at 289 to 316, 772 to 793, 872 to 892, 1,046 to 1,111, and 1,307 to 1,374 feet. Supplies oil refinery. Owner's No. 5. See log.
1174	8½ miles southeast of Houston Courthouse.	do	do	1930	802	24, 12	1.5	43.6	Mar. 25, 1931	T, E, 100	Ind	Casing, 250 feet of 24-inch and 552 feet of 12-inch. Screen at 428 to 469, 621 to 661, and 750 to 791 feet. Supplies oil refinery. Owner's No. 6.
1176	8¼ miles east of Houston Courthouse.	do	McMasters & Pomeroy.	1920	1,150	8	4.7	28.0 61 2 83.9	Mar. 25, 1931 Nov. 7, 1939 Nov. 18, 1941	None	N	Screen at 896 to 938, 1,035 to 1,057, and 1,093 to 1,134 feet. Casing obstructed at 240 feet. Owner's No. 4.
1179	9¾ miles east of Houston Courthouse.	American Petroleum Co.	McMasters & Pomeroy.	1931	707	10	0	[4] 93	Feb. 27, 1940	T, E, 20	Ind	Screen from 647 to 707 feet. Supplies oil refinery. Owner's No. 2.
1181	9¼ miles southeast of Houston Courthouse.	Phillips Petroleum Co.	do	1910	691	4	0	[4] 27	June 1929	A, E, 1	Ind	Stand-by for well 1143. Owner's No. 1.
1182	9½ miles southeast of Houston Courthouse.	Port Terminal Railroad Association.	do	1923	715	6	0	[4] 55 135. 4	Feb. 25, 1929 Jan. 26, 1942	None	N	Screen from 675 to 715 feet. Measured depth, 685 feet.
1183	9¼ miles southeast of Houston Courthouse.	Crown Central Petroleum Corporation.	do	1919	720	10, 8				A	Ind	Screen from 640 to 720 feet. Estimated yield, 150 gallons a minute in July 1941. Supplies oil refinery. Owner's No. 1.
1184	do	do	do	1919	704	10, 8				T, E, 30	Ind	Screen from 634 to 704 feet. Estimated yield, 300 gallons a minute in July 1941. Supplies oil refinery. Owner's No. 3.
1185	do	do	do	1919	716	10, 8				T, E, 30	Ind	Screen from 636 to 716 feet. Estimated yield, 300 gallons a minute in July 1941. Supplies oil refinery. Owner's No. 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
1187	9¼ miles southeast of Houston Courthouse.	City of Pasadena	McMasters & Pomeroy.	1930	834	10	2.5	101.7 130	Mar. 1, 1938 Mar. 15, 1941	T, E, 30	P	Screen, 60 feet in three sections between 700 and 834 feet. Estimated yield, 365 gallons a minute 1941. Owner's No. 1.
1190	9 miles southeast of Houston Courthouse.	Lone Star Clay Pit.	do	1930	400	3				None	N	
1193	11½ miles southeast of Houston Courthouse.	Rice Hotel Broadcasting Station.	do	1930	350	4				A, E	D	Screen from 330 to 350 feet.
1194	11¾ miles southeast of Houston Courthouse.	Deep Water Subdivision.	Layne-Texas Co		811	8	1.5	91.5	Jan. 19, 1939	None	N	Casing obstructed at 95 feet.
1197	12½ miles southeast of Houston Courthouse.	T. Jones	McMasters & Pomeroy.	1927	823	12	1.0	57.7	Apr. 1, 1931	T, E, 50	D, S	Screen at 465 to 535 and 713 to 823 feet.
1198	14 miles east of Houston Courthouse.	Shell Oil Co., Inc.	do	1929	790	16, 12	0	[4] 42 [4] 70 [4] 114	April 1929 1935 Sept. 1941	T, E, 150	Ind	Casing, 202 feet of 16-inch and 588 feet of 12-inch. Screen at 294 to 315, 369 to 509, 630 to 672, 707 to 729, and 749 to 784 feet. Yield, 700 gallons a minute on July 16, 1941. Supplies oil refinery. Owner's No. 2.
1199	do	do	do	1929	860	16, 12	0	[4] 45 [4] 109	April 1929 Sept. 1941	T, E, 150	Ind	Casing, 199 feet of 16-inch and 661 feet of 12-inch. Screen at 374 to 476, 665 to 708, and 751 to 860 feet. Yield, 930 gallons a minute on July 16, 1941. Supplies oil refinery. Owner's No. 3. See log.
1200	do	do	Layne-Texas Co	1928	488	12, 8	0	[4] 91	August 1938	T, E, 50	Ind	Casing, 162 feet of 12-inch and 326 feet of 8-inch. Screen at 247 to 267, 333 to 373, 417 to 437, and 458 to 479 feet. Yield, 500 gallons a minute in 1942. Supplies oil refinery. Owner's No. 1.

1201	14 miles southeast of Houston Courthouse.	do	McMasters & Pomeroy.	1929	1,284	16, 12	0	51 95	1929 Sept. 1940	T, E, 150	Ind	Well deepened from 860 to 1,284 feet in 1934. Screen at 346 to 388, 427 to 499, 601 to 618, 641 to 681, 749 to 790, 807 to 823, 837 to 858, 903 to 924, 973 to 1,013, 1,076 to 1,099, 1,156 to 1,177, 1,199 to 1,220, and 1,261 to 1,283 feet. Yield, 940 gallons a minute on July 16, 1941. Supplies oil refinery. Owner's No. 4.
1202	14½ miles southeast of Houston Courthouse.	Deer Park Water Works.	do	1929	504	8				T, E, 15	P	Screen at 360 to 386 and 423 to 504 feet. Yield, 500 gallons a minute when drilled.
1205	9½ miles southeast of Houston Courthouse.	City of South Houston.	J. A. Walling	1927	668	8	1.5	82.3	June 5, 1941	T, E	P	Screen from 600 to 668 feet. Owner's No. 1.
1209	10¼ miles southeast of Houston Courthouse.	Texas Fireworks Distributing Co.			650±	3	4.0	39.5 48.0 64.5	Oct. 6, 1932 Aug. 13, 1937 Aug. 15, 1941	None	N	
1213	11¼ miles southeast of Houston Courthouse.	H. W. Boehm	H. W. Boehm		91	24, 9⅝				C, W	D, S	Casing, 40 feet of 24-inch and 51 feet of 9⅝-inch. Screen from 71 to 91 feet. Formerly used for irrigating rice.
1214	11 miles southeast of Houston Courthouse.	R. B. McCullough.	McMasters & Pomeroy.	1928	502	4				C, –, 1½	P	Screen from 488 to 502 feet. Supplies Alta Vista Subdivision.
1222	11¼ miles southeast of Houston Courthouse.	Vincent Lopez	M. R. Pretty	1932	100	4				A, G, 1½	D, Irr	Screen from 90 to 100 feet.
1223	11½ miles southeast of Houston Courthouse.	C. A. Graham	C. A. Graham	1932	103	4	2.5	11.6	Sept. 29, 1932	A, G, 2	D, S, Irr	Screen from 85 to 103 feet.
1226	13¾ miles southeast of Houston Courthouse.	Schoenmann Produce Co.	M. R. Pretty	1932	106	4				A, G,	Irr	Screen from 96 to 106 feet. Owner's No. 2.
1228	do	do	do	1932	100	4				A, G,	Irr	Screen from 89 to 100 feet. Yield, 100 gallons a minute when drilled. Owner's No. 1.
1229	11¾ miles southeast of Houston Courthouse.	City of Houston	Core Drilling Co	1939	1,680	3½	1.5	87.0 106.7	July 2, 1939 July 8, 1941	None	N	Screen from 1,661 to 1,676 feet. Owner's test well 8.
1230	do	do	do	1939	1,419	3½	1.9	97.4 111.7	July 2, 1939 July 8, 1941	None	N	Screen from 1,399 to 1,414 feet. Owner's test well 9.
1231	9¼ miles southeast of Houston Courthouse.	City of Pasadena	McMasters & Pomeroy.	1935	834	10	2.5	101.1 128	Mar. 1, 1938 Mar. 15, 1941	T, E, 15	P	Screen, 60 feet in three sections between 700 and 834 feet. Owner's No. 2.
1232	14¼ miles southeast of Houston Courthouse.	Unknown				3	2.0	94.2 109.0	Feb. 17, 1939 Jan. 26, 1942	None	N	

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
1234	9½ miles southeast of Houston Courthouse.	City of South Houston.	J. A. Walling & Pat O'Day.	1941	316	8	------	------	----------	T, E, 25	P	Screen from 258 to 316 feet. Yield, 375 gallons a minute when drilled. Owner's No. 3.
1235	10 miles southeast of Houston Courthouse.	J. A. Campbell	W. J. Swinehart	1941	336	8, 6	------	------	----------	T, E, —	P	Screen from 306 to 336 feet. Supplies Pasadena Highlands Subdivision.
1236	6¼ miles southeast of Houston Courthouse.	Houston Milling Co.	McMasters & Pomeroy.	1938	640	8	0	4 67	Feb. 5, 1938	T, E, 15	Ind	Screen at 500 to 521 and 600 to 629 feet. Yield, 125 gallons a minute when drilled.
1237	8¼ miles southeast of Houston Courthouse.	East End Water Works.	do	1941	1,157	10, 8, 6	0	4 108	July 31, 1941	T, E, 30	P	All sands from 720 to 1,157 feet screened (40 feet of screen at bottom). Yield, 530 gallons a minute when drilled. Supplies Meadowbrook Subdivision. Owner's No. 2.
1238	6¼ miles southeast of Houston Courthouse.	Federal Building & Development Co.	do	1938	360	6	------	------	----------	T, E, 7½	P	Screen from 340 to 360 feet. Supplies Houston Acreage Subdivision.
1239	5½ miles southeast of Houston Courthouse.	Golf Crest Country Club.	do	1938	784	10	------	------	----------	T, E, 20	P, Irr	Screen at 530 to 550, 663 to 686, and 734 to 770 feet. Yield, 400 gallons a minute when drilled. Supplies swimming pool and golf course.
1240	do	Harrbrook Development Co.	do	1939	332	6	0	4 60	August 1939	T, E, 10	P	Screen from 280 to 332 feet. Yield, 200 gallons a minute when drilled. Supplies Golfview Manor Subdivision.
1241	4½ miles southeast of Houston Courthouse.	Hinderliter Tool Co.	A. E. Fawcett, Sr	1937	457	4	------	------	----------	C, E, 1	D	Screen from 437 to 457 feet.
1242	4¾ miles south of Houston Courthouse.	M. E. Foster	Texas Water Supply Corporation.	1937	475	6	0	4 45	Aug. 1, 1937	T, E, 15	P	Screen from 427 to 455 feet. Yield, 100 gallons a minute in 1941. Supplies Foster Place Subdivision. Owner's No. 3.
1243	do	do	do	1941	531	6	0	4 76	May 1941	T, E, 15	P	Screen from 500 to 530 feet. Yield, 200 gallons a minute with a draw-down of 38 feet when drilled. Supplies Foster Place Subdivision. Owner's No. 4.

1244	5¾ miles south of Houston Courthouse.	Ben Taub	McMasters & Pomeroy.	1939	602	6,4	0	4 53	November 1939.	T, E, 15	P	Screen from 542 to 602 feet. Yield, 150 gallons a minute. Supplies Brookhaven Addition. Owner's No. 2.
1245	7 miles southwest of Houston Courthouse.	Gulf Oil Corporation.	Gulf Oil Corporation	1933	300	6				A, E	D	Screen from 256 to 300 feet. Supplies Pierce Junction Camp.
1246	7½ miles southwest of Houston Courthouse.	do	L. Patterson	1935	376	7				A, E	D	Screen at 214 to 234 and 325 to 345 feet. Supplies Pierce Junction warehouse.
1247	8¼ miles southwest of Houston Courthouse.	M. C. Williams	Fred Powell	1928	229	5				None	N	Screen from 209 to 229 feet.
1248	do	Gulf Oil Corporation.	L. Patterson	1933	278	6				None	O	Screen from 257 to 278 feet. Supplies oil tests.
1249	7¾ miles southwest of Houston Courthouse.	Rio Bravo Oil Co.	Layne-Texas Co	1936	276	12,7	0	4 34	February 1936.	T, E, 7½	D	Screen from 177 to 206 and 211 to 270 feet. Gravel-walled. Yield, 60 gallons a minute with a draw-down of 4 feet when drilled. Owner's No. 3.
1250	do	Hamill & Smith	Hamill & Smith	1932	540	6				A	O	Screen from 520 to 540 feet.
1253	4¼ miles southwest of Houston Courthouse.	Old Clinton Water Supply Corporation.	McMasters & Pomeroy.	1939	505	6	0	4 62	Sept. 25, 1939.	T, E, 15	P	Screen from 445 to 495 feet. Yield, 150 gallons a minute when drilled. Supplies Central City Subdivision.
1254	5 miles southwest of Houston Courthouse.	D. B. McDaniel	A. E. Fawcett, Sr.	1935	827	9⅝, 7⅝, 6⅝				T, E, 20	D	Casing, 200 feet of 9⅝-inch and 627 feet of 7⅝-inch and 6⅝-inch; 115 feet of screen between 500 and 827 feet.
1255	5½ miles southwest of Houston Courthouse.	Carlon Hotel Courts.	G. E. Failing Drilling Co.	1938	400	4				J, E, 1	P	Screen, 20± feet at bottom of well. Owner's No. 1.
1256	do	do	do	1939	600	4				J, E, 3	P	Screen, 20± feet at bottom of well. Owner's No. 2.
1257	do	Grant Motel	I. H. Mowery	1941	136	4,3				J, E, 1	P	Screen from 118 to 136 feet. Owner's No. 2.
1258	do	do	Layne-Texas Co	1940	326	6⅝, 4½, 2⅜	0	4 44	Apr. 22, 1940.	J, E, 3	P	Screen from 304 to 314 feet. Yield, 110 gallons a minute with a draw-down of 52 feet when drilled. Owner's No. 1.
1259	do	N. G. Cummings	G. E. Failing Drilling Co.	1938	326	4				J, E, 2	P	Screen from 306 to 326 feet. Supplies Prince's Drive-In Stand No. 30.
1260	5¾ miles southwest of Houston Courthouse.	Speer Park	I. H. Mowery	1941	134	4				J, E, 2	P	Screen from 114 to 134 feet.
1261	do	Alamotel Court	M. R. Pretty	1939	324	4,2				C, E, 2	P	Casing, 100 feet of 4-inch and 224 feet of 2-inch. Screen from 294 to 324 feet. Yield, 50 gallons a minute when drilled.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level [1]		Method of lift [2]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
1262	6 miles southwest of Houston Courthouse.	King Tourist Camp.	I. H. Mowery	1940	138	4				J, E, 2	P	Screen from 118 to 138 feet.
1263	do	Plantation	do	1940	507	3	0	4 68	1940	J, E, 2	P	Screen from 487 to 507 feet. Supplies night club.
1264	6¼ miles southwest of Houston Courthouse.	Gaido's Restaurant.	do	1941	138	4				J, E, 1	P	Screen from 113 to 138 feet. Yield, 100 gallons a minute when drilled.
1265	8¼ miles southwest of Houston Courthouse.	Brochsteins Inc	Texas Water Supply Corporation.	1940	460	6				T, E, 15	D	Screen from 420 to 460 feet. Yield, 180 gallons a minute when drilled.
1266	5½ miles southwest of Houston Courthouse.	City of Southside Place.	McMasters & Pomeroy.	1935	998	8, 6	0	4 68	October 1939	T, E, 10	P	Casing, 850 feet of 8-inch and 148 feet of 6-inch. Screen at 911 to 935 and 948 to 988 feet. Yield, 250 gallons a minute in 1938. Owner's No. 2. Temperature, 80° F.
1267	5½ miles southwest of Houston Courthouse.	do	do	1941	894	13, 8⅝	0	4 65	July 1941	T, E, 20	P	Casing, 279 feet of 13-inch and 615 feet of 8⅝-inch. Screen at 484 to 504, 529 to 549, 584 to 604, 694 to 704, 719 to 749, and 869 to 889 feet. Yield, 400 gallons a minute with a drawdown of 33 feet in July 1941. Owner's No. 3.
1268	do	City of West University Place.	Layne-Texas Co	1938	768	13⅜, 6⅝	0	4 51	Mar. 13, 1938	T, E, 30	P	Screen at 632 to 642, 650 to 691, 700 to 708, 714 to 722, and 734 to 756 feet. Yield, 500 gallons a minute in July 1941. Owner's No. 3.
1269	do	do	do	1939	1,183	16, 8⅝	1.5	119	Jan. 2, 1942	T, E, 125	P	Casing, 799 feet of 16-inch and 384 feet of 8⅝-inch. Screen at 944 to 976, 993 to 1,021, 1,033 to 1,065, 1,087 to 1,131, and 1,147 to 1,169 feet. Yield 1,510 gallons a minute when drilled. Owner's No. 4. See log.

1270	....do....	....do....	....do....	1941	1,673	20, 12¾	0	[4]103	June 1941....	T, E, 150	P	Screen at 1,205 to 1,221, 1,309 to 1,340, 1,360, to 1,370, 1,400 to 1,440, 1,470, to 1,489, 1,559 to 1,619, and 1,627 to 1,649. Yield, 2,000 gallons a minute with a draw-down of 67 feet in June 1941. Owner's No. 5.
1276	11¼ miles southeast of Houston Courthouse.	West Production Co.	West Production Co..	1935	920±	6	4.0	58.9	Dec. 1, 1939..	A, D	D, S, Ind	
1277	3¼ miles northeast of of Houston Courthouse.	Texas Water Co..	McMasters & Pomeroy.	1940	544	6	----	----	----	T, E, 7½	P	Screen from 494 to 544 feet. Yield, 125 gallons a minute in July 1941. Supplies Kashmere Gardens Subdivision.
1278	7 miles southwest of Houston Courthouse.	Southern Floral Co.	M. R. Pretty.....	1936	260	2	----	----	----	A	D, Irr	Screen from 240 to 260 feet.
1279	6½ miles southwest of Houston Courthouse.	J. S. Abercrombie.	Layne-Texas Co.....	1941	662	6⅝, 4½	----	----	----	T, E, 7½	D, S	Screen, 50 feet in two sections between 590 and 662 feet. Yield, 100 gallons a minute in 1941. Supplies Pin Oak Stable.
1280	7 miles southwest of Houston Courthouse.	The Texas Co.....	....do....	1941	696	6⅝, 4½	0	[4]55	May 28, 1941..	T, E, 3	Ind	Casing, 561 feet of 6-⅝inch and 131 feet of 4½-inch. Screen at 606 to 641 and 662 to 684 feet. Yield, 190 gallons a minute with a draw-down of 29 feet when drilled. Supplies geophysical laboratory.
1281	6½ miles southwest of Houston Courthouse.	Academy of Incarnate Word.	....do....	1931	115	6⅝	0	[4]19.4	May 1931....	T, E	D	Screen from 92 to 115 feet. Yield, 90 gallons a minute in 1940.
1282	7¾ miles southwest of Houston Courthouse.	Harris County....	----------	1917?	850	4	----	----	----	A, E	D, S	Estimated yield, 20 gallons a minute in 1939. Supplies Bellview Convalescent Home.
1283	6¼ miles southwest of Houston Courthouse.	....do....	McMasters & Pomeroy.	1936	393	4, 2½	0	[4]41	Aug. 22, 1936..	C, E	P	Screen from 373 to 393 feet. Yield, 110 gallons a minute when drilled. Supplies Post Oak School.
1284	7¾ miles southwest of Houston Courthouse.	....do....	....do....	1940	780	6	0	[4]54	May 3, 1940..	T, E, 5	P	Screen at 687 to 717 and 746 to 767 feet. Yield, 300 gallons a minute with draw-down of 30 feet when drilled. Supplies Bellaire School for Girls. Owner's No. 4. See log.
1285	8¼ miles southwest of Houston Courthouse.	J. E. Foster.....	W. J. Swinehart....	----	250	4½	----	----	----	J, E	S, Irr	Screen from 230 to 250 feet. Supplies Phenix-Holstein Baby Milk Dairy.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
1286	10¾ miles southwest of Houston Courthouse.	R. D. Moers	Layne-Texas Co	1940	220	4½, 2⅜	0	[4] 30	Oct. 1, 1940	J, E, ½	D, S	Screen from 197 to 207 feet. Yield, 60 gallons a minute when drilled.
1287	12 miles southwest of Houston Courthouse.	C. M. Abercrombie.	do	1940	442	4½, 2½				T, E, 2	D	Screen from 424 to 442 feet. Yield, 35 gallons a minute when drilled.
1288	11¾ miles southwest of Houston Courthouse.	E. P. Krenek		1932	200±	[5] 8	.5	13.8	Feb. 9, 1939	C, G, 2	D, S	Casing, 40 feet of 8-inch and 160± feet of casing of smaller diameter. Estimated yield, 5 gallons a minute in 1939. Supplies dairy.
1289	13½ miles southwest of Houston Courthouse.	R. W. Henderson		1929	48	3	0	[4] 6	1939	A, E	D, S, Ind	Yield, 20 gallons a minute in 1939.
1290	1½ miles southwest of Houston Courthouse.	Horlock Ice Co	Layne-Texas Co	1941	520	8				A	Ind	
1291	5⅝ miles south of Houston Courthouse.	Ben Taub	McMasters & Pomeroy.	1935	592	6				T, E, 15	P	Screen from 549 to 592 feet. Yield, 150 gallons a minute when drilled. Supplies Brookhaven Addition. Owner's No. 1.
1292	7⅛ miles southeast of Houston Courthouse.	B. F. Harris	do	1941	687	6,4	0	[4] 111	June 9, 1941	T, E, 10	P	Casing, 318 feet of 6-inch and 327 feet of 4-inch. Screen from 663 to 645 feet. Yield, 200 gallons a minute when drilled. Casing of old well pulled and new well drilled in same location. Supplies Allendale Subdivision.
1293	6 miles southeast of Houston Courthouse.	Consolidated Chemical Co.	Layne-Texas Co	1941	804	24, 18⅝, 10¾	0	[4] 121	December 1941.	T, E	Ind	Casing, 30 feet of 24-inch; 454 feet of 18⅝-inch; and 320 feet of 10¾-inch. Screen at 594 to 634 and 725 to 799 feet. Gravel-walled. Yield, 760 gallons a minute with drawdown of 56 feet when drilled.

1294	3¼ miles southeast of Houston Courthouse.	Petroleum Rectifying Co. of California.	Texas Water Supply Corporation.	1941	505	6				T, E, 10	Ind	Screen from 475 to 495 feet.
1295	4½ miles southeast of Houston Courthouse.	Forest Park Cemetery.	McMasters & Pomeroy.	1936	520	6				T, E, 10	P, Irr	Screen from 500 to 520 feet. Estimated yield, 100 gallons a minute in 1941.
1296	8¾ miles southeast of Houston Courthouse.	Forest Oaks Water Works.	A. E. Fawcett, Sr.	1937	923	6	0	478.5	1937	T, E, 10	P	Screen from 893 to 923 feet. Yield, 220 gallons a minute when drilled.
1297	9 miles southeast of Houston Courthouse.	State of Texas	Layne-Texas Co.	1939	630	8⅝, 5	0	485	July 1939	T, E, 15	P	Screen from 587 to 623 feet. Gravel-walled. Yield, 100 gallons a minute with a draw-down of 33 feet when drilled. Supplies Houston Airport.
1298	9¾ miles southeast of Houston Courthouse.	Stanolind Oil and Gas Co.	McMasters & Pomeroy.	1935	672	8				T, E	D, Ind	Screen from 632 to 672 feet. Supplies south Houston camp and warehouse. Owner's No. 1.
1299	15 miles southeast of Houston Courthouse.	U. S. War Department.	Layne-Texas Co.	1941	558	13⅜, 7	0	473	Mar. 19, 1941	T, E, 50	P, Ind	Screen from 468 to 548 feet. Yield, 550 gallons a minute with a draw-down of 26 feet when drilled. Supplies Ellington Field. Owner's No. 2.
1300	do	do	do	1940	583	13⅜, 7	0	479	Oct. 4, 1940	T, E, 50	P, Ind	Casing, 352 feet of 13⅜-inch and 281 feet of 7-inch. Screen at 465 to 478 and 500 to 571 feet. Yield, 875 gallons a minute with a draw-down of 49 feet when drilled. Supplies Ellington Field. Owner's No. 1. See log.
1302	In Genoa	City of Genoa	do	1928	832	6, 4	1.0	48.1 55.6 90.6	Apr. 3, 1931 Aug. 12, 1936 Aug. 15, 1941	C, E	P	Screen at 655 to 667, 711 to 721, and 809 to 832 feet.
1304	do	G. H. & H. R. R.	Layne-Bowler Co.	1940	683	6, 4				C, D	RR	Screen from 661 to 683 feet.
1308	14¾ miles southeast of Houston Courthouse.	J. M. West			101	2				C, W	D, S	
1314	16 miles southeast of Houston Courthouse.	T. C. Dunn	J. H. Lowery	1930	87	2				C, H	D, S	
1315	do	Steve Waldrip	do		105	4	2	4.9	Oct. 6, 1932	E	D, S	
1318	15½ miles southeast of Houston Courthouse.	J. M. West	—— Crenshaw		99	2	1.0	6.6	Jan. 27, 1942	None	N	Measured depth, 92 feet.
1322	18¼ miles southeast of Houston Courthouse.	S. Siabara	Layne-Texas Co.	1927	806	24, 18, 12	0	18 45 71	1927 April 1935 June 1940	T, E	Irr	Screen at 416 to 437, 494 to 597, and 769 to 806 feet. Yield, 2,100 gallons a minute when drilled. Well used for irrigating rice.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
1326	19½ miles southeast of Houston Courthouse.	G. R. Peck	Pat O'Day	1923	510	4, 2½	0	‹10	1923	C, W	D, S	Screen from 470 to 510 feet.
1327	19 miles southeast of Houston Courthouse.	Frank Peck	Layne-Bowler Co	1906	733	30, 10	1	43.2	Sept. 11, 1931	None	N	
1329	19¼ miles southeast of Houston Courthouse.	J. W. Goar	Pat O'Day	1924	473	3				C, H	S	Screen from 433 to 473 feet.
1330	do	J. T. Cantwell	do	1924	243	4	0	10.3	Oct. 7, 1932	C, H	D, S	Screen from 220 to 240 feet.
1333	20¼ miles southeast of Houston Courthouse.	Robert Bruce			500	4	2.5	38.5	do	A	N	
1335	21 miles southeast of Houston Courthouse.	Raymond Pearson	Layne-Bowler Co	1907	700	[5] 30	.5	32.4	do	C, W	D, S	Flowed when drilled.
1339	21¼ miles southeast of Houston Courthouse.	S. M. Houston	Floyd Layne	1911	490	6, 4	2.0	45.4	July 13, 1940	C, W	D, S	
1341	22 miles southeast of Houston Courthouse.	G. M. Young	Charles Ellis	1939	230	4, 2	0	‹15	Sept. 1939	C	D	Screen from 220 to 230 feet.
1342	do	M. E. Boehm	Layne-Texas Co	1926	513	4				T, E	D	Screen from 439 to 506 feet. Yield, 70 gallons a minute in 1936.
1343	21¼ miles southeast of Houston Courthouse.	J. M. West	do	1928	530	6	0	‹21	May 1928	A	D	Screen from 473 to 508 feet. Yield, 105 gallons a minute with a draw-down of 46 feet when drilled.
1344	21¼ miles southeast of Houston Courthouse.	do	Layne-Bowler Co	Old	662					T, E, 15	D	Screen from 593 to 660 feet.
1345	12¾ miles southwest of Goose Creek.	Peden Estate	Wallie Burns	1918	530	4	1.0	53.1	June 7, 1940	J, E	D	Screen from 510 to 530 feet.
1346	12¼ miles southwest of Goose Creek.	W. W. Plowden		1939	504	4				T, E	D	
1347	12½ miles southwest of Goose Creek.	Morris Siegel	Texas Water Supply Corporation.	1938	550	4				C, E	D, S	

1348	12¼ miles southwest of Goose Creek.	J. L. Burns	Wallie Burns	1910	527	2	1,0	52.1	June 7, 1940	A, C	D	Casing, 527 feet of 2-inch, with 3-inch on outside of 2-inch from 0 to 120 feet to seal leak in 2-inch casing at 80 feet.
1349	13 miles southwest of Goose Creek.	Seabrook Yacht Corporation.	McMasters & Pomeroy.	1939	523	6	0	‘50	1939	T, E, 5	Ind	Yield, 150 gallons a minute with a draw-down of 40 feet when drilled.
1350	12½ miles southwest of Goose Creek.	Irma Christy	Wallie Burns	1913	521	4	2.0	51.4	June 7, 1940	A, E	D	
1356	In Webster	A. A. Polk	L. Wilson	1932	130	4				C, E, ½	D, S	Screen from 103 to 125 feet.
1357	do	G. H. & H. R. R.		Old	565						RR	
1359	do	G. H. Whitcomb	Aberson & Altemus	Old	563	2	2.0	36.9	Oct. 7, 1932	C, E	D	
1360	21¼ miles southeast of Houston Court house.	S. Siabara	Layne-Bowler Co	1908	659	24, 9⅝	2.0	31.5 40.2 62.5	Apr. 3, 1931 May 12, 1936 Jan. 27, 1942	C, E	D, S	Screen from 547 to 659 feet. Well formerly used for irrigating rice.
1362	In Webster	Harris County	Wallie Burns	1927	500+	3				C, E, ¾	D	
1365	22½ miles southeast of Houston Courthouse.	Humble Pipe Line Co.	Layne-Texas Co	1927	652	10, 8	0 0	15.7 47.3	Sept. 15, 1927 July 13, 1940	None	N	Casing, 102 feet of 10-inch and 550 feet of 8-inch. Screen from 583 to 649 feet. Owner's No. 1.
1366	22¾ miles southeast of Houston Courthouse.	Galveston-Houston Electric Co.	Layne-Bowler Co	1910	788	6				A, E	D, RR	Screen at 568 to 587 and 611 to 653 feet. See log.
1367	22½ miles southeast of Houston Courthouse.	Humble Pipe Line Co.	Layne-Texas Co	1938	660	8⅝, 6⅝	0	‘42	June 11, 1938	T, E, 7½	Ind	Screen from 592 to 659 feet. Yield, 150 gallons a minute with a draw-down of 6 feet when drilled. Owner's No, 2.
1368	8¼ miles northeast of Houston Courthouse.	J. M. Cordell & Sons.	A. E. Fawcett, Sr.	1938	442	4				J, E, 5	Inn	Screen from 422 to 442 feet. Supplies brick kiln.
1369	9½ miles southeast of Houston Courthouse.	City of South Houston.	McMasters & Pomeroy.	1935	916	8, 6	2.2	95.9	June 5, 1941	T, E	P	Casing, 721 feet of 8-inch and 195 feet of 6-inch. Screen from 856 to 916 feet. Owner's No. 2.
1371	9¾ miles east of Houston Courthouse.	Sheffield Steel Corp.	Layne-Texas Co	1941	449	16, 10¾, 8⅝	0	‘95	Oct. 17, 1941	T, E, 75	Ind	Casing, 209 feet of 16-inch; 40 feet of 10¾-inch; and 200 feet of 8⅝ inch. Screen at 249 to 268, 286 to 308, and 396 to 448 feet. Gravel-walled. Yield, 660 gallons a minute with a draw-down of 55 feet when drilled. Owner's No. 3.
1372	do	do	do	1941	713	16, 8⅝	0	‘104	Sept. 20, 1941	T, E, 75	Ind	Casing, 483 feet of 16-inch and 230 feet of 8⅝-inch. Screen at 592 to 616 and 629 to 710 feet. Gravel-walled. Yield, 610 gallons a minute with a draw-down of 67 feet when drilled. Owner's No. 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [2]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
1373	10¼ miles east of Houston Courthouse.	Haden Lime Co.	J. E. Roberts	1929	400±	6				A, E	Ind	Screen at bottom of well.
1374	9 miles east of Houston Courthouse.	Harris County Fresh Water District No. 5.	Layne-Texas Co.	1940	750	13⅜, 6⅝	0	4 97	June 10, 1940	T, E, 40	P	Casing, 481 feet of 13¾-inch and 269 feet of 6⅝-inch. Screen at 595 to 630, 640 to 662, 677 to 701, and 715 to 740 feet. Yield, 520 gallons a minute with a draw-down of 75 feet when drilled. See log
1375	8½ miles east of Houston Courthouse.	Federal Investment Co.	A. E. Fawcett, Sr.	1934	489	6				J, E, 3	P	Screen from 479 to 489 feet. Yield, 20 gallons a minute when drilled. Supplies Nira Park Addition.
1376	7¼ miles east of Houston Courthouse.	George Merritt	W. J. Swinehart	1938	204	6, 4				J, E, 3½	P	Screen from 184 to 204 feet. Yield, 30 gallons a minute when drilled. Supplies Industrial Addition. Owner's No. 2.
1377	7 miles east of Houston Courthouse.	T. F. Hackney	J. C. Bland	1940	200					J, E, 5	P	Supplies Meadowview Addition.
1378	4½ miles east of Houston Courthouse.	S. E. Ables	Layne-Texas Co.	1936	342	4, 3, 2	0	4 67	Oct. 1936	T, E	D	Screen from 325 to 342 feet.
1379	do	A. M. Geibel	A. E. Fawcett, Sr.	1937	439	3, 2	0	4 72	1937	C, E, ¾	D	Screen from 433 to 439 feet.
1380	do	A. E. Fawcett, Sr.	do	1936	600	3, 2	0	4 87	1940	C, E, 1½	D	Screen from 594 to 600 feet.
1381	4¼ miles northeast of Houston Court house.	Houston Band Mill.	do	1937	110	6				S	D, Ind	Screen from 92 to 110 feet. Owner's No. 1.
1382	do	do	do	1936	110	6				S	D, Ind	Screen from 90 to 110 feet. Owner's No. 2.
1383	4 miles northeast of Houston Courthouse.	Oldham-Parks Lumber Co.	G. Glidden	1936	540	6, 4				A	Ind	Casing, 60 feet of 6-inch and 480 feet of 4-inch. Screen from 516 to 540 feet.
1384	4¾ miles northeast of Houston Courthouse.	Southern Acid & Sulphur Co.	McMasters & Pomeroy.	1939	378	6	0	4 54	1939	T, E, 7½	Ind	Screen at 152 to 175, 196 to 218, and 335 to 355 feet. Yield, 150 gallons a minute with a draw-down of 35 feet when drilled.

1385	7 miles northeast of Houston Courthouse.	Two Point Filling Station.	J. W. Evans	1939	314	3, 2				C, E, 1	D	Screen from 304 to 314 feet.
1386	5¾ miles northeast of Houston Courthouse.	A. W. Baker	A. E. Fawcett, Sr	1937	481	4, 2				C, E, 1	D, S	Screen from 475 to 481 feet.
1387	4¼ miles northeast of Houston Courthouse.	Pittsburg Plate Glass Co.	Layne-Texas Co	1940	638	13⅝, 6⅝	0	190	June 21, 1940	T, E, 75	Ind	Casing, 398 feet of 13⅜-inch and 240 feet of 6⅝ inch. Screen at 514 to 574, 584 to 594, and 606 to 626 feet. Yield, 445 gallons a minute with a draw-down of 61 feet when drilled. Temperature, 76° F.
1388	4¼ miles northeast of Houston Courthouse.	General Metals Corporation.	A. E. Fawcett, Sr	1938	912	8, 6				T, E, 15	Ind	Casing, 250 feet of 8-inch and 662 feet of 6-inch. Screen from 872 to 912 feet. Estimated yield, 200 gallons a minute in 1941.
1389	do	Industrial Engineering Co.	do	1940	205	2½		150	Nov. 1940	J, E, ¾	Ind	Screen from 188 to 198 feet. Yield, 10 gallons a minute when drilled.
1390	5¾ miles northeast of Houston Courthouse.	Houston Gardens Subdivision.	McMasters & Pomeroy.	1938	330	6	0	159	1938	T, E, 5	P	Screen from 300 to 330 feet. Yield, 125 gallons a minute with a draw-down of 41 feet when drilled.
1391	do	Rosedale Gardens Subdivision.	do	1938	330	6	0	159	Nov. 23, 1938	T, E, 5	P	Screen at 284 to 304 and 311 to 321 feet. Yield, 125 gallons a minute with a draw-down of 41 feet when drilled.
1392	4½ miles northeast of Houston Courthouse.	Houston Belt & Terminal R. R.	do	1940	826	8				T, E, 7½	RR	Screen from 766 to 826 feet. Yield, 100 gallons a minute in July 1941. Supplies Gulf Coast Station.
1393	6¼ miles southwest of Houston Courthouse.	Rice Institute Estate.	L. J. Martin	1937	85	3	2.0	24.1	Feb. 9, 1939	A, G	S	
1394	3¼ miles northeast of Houston Courthouse.	Southern Pacific Co.	Layne-Texas Co	1941	919	13	0	110	Apr. 8, 1941	T, E, 40	RR Ind	Screen at 561 to 580, 600 to 620, 775 to 796, and 835 to 898 feet. Supplies Englewood yard and creosote plant. See log.
1395	2½ miles northeast of Houston Courthouse.	City of Houston	do	1938	1,291	21½, 12¾	3.0	88.3 98.5	Apr. 25, 1939 May 20, 1941	TE,150	P	Casing, 375 feet of 21½-inch and 916 feet of 12¾-inch. Screen at 461 to 534, 629 to 884, 1,015 to 1,036, 1,114 to 1,135, and 1,245 to 1,279 feet. Gravel-walled. Yield, 2,010 gallons a minute in January 1942. Owner's No. Northeast 2.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
1396	2 miles northeast of Houston Courthouse.	Ward-Baird Lumber Co.	I. H. Mowery	1941	154	3				C, E, 1	D, Ind	Screen from 139 to 154 feet.
1397	2¾ miles east of Houston Courthouse.	Standard Asbestos Manufacturing & Insulating Co.	A. E. Fawcett, Sr	1938	325	4	0	478	1938	C, E, 1	D, Ind	Screen from 310 to 325 feet.
1398	3¼ miles northeast of Houston Courthouse.	Mission Manufacturing Co.	Layne-Texas Co	1939	574	8⅝, 6⅝	0	480	June 6, 1939	T, E	Ind	Screen from 519 to 572 feet. Yield, 300 gallons a minute with a draw-down of 30 feet when drilled. Owner's No. 2.
1399	3½ miles northeast of Houston Courthouse.	Elizabeth Moody Estate.	G. Crook	1938	207±	6				J, E	D, S, Irr	Screen, 20 feet at bottom of well.
1400	do	Adams Theater Interests.	do	1937	400	6, 4	0	437	1939	J, E, 5	D, Ind	Screen from 355 to 400 feet. Yield, 100 gallons a minute when drilled.
1401	4½ miles northeast of Houston Courthouse.	Whyte Florists		1927	260	6	0	435	1938	A, E, 10	D, Irr	Screen from 200 to 230 feet. Yield, 90 gallons a minute when drilled.
1402	3½ miles north of Houston Courthouse.	Missouri Pacific Lines.	McMasters & Pomeroy.	1929	1,000	10	0	476.7	Sept. 20, 1938	T, E, 7½	RR	Screen at 641 to 682, 745 to 806, 846 to 869, and 948 to 981 feet. Estimated yield, 260 gallons 8 minute in 1939. Supplies Percival Junction yards. See log.
1403	3¾ miles north of Houston Courthouse.	Houston Concrete Products.	M. R. Pretty	1939	204	4				C, E	D, Ind	Yield, 10 gallons a minute when drilled.
1404	3 miles north of Houston Courthouse.	Newsom's Truck Lines.	Layne-Texas Co	1939	210	4, 2½	0	464	Dec. 5, 1939	T, E	D, Ind	Screen from 200 to 210 feet. Yield, 8 gallons a minute when drilled.
1405	3¾ miles north of Houston Courthouse.	H. C. Hollenback	McMasters & Pomeroy.	1939	656	8, 6				T, E, 7½	P.	Screen from 624 to 656 feet. Estimated yield, 130 gallons a minute in 1941. Supplies Linder Lake.

1406	...do	Harris County Water Control District No. 2.	...do	1940	853	12, 8	0	4104	June 17, 1940	T, E, 50	P	Casing, 250 feet of 12-inch and 603 feet of 8-inch. Screen at 626 to 648, 708 to 752, 764 to 774, 799 to 821, and 831 to 843 feet. Yield, 760 gallons a minute when drilled. Supplies Lindale Park. Owner's No. 2.
1407	4¼ miles north of Houston Courthouse.	Texas Water Co	...do	1941	753	8, 6	0	491	May, 1941	T, E	P	Casing, 304 feet of 8-inch and 449 feet of 6-inch. Screen at 496 to 520, 615 to 648, and 712 743 feet. Yield, 90 gallons a minute with a draw-down of 23 feet when drilled. Supplies Oakwood Addition. Owner's No. 2.
1408	4 miles northwest of Houston Courthouse.	Houston Independent School District.	...do	1936	210	6	.....	.....	.....	T, E, 5	P	Screen from 190 to 210 feet. Supplies Roosevelt School.
1409	4¾ miles northwest of Houston Courthouse.	Texas Water Co	...do	1939	411	6, 4	.....	.....	.....	T, E, 5	P	Screen from 372 to 411 feet. Estimated yield, 75 gallons a minute in July 1941. Supplies airline addition.
1410	4¼ miles northwest of Houston Courthouse.	City of Houston	Layne-Texas Co	1936	1, 232	25, 13	2.0	95.4 109.1	Aug. 21, 1939 Sept. 9, 1941	T, E, 150	P	Casing, 456 feet of 25-inch and 776 feet of 13-inch. Screen at 581 to 616, 660 to 695, 766 to 817, 866 to 887, 977 to 1,029, 1,062 to 1,151, and 1,183 to 1,226 feet. Gravel-walled. Yield, 2,500 gallons a minute in January 1942. Owner's No. Heights 6.
1411	4 miles northwest of Houston Courthouse.	...do	...do	1938	1, 252	21½, 12¾	3.0	93.0 101.3	Apr. 24, 1939 May 20, 1941	T, E, 150	P	Casing, 473 feet of 21½-inch and 779 feet of 12¾-inch. Screen at 558 to 580, 679 to 760, 778 to 829, 958 to 1,007, 1,017 to 1,042, 1,062 to 1,156, and 1,175 to 1,240 feet. Gravel-walled. Yield, 1,670 gallons a minute in January 1942. Owner's No. Heights 8.
1412	3¾ miles northwest of Houston Courthouse.	...do	...do	1936	1, 458	25, 13	1.0	89.5 97.0	May 25, 1939 May 20, 1941	T, E, 150	P	Casing, 459 feet of 25-inch and 999 feet of 13-inch. Screen at 565 to 651, 703 to 778, 798 to 848, 879 to 912, 992 to 1,271, 1,352 to 1,384, and 1,422 to 1,454 feet. Gravel-walled. Yield, 2,010 gallons a minute in January 1942. Owner's No. Heights 7.

See footnotes at end of table.

Records of wells in Harris County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
1413	5 miles northwest of Houston County house.	Harris County Water Control and Improvement District No. 3.	McMasters & Pomeroy.	1937	300	6	-----	-----	-----	T,E,7½	P	Reported yield, 125 gallons a minute in July 1941. Auxiliary supply for Garden Oaks subdivision. Owner's No. 1.
1414	----do----	----do----	Layne-Texas Co	1940	834	13⅜, 7	0	491	Oct. 3, 1940	T, E, 75	P	Casing, 352 feet of 13⅜-inch and 482 feet of 7-inch. Screen at 362 to 426, 540 to 584, 682 to 706, and 794 to 814 feet. Yield, 1,120 gallons a minute with a draw-down of 73 feet when drilled. Supplies Garden Oaks subdivision. Owner's No. 2. See log.
1415	5¾ miles northwest of Houston Courthouse.	Heights Golf Course.	Fred Powell	1938	290	6.4	-----	-----	-----	J, E, 5	Irr	
1416	11 miles west of Houston Courthouse.	J. C. Bauer	M. R. Pretty	1937	170	3?	-----	-----	-----	C, E	D	

[1] Plus (+) indicates water level is above ground.
[2] Pump or lift: T, Turbine; Cf, centrifugal; J, jet; C, cylinder; A, air; Ng, natural gas; B, rope and bucket. Power: E, Electric; D, diesel; G, gasoline engine; S, steam; W, windmill; H, hand. Figure indicates horsepower.
[3] Use of water: P, Public supply; Ind, industrial; Irr, irrigation; D, domestic; RR, railroad; S, stock; O, oil field; N, none.
[4] Water level reported by driller or owner.
[5] Diameter at top; reduced at unknown depth.

Records of wells in Fort Bend County

[All wells are drilled unless otherwise stated under "Remarks." Chemical analyses of water from these wells are shown in the tables of analyses on p. 262]

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [2]	Remarks
1	10½ miles southwest of Katy.	Pecan Acres, Inc.	Layne-Bowler Co.	1913	205	18, 11⅝	1.2	31.3	Oct. 1, 1940	C, W	D, S	Casing, 104 feet of 18-inch and 101 feet of 11⅝-inch. Screen at 59 to 103 and 145 to 202 feet. Formerly used for irrigating rice. See log.
6	6 miles southwest of Katy.	P. V. Cook	Ira Southard	1930	596	[3] 16	4.0	66.0	Jan. 15, 1942	T, E, 50	Irr	Measured yield, 1,130 gallons a minute in 1940. Irrigated 280 acres of rice in 1941. Owner's No. 4.
7	4 miles southwest of Katy.	C. C. Cardiff	Layne-Texas Co.	1925	337	24, 18, 12, 6	.5	61.7	Jan. 19, 1942	C, W	S	Casing, 98 feet of 24-inch; 14 feet of 18-inch; 159 feet of 12-inch; and 66 feet of 6-inch. Formerly used for irrigating rice. Owner's No. 1.
9	2¼ miles southwest of Katy.	L. D. Brown	Ira Southard	1925	174	26, 10	0	58.4	do	T, E, 30	Irr	Casing, 68 feet of 26-inch and 106 feet of 10-inch. Measured yield, 910 gallons a minute in 1940. Irrigated 160 acres of rice in 1941.
11	1¾ miles southwest of Katy.	P. V. Cook	do	1929	170±	28, 12	2.0	48.7 57.7	Mar. 18, 1933 Jan. 15, 1942	T, D, 80	Irr	Casing, 70 feet of 28-inch; 12-inch to bottom. Measured yield, 570 gallons a minute in 1940. Irrigated 120 acres of rice in 1941. Owner's No. 3.
13	1 mile southwest of Katy.	T. B. Turner	Layne-Bowler Co.	1909	180	24, 11⅝				T, E, 30	Irr	Casing, 74 feet of 24-inch and 106 feet of 11⅝-inch. Screen from 102 to 178 feet. Irrigated about 200 acres of rice in 1941. Owner's No. 1.

See footnotes at end of table.

Records of wells in Fort Bend County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
15	3¼ miles southwest of Katy.	P. V. Cook	I. W. Lawson	Old	172	24, 10	.5	52.3 60.9	Mar. 24, 1931 Jan. 15, 1942	T, E, 40	Irr	Casing, 63 feet of 24-inch and 109 feet of 10-inch. Measured yield, 575 gallons a minute in 1940. Irrigated 160 acres of rice in 1941. Owner's No. 1.
16	4½ miles southwest of Katy.	C.C. Cardiff	Layne-Texas Co.	1925	628	24, 12, 10	.6	53.8 59.4	Mar. 24, 1931 Jan. 19, 1932	T, E, 60	Irr	Casing, 90 feet of 24-inch, 108 feet of 12-inch and 430 feet of 10-inch. Screen at 284 to 303, 344 to 365, and 583 to 624 feet. Measured yield, 1,375 gallons a minute. Irrigated 360 acres of rice in 1941. Owner's No. 2. See log.
17	5 miles south of Katy.	Mrs. H. L. Gordon	I. W. Lawson	1926	586	24, 12, 8	.7	53.2	Jan. 19, 1942	T, E, 75	Irr	Casing, 100 feet of 24-inch; 140 feet of 12-inch; and 346 feet of 8-inch. Measured yield, 1,415 gallons a minute in 1940. Irrigated 300 acres of rice in 1940.
18	5¾ miles southwest of Katy.	Sam Poorman	Layne-Texas Co.	1928	723	26, 12, 10	.3	49.2 53.3	Mar. 24, 1931 Jan. 15, 1942	T, E, 60	Irr	Casing, 132 feet of 26-inch; 83 feet of 12-inch; and 508 feet of 8-inch. Measured yield, 1,370 gallons a minute in 1940. Irrigated 400 acres of rice in 1940. See log.
19	4¾ miles south of Katy.	R. Robertson	I. W. Lawson	1926	545	24, 10, 6	0	34.5 47.6	Mar. 24, 1931 Mar. 11, 1941	T, D	Irr	Casing, 100 feet of 24-inch. Irrigated 300 acres of rice in 1940.
20	5¾ miles southeast of Katy.	L. Pauli	do	1913	250	24, 10	1.0	39.9	Jan. 19. 1942	T, E, 30	Irr	Casing, 50 feet of 24-inch and 200 feet of 10-inch.
21	6¼ miles south of Katy.	do		Old		36	0	39.4 43.0	Mar. 24, 1931 Jan. 15, 1942	T, E, 40	Irr	Irrigated 215 acres of rice in 1941
26	10¼ miles southeast of Katy.	C. Pillot	Southern Well Drilling Co.	1923	657	26, 12	0	28.7	Jan. 19, 1942	T, D, 100	D,S,Irr	Casing, 82 feet of 26-inch and 575 feet of 12-inch. Formerly used for rice irrigation.

29	9¼ miles southeast of Katy.	----do----	Delta-Shurwell, Inc.	1939	500	20, 14	2.8	32.7	Mar. 11, 1941	T,E,50	Irr	Casing, 127 feet of 20-inch and 373 feet of 14-inch; slotted from 85 to 114, 137 to 164, 176 to 254, 294 to 386, 396 to 476, and 486 to 500 feet. Yield 1,700 gallons a minute when drilled. Irrigated 250 acres of rice in 1940. Owner's No. 2.
30	6½ miles southwest of Katy.	B. Ray Woods	----do----	1936	334	16, 12, 8	0.2	65.7	Jan. 19, 1942	T, E, 50	Irr	Casing, 123 feet of 16-inch; 38 feet of 12-inch; and 171 feet of 8-inch; slotted from 74 to 118, 123 to 139, 146 to 155, 161 to 166, 176 to 181, 225 to 248, 270 to 294, and 310 to 331 feet. Measured yield, 1,755 gallons a minute in 1940. Irrigated 356 acres of rice in 1940. Owner's No. 2.
31	5 miles southwest of Katy.	C. C. Cardiff	----do----	1939	496	18, 13, 9	2.0	66.5	Oct. 24, 1941	T, E, 60	Irr	Slotted casing, 235 feet. Measured yield, 1,600 gallons a minute in July 1940. Irrigated 350 acres of rice in 1941. Owner's No. 4.
32	6½ miles southwest of Katy.	L. D. Ware	Ware & Ginn	1940	590	18, 12	.7	65.2	Jan. 19, 1942	T, D, 95	Irr	Casing, 140 feet of 18-inch and 450 feet of 12-inch, slotted casing, 442 feet. Irrigated 325 acres of rice in 1941.
33	3½ miles southwest of Katy.	Earl McMillian	Ira Southard	1938	346	15	1.5	62.5	----do----	T, E, 50	Irr	Slotted casing, 170 feet. Irrigated 350 acres of rice in 1941.
34	3¾ miles southwest of Katy.	C. C. Cardiff	Delta-Shurwell, Inc.	1939	315	18, 12	1.0	53.9	----do----	T, R, 40	Irr	Measured yield, 1,740 gallons a minute in 1940. Irrigated 360 acres of rice in 1940. Owner's No. 3.
35	10¼ miles southeast of Katy.	C. Pillot	----do----	1939	500	20, 14	2.0	[4] 35.5	September 1939.	T, E, 75	Irr	Casing, 120 feet of 20-inch and 380 feet of 14-inch; slotted from 135 to 215, 241 to 255, 272 to 346, 355 to 371, 382 to 412, 422 to 426, 431 to 458, 467 to 481, and 484 to 495 feet. Measured yield, 2,045 gallons a minute in 1940. Irrigated 293 acres of rice in 1940. Owner's No. 1. See log.
37	3½ miles southwest of Katy.	J. L. Rose	J. H. Bennett	1922	135	3	.5	63.2	June 2, 1941	None	N	Measured depth 123 feet.
38	3¾ miles southwest of Katy.	----do----	----do----	1916	118	4	----	----	----	C, W	D, S	Screen from 112 to 118 feet.
39	6½ miles south of Katy.	M. A. McDonald	----	----	50	3	----	----	----	C, W	D, S	

See footnotes at end of table.

Records of wells in Fort Bend County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [2]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
40	6¾ miles southeast of Katy.	—— Settegast			156	8	1.0	41.4	June 2, 1941	C, W	S	
41	7 miles southeast of Katy	Jack Mehrens	Otto Mickelson	1941	517	18, 16, 12	0	32.4	do	T, D, 150	Irr	Casing, 120 feet of 18-inch; 80 feet of 16-inch: and 317 feet of 12-inch; slotted opposite all sands below 100 feet. Yield, 2,600 gallons a minute when drilled. Irrigated about 305 acres of rice in 1941.
42	do	do	C. F. Mahler	1941	80	2½				C, H	D	
43	6 miles southeast of Katy.	W. M. Wheless	Delta-Shurwell, Inc.	1941	630	20, 13				T, E, 60	Irr	Casing, 140 feet of 20-inch and 490 feet of 13-inch; slotted casing, 291 feet between 64 and 630 feet. Irrigated 322 acres of rice in 1941.
45	9½ miles southeast of Katy.	C. Pillot			80	2, 1½	2.0	26.7	Mar. 11, 1941	None	N	
49	In Sugarland	Fort Bend Utilities Co.	Layne-Texas Co.	1941	726	16, 10¾	1.0	49.5	Nov. 25, 1941	T, E, 100	Ind	Casing, 420 feet of 16-inch and 306 feet of 10¾-inch. Screen from 501 to 561, 581 to 661, and 681 to 721 feet. Yield, 400 gallons a minute when drilled. Owner's No. 7.
50	do	do	do	1934	733	16, 10	4.0	45.8	Mar. 2, 1941	T, E, 75	Ind	Casing, 297 feet of 16-inch and 436 feet of 10-inch. Screen from 555 to 638 and 737 to 802 feet. Yield, 1,260 gallons a minute with drawdown of 57 feet in November 1938. Owner's No. 6.
54	do	do	do	1920	1,606	24, 10, 8	1.0	25.9	May 25, 1941	T, E. 75	D	Casing, 92 feet of 24-inch, 1,400 feet of 10-inch and 114 feet of 8-inch. Screen from 1,545 to 1,606 feet. Owner's No. 3.

55	....do....	....do....	....do....	1922	604	16,8	.....	.....	.....	T, E, 50	Ind	Casing, 88 feet of 16-inch and 516 feet of 8-inch. Screen at 293–353, 437–460, 505–527, 543–565 and 578–600 feet. Owner's No. 5.
64	21 miles southeast of Katy.	Balke Electric Co.	....do....	1927	297	6,4	.....	.....	.....	C, E, ½	D	Casing, 181 feet of 6-inch and 116 feet of 4-inch. Screen from 274 to 296 feet. See log.
75	26 miles southeast of Katy.	Gulf Pipe Line Co.	Gulf Production Co.	1920	800±	6	2.5	56.1	Jan. 27, 1942	A	D, S	
76	24 miles southeast of Katy.	Unknown	.....	.....	.....	6	2.8	35.7	....do....	None	N	

[1] Plus (+) indicates water level is above ground.
[2] Pump or lift: T, Turbine; C, cylinder; A, air. Power: E, Electric; D, diesel; W, windmill; H, hand. Figure indicates horsepower.
[3] Use of water: Ind, Industrial; Irr, irrigation; D, domestic; S, stock; N, none.
[4] Water level reported by driller or owner.
[5] Diameter at top; reduced at unknown depth.

Records of wells in Waller County

[All wells are drilled unless otherwise stated under "Remarks." Chemical analyses of water from these wells are shown in the tables of analyses on p. 283]

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet)[1]	Water level: Date of measurement	Method of lift[2]	Use of water[3]	Remarks
117	In Prairie View	Mrs. H. L. Milam		1931	20	2	0	8.0	Jan. 23, 1942	None	N	Test well used for water-lever measurements.
119	23¼ miles northwest of Katy.	Prairie View State College.	Layne-Texas Co.	1930	576	12½, 10				T, E, 25	P	Owner's No. 3.
120	do	do	do	1920	571	6				A	P	Screen at 519 to 529 and 550 to 571 feet. Owner's No. 2. See log.
121	do	do		Old	600±					A	P	Owner's No. 1.
128	In Prairie View	H. & T. C. R. R.		Old	90±	4	.4	40.7	Jan. 23, 1942	C, H	D	Rarely used.
152	21 miles northwest of Katy.	—— Meyer		1931	20	2	0	2.6	do	None	N	Test well used for water-level measurements.
154	19¾ miles northwest of Katy.	W. D. Weaver	W. D. Weaver	Old	58	5	1.0	11.4	do	C, W	D, S	
221	7¾ miles northwest of Katy.	Harry Hebert	Harry Hebert	1930	524	16, 12	0	46.2 56.7	Feb. 10, 1931 Oct. 28, 1941	None	N	Casing, 150 feet of 16-inch and 374 feet of 12-inch. Screen at 110 to 150, 286 to 326, 358 to 375, 385 to 405, and 478 to 518 feet. Irrigated 314 acres of rice in 1940. Abandoned in 1941. Temperature, 72° F. Owner's No. 1.
223	6¾ miles northwest of Katy.	T. B. Tucker	Layne-Texas Co.	1928	767	16, 12, 8	.3	49.2 58.9	Feb. 10, 1931 Jan. 15, 1942	T, E, 30	Irr	Casing, 115 feet of 16-inch; 93 feet of 12-inch; and 559 feet of 8-inch. Screen at 117 to 145, 165 to 198, 304 to 343, 425 to 445, 467 to 488, 596 to 630, and 693 to 714 feet. Measured yield, 880 gallons a minute in 1940. Used with well 247 to irrigate about 460 acres of rice in 1941. Temperature, 71° F. Owner's No. 2.

225	5¾ miles northwest of Katy.	L. E. Morrison	do	1929	643	24, 12	1.0	60.4	Jan. 20, 1942	T, E, 30	Irr	Casing, 120 feet of 24-inch and 523 feet of 12-inch. Screen at 155 to 165, 201 to 211, 321 to 341, 381 to 443, 529 to 572, and 607 to 628 feet. Measured yield of wells 225 and 257, 1,500 gallons a Minute in 1940. Two wells irrigated 450 acres of rice in 1941. Owner's No. 2. See log.
226	4½ miles northwest of Katy.	Campbell & Jones	W. M. Justman	1930	470	16, 12				T, E	Irr	Estimated yield, about 2,000 gallons a minute in 1940. Irrigated 400 acres of rice in 1941.
230	3 miles northwest of of Katy.	Francis Young	Southern Well Drilling Co.	1922	273	26, 12				None	N	Casing, 68 feet of 26-inch and 205 feet of 12-inch.
233	3½ miles west of Katy	J. Alt		1927	256	12				T. E, 40	Irr	Screen at 130 to 170 and 210 to 256 feet. Measured yield, 1,650 gallons a minute in 1940. Irrigated 146 acres of rice in 1941.
235	2¼ miles west of Katy	John Cope	I. W. Lawson	1932	175	[5] 24	2.9	49.1 62.6	Mar. 12, 1931 Jan. 15, 1942	T, E	Irr	Irrigated 175 acres of rice in 1941.
236	1¼ miles northwest of Katy.	W. J. Alderson	—— Jone	1904	174	48, 11¼, 8¼				T, E, 30	Irr	Casing, 60 feet of 48-inch, with one 8¼-inch and one 11½-inch well in bottom of pit. Irrigated 100 acres of rice in 1940. Unused in 1941.
238	3 miles northwest of Katy.	Francis Young	Delta Shurwell, Inc.	1936	280	12	0	63.0	Jan. 20, 1942	T, E, 60	Irr	Casing slotted from 9 to 33, 47 to 86, and 90 to 202 feet. Measured yield, 1,450 gallons a minute in 1940. Irrigated 200 acres of rice in 1941.
239	12 miles northwest of Katy.	Lyn Hebert	Norman Ginn	1939	828	30, 18, 12	.5	54.8	do	T, D	Irr	Estimated yield, 2,000 gallons a minute in 1940. Irrigated 385 acres of rice in 1941.
240	6¼ miles west of Katy.	B. Ray Woods	Delta-Shurwell, Inc.	1939	290	20, 14	0.5	59.4	Jan. 20, 1942	T, D	Irr	Casing, 148 feet of 20-inch and 142 feet of 14-inch; slotted opposite all sands below 80 feet. Used with well 255 to irrigate 370 acres of rice in 1941. Owner's No. 3.
241	11 miles northwest of Katy.	Dr. —— Harris	do	1938	905	18,12,10,8				T, D, 125	Irr	Casing, 130 feet of 18-inch; 307 feet of 12-inch; 150 feet of 10-inch; and 318 feet of 8-inch; slotted from 260 to 278, 395 to 435, 482 to 492, 567 to 585, and 883 to 903 feet. Yield, 1,800 gallons a minute when drilled. Irrigated 350 acres of rice in 1941.

See footnotes at end of table.

Records of wells in Waller County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level		Method of lift [2]	Use of water [3]	Remarks
								Below measuring point (feet) [1]	Date of measurement			
242	8 miles northwest of Katy.	Robichaux and Thompson.	Delta-Shurwell, Inc.	1939	555	18, 12, 8	1.0	61.1	Jan. 20, 1942	T, E	Irr	Casing, 130 feet of 18-inch; 277 feet of 12-inch; and 148 feet of 8-inch; 207 feet of slotted casing between 60 and 555 feet. Yield, 1,000 gallons a minute when drilled. Irrigated 360 acres of rice in 1941.
243	9¾ miles northwest of Katy.	Clyde M. Nelson	do	1939	810	18, 13	.5	45.1	do	T, E, 75	Irr	Slotted casing, 323 feet between 40 and 810 feet. Yield, 1,600 gallons a minute when drilled. Irrigated 360 acres of rice in 1941.
244	do	Perry Robertson	Ira Southard	1937	893	24, 12	1.0	75.3	Oct. 7, 1940	T, D	Irr	Estimated yield, 2,200 gallons a minute in 1940. Irrigated 525 acres of rice in 1941.
245	do	G. P. Nelson	Delta-Shurwell, Inc.	1939	482	20, 16, 12	0	59.0	Jan. 20, 1942	T, E, 75	Irr	Casing, 148 feet of 20-inch; 169 feet of 16-inch; and 169 feet of 12-inch; 288 feet of slotted casing between 51 and 482 feet. Irrigated 425 acres of rice in 1941. Owner's No. 2.
246	8½ miles northwest of Katy.	A. E. Thompson	Layne-Texas Co.	1937	926	18⅝, 12¾, 8⅝	1.0	53.0	do	T, E	Irr	Casing slotted from 145 to 166, 267 to 287, 464 to 523, 840 to 877, and 844 to 908 feet. Measured yield, 1,390 gallons a minute in 1940. Irrigated 300 acres of rice in 1941. Owner's No. 2.
247	6½ miles northwest of Katy.	T. B. Tucker	Delta-Shurwell, Inc.	1938	641	18, 12, 8	1.0	60.1	do	T, E, 40	Irr	Casing, 120 feet of 18-inch; 78 feet of 12-inch; and 443 feet of 8-inch; 181 feet of slotted casing between 75 and 630 feet. Used with well 223 to irrigate 460 acres of rice in 1941. Owner's No. 3.

248	7¼ miles northwest of Katy.	John and C. R. England.	do	1939	428	18, 12	2.0	61.0	do	T, D, 85	Irr	Casing, 120 feet of 18-inch and 298 feet of 12-inch. Yield, 1,700 gallons a minute with a draw-down of 38 feet when drilled. Used with well 269 to irrigate 609 acres of rice in 1941. Owner's No. 1.
249	6½ miles northwest of Katy.	J. V. Cardiff	ne-Texas Co	1940	586	18⅝, 13	.5	59.2	do	T, E, 60	Irr	Casing slotted from 151 to 243, 343 to 472, and 536 to 576 feet. Measured yield, 1,415 gallons a minute in 1940. Irrigated 385 acres of rice in 1941. Owner's No. 2.
250	13¾ miles northwest of Katy.	Roy Turner	Delta-Shurwell, Inc.	1940	846	24, 12¾	0	65.6	do	T, D, 90	Irr	Casing, 175 feet of 24-inch and 671 feet of 12¾-inch; 350 feet of slotted casing between 50 and 838 feet. Estimated yield, 2,000 gallons a minute in 1940. Irrigated 450 acres of rice in 1941. See log.
251	5¼ miles northwest of Katy.	J. V. Cardiff	Layne-Texas Co	1925	653	24, 12, 10				T, E, 50	Irr	Casing slotted from 136 to 198, 283 to 302, 344 to 364, and 583 to 623 feet. Irrigated 325 acres of rice in 1941. Owner's No. 1. See log.
252	2¼ miles northwest of Katy.	J. A. Kimball	do	1936	246	24, 12	.2	60.4	Jan. 15, 1942	T, E, 40	Irr	Casing slotted from 90 to 120, 125 to 146, 166 to 188, and 207 to 209 feet. Measured yield, 1,260 gallons a minute in 1940. Irrigated 200 acres of rice in 1941.
253	3¾ miles west of Katy	J. D. Woods	Delta-Shurwell, Inc.	1937	311	16, 8				T, D	Irr	Casing, 147 feet of 16-inch and 165 feet of 8-inch; 146 feet of slotted casing between 81 and 305 feet. Yield, 1,800 gallons a minute when drilled. Irrigated 350 acres of rice in 1940. Owner's No. 2.
254	3½ miles west of Katy	do	do	1935	165	16, 12				T, D	Irr	Casing slotted from 80 to 165 feet. Estimated yield, 1,400 gallons a minute. Irrigated 265 acres of rice in 1941. Owners' No. 1.
255	6 miles west of Katy	B. Ray Woods	do	1936	150	16, 8				T, D	Irr	Casing slotted from 80 to 150 feet. Measured yield, 1,210 gallons a minute in 1940. Used with well 240 to irrigate 370 acres of rice in 1941. Owner's No. 1.

See footnotes at end of table.

Records of Wells in Waller County—Continued

Well No.	Location	Owner	Driller	Date completed	Depth (feet)	Diameter (inches)	Height of measuring point above ground (feet)	Water level: Below measuring point (feet) [1]	Water level: Date of measurement	Method of lift [2]	Use of water [3]	Remarks
256	6¼ miles southwest of Katy.	Chester Jordan	Delta-Shurwell, Inc.	1936	335	16, 12				T, D, 60	Irr	Casing, 178 feet of 16-inch and 157 feet of 12-inch; slotted opposite all sands below 84 feet. Measured yield, 2,000 gallons a minute in 1940. Irrigated 440 acres of rice in 1941.
257	5½ miles northwest of Katy.	L. E. Morrison	Layne-Texas Co	1939	213	20, 12				T, E, 40	Irr	Screen at 56 to 122, 153 to 188, and 206 to 212 feet. Measured yield of wells 225 and 257, 1,500 gallons a minute in 1940. 2 wells irrigated 450 acres of rice in 1940. Owner's No. 3.
258	13¼ miles northwest of Katy.	Roy Turner			60	6	1.5	39.4	Aug. 12, 1940	C, W	S	
259	12 miles northwest of Katy.	C. B. Frazier	J. H. Bennett	1940	65	4	0	425	1940	C, H	D, S	Screen from 60 to 65 feet.
260	9½ miles northwest of Katy.	G. P. Nelson	Delta-Shurwell, Inc.	1941	990	20, 13, 10¾				T, D, 150	Irr	Casing, 200 feet of 20-inch; 306 feet of 13-inch; and 484 feet of 10¾-inch; 396 feet of slotted casing between 74 and 990 feet. Irrigated about 325 acres in 1941. Owner's No. 3.
261	10½ miles northwest of Katy.	G E. Longenbaugh	Norman Ginn	1941	585					T, E, 75	Irr	Irrigated 330 acres of rice in 1941.
262	8¼ miles northwest of Katy.	Robichaux and Thompson.			32	12, 8	1.5	23.0	Aug. 12, 1940	B, H	D	
263	7½ miles northwest of Katy.	Harry Hobert	Layne-Texas Co	1941	939	20, 13	1.0	59, 8	Oct. 28, 1941	T, D	Irr	Casing, 206 feet of 20-inch and 733 feet of 13-inch; slotted opposite all sands between 126 and 933 feet. Yield, 1,800 gallons a minute when drilled. Owner's No. 2.
264	6¾ miles northwest of Katy.	—— Loss			87	4	2.0	57.9	Apr. 27, 1940	C, W	S	

265	4 miles west of Katy	A. L. Short	Norman Ginn	1934	160	4				C, H, G, I	D, S	Screen from 154 to 160 feet.
266	5¾ miles west of Katy	J. D. Woods	J. D. Woods	1934	90	4				C, E, ¾	D, S	Screen from 87 to 90 feet.
267	7 miles west of Katy	G. E. Bains	—— Smith	1900	62	6	1.0	58.5	June 2, 1941	C, E	D, S	
268	do	W. F. Entrop		1937	84	4				C, W	D, S	Screen from 72 to 84 feet.
269	8 miles northwest of Katy	John and C. R. England.	Layne-Texas Co	1941	600	18⅝, 13	0	[4] 60	February 1942	T, E	Irr	Casing, 166 feet of 18⅝-inch and 434 feet of 13-inch; slotted opposite all sands between 86 and 485 feet. Yield, 1,700 gallons a minute with a draw-down of 41 feet when drilled. Used with well 248 to irrigate 600 acres of rice in 1941. Owner's No. 2.
270	5¾ miles west of Katy	J. D. Woods	Delta-Shurwell, Inc.	1937	85	4	0	[4] 58	1940	C, E	D, S	Screen from 81 to 85 feet.

[1] Plus (+) indicates water level is above ground.
[2] Pump or lift: T, Turbine; C, cylinder; A, air; B, rope and bucket. Power: E, electric; D, diesel; G, gasoline engine; W, windmill; H, hand. Figure indicates horsepower.
[3] Use of water: P, Public supply; Irr, irrigation; D, domestic; S, stock; O, oil field; N, none.
[4] Water level reported by driller or owner.
[5] Diameter at top; reduced at unknown depth.

DRILLERS' LOGS

Drillers' logs of wells in Harris County

Well 31, R. L. Burton, 10½ miles northwest of Cypress

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Soil	2	2	Sand	4	142
Clay	16	18	Broken sand and sand rock	23	165
Sand	29	47	Sand	20	185
Clay	2	49	Clay	4	189
Sand	10	59	Sand	32	221
Sand rock	1	60	Clay	20	241
Sand	22	82	Sand	55	296
Clay	7	89	Sand rock	1	297
Sand	48	137	Total depth		297
Sand rock	1	138			

Well 93, Missouri Pacific Lines, in Spring

Clay	82	82	Rock	2	571
Fine-grained sand	41	123	Sand	18	589
Clay	41	164	Rock	2	591
Sand	60	224	Sand	18	609
Clay	83	307	Gumbo	22	631
Sand	48	355	Gumbo and rock	163	794
Clay	38	393	Clay	39	833
Rock	2	395	Rock	3	836
Clay	11	406	Clay	4	840
Rock	8	414	Sand	22	862
Clay	32	446	Gumbo	41	903
Boulders and fine-grained sand	41	487	Shale	40	943
Lime rock	21	508	Gumbo	41	984
Gumbo	41	549	Sand, water	86	1,070
Rock	2	551	Total depth		1,070
Gumbo	18	569			

Well 155, E. B. Longenbaugh, 7¼ miles northwest of Katy

Soil	4	4	Boulders	6	285
Red clay and sand	48	52	Rock	1	286
Coarse-grained sand	16	68	Sand and gravel	51	337
Sand and gravel	30	98	Sand	2	339
Gravel	2	100	Gumbo	12	351
Gravel, with hard layers	30	130	Sand	75	426
Hard clay	3	133	Gumbo	3	429
Soft clay	31	164	Sand with layers of shale	28	457
Hard layers of sand	34	198	Sand	55	512
Gumbo	49	247	Clay	2	514
Clay	7	254	Total depth		514
Sand	25	279			

Well 225, Burlington-Rock Island Railroads, 11½ miles southeast of Cypress

Surface soil, clay, layers of rock and sand	100	100	Gumbo	100	470
Yellow clay	120	220	Soft gumbo	28	498
Coarse-grained sand	22	242	Rock	3	501
Rock	2	244	Gumbo	17	518
Sand	16	260	Rock	4	522
Clay and boulders	30	290	Gumbo and boulders	53	575
Coarse-grained sand	65	355	Sand and gravel	41	616
Clay	15	370	Total depth		616

Well 226, Frazer and Lapham, 6 miles east of Cypress

Sand and clay	104	104	Limestone and shale	65	445
Sand	15	119	Sand	40	485
Clay	13	132	Sandy clay	15	500
Sand	8	140	Sandstone and clay	8	508
Sand clay	8	148	Boulders and clay	17	525
Gravel	12	160	Limestone and sand	15	540
Sand	9	169	Clay	10	550
Clay	16	185	Sandy clay	13	563
Sand	20	205	Sandy shale	17	580
Clay	16	221	Sand	23	603
Sand	10	231	Gumbo	27	630
Clay	7	238	Sand	22	652
Sand	7	245	Clay	7	659
Clay	20	265	Sand and boulders	59	718
Sand	37	302	Clay	6	724
Clay	24	326	Sand	10	734
Sand and limestone	24	350	Clay	6	740
Limestone and clay	30	380	Total depth		740

Drillers' logs of wells in Harris County—Continued

Well 227, E. S. Hamilton, 5¼ miles southeast of Cypress

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay	17	17	Sandy clay	13	323
White sand	17	34	Clay, with hard layers	11	334
Clay	23	57	Red clay	45	379
White clay	18	75	White brittle clay	19	398
Clay	3	78	Layers of clay and sand	10	408
Sand and gravel	35	113	Clay	27	435
Clay	32	145	Sand and clay	23	458
Sand and gravel	31	176	Clay	12	470
Clay	3	179	Coarse-grained sand	18	488
Sand and gravel	11	190	Clay	5	493
Clay	37	227	Sand	18	511
Sand and gravel	55	282	Clay	16	527
Clay	3	285	Sand	16	543
Sand and gravel	5	290	Clay	22	565
Clay	20	310	Total depth		565

Well 301, J. H. Powell, 4¾ miles southeast of Humble

Soil	25	25	Sandy shale and sand	45	890
Brown sand, water	75	100	Gray gumbo	22	912
Soft gumbo	110	210	Hard sandy shale	6	918
Gravel and shell	20	230	Gumbo	67	985
Shale	110	340	Sandy shale	10	995
Gumbo	30	370	Gumbo	10	1,005
Sand	12	382	Sand	45	1,050
Gumbo and shale	36	418	Sandy shale	10	1,060
Hard sand	25	443	Gumbo	27	1,087
Gumbo	37	480	Sand	10	1,097
Sand, water	97	577	Gumbo	21	1,118
Gumbo	5	582	Sand	17	1,135
Sand, water	20	602	Gumbo	15	1,150
Gumbo and shale	93	695	Sand and blue sandy shale	10	1,160
Gravel	10	705	Blue gumbo	30	1,190
Hard sandy shale	10	715	Gumbo and sandy shale	10	1,200
Gumbo	10	725	Gumbo	10	1,210
Sand, water	40	765	Sand	50	1,260
Gumbo	10	775	Blue gumbo	28	1,288
Sand, water	70	845	Total depth drilled		2,108

Well 326, Gulf Pipe Line Co., 14 miles southeast of Humble

Soil	1	1	Sand	14	303
Clay	153	154	Gumbo	30	333
Sand	15	169	Sand	45	378
Gumbo	77	246	Gumbo	116	494
Sand	6	252	Sand	39	533
Gumbo	37	289	Total depth		533

Well 350, W. C. Stockdick, 5¾ miles northeast of Katy

Clay	26	26	Clay	8	348
Clay and gravel	5	31	Rock and sand	21	369
Clay	57	88	Shale	30	399
Gravel	14	102	Clay and boulders	47	446
Clay	43	145	Sand	22	468
Limestone and sand	38	183	Clay	20	488
Clay	10	193	Sand	8	496
Limestone layers	14	207	Clay	13	509
Gumbo	9	216	Sand	20	529
Porous limestone	8	224	Sandy shale	40	569
Clay	6	230	Clay	29	598
Sand, boulders and rock	65	295	Sandy clay	19	617
Boulders and clay	13	308	Sand	42	659
Limestone and sand	32	340	Total depth		659

Drillers' logs of wells in Harris County—Continued

Well 353, A. E. Thompson, 5¼ miles north of Katy

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay	18	18	Soft clay and boulders	37	736
Quicksand	20	38	Brown shale	9	745
Tough red clay	37	75	Hard rock	7	752
Gravel, water	53	128	Sand and gravel	16	768
Sand and hard rock	35	163	Blue clay	5	773
Boulders and clay	40	203	Sand and gravel	30	803
Sand and gravel	41	244	Blue gumbo and rock	31	834
Shale, rock	3	247	Sand, water	12	846
Soft clay	35	282	Blue gumbo and hard rock	27	873
Boulders and clay	22	304	Clay	97	970
Hard rock	2	306	Gumbo	20	990
Tough blue and red gumbo	25	331	Sand	22	1,012
Clay and boulders	15	346	Clay	4	1,016
Hard rock	3	349	Sand	3	1,019
Sand and gravel	12	361	Clay	1	1,020
Boulders and clay	43	404	Sand	10	1,030
Sand, gravel and water	50	454	Clay and gumbo	28	1,058
Blue shale and iron rock	3	457	Rock	4	1,062
Gravel and clay	64	521	Sand	8	1,070
Blue shale	22	543	Rock	4	1,074
Boulders and clay	72	615	Gumbo and soft clay	67	1,141
Hard rock	2	617	Gravel and clay	14	1,155
Fine-grained sand	10	627	Gumbo and clay	36	1,191
Hard red clay	38	665	White sand	27	1,218
Rock, with hard and soft layers	15	680	Gumbo	22	1,240
Fine-grained sand	4	684	Sand, water	18	1,258
Hard rock	10	694	Hard rock, gumbo and clay	344	1,602
Fine-grained sand	5	699	Total depth		1,602

Well 370, J. M. Johnson No. 1, 3¼ miles east of Katy

Sandy soil	3	3	Sand and gravel	16	368
Clay	20	23	Hard rock	3	371
Sand	10	33	Clay	7	378
Clay	61	94	Hard rock	2	380
Sand and gravel	37	131	Tough gumbo	23	403
Soft clay	40	171	Sand and gravel	17	420
Hard sand and gravel	56	227	Gumbo	27	447
Soft clay	34	261	Clay and small boulders	61	508
Sand	10	271	Gumbo	26	534
Soft clay	25	296	Hard sand	80	614
Hard sand and gravel	33	329	Gumbo	4	618
Soft clay	13	342	Hard sand	7	625
Boulders	10	352	Total depth drilled		625

Well 480, John Pillot, 19¼ miles west of Houston

Silt and clay	22	22	Sand	47	387
White sand	11	33	Clay	14	401
Clay	74	107	Sand and rock	43	424
Sand	24	131	Clay	9	433
Clay	7	138	Sand with streaks of lime	19	452
Sand	4	142	Clay	8	460
Clay	17	159	Sand	10	470
Sand	77	236	Clay	8	478
Blue gumbo	28	264	Sand	34	512
Sand and gravel	39	303	Total depth		512
Clay and shale	17	320			

Well 553, River Oaks Country Club No. 2, Houston

Soil	2	2	Sand	12	466
Red clay	12	14	Clay	5	471
White sand	36	50	Sand	46	517
White sand with layers of sand	40	90	Sandy clay	51	568
Clay with layers of sand	70	160	Fine-grained sand	26	594
Red clay	51	211	Clay	13	607
Sand	35	246	Sand	14	621
Clay	10	256	Clay	4	625
Sand	28	284	Sand	45	670
Clay	33	317	Clay	25	695
Sand	12	329	Sand	13	708
Clay	26	355	Sandy clay	5	713
Sand	11	366	Fine-grained sand	35	748
Layers of sand and rock	6	372	Sand and clay	40	788
Sand	20	392	Fine-grained sand	33	821
Clay	35	427	Sand	63	884
Sand	23	450	Clay	40	924
Clay	4	454	Total depth		924

Drillers' logs of wells in Harris County—Continued

Well 589, City of Houston, Heights 5

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Soil	8	8	Sandy shale	35	1,026
Clay	18	26	Tough gumbo	27	1,053
Sand	22	48	Fine-grained sand	57	1,110
Clay	69	117	Sand and layers of gumbo	15	1,125
Sandy clay	30	147	Gumbo	51	1,176
Clay	29	176	Sandy clay	5	1,181
Sandy clay	20	196	Sand	38	1,219
Clay	41	237	Fine-grained sand and shale	22	1,241
Sand	15	252	Gumbo	76	1,317
Clay	10	262	Sand	8	1,325
Sand and shale	23	285	Gumbo	5	1,330
Clay and gravel	18	303	Fine-grained hard sand	15	1,345
Clay	31	334	Gumbo	70	1,415
Sandy clay	22	356	Hard sandy shale and bowlders	22	1,437
Hard clay and boulders	30	386	Gumbo	11	1,448
Hard sand	5	391	Gumbo and boulders	5	1,453
Sand, water	20	411	Gumbo	40	1,493
Clay	22	433	Sand and gumbo	14	1,507
Sand	20	453	Gumbo	55	1,562
Sandy clay	18	471	Hard sandy shale	16	1,578
Gumbo	25	496	Gumbo	18	1,596
Clay and gravel	65	561	Sand and shale	17	1,613
Sand	14	575	Sand	22	1,635
Gumbo and boulders	47	622	Hard sand with layers of shale	26	1,661
Sand	21	643	Shale	12	1,673
Gumbo	33	676	Gumbo	18	1,691
Sand	38	714	Shale, sand and water	36	1,727
Sand and shale	29	743	Gumbo	53	1,780
Hard sand	12	755	Shale, sand and water	33	1,813
Gumbo	10	765	Gumbo	8	1,821
Sand	40	805	Hard shale and sand	22	1,843
Layers of sand and shale	21	826	Rock	2	1,845
Gumbo	35	861	Hard shale and sand	2	1,847
Sand	36	897	Sand	4	1,851
Tough gumbo	76	973	Rock	1	1,852
Sand and shale	14	987	Sand and shale	13	1,865
Gumbo with layers of sand and shale	4	991	Gumbo and shale	225	2,090
			Total depth drilled		2,090

Well 610, Standard Rice Co. Inc., Houston

Soil and clay	20	20	Packsand	8	500
Sand	10	30	Hard gumbo	25	525
Clay	30	60	Gravel	15	540
Sand	15	75	Hard gumbo	27	567
Gumbo	83	158	Sand	18	585
Blue shale	12	170	Gumbo	92	677
White gumbo	90	260	Hard shale	10	687
Blue shale	20	280	Hard rock	5	692
Coarse-grained sand	15	295	Packsand	40	732
Packsand	10	305	Gumbo	5	737
Hard rock	3	308	Sand	19	756
Soft rock	4	312	Gumbo	4	760
Gumbo	88	400	Sand	78	838
Shale	20	420	Gumbo	2	840
Sand	60	480	No record	13	853
Clay and boulders	12	492	Total depth		853

Well 641, Rice Hotel Laundry, Houston

Soil	7	7	Sand	25	681
Clay	18	25	Tough clay	53	734
Clay and streaks of sand	150	175	Sand	65	799
Sand	25	200	Shale with layers of sand	38	837
Tough clay	64	264	Sand and hard breaks	45	882
Sand	15	279	Sand and shale layers	88	970
Tough clay	31	310	Tough shale	14	984
Hard sand	63	373	Hard layers of sand	42	1,026
Tough clay	10	383	Sand and shale layers	12	1,038
Sand	32	415	Tough shale	8	1,046
Tough clay	40	455	Tough sticky shale	44	1,090
Sand and few clay breaks	67	522	Tough shale	37	1,127
Sand	21	543	Tough shale with sand layers	55	1,182
Hard sand	8	551	Sand	74	1,256
Tough clay	3	554	Shale	40	1,296
Rock	2	556	Sand	29	1,325
Tough clay	12	568	Sand and shale breaks	73	1,398
Sand	32	600	Tough shale	11	1,409
Tough clay	16	616	Sand with layers of shale	41	1,450
Sand	9	625	Shale	52	1,502
Tough clay	31	656	Total depth		1,502

Drillers' logs of wells in Harris County—Continued

Well 728, Burkhart Laundry, Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Surface and clay	147	147	Boulders	8	772
Sand	12	159	Sand and boulders	21	793
Gumbo	23	182	Sand and gravel	24	817
Fine-grained sand	21	203	White rock and sand	38	855
Sand	51	254	Rock	6	861
Fine-grained sand	51	305	Gumbo	6	867
Shale	17	322	Sand and boulders	50	917
Sand	57	379	Gumbo and shale	13	930
Rock	1	380	Sand and boulders	56	986
Boulders	10	390	Rock	28	1,014
Gumbo	12	402	Sand and boulders	53	1,057
Sand	20	422	Gumbo	28	1,095
Boulders	4	426	Boulders	5	1,100
Gumbo	44	470	Gumbo	141	1,241
Hard sand	30	500	Sand	51	1,292
Fine-grained sand	19	519	Gumbo	5	1,297
Sand	21	540	Sand	14	1,311
Layers of sand, rock and gumbo	12	552	Gumbo	5	1,316
Rock and gumbo	44	596	Sand	13	1,329
Gumbo	42	638	Gumbo	39	1,368
Layers of sand and gumbo	34	672	Sand and gravel	44	1,412
Sand and boulders	28	700	Total depth drilled		1,412
Gumbo	64	764			

Well 744, City of Houston, Northeast 1

Rotary to surface	5	5	Sand, water	8	1,276
Shale	107	112	Blue shale	36	1,312
Shale and fine-grained sand	18	130	Sand, water	8	1,320
Shale	15	145	Hard gummy sand	11	1,331
Sand	42	187	Gumbo and boulders	39	1,370
Gumbo and shale	105	292	Sand rock	2	1,372
Sand	3	295	Boulders	20	1,392
Gumbo and shale	17	312	Blue shale	7	1,399
Gumbo and boulders	90	402	Sand and shale	49	1,448
Rock	14	416	Gumbo, boulders, and hard sand	39	1,487
Gumbo, shale, and lime	36	453	Ledges of rock	62	1,549
Sandy shale	10	462	Sand, shale, and boulders	15	1,564
Shale and gumbo	3	465	Sand	10	1,574
Sand and shale	3	468	Boulders and rock	57	1,631
Sand and boulders	3	471	Gumbo	53	1,634
Gumbo and boulders	70	541	Rock	2	1,686
Sand	96	637	Sand	2	1,688
Shale and boulders	2	639	Gumbo and shale	102	1,790
Shale and sand	29	668	Rock	2	1,792
Shale and gumbo	22	690	Sandy shale	9	1,801
Sand and gravel	34	724	Fine-grained sand	31	1,832
Shale and gumbo	48	772	Sand	12	1,844
Rock, shale, and lime	32	804	Shale	6	1,850
Gumbo	12	816	Sand	26	1,876
Gumbo, lime, and boulders	40	856	Gumbo	23	1,899
Tough gumbo	43	899	Hard shale	11	1,910
Sand	10	909	Gray sandy shale	3	1,913
Gumbo	12	921	Blue sand and pink shale	10	1,923
Sand and boulders	104	1,025	Pink shale	8	1,931
Sand	15	1,040	Shale	5	1,936
Shale and gumbo	60	1,100	Gumbo	40	1,976
Boulders	12	1,112	Broken lime	8	1,984
Sand	8	1,120	Blue shale	29	2,013
Sand rock	8	1,128	Gumbo	52	2,065
Boulders	34	1,162	Sand	40	2,105
Hard gummy sand	10	1,172	Sand and boulders	26	2,131
Gumbo	40	1,212	Gumbo	3	2,134
Hard sand	8	1,220	Sand	12	2,146
Sand and gravel	33	1,253	Gumbo	4	2,150
Gummy sand	15	1,268	Total depth drilled		2,150

Drillers' logs of wells in Harris County—Continued

Well 788, Shepherd Laundries, Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Surface soil and clay	20	20	Sand	5	776
Surface sand	4	24	Gumbo and boulders	22	798
Clay	21	45	Sand and boulders	22	820
Red sand	15	60	Gumbo and boulders	44	864
Clay	145	205	Sand and gravel	61	925
Shale and sand	20	225	Rock	5	930
Sand	20	245	Gumbo and boulders	2	932
Shale	11	256	Sand and gravel	56	988
Sand	21	277	Gumbo	15	1,003
Shale	51	328	Sand	73	1,076
Coarse-grained sand	42	370	Hard rock	1	1,077
Gumbo	27	397	Gumbo	4	1,081
Sand and boulders	9	406	Fine-grained sand and boulders	30	1,111
Gumbo	10	416	Gumbo	115	1,226
White rock and sand	20	436	Sandy shale	61	1,287
Hard sandy shale	8	444	Gumbo	12	1,299
Gumbo	35	479	Sand and boulders	12	1,311
Hard sandy shale	20	499	Gumbo	12	1,323
Sand and gravel	29	528	Sand	40	1,363
Gumbo	53	581	Gumbo	3	1,366
Hard gummy sand	22	603	Sand	12	1,378
Hard sand and white rock	19	622	Gumbo	4	1,382
Sandy shale	7	629	Sand	7	1,389
Sand and boulders	37	666	Gumbo	6	1,395
Sand, water	40	706	Sand and gravel	21	1,416
Gumbo and boulders	43	749	Total depth		1,416
Gumbo	22	771			

Well 793, City of Houston, South End 5

Surface	6	6	Sand	17	1,058
Fine-grained sand	6	12	Hard shale	4	1,062
Clay	20	32	Sandy shale	30	1,092
Sand	22	54	Gumbo	10	1,102
Rock	1	55	Sand, with hard layers	26	1,128
Sand	11	66	Gumbo	38	1,166
Clay	267	333	Shale	21	1,187
Sand	70	403	Gumbo	79	1,266
Sandy clay	38	441	Sand, with hard layers	13	1,279
Sand	21	462	Rock	1	1,280
Clay	41	503	Layers of sandy shale	12	1,292
Sand	11	514	Gumbo	36	1,328
Clay, some sand and gravel	39	553	Sand, with hard layers	69	1,397
Sandy shale	12	565	Sandy shale	3	1,400
Gumbo	2	567	Rock	1	1,401
Sand	4	571	Layers of sand and shale	23	1,424
Gumbo and shale	11	582	Gumbo	19	1,443
Sand	16	598	Sand with streaks of shale	58	1,501
Sandy shale	73	671	Sand	35	1,536
Sand	26	697	Gumbo	7	1,543
Sandy shale	14	711	Layers of sand and shale	15	1,558
Sand	52	763	Sand	38	1,596
Sandy shale	10	773	Gumbo and shale	94	1,690
Sand	23	796	Sand	14	1,704
Gumbo	4	800	Shale and boulders	6	1,710
Sand, with hard streaks	46	846	Rock and shale	18	1,728
Gummy shale	12	858	Gumbo	6	1,734
Sand with streaks of shale	30	888	Sand	2	1,736
Gumbo	35	923	Rock and gumbo	278	2,014
Sand and shale	29	952	Sandy shale	4	2,018
Shale	11	963	Gumbo	45	2,063
Sand with streaks of shale	14	977	Sandy shale	13	2,076
Shale	11	988	Gumbo	32	2,108
Hard sand with streaks of shale	19	1,007	Sand	13	2,121
Shale	5	1,012	Total depth drilled		2,121
Sand with streaks of shale	29	1,041			

Well 815, Greenwood Sanitarium, 5 miles southwest of Houston

Soil and clay	24	24	Gumbo	149	557
Sand	8	32	Packsand	49	606
Joint clay	108	140	Gumbo and clay	86	692
Sand	20	160	Gumbo	22	714
Clay	19	179	Sand, water	66	780
Gumbo	112	291	Gumbo	21	801
Joint clay	19	310	Sand, water	78	879
Gumbo	77	387	Gumbo	13	892
Shale	21	408	Total depth		892

Drillers' logs of wells in Harris County—Continued

Well 841, Houston Country Club No. 2, Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Rotary	4	4	Sand	10	564
Soil	4	8	Shale	3	567
White clay	12	20	Sand	2	569
Red clay and fine-grained sand	55	75	Shale	8	577
Red shale	25	100	Sand	7	584
Fine-grained sand	20	120	Tough shale	48	632
Red shale	62	182	Sand	10	642
Soft shale and sand	28	210	Shale	22	664
Tough shale	21	231	Sand	18	682
Sand	9	240	Tough shale	15	697
Shale and sand	28	268	Fine-grained sand	20	717
Sand	10	278	Shale	11	728
Tough shale	106	384	Tough shale	16	744
Sand	42	426	Shale, lime and gravel	24	768
Shale	53	479	Small gravel and sand	9	777
Sand	13	492	Tough shale	53	830
Gumbo	16	508	Soft shale	17	847
Shale	12	520	Shale with layers of sand	17	855
Sand	12	532	Sand, water	44	899
Soft shale	22	554	Total depth		899

Well 850, Reed Roller Bit Co. No. 2, Houston

Surface soil	12	12	Gumbo	33	515
Sand	18	30	Gravel	8	523
Clay	95	125	Shale	6	529
Packsand	40	165	Shale and gravel	36	565
Gumbo	95	260	Gumbo	50	615
Sand	22	282	Sand and gravel	70	685
Gumbo	49	331	Gumbo	17	702
Sand and boulders	34	365	Gumbo and boulders	43	745
Gumbo and boulders	20	385	Sand and gravel	47	792
Sand	25	410	Gumbo	8	800
Gumbo	42	452	Sand and gravel	47	847
Sand	30	482	Total depth		847

Well 860, Henke & Pillot, Houston

Clay	6	6	Gumbo	2	551
Sand	10	16	Sand	46	597
Clay	20	36	Gumbo	13	610
Sand	5	41	Shale	33	643
Clay	198	239	Sand	15	658
Sand	25	264	Shale	68	726
Clay	72	336	Sand	6	732
Sand	46	382	Gumbo	33	765
Gumbo	47	429	Sand	30	795
Sand rock	2	431	Shale	44	839
Sand	27	458	Sand	64	903
Gumbo	55	513	Gumbo	5	908
Sand	36	549	Total depth		908

Well 890, Consolidated Chemical Co. No. 2, Houston

Soil	2	2	Sand	81	807
Clay	10	12	Gumbo	21	828
Sand	8	20	Sand	11	839
Joint clay	151	171	Gumbo	32	871
Sand	27	198	Shale	33	904
Tough clay	90	288	Gumbo	18	922
Sand	19	307	Sand and boulders	30	952
Tough clay	62	369	Hard packsand	34	986
Clay and boulders	10	379	Gumbo and boulders	15	1,001
Tough clay	45	424	Packsand	17	1,018
Sand	12	436	Shale	4	1,022
Tough clay	63	499	Hard rock	1	1,023
Sand rock	22	521	Packsand	19	1,042
Clay	18	539	Gumbo	7	1,049
Packsand	17	556	Loose sand	52	1,101
Clay	6	562	Gumbo	23	1,124
Sand	10	572	Loose sand	23	1,147
Tough clay	14	586	Tough gumbo	27	1,174
Packsand	40	626	Soft shale	45	1,219
Clay and boulders	16	642	Gumbo	22	1,241
Gumbo	24	666	Sand	39	1,280
Sand	10	676	Gumbo	4	1,284
Clay and boulders	26	702	Total depth drilled		1,284
Clay	24	726			

Drillers' logs of wells in Harris County—Continued

Well 895, City of Houston, East End 1

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay	159	159	Gumbo	22	1,120
Shale	63	222	Sand	44	1,164
Sand	43	265	Gumbo	13	1,177
Gumbo	89	354	Sand	25	1,202
Sand	37	391	Gumbo	23	1,225
Gumbo	72	463	Sand	5	1,230
Sand	44	507	Gumbo	5	1,235
Gumbo	10	517	Sand	33	1,268
Sand	26	543	Gumbo	95	1,363
Gumbo	74	617	Hard shale	63	1,426
Sand	51	668	Gumbo	42	1,468
Gumbo	134	802	Shale	33	1,501
Coarse-grained sand	55	857	Gumbo	23	1,524
Gumbo	79	936	Sand	54	1,578
Sand	71	1,007	Gumbo	5	1,583
Gumbo	18	1,025	Sand	81	1,664
Sand	73	1,098	Total depth drilled		1,664

Well 906, Garden Villas Subdivision No. 2, 7¾ miles southeast of Houston

Soil	3	3	Gumbo	33	612
Clay	39	42	Hard shale	28	640
Sandy clay	5	47	Sand	10	650
Clay	3	50	Clay	5	655
Sand	18	68	Sand	20	675
Clay	17	85	Hard shale	51	726
Hard clay	45	130	Gumbo	20	746
Clay	59	189	Hard shale	5	751
Clay with streaks of sand	10	199	Soft shale	12	763
Clay	56	255	Hard shale	5	768
Hard sand with clay layers	15	270	Sand	28	796
Gumbo	64	334	Clay	29	825
Fine-grained sand	5	339	Sand and gravel	45	870
Sandy gumbo	44	383	Clay	5	875
Sand	10	393	Sand	23	898
Gumbo with layers of sand	32	425	Clay	2	900
Gumbo	79	504	Sand	5	905
Sand	8	512	Clay	3	908
Gumbo	59	571	Total depth		908
Sand	8	579			

Well 1140, Sinclair Refining Co. No. 8, 8¼ miles southeast of Houston

Soil	4	4	Gumbo	10	989
Clay	16	20	Sand	13	1,002
Sand	6	26	Gumbo	6	1,008
Clay	138	164	Sand	48	1,056
Sand	15	179	Gumbo	27	1,083
Clay	73	252	Sand	34	1,117
Sand	12	264	Gumbo	20	1,137
Clay	8	272	Hard sand	48	1,185
Sand	78	350	Sand	36	1,221
Clay	43	393	Gumbo	133	1,354
Sand	25	418	Hard layer of shale	1	1,355
Clay	30	448	Sand	54	1,409
Sand	35	483	Hard layer of shale	1	1,410
Clay	39	522	Sand	20	1,430
Sand	30	552	Gumbo	55	1,485
Clay	66	618	Sand	17	1,502
Sand	45	663	Hard layer of shale	1	1,503
Sand and clay layers	79	742	Sand	37	1,540
Sand	102	844	Gumbo	35	1,575
Gumbo	26	870	Sand	130	1,705
Sand	109	979	Total depth drilled		1,705

Drillers' logs of wells in Harris County—Continued

Well 1172, The Texas Co. No. 5, 8¼ miles southeast of Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Clay	267	267	Sand	10	903
Sand	5	272	Gumbo	43	946
Clay	10	282	Sand	24	970
Sand	28	310	Gumbo	15	985
Clay	6	316	Sand	19	1,004
Gumbo	61	377	Gumbo	42	1,046
Sand	21	398	Sand rock	2	1,048
Gumbo	73	471	Sand	61	1,109
Gumbo and boulders	22	493	Gumbo	7	1,116
Gumbo	21	514	Sand	18	1,134
Gumbo and boulders	21	535	Gumbo	2	1,136
Gumbo	69	604	Sand	18	1,154
Sand	63	667	Gumbo	73	1,227
Gumbo	103	770	Gumbo and boulders	23	1,250
Sand	22	792	Gumbo	60	1,310
Gumbo	52	844	Rock	4	1,314
Sand	10	854	Sand	59	1,373
Gumbo	10	864	Gumbo	3	1,376
Sand	24	888	Total depth		1,376
Gumbo	5	893			

Well 1199, Shell Oil Co. Inc. No. 3, 14 miles east of Houston

Clay	80	80	Gumbo	32	562
White sand	45	125	Sand with shale streaks	28	590
Shale and sand	52	177	Hard sand	39	629
Clay	59	236	Shale and hard shell	36	665
Hard sand	18	254	Sand	48	713
Sticky shale	81	335	Shale and gumbo	28	741
Sand, water	155	490	Sand, water	119	860
Gumbo	30	520	Total depth		860
Hard sand	10	530			

Well 1269, City of West University Place No. 4, Houston

Soil	4	4	Shale	5	651
Clay	8	12	Sand	74	725
Red sand	10	22	Clay and sand streaks	11	736
Clay	5	27	Sand and clay breaks	31	767
Sandy clay	10	37	Clay	4	771
Red clay	13	50	Sand	26	797
Red fine-grained sand	11	61	Sticky shale	35	832
Red clay	43	104	Sand	8	840
Fine-grained sand and clay	24	128	Clay	9	849
Red clay	18	146	Sand	20	869
Sand	14	160	Shale	26	895
Blue and red clay	127	287	Rock	1	896
Sand	11	298	Sand and shale	12	908
Clay	28	326	Hard shale	34	942
Sand	15	341	Sand	29	978
Clay and sand streaks	20	361	Hard shale	17	981
Sand	34	395	Sand	28	1,012
Shale	8	403	Shale	9	1,026
Sand	43	446	Sand	37	1,065
Hard shale	20	466	Shale and streaks of sand	26	1,088
Sand	23	489	Sand	40	1,128
Shale and sand	17	506	Shale	15	1,143
Shale	10	516	Sand	23	1,167
Sand	19	535	Clay	31	1,196
Hard shale	11	546	Rock	1	1,198
Hard sand	24	570	Sand	6	1,204
Shale	12	582	Clay with streaks of sand	9	1,213
Sand	19	601	Sand	16	1,229
Shale	8	609	Hard shale	41	1,270
Broken sand and shale	17	626	Total depth drilled		1,270
Hard sand	20	646			

Drillers' logs of wells in Harris County—Continued

Well 1284, Harris County No. 4, 7¾ miles southwest of Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Surface soil	14	14	Gumbo	18	458
Tight caliche	11	25	Sand	7	465
White sand	17	42	Shale	8	473
Red sand	7	49	Sand	27	500
Boulders	5	54	Packsand and boulders	21	521
Red shale	73	127	Boulders	2	523
Fine-grained sand	19	146	Gumbo	19	542
Gumbo	28	174	Sandy shale	68	610
Sand	14	188	Coarse-grained sand	65	675
Sandy shale	28	216	Gumbo	15	690
Hard shale	7	223	Sand and gravel	30	720
Sand	5	228	Gumbo and boulders	24	744
Hard shale	60	288	Sand and gravel	26	770
Sand	5	293	Gumbo	10	780
Gumbo	50	343	Total depth		780
Coarse-grained sand	100	443			

Well 1300, U. S. War Department No. 1, 15 miles southeast of Houston

Soil	3	3	Sandy clay	15	334
Broken clay	21	24	Sand	10	344
Sand	14	38	Clay	19	363
Clay	16	54	Sand	27	390
Sand and gravel	26	80	Clay	26	416
Sandy clay	20	100	Sandy clay	10	426
Hard clay	12	112	Sand	150	576
Clay	148	260	Clay	7	583
Sand	16	276	Total depth		583
Clay	43	319			

Well 1366, Galveston-Houston Electric Co., 22¾ miles southeast of Houston

Clay	24	24	Sand	16	502
Sand	12	36	Gumbo	32	534
Clay	14	50	Sand	51	585
Sand	54	104	Gumbo	24	609
Clay	14	118	Sand	44	653
Sand	116	234	Gumbo	82	735
Clay	67	301	Sand	8	743
Gumbo	125	426	Gumbo	45	788
Sand	16	442	Total depth		788
Gumbo	44	486			

Well 1374, Harris County Fresh Water District No. 5, 9 miles east of Houston

Black surface soil	2	2	Layers of tough shale	30	464
White clay	9	11	Sand	7	471
White sand	9	20	Layers of tough shale	29	500
Clay	2	22	Fine-grained sand	18	518
White sand	17	39	Tough sticky shale	56	574
Clay	17	56	Fine-grained sand	10	584
Sand	14	70	Tough sticky shale	11	595
Red clay	42	112	Sand	38	633
Hard layers of sand and clay	49	161	Tough sticky shale	10	643
Red and blue clay	20	181	Sand	22	665
Sand	45	226	Tough sticky shale	15	680
Clay	111	337	Sand	24	704
Sandy clay	18	355	Shale	4	708
Hard clay	32	387	Sand	4	712
Tough sticky shale	21	408	Hard shale	6	718
Broken sand and shale	5	413	Sand	24	742
Tough sticky shale	17	430	Tough shale	8	750
Broken sand and shale	4	434	Total depth		750

Drillers' logs of wells in Harris County—Continued

Well 1394, Southern Pacific Co., Houston

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Surface clay	15	15	Hard layers of sand	25	519
Sandy clay	10	25	Sand and clay	10	529
Clay	31	56	Sand	58	587
Sandy clay	43	99	Sand and clay	10	597
Clay	65	164	Sand	25	622
Clay with layers of sand	39	203	Clay	15	637
Sand	25	228	Sand	36	673
Sand with layers of clay	30	258	Clay and sand	5	678
Clay	18	276	Gumbo	32	710
Sand	15	291	Hard layers of sand	31	741
Clay	37	328	Gumbo with hard layers of sand	24	765
Clay and sand	24	352	Hard layers of sand	32	797
Clay	22	374	Gumbo	8	805
Sand	39	413	Sand	106	911
Clay	58	471	Gumbo	8	919
Clay and sand	23	494	Total depth		919

Well 1402, Missouri Pacific Lines, Houston

Surface soil	12	12	Brown shale	33	575
Sand	10	22	Gumbo	10	585
Yellow clay	79	101	Sand and boulders	10	595
Brown sand	15	116	Gumbo	33	628
Red clay	46	162	Sand and gravel	58	686
Packsand	45	207	Gumbo	32	718
Clay and red shale	35	242	Sand and gravel	33	751
Sand and fine gravel	13	255	Sand	11	762
Tough clay	15	270	Sand and gravel	53	815
Packsand	45	315	Gumbo	20	835
Gumbo	50	365	Hard sand	8	843
Sand and gravel	8	373	Rock	1	844
Gumbo	10	383	Coarse gravel	32	876
Sand and rock	15	398	Gumbo	72	948
Rock	1	399	Sand	35	983
Gumbo	23	422	Gumbo	17	1000
Packsand and boulders	120	542	Total depth		1000

Well 1414, Harris County Water Control and Improvement District No. 3, 5 miles northwest of Houston

Sandy soil	3	3	Hard white clay	53	536
Clay	8	11	Sand	47	583
White sand	15	26	Clay	19	602
Red Sand	27	53	Sand with layers of rock	29	631
Red Clay	51	104	Clay	18	649
Hard blue and white clay	32	136	Sand	16	665
Blue, white and brown clay	99	235	Sandy clay	11	676
Sand	48	283	Sand	88	764
Clay	13	296	Clay	25	789
Sand and clay	21	317	Sand	21	810
Clay and sand breaks	34	351	Clay	81	891
Sand	72	423	Sand	34	925
Hard sandy clay	60	483	Total depth drilled		925

Drillers' logs of wells in Fort Bend County

Well 1, Pecan Acres, Inc., 10½ miles southwest of Katy

Clay	43	43	Fine-grained sand	3	121
Fine-grained sand	10	53	Rock	1	122
Coarse-grained sand	47	100	Clay	13	135
Clay	12	112	Medium-grained sand	68	203
Rock	1	113	Gumbo	2	205
Fine-grained sand	4	117	Total depth		205
Rock	1	118			

Drillers' logs of wells in Fort Bend County—Continued

Well 16, C. C. Cardiff, 4½ miles southwest of Katy

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Surface	3	3	Sand	70	409
Clay	42	45	Clay	10	419
Sand	65	110	Rock	1	420
Clay	5	115	Hard packsand	18	438
Sand	60	175	Rock	2	440
Sand and gravel	25	200	Sand	8	448
Rock	3	203	Clay	92	540
Clay	14	217	Rock	2	542
Sand, with hard streaks	55	272	Clay	18	560
Rock	10	282	Sand	10	570
Coarse-grained sand	33	315	Sand and gravel	65	635
Fine-grained sand	16	331	Clay	18	653
Clay	8	339	Total depth drilled		653

Well 18, Sam Poorman, 5¾ miles southwest of Katy

No record, pit	132	132	Rock	5	373
Sand and gravel	10	142	Sand	12	385
Yellow clay	1	143	Boulders	8	393
Sand and gravel	47	190	Rock	7	400
Gumbo	4	194	Gumbo	25	425
Rock	3	197	Gumbo, boulders and rock	185	610
Sand and gravel	15	212	Gumbo	35	645
Gumbo	3	215	Sand	10	655
Rock	4	219	Rock	2	657
Gumbo	35	254	Sand	10	667
Boulders and gumbo	61	315	Rock	4	671
Rock	10	325	Gumbo	12	683
Sand	12	337	Sand and gravel	30	713
Rock	6	343	Gumbo	10	723
Sand and gravel	25	368	Total depth		723

Well 35, C. Pillot, 10¼ miles southeast of Katy

Clay	22	22	Sand	30	412
Fine-grained sand	6	28	Clay	10	422
Clay	107	135	Sand	4	426
Sand	80	215	Clay	5	431
Clay	26	241	Sand	27	458
Sand	14	255	Clay	9	467
Clay	17	272	Sand	14	481
Sand	74	346	Clay	4	485
Clay	9	355	Sand	12	497
Sand	16	371	Clay	3	500
Clay	11	382	Total depth		500

Well 64, Balke Electric Co., 21 miles southeast of Katy

Clay	15	15	Shale	20	180
Sand	9	24	Clay	25	205
Clay	14	38	Sand	7	212
Sand	12	50	Clay	48	260
Limestone	12	62	Sand	37	297
Clay	98	160	Total depth		297

Drillers' logs of wells in Waller County

Well 120, Prairie View State College No. 2, in Prairie View

Surface soil	20	20	Clay	90	445
Red sand	60	80	Rock (?)	38	483
Clay	220	300	Sand	50	533
Soft rock	1	301	Clay	17	550
Packsand	30	331	Sand	21	571
Clay	23	354	Total depth		571
Hard rock	1	355			

Drillers' logs of wells in Waller County—Continued

Well 225, L. E. Morrison, 5¼ miles northwest of Katy

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Sandy soil	2	2	Rock	1	332
Clay	15	17	Fine-grained sand	17	349
Sand	10	27	Tough gumbo	8	357
Clay	27	54	Rock	1	358
Coarse-grained sand	25	79	Gumbo	27	385
Clay	10	89	Medium-grained sand	60	445
Sand and gravel	12	101	Gumbo	6	451
Gumbo	35	136	Shale	12	463
Rock	3	139	Tough gumbo	24	487
Tough gumbo	21	160	Sand	12	499
Sand and corase gravel	11	171	Gumbo	8	507
Rock	1	172	Sand	10	517
Clay	20	192	Gumbo	10	527
Rock	2	194	Coarse-grained packstand	48	575
Clay	10	204	Gumbo and shale	30	605
Corase-grained sand	10	214	Sand	15	620
Tough gumbo	76	290	Rock	1	621
Sand	8	298	Sand and rock	22	643
Tough gumbo	15	313	Total depth		643
Fine-grained sand	18	331			

Well 250, Roy Turner, 13¾ miles northwest of Katy

Soil and clay	10	10	Hard sand	8	450
Quicksand and dry gravel	35	45	Shale	12	462
Clay	5	50	Sand	11	473
Sand and gravel	34	84	Gumbo	11	484
Clay	101	185	Sand	14	498
Sand	31	216	Clay	17	515
Clay	9	225	Sand and some rock	11	526
Hard shale	12	237	Clay	50	576
Sandy shale	7	244	Sand and some rock	30	606
Sand	6	250	Clay	43	649
Clay	6	256	Sand and some rock	23	672
Sand	14	270	Shale	29	701
Shale	8	278	Sand	21	722
Sandy ale	15	293	Clay	16	738
Clay	12	305	Sand and boulders	18	756
Sand	20	325	Shale	28	784
Clay	15	340	Sand	21	805
andy shale	29	369	Gumbo	12	817
Shale	11	380	Fine-grained sand	18	835
Sand	22	402	Sandstone	3	838
Shale	12	414	Shale	8	846
Hard sand	16	430	Total depth		846
Gumbo	12	442			

Well 251, J. V. Cardiff, 5¼ miles northwest of Katy

Clay	45	45	Clay	10	419
Sand	65	110	Rock	1	420
Clay	5	115	Hard packsand	18	438
Sand	60	175	Rock	2	440
Sand and gravel	25	200	Sand	8	448
Rock	3	203	Clay	92	540
Clay	14	217	Rock	2	542
Sand and rock	55	272	Clay	18	560
Rock	10	282	Sand	10	570
Coarse-grained sand	33	315	Sand and gravel	65	635
Fine-grained sand	16	331	Clay	18	653
Clay	8	339	Total depth		653
Sand	70	409			

ANALYSES OF WATER

Analyses of water from wells in Harris County

Unless otherwise noted, analyses were made by Margaret D. Foster, E. W. Lohr, or W. W. Hastings, Geological Survey. Results are in parts per million. Well numbers correspond to numbers in table of well records]

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
12	J. A. Hafner	61	Aug. 2, 1933	122	------	------	12	3.2	31	50	3.3	46	------	1.7	43
35	O. M. Taylor	35	----do----	------	------	------	------	------	------	35	2	138	------	84	177
38	Louis Hegar	75±	Aug. 8, 1933	------	------	1.3	------	------	------	16	1	8.0	------	28	36
39	Mrs. Joe Blake	38	Aug. 5, 1933	------	------	.95	------	------	------	38	2	22	------	2.1	33
48	Warren Estate	210	Oct. 14, 1941	140	------	------	28	7.3	17	110	4	30	0.0	(1)	100
49	----do----	108	----do----	2,925	------	------	632	15	289	226	153.6	342	0	(1)	1,639
51	H. C. Nichols	64	Aug. 5, 1933	------	------	.43	------	------	------	28	1	14	------	6.7	26
52	J. Hirsh	37	----do----	------	------	.34	------	------	------	44	2	30	------	44	51
53	E. Schultz	33	Aug. 4, 1933	76	------	.35	5.1	3.1	16	20	2.2	15	------	25	25
55	Fritz Treichel	21	----do----	------	------	.63	------	------	------	12	1	31	------	47	51
62	Humble Oil & Refining Co	864	Oct. 14, 1941	401	------	------	12	6.1	148	360	3	54	.8	(1)	54
65	City of Tomball	303	----do----	184	------	------	51	4.9	14	153	8	30	.6	(1)	148
74	M. F. Michel	23	Aug. 4, 1933	------	------	.64	------	------	------	12	2	84	------	327	172
75	T. J. Kuehn	30	----do----	184	------	.4	17	9.1	34	26	2.7	72	------	36	80
76	W. M. Buvinghausen	96	----do----	------	------	------	------	------	------	134	3	24	------	.2	114
77	L. C. Hassell	26	----do----	------	------	------	------	------	------	70	3	52	------	2	60
78	S. Bloom	30±	----do----	------	------	.54	------	------	------	124	4	207	------	22	255
93	Missouri Pacific Lines	1,070	Mar. 31, 1935	344	------	.05	16	5.9	119	325	11	32	------	.05	64
105	Marshall Ekz	20	Aug. 8, 1933	------	------	------	------	------	------	285	13	149	------	13	318
131	C. E. House	92	Aug. 9, 1933	213	------	.02	36	5.7	41	167	3.7	44	------	.4	113
134	Ira Southard	274	Aug. 12, 1940	223	------	------	------	------	------	206	4	28	.4	------	156
136	J. Freeman	138	Aug. 7, 1933	252	------	.35	61	5.4	32	237	4.0	33	------	0	175
140	Oscar Kemp	350	Aug. 12, 1940	218	------	------	------	------	------	170	4	44	0	------	130
169	Southern Pacific Co	400	Sept. 28, 1929	203	26	------	25	3.4	41	124	4.4	42	------	------	76
173	Hot Wells Health Resort	110	Aug. 2, 1933	243	------	0	50	5.5	39	205	4.8	42	------	.5	148
186	T. B. Tucker	628	Aug. 12, 1940	215	------	------	------	------	------	188	5	32	0	------	134
192	Hot Wells Health Resort	729	Oct. 14, 1941	273	------	------	42	7.3	59	256	2	37	------	(1)	135
202	R. H. Richards	48	Aug. 19, 1932	400	------	1.3	87	15	55	446	8	17	------	.55	279
212	H. & T. C. R. R	56	May 9, 1932	1,344	28	.41	278	59	125	415	10	540	------	100	937
219	Tom Franklin	19	Aug. 4, 1933	------	------	.56	------	------	------	21	2	42	------	16	33
220	Mrs. L. Hargrove	28	----do----	------	------	------	------	------	------	407	4	18	------	.30	288

See footnotes at end of table.

Analyses of water from wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
223	G. Terpstra	238	Aug. 3, 1933	474		1.2	81	36	71	458	16	80		.42	350
225	Burlington-Rock Island R. R. Co	616	Oct. 27, 1931	332	40		65	5.7	41	189	12	75			186
247	W. H. Wood	54±	Aug. 3, 1933							443	30	165		.2	372
264	H. Weary	1,610	June 14, 1939	254						188	10	52			132
268	City of Houston	793	Aug. 6, 1939	390	4	[3]1	15	2	99	235	10	41			46
269	do	1,049	June 1, 1939	415	17	.14	12	3.5	147	286	15	78	1.1		44
290	J. C. Townes	296	Oct. 13, 1941	298			36	15	65	281	5	39		(1)	149
291	A. T. McDannald	1,308	do	251			37	13	45	232	12	30	.1	(1)	148
292	P. C. Cezeaux	440	do	222			34	8.5	44	220	8	19		(1)	120
294	Fred Rudy	150	Mar. 14, 1939	1,053			137	54	185	404	32	420			555
295	City of Humble	1,140	Oct. 13, 1941	418			3.2	4.9	165	323	2	83	1.2	(1)	28
296	do	377	do	249			46	9.7	39	207	8	44	.2	(1)	156
297	do	740	do	291			34	9.7	70	238	7	53	.4	(1)	126
300	Humble Oil & Refining Co	648	Mar. 14, 1939	304			18	6.1	102	270	3	47			70
302	Rebel Oil Co	1,000±	Mar. 14, 1939							72	1	500			99
311	R. Sralla	298±	June 27, 1939	253						240	2	31		.5	39
312	do	98	do	453						382	2	82		.3	232
314	Mrs. J. W. Pate	218	Mar. 3, 1939	257						244	8	26			66
315	H. P. Guinn	227	Mar. 7, 1939	243						231	5	27			78
318	Crosby Water Works	226	Oct. 13, 1941	256			6.8	3.6	96	244	2	28	(1)	.2	32
331	Unknown		Feb. 28, 1939	253						222	3	47			74
336	Sinclair Refining Co	580	Oct. 13, 1941	157			37	4.9	18	153	7	14	1.0	.1	113
348	P. V. Cook	269	Aug. 12, 1940	260						234	3	38		0	168
364	John Cope	789	May 27, 1940	262						216	8	44	.40		171
370	J. M. Johnson	609	Aug. 2, 1932	327	31	.1	68	7.3	42	254	11	47	.1		200
373	do	608	Aug. 12, 1940	287						250	8	42		.2	180
385	A. J. Jordens	359	do	261						228	3	42		0	171
396	H. Speckmaier	94	Aug. 7, 1933	300		.92	75	9.6	30	271	13	39	.3		227
399	J. I. Brubaker	280	Aug. 1, 1932	285		.03	69	7.0	35	260	4	42	.2		201
407	A. G. George	165	Feb. 13, 1939	350						299	6	58	.0		202
409	Joe Schiller	184	Feb. 10, 1939	494						265	10	162	.0	.1	318
410	E. A. Winkelman	112±	do	426						327	10	87	.0		264
413	Walter Krenek	74	Feb. 9, 1939	545						292	7	180	3.0		345
415	—— Owens	80±	do	1,235						313	200	425	10.0		630
416	Houston Pet Cemetery	65	Feb. 15, 1939	722						333	10	269	.20		375
419	Mrs. Nellie E. Rogers	100	do	847						417	24	288	3.4	0	420
431	G. E. Wilkins	2,000±	Jan. 28, 1942	414						380	3	59			40
446	C. W. Hahl Co	60	Aug. 19, 1932	959		.05	104	50	203	532	25	315	0		465
454	H. & T. C. R. R	124	Sept. 27, 1929	512	29		118	17	46	427	29	55	8		[2]365

473	H. W. Rasmussen	416	Feb. 10, 1939	293						241	12	47	.24	0	191
480	John Pillot	512	Aug. 12, 1940	337						270	10	61		.2	213
484	Tim Miles	152	Feb. 10, 1939	375						307	7	68	.16	.2	243
485	C. R. Hastings	72	Feb. 15, 1939	391						321	4	385	.40	.5	488
489	City of Houston	470	May 13, 1939	426	18	[3] 1	63	8	36	243	6	45			190
490	do	1,188	do	395	14	[3] 5	31	7	66	216	17	41			106
492	G. H. & S. A. R. R	220	May 5, 1931	484	6.5	[3] 1.6	77	21	81	341	16	113			[2] 279
497	Westwood Country Club	590	Feb. 9, 1939	278						258	6	34	.3	.1	218
499	Brae Burn Country Club	701	do	285						242	8	44	.4	.2	189
500	Mike Albanese	228	Mar. 22, 1939								4	39			
533	R. W. Gillette	406	Feb. 10, 1939	382						254	8	68	.28	.1	222
535	R. H. Goodrich	1,996	Oct. 14, 1941	569			3.6	4.6	229	451	2	106	(1)	1.7	28
588	Oriental Textile Mills	800	Jan. 28, 1942	273			27	9.4	70	248	17	27			70
589	City of Houston	1,858	May 3, 1939	565	6	[3] 2	27	5	127	329	1	67			[4] 88
602	River Oaks Country Club	887	Jan. 28, 1942	269			44	12	46	242	18	30			160
607	Henke & Pillot	571	Aug. 5, 1939	308						234	13	56		.4	186
610	Standard Rice Co., Inc	853	Jan. 31, 1942	252			37	10	50	232	15	26			133
616	City of Houston	1,456	Jan. 18, 1938	495	4	[3] 0	17	2	121	303	0	49			[4] 50
617	do	1,540	do	567	3	[3] 2	16	1	146	340	0	61			[4] 44
618	do	1,320	do	463	3	[3] 1	19	3	108	285	2	42			[4] 60
620	Public Laundries	1,379	Jan. 31, 1942	300						286	3	36			58
622	Horlock Ice Co	360	do	343			46	14	52	276	13	33			172
624	City of Houston	953	Apr. 16, 1940	438	20	[3] 2	37	5	74	249	2	48			[4] 113
625	do	2,041	Mar. 29, 1938	815	10	[3] 0	7	1	232	459	0	107			[4] 2
634	Houston Ice & Cold Storage Co	354	Jan. 31, 1942	318			58	14	48	265	13	54			202
635	Houston Lighting & Power Co	887	Jan. 30, 1942	246			38	10	47	228	13	26			136
641	Rice Hotel Laundry	1,502	Jan. 31, 1942	370						329	2	58			54
646	Model Laundry	1,875	do	345						324	3	44			42
654	H. A. Burden	58	July 21, 1933	404		.08	78	21	55	402	8.1	44		0	281
656	Texas Creosoting Co	666	Jan. 28, 1942	245			39	10	45	220	15	28			138
662	South Texas Cotton Oil Co	834	do	250			44	9.8	42	228	10	32			150
667	Sunshine Laundry	602	Jan. 30, 1942	301			62	13	38	222	8	71			208
669	Willborg's Laundry	958	do	262			23	7.4	74	246	7	29			88
677	Houston Lighting & Power Co	873	Feb. 2, 1939	247						219	15	27		0	126
681	Southern Pacific Co	861	Jan. 31, 1942	251			32	9.5	55	226	17	26			119
683	Houston Ice & Cold Storage Co	825	May 23, 1940	282						200	15	28		.0	111
684	do	720	Feb. 18, 1941	243						206	13	33			112
688	City of Houston	1,535	Jan. 25, 1938	579	32	[3] 2	14	1	142	339	0	50			[4] 39
689	do	980	Nov. 15, 1935	373	10	[3] 3	26	7	66	234	0	30			[4] 94
693	First National Bank Bldg	363	Jan. 30, 1942	290			48	13	49	258	17	36			175
700	Rice Hotel	1,395	Feb. 6, 1939	377						335	2	59		.10	46
701	do	896	Jan. 30, 1942	252			36	9.9	51	216	13	36			131
710	Niels Esperson Bldg	895	Aug. 5, 1939	259						232	15	28			129
715	Ambassador Apartments	888	Feb. 17, 1941							222	13	30			120
728	Burkhart Laundry	1,402	Jan. 30, 1942	341						320	2	45			40
731	Missouri Pacific Laundry	1,390	do	356						334	2	47			44
732	Gould Wet Wash Laundry	1,391	do	371						346	2	50			44
736	Houston Packing Co	1,618	do	471						420	2	74			34
744	City of Houston	1,876	Aug. 22, 1938	668	8	2	4	2	194	380	3	90			18
747	Southern Pacific Co	948	Jan. 30, 1942	260			25	6.7	71	228	17	28			90
767	City of Houston	957	Mar. 13, 1939	402	6	[3] 0	34	8	64	257	3	31			[4] 118
775	do	1,796	Mar. 17, 1938	505	9	[3] 0	10	3	130	299	6	48			[4] 38

See footnotes at end of table.

Analyses of water from wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
779	American Service Co	584	Feb. 28, 1939	293						264	7	41			183
788	Shepherd Laundries	1,416	Jan. 31, 1942	328			16	5.5	113	292	2	48			62
791	Warwick Hotel	576	Jan. 29, 1942	277			50	12	43	256	18	28			174
793	City of Houston	1,618	Mar. 29, 1938	458	9	[3]0	14	2	113	277	5	38			[4]43
794	do	777	May 24, 1938	435	8	[3]0	47	7	61	264	14	34			[4]146
795	do	830	Mar. 17, 1938	433	10	[3]2	33	3	81	250	24	30			[4]95
797	Rice Institute	910	Jan. 20, 1939	257						236	16	24		.0	99
806	Gem Electric Co	233	July 21, 1933	310		.14	62	14	41	270	12	48		0	212
811	Harris County	385	do	298		.09	71	12	29	254	9.2	51		.4	227
821	Houston Gulf Gas Co	211	Aug. 27, 1932	334		.08	53	14	60	276	17	54		.20	190
837	C. W. Mowery	260	Aug. 10, 1933			.45				281	14	27		.6	162
840	City of Bellaire	827	Feb. 16, 1939	249						232	6	29	.3	.10	129
848	Houston Electric Co	583	Jan. 30, 1942	258			51	11	36	220	10	42			172
855	City of Houston	1,521	Sept. 28, 1938	562	12	[3]0	8	3	147	340	0	53			[4]33
856	do	866	Nov. 26, 1935	380	4	[3]5	39	5	56	242	4	27			[4]114
857	do	1,350	Sept. 26, 1938	428	12	[3]1	29	11	70	257	19	29			[4]117
858	do	1,756	do	616	13	[3]3	9	3	162	360	4	62			[4]35
870	Hygeia Ice Co	728	Jan. 30, 1942	288			29	13	69	266	20	26			130
878	Houston Compress Co	905	Nov. 9, 1929	267	15	[3]4.2	23	6.4	69	220	14	28			[5]83
879	City of Houston	1,033	Nov. 23, 1936	410	3	[3]2	32	5	74	246	20	27			[4]101
893	Carnegie-Illinois Steel Corporation	841	Jan. 30, 1942	259			26	6.5	70	232	18	24			92
892	Lone Star Cement Co	1,283	Jan. 29, 1942	277						250	10	34			44
896	City of Houston	1,637	Mar. 29, 1938	583	10	[3]0	3	1	160	365	0	43			[4]12
906	Garden Villas Subdivision	908	Jan. 29, 1942	302			16	4.4	101	252	20	36			58
907	do	897	Aug. 8, 1939	299						253	20	38			40
909	J. W. Madden	900±	Jan. 27, 1942	310			28	11	85	306	3	32			115
938	Harris County Fresh Water Supply District No. 6	640	Oct. 13, 1941	285			16	7.3	91	256	13	31	.4	[1]	70
945	Harris County Water Control & Improvement District No. 1	606	do	292			9.6	6.1	104	262	7	35	1.0	[1]	49
995	City of Goose Creek	970	Oct. 14, 1941	577			1.2	5.6	234	488	2	94		[1]	26
996	do	485	Nov. 10, 1941	568			12	6.1	218	476	2	94	1.6	[1]	54
1019	Captain Charles Crotty	450	Feb. 17, 1939	449						372	2	83	1.2	.75	24
1051	Humble Oil & Refining Co	562	Aug. 9, 1939	378						363	1	46			38
1053	do	974	Feb. 20, 1941	456						388	3	80			32
1054	do	572	do	370						338	2	53			33
1057	do	515	do	420						392	5	54			42
1058	do	542	May 24, 1940	519						388	4	119			40
1067	do	545	Feb. 1, 1939	379						357	3	48		.40	33

1068	....do	998	Feb. 20, 1941	600						511	1	108				28
1072	....do	516	....do	433						368	3	75	.9			36
1087	Mrs. John Martin	478	July 11, 1940	381						342	1	57	1.1	.25		28
1088	Mrs. M. K. Kennedy	600	....do	466						395	1	89	1.2	.50		22
1089	Allen Saint	510	June 7, 1940	446						376	1	90	1.2	.25		26
1095	San Jacinto Monument	499	Jan. 29, 1942	324			18	5.4	108	284	15	38				67
1103	Southern Pacific Co	770	....do	691						580	2	128				32
1104	City of La Porte	570	May 24, 1940	410						360	4	65				28
1105	....do	585	Jan. 29, 1942	465			9.2	3.5	181	398	2	73				38
1106	T. Schmitt	720	June 5, 1940	570						372	1	160	1.0			44
1107	....Schwander	500±	....do	498						368	1	117	1.0			33
1108	Mrs. C. K. Lockart	485	....do	524						386	1	113	1.2	.25		27
1109	E. D. Mills	655	June 7, 1940	602						381	1	175	.8	.50		45
1110	John Chapman	660±	....do	674						428	1	196	.9	0		45
1117	Stanolind Oil & Gas Co	526	June 5, 1940	399						351	1	64	1.0			45
1118	W. R. McClendon	580	July 11, 1940	384						350	1	55	.9			60
1124	Shell Oil Co., Inc	1,329	1941	413						356	8	66				40
1129	Champion Paper & Fiber Co	515	Feb. 19, 1941	299						278	13	31				93
1130	....do	1,481	Jan. 29, 1942	375			10	1.2	146	346	7	40				30
1131	....do	960	Feb. 19, 1941	281						251	12	34				36
1132	....do	1,840	Jan. 29, 1942	433						406	2	64				22
1133	....do	1,399	Feb. 19, 1941	368						326	7	54				14
1134	City of Pasadena	350	Aug. 13, 1941				19	8.0	86	244	13	36	.3	.5		80
1135	Champion Paper & Fiber Co	974	Feb. 19, 1941	274						249	12	31				62
1136	....do	1,275	....do	314						295	7	36				10
1137	....do	1,927	Jan. 29, 1942	316						460	2	81				28
1138	Sinclair Refining Co	1,192	....do	292						296	12	43				26
1140	....do	1,701	....do	387						390	2	37				22
1151	Southern Pacific Co	773	Jan. 30, 1942	271			25	8.0	74	242	17	28				96
1155	Gulf Oil Corporation	752	Jan. 29, 1942	116			32	8.7	75	269	21	25				75
1162	Sinclair Refining Co	1,223	May 24, 1940	287						262	10	34				58
1165	Houston Lighting & Power Co	826	Feb. 19, 1941	266						236	16	29				84
1166	....do	823	Mar. 1, 1922	302	14	4.8	9.3	5.1	103	227	12	41		.5	4	44
1172	The Texas Co	1,376	Jan. 29, 1942	303			18	6.0	99	276	12	32				70
1187	City of Pasadena	834	May 21, 1940	289						248	18	36				74
1189	Shell Oil Co., Inc	860	Aug. 5, 1939	309						278	12	38				50
1200	....do	488	Jan. 29, 1942	320			19	4.8	106	282	15	36				67
1201	....do	1,284	Feb. 19, 1941							514	2	80				27
1206	City of South Houston	668	Jan. 27, 1942	317						296	2	42				84
1208	City of Houston	1,680	June 13, 1939	1,353	12	2	5	1	422	643	2	286				18
1230	....do	1,419	June 13, 1939	960	7	2	4	1	303	463	1	208				14
1232	East End Water Works	1,157	Jan. 29, 1942	373			6.8	2.3	146	342	17	32				26
1240	Gulf Oil Corporation	376	Oct. 13, 1941	304			41	2.4	81	287	7	32	0	(3)		112
1270	City of West University Place	1,673	Jan. 31, 1942	307			10	3.3	114	280	8	34				38
1275	West Production Co	920±	May 10, 1939	288						261	1	32	.4			102
1283	Academy of Incarnate Word	115	Feb. 16, 1939	318						266	7	54		0		195
1285	E. P. Krenek	200±	Feb. 9, 1939	1,048						294	81	480		1.0		442
1302	City of Genoa	832	Jan. 27, 1942	458			12	4.0	172	384	2	74				46
1314	T. C. Dunn	87	Aug. 1, 1933			3.6				476	7	137		1.1		318
1320	J. W. Goar	473	Jan. 27, 1942	198			23	11	40	148	7	44				103
1342	M. E. Boehm	513	July 13, 1940	373						332	1	58	1.1			36

See footnotes at end of table.

Analyses of water from wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
1345	Peden Estate	530	June 7, 1940	461						355	1	101	1.0		39
1346	W. W. Howden	504	July 19, 1940	494						356	1	121	1.0		38
1347	Morris Siegel	550	June 7, 1940	513						366	3	126	.8	.25	34
1348	J. L. Burns	527	do	553						377	2	146	1.1	.10	45
1350	Irma Christy	521	do	567						387	1	151	1.0	0	40
1355	A. A. Polk	130	July 20, 1933	958		.61	48	32	289	468	22	335		1.4	251
1359	G. H. Whitcomb	563	Jan. 27, 1942	330			17	4.5	115	304	2	42			61
1365	Galveston-Houston Electric Co	788	1924	1,175	10	[3] 5	44	45	333	110	96	588			294
1366	Humble Pipe Line Co	660	Jan. 27, 1942	438			12	3.8	165	330	2	93			46
1368	City of South Houston	916	do	372						338	10	48			28
1385	City of Houston	1,291	Aug. 17, 1938	392	8	[3] 1	27	9	68	248	2	35			[4] 105
1400	do	1,232	May 8, 1939	527	9	[3] 2	26	3	117	318	0	50			[4] 78
1401	do	1,252	June 20, 1939	495	11	[3] 0	23	2	113	301	0	47			[4] 66
1402	do	1,458	May 8, 1939	583	10	[3] 4	24	1	138	353	0	53			[4] 64

[1] Nitrate less than 20 parts per million.
[2] Analyzed by C. S. Wilson.
[3] Iron and aluminum oxides.
[4] Analyzed by city of Houston Water Department.
[5] Analyzed by Houston Laboratories.
[6] Analyzed by Pennsylvania Power & Light Co.

Analyses of water from wells in Fort Bend County

[Analyses by Margaret D. Foster and E. W. Lohr, Geological Survey. Results are in parts per million. Well numbers correspond to numbers in table of well records]

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
9	L. D. Brown	174	Aug. 8, 1933	317		0.04	74	8.7	39	262	3.8	62	0.2		221
11	P. V. Cook	170±	Sept. 12, 1940	343						272	3	70		0	216
18	Sam Poorman	723	Aug. 12, 1940	349						270	7	71		.2	207
29	C. Pillot	500	do	288						232	8	52		.3	162
31	C. C. Cardiff	496	do	285						214	4	63		0	186
50	Fort Bend Utilities Co	733	Mar. 13, 1939							238	10	61			232
			May 24, 1940							192	10	62			178
			Feb. 19, 1941							240	8	61			201
			Jan. 27, 1942	305			68	12	35	238	10	63			219
54	do	1,606	Mar. 13, 1939	258						258	12	59			46
			May 24, 1940	264						264	20	58			90
			Feb. 19, 1941	276						276	17	59			52
			Jan. 27, 1942	342			13	4.4	121	262	17	58			50
75	Gulf Pipe Line Co	800±	Aug. 15, 1933							366	24	248	.3		81

Analyses of water from wells in Waller County

[Unless otherwise noted, analyses were made by E. W. Lohr, Geological Survey. Results are in parts per million. Well numbers correspond to numbers in table of well records]

Well No.	Owner	Depth (feet)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K) (calculated)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$
119	Prairie View State College	576	1930	309	10		34	11	70	255	23	36			[1] 130
120	do	571	Mar. 24, 1928	415	33		36	5.5	111	336	30	34			[2] 113
223	T. B. Tucker	767	Aug. 12, 1940	241						206	3	41		0	159
230	Francis Young	273	Aug. 1, 1932	240		0.02	63	5.9	24	220	2	37	0.15		182
238	do	280	Aug. 12, 1940	267						210	4	54		0	165
240	B. Ray Woods	290	do	276						180	8	72		0	159
242	Robichaux and Thompson	555	do	280						178	15	69		.2	153
250	Roy Turner	846	do	324						234	7	74		.2	123

[1] Analyzed by National Supply Co.

[2] Analyzed by International Filter Co.

Partial analyses of water from observation wells in Harris County

[Unless otherwise noted, analyses were made by Margaret D. Foster, E. W. Lohr, or W. W. Hastings Geological Survey. Results are in parts per million. Well numbers correspond to numbers in table of well records]

Well No.	Owner	Depth (feet)	Date of collection	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$
			Mar. 20, 1931 [1]	----------	30	30	110
			Jan. 14, 1939	247	12	26	99
			Aug. 5, 1939	244	12	27	106
588	Oriental Textile Mills	800	May 21, 1940	248	10	27	102
			Feb. 18, 1941	227	17	28	88
			Jan. 28, 1942	248	17	27	70
			Jan. 19, 1931 [1]	----------	20	35	150
			Jan. 20, 1939	244	14	37	150
602	River Oaks Country Club	887	July 25, 1939	234	15	30	135
			May 21, 1940	244	20	36	153
			Feb. 18, 1941	224	17	28	117
			Jan. 28, 1942	242	18	30	160
			Jan. 25, 1931 [1]	----------	10	30	140
			Jan. 14, 1939	236	18	25	120
			July 24, 1939	240	15	33	135
610	Standard Rice Co., Inc	853	May 21, 1940	204	16	28	100
			Feb. 18, 1941	231	17	34	132
			Jan. 31, 1942	232	15	26	133
			May 2, 1927	----------	----------	40	65
			Mar. 30, 1935	297	2	42	----------
			Jan. 31, 1939	293	2	38	57
620	Public Laundries	1,379	Aug. 5, 1939	290	2	39	58
			May 21, 1940	290	5	37	65
			Feb. 17, 1941	294	2	35	63
			Jan. 31, 1942	286	3	36	58
			Jan. 31, 1939	277	20	34	168
			Aug. 5, 1939	266	17	34	176
622	Horlock Ice Co	360	May 21, 1940	264	20	37	166
			Feb. 17, 1941	254	10	41	158
			Jan. 31, 1942	276	13	33	172
			July 24, 1939	235	17	24	126
635	Houston Lighting & Power Co	887	May 23, 1940	226	30	26	124
			Feb. 20, 1941	220	13	25	130
			Jan. 30, 1942	228	13	26	136
			Jan. 9, 1931 [1]	----------	30	35	150
			Feb. 6, 1939	222	10	26	129
			July 25, 1939	208	12	28	129
656	Texas Creosoting Co	666	May 24, 1940	221	16	28	128
			Feb. 20, 1941	214	8	27	123
			Jan. 28, 1942	220	15	28	138
			Jan. 14, 1931 [1]	----------	30	40	150
			Jan. 14, 1939	222	10	37	150
			July 25, 1939	222	16	36	141
662	South Texas Cotton Oil Co	834	May 24, 1940	225	12	34	135
			Feb. 20, 1941	198	5	37	132
			Jan. 28, 1942	228	10	32	150
			Jan. 31, 1939	244	12	69	189
			Aug. 5, 1939	227	10	67	195
667	Sunshine Laundry	602	May 21, 1940	----------	6	68	----------
			Feb. 18, 1941	----------	10	70	----------
			Jan. 30, 1942	222	8	71	208
			Apr. 26, 1932 [1]	----------	5	35	90
			Jan. 31, 1939	246	8	28	81
			Aug. 5, 1939	237	5	29	81
669	Willborg's Laundry	958	May 21, 1940	245	5	30	80
			Feb. 20, 1941	250	4	29	88
			Jan. 30, 1942	246	7	29	88
			Jan. 29, 1931 [1]	----------	25	30	120
			Feb. 2, 1939	219	15	27	126
677	Houston Lighting & Power Co	873	July 24, 1939	235	17	27	126
			Feb. 3, 1931 [1]	----------	15	30	120
			Feb. 2, 1939	229	10	28	102
			Aug. 9, 1939	216	13	27	104
681	Southern Pacific Co	861	May 23, 1940	211	13	26	99
			Feb. 18, 1941	206	14	26	98
			Jan. 31, 1942	226	17	26	119
			Jan. 31, 1939	266	12	49?	189
683	Houston Ice & Cold Storage Co	825	Aug. 5, 1939	212	17	29	120
			May 23, 1940	200	15	28	111
			Jan. 31, 1939	236	22	33	144
684	do	720	Aug. 5, 1939	216	18	33	120
			May 23, 1940	214	15	34	138
			Feb. 18, 1941	206	13	33	112
			Feb. 4, 1931 [1]	----------	10	45	190
			Feb. 2, 1939	255	10	38	153
693	First National Bank Building	363	Aug. 5, 1939	228	16	38	162
			May 23, 1940	214	16	36	134
			Feb. 18, 1941	----------	15	37	----------
			Jan. 30, 1942	236	17	36	173

See footnotes at end of table.

Partial analyses of water from observation wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$
700	Rice Hotel	1,395	Feb. 4, 1931 [1]		10	40	150
			Feb. 6, 1939	335?	2	59	46
710	Niels Esperson Building	895	Mar. 9, 1927 [2]	260	21	31	118
			Feb. 18, 1931 [1]		10	30	130
			Feb. 2, 1939	222	20	24	117
			Aug. 5, 1939	232	15	28	129
715	Ambassador Apartments	888	February 1931 [1]		10	30	135
			Feb. 2, 1939	228	12	37	129
			Aug. 5, 1939	224	17	28	120
			May 21, 1940	212	14	26	120
			Feb. 17, 1941	222	13	30	120
728	Burkhart Laundry	1,402	July 1931 [1]		10	40	30
			Feb. 2, 1939	315	1	35	26
			Aug. 5, 1939	313	1	46	30
			May 23, 1940	312	1	45	28
			Feb. 20, 1941	318	1	45	32
				320	2	45	40
731	Missouri Pacific Lines	1,390	Jan. 28, 1931 [1]			50	30
			Feb. 6, 1939	323	1	51	36
			Aug. 9, 1939	334	1	52	40
			May 27, 1940	328	1	48	40
			Feb. 20, 1941	342	1	49	44
			Jan. 30, 1942	334	2	47	44
732	Gould Wet Wash Laundry	1,391	Mar. 9, 1927 [2]	373	8.6	50	63
			Jan. 27, 1931 [1]			55	36
			Feb. 2, 1939	329	1	51	30
			Aug. 5, 1939	328	1	52	33
			May 27, 1940	326	1	51	34
			Feb. 20, 1941	371	1	50	40
			Jan. 30, 1942	346	2	50	44
747	Southern Pacific Co	948	Jan. 12, 1931		5	30	120
			Feb. 6, 1939	234	16	27	102
			Aug. 5, 1939	228	10	27	102
			May 24, 1940	224	17	28	81
			Feb. 20, 1941	234	15	26	105
			Jan. 30, 1942	228	17	28	90
788	Shepherd Laundries	1,416	July —, 1930			60	70
			Feb. 2, 1939	298	1	52	62
			Aug. 5, 1939	302	1	53	60
			May 21, 1940	294	1	50	60
			Feb. 17, 1941	310	1	49	70
			Jan. 31, 1941	292	2	48	62
791	Warwick Hotel	576	Jan. 31, 1939	258	8	29	145
			Aug. 5, 1939	260	12	31	165
			May 24, 1940	260	20	29	179
			Feb. 17, 1941	261	18	28	177
			Jan. 29, 1942	256	18	28	174
870	Hygeia Ice Co	728	Jan. 16, 1931 [1]		5	35	190
			Feb. 2, 1939	257	16	28	141
			Aug 5, 1939	262	12	28	147
			May 24, 1940	229	7	28	114
			Feb. 19, 1941		18	27	
883	Carnegie-Illinois Steel Corporation	841	Jan. 30, 1942	266	20	26	130
			Mar. 27, 1931 [1]		20	30	90
			Jan. 19, 1939	235	8	26	75
			Aug. 5, 1939	230	17	25	82
			May 6, 1940	225	13	26	78
			Feb. 20, 1941	214	18	24	74
			Jan. 30 1941	232	18	24	92
892	Lone Star Cement Co	1,283	Feb. 4, 1929 [3]	354	12	53	31
			Jan. 21, 1931 [1]		30	45	35
			Feb. 6, 1939	251	12	35	32
			Aug. 5, 1939	252	10	36	34
			May 22, 1940	246	9	36	39
			Feb. 19, 1941	248	9	34	40
			Jan. 29, 1942	250	10	34	44
906	Garden Villas Subdivision	908	June 7, 1929 [3]	256	16	38	88
			Jan. 19, 1939	261	16	32	87
			Aug. 8, 1939	252	15	38	46
			May 24, 1940	256	8	33	81
			Feb. 18, 1941		20	36	58
			Jan. 29, 1942	252	20	36	58
909	J. W. Madden	900±	Jan. 19, 1939	306	3	32	111
			May 24, 1940	316	5	34	134
			Feb. 19, 1941	332	4	32	144
			Jan. 27, 1942	306	3	32	115
1051	Humble Oil & Refining Co	562	October 1931 [1]	260		50	
			Feb. 1, 1939	326	5	46	27
			Aug. 9, 1939	362	1	46	38

See footnotes at end of table.

Partial analyses of water from observation wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$
1053	Humble Oil & Refining Co.	974	October 1931[1]	320	----------	140	----------
			Feb. 1, 1939	399	3	90	32
			Aug. 9, 1939	396	1	84	32
			May 24, 1940	384	6	84	33
			Feb. 20, 1941	388	3	80	32
1057	do	515	October 1931[1]	300	----------	62	----------
			Feb. 1, 1939	400	5	55	22
			Aug. 9, 1939	412	1	57	28
			Feb. 20, 1941	392	5	54	42
1058	do	542	October 1931[1]	300	----------	99	----------
			Feb. 1, 1939	383	2	117	28
			May 24, 1940	388	4	119	40
1103	Southern Pacific Co.	770	Apr. 2, 1931[1]	----------	5	130	35
			Oct. 6, 1931[4]	570	----------	133	25
			Jan. 18, 1939	507	6	112	22
			Aug. 5, 1939	520	2	120	26
			May 24, 1940	562	1	128	26
			Feb. 20, 1941	571	1	127	32
			Jan 29, 1942	580	2	128	32
1104	City of La Porte	570	Apr. 2, 1931[1]	----------	5	85	40
			Jan. 18, 1939	370	2	67	24
			Aug. 5, 1939	372	1	63	30
			May 24, 1940	360	4	65	28
1107	do	585	Jan. 18, 1939	406	1	76	24
			Aug. 5, 1939	396	1	75	30
			Feb. 19, 1941	423	2	73	44
			Jan. 29, 1942	398	2	73	38
1140	Sinclair Refining Co.	1,701	Jan. 18, 1939	393	1	36	9
			Aug. 5, 1939	391	1	38	15
			May 24, 1940	394	1	38	15
			Feb. 19, 1941	392	2	36	21
1151	Southern Pacific Co.	773	Sept. 19, 1930[4]	228	16	31	77
			Mar. 27, 1931[1]	----------	15	30	85
			Jan. 19, 1939	244	10	39	70
			Aug. 5, 1939	232	15	29	76
			May 24, 1940	236	15	29	78
			Feb. 19, 1941	233	17	29	86
				242	17	28	96
1155	Gulf Oil Corporation	752	Mar. 27, 1931[1]	----------	15	30	120
			Jan 19, 1939	368	2	36	87
			Aug. 5, 1939	264	18	27	117
			May 24, 1940	268	12	27	104
			Feb. 19, 1941	264	20	25	110
			Jan. 29, 1942	269	21	25	75
1162	Sinclair Refining Co.	1,223	Apr. 1, 1931[1]	----------	10	45	60
			Jan. 18, 1939	246	17	31	78
			Aug. 5, 1939	252	15	33	46
			May 24, 1940	262	10	34	58
1168	Houston Lighting & Power Co.	826	Mar. 1, 1922[5]	229	14	35	72
			Jan. 18, 1939	234	16	31	74
			Aug. 5, 1939	234	17	31	82
			May 21, 1940	236	15	30	82
			Feb. 19, 1941	236	16	29	84
1172	The Texas Co.	1,376	Jan. 19, 1939	284	17	31	100
			Aug. 5, 1939	271	12	32	64
			May 24, 1940	260	12	32	82
			Feb. 19, 1941	270	13	31	64
			Jan. 29, 1942	276	12	32	70
1187	City of Pasadena	834	1931[1]	----------	15	35	50
			Jan. 18, 1939	524?	12	36	66
			Aug. 5, 1939	244	12	37	69
			May 21, 1940	248	18	36	74
1201	Shell Oil Co., Inc.	1,284	Feb. 17, 1939	601	1	100	16
			Aug. 5, 1939	568	2	93	22
			May 27, 1940	576	5	98	28
			Feb. 19, 1941	514	2	80	27
1205	City of South Houston	668	Aug. 8, 1939	356	8	45	27
			Feb. 19, 1941	309	2	43	39
			Jan. 27, 1942	296	2	42	34
1302	City of Genoa	832	Apr. 3, 1931[1]	----------	5	85	50
			Mar. 30, 1935	388	3.1	75	43
			Apr. 3, 1939	388	1	76	30
			Aug. 8, 1939	412	1	77	42
			May 20, 1940	388	2	77	44
			Feb. 19, 1941	382	1	74	46
			Jan. 27, 1942	384	2	74	46

See footnotes at end of table.

Partial analyses of water from observation wells in Harris County—Continued

Well No.	Owner	Depth (feet)	Date of collection	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$
1359	G. H. Whitcomb	563	Sept. 30, 1932[1]	----------	5	45	50
			Feb. 3, 1939	306	1	44	51
			Aug. 8, 1939	294	2	44	45
			May 24, 1940	304	1	44	54
			Feb. 18, 1941	308	1	43	56
			Jan. 27, 1942	304	2	42	61
1367	Humble Pipe Line Co	660	Feb. 3, 1939	363	1	90	34
			Aug. 8, 1939	341	1	94	42
			May 24, 1940	326	5	92	42
			Feb. 18, 1941	332	1	93	44
			Jan. 27, 1942	330	2	93	46
1369	City of South Houston	916	Jan. 19, 1939	336	10	45	10
			Aug. 8, 1939	337	7	46	16
			Feb. 19, 1941	339	8	45	21
			Jan. 27, 1942	338	10	48	28

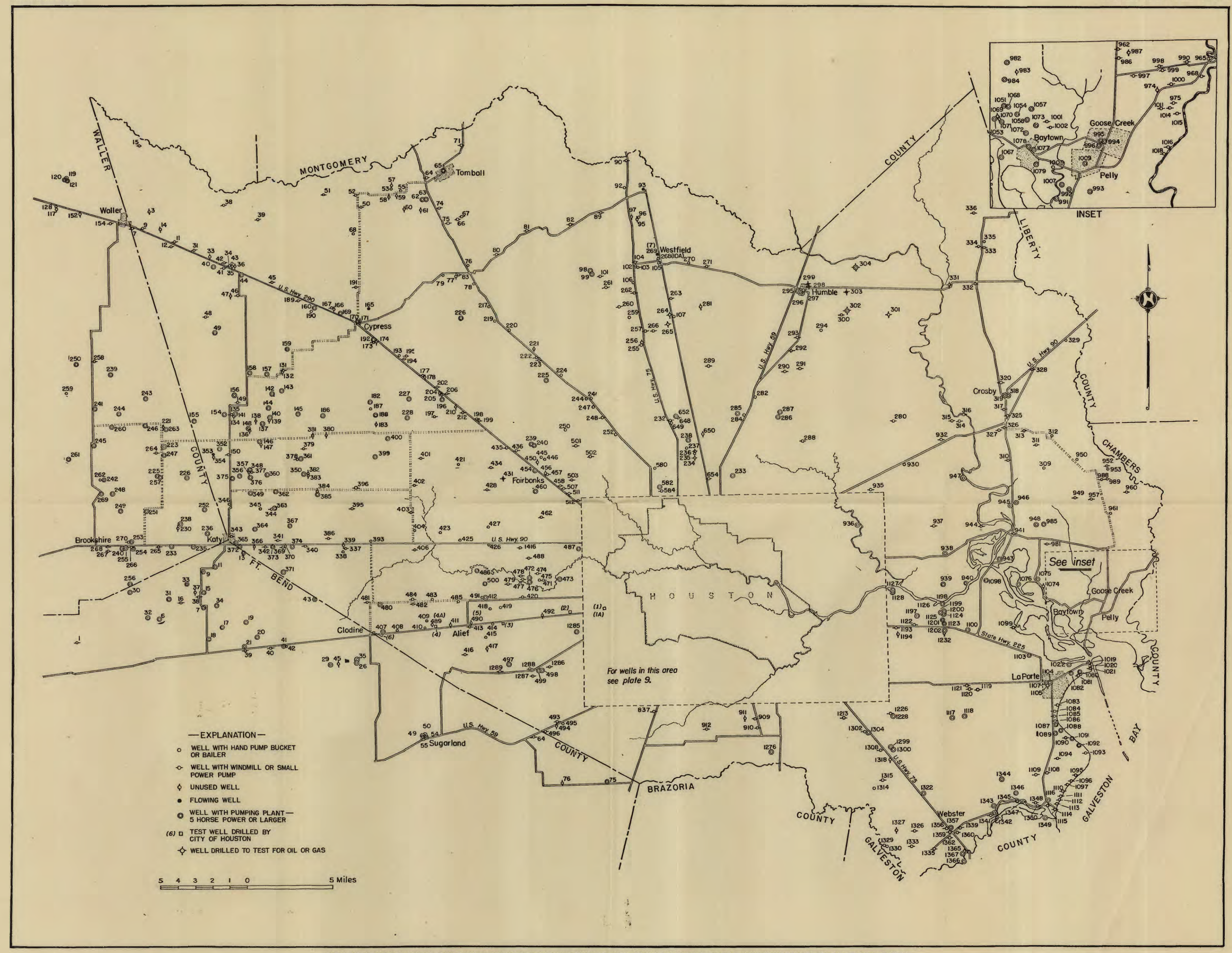
[1] Field test by Samuel F. Turner.
[2] Analysis by Curtis Laboratories.
[3] Analysis by Houston Laboratories.
[4] Analysis by C. S. Wilson.
[5] Analysis by Pennsylvania Power & Light Co.

Analyses of water from City of Houston test wells

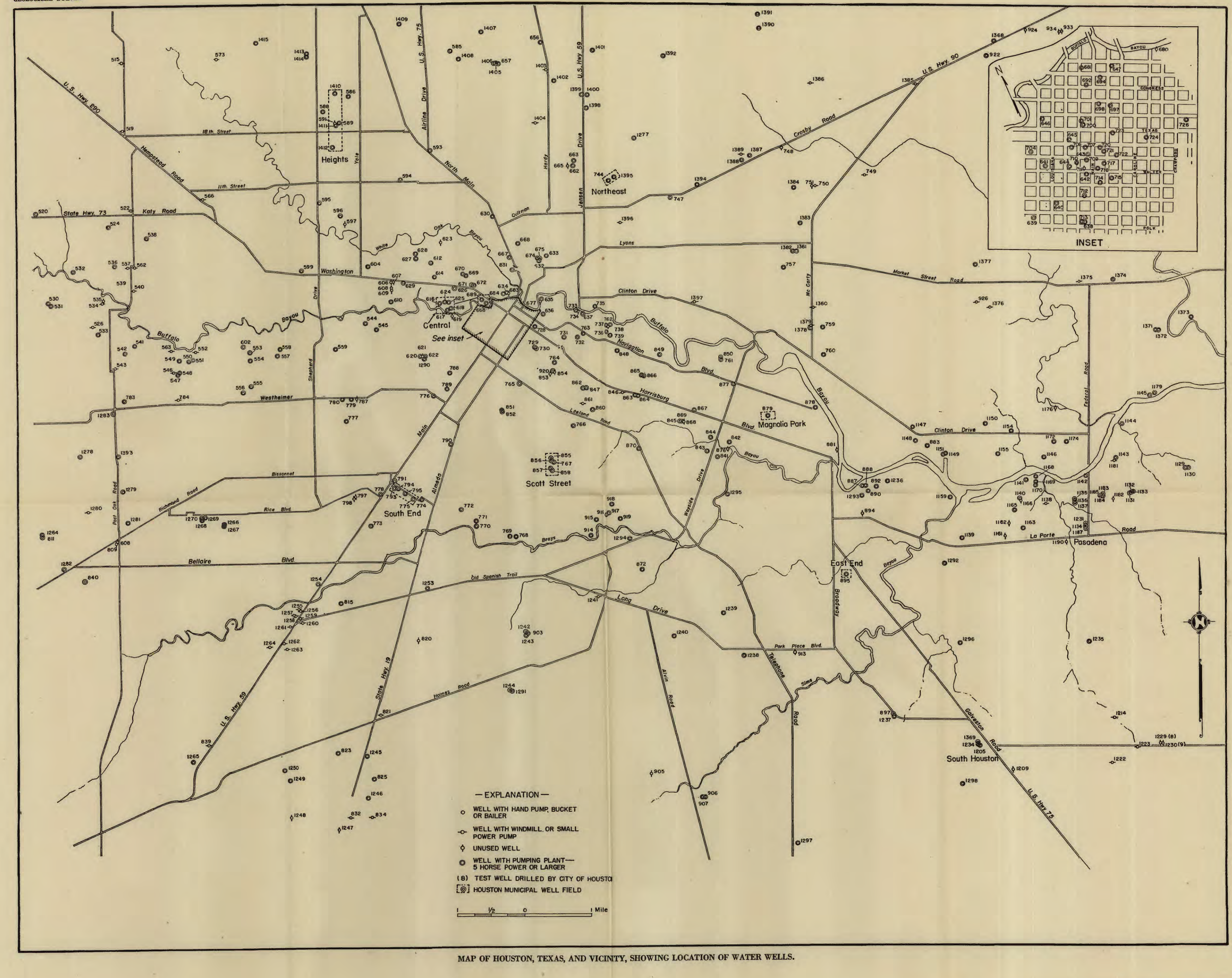
Well No.	Depth (feet) [1]	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na+K)	Carbonate (CO_3)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Total hardness as $CaCO_3$	Analyst
1A	438–467	Apr. 7, 1939	520	12	[2] 1	23	3	120	0	267	36	54	----------	70	A. J. Hartsook.
2	1,009–1,031	Apr. 14, 1939	379	10	.02	15	4.4	[3] 131	0	304	7.8	57	0.8	56	E. W. Lohr.
2	1,437–1,464	Apr. 15, 1939	424	12	.02	11	4.0	[3] 170	0	384	4.1	65	1.0	44	Do.
2	1,653–1,669	Apr. 19, 1939	808	49	[2] 5	10	1	213	9	427	1	89	----------	29	A. J. Hartsook.
2	1,808–1,820	Apr. 20, 1939	----------	----------	----------	10	1	219	24	378	----------	111	----------	29	Do.
2	1,943–1,998	Apr. 22, 1939	838	56	[2] 7	7	1	233	18	374	1	133	----------	22	Do.
3	1,766–1,810	May 2, 1939	879	17	[2] 1	12	2	259	4	382	----------	199	----------	33	Do.
4	1,203–1,280	May 5, 1939	381	4	[2] 3	17	2	93	3	180	24	54	----------	51	Do.
[4] 4A	449–464	May 13, 1939	425	18	[2] 1	63	8	36	0	243	6	45	----------	190	Do.
[4] 5	1,167–1,182	do	395	14	[2] 5	31	7	66	0	216	17	41	----------	106	Do.
6	1,684–1,704	May 22, 1939	550	38	.06	9.9	2.5	196	0	378	14	96	.6	35	E. W. Lohr.
6	1,970–2,000	May 25, 1939	2,629	19	.01	102	15	855	0	141	172	1,330	1.9	316	Do.
7	583–617	May 29, 1939	265	24	.05	47	6.4	39	0	186	6.3	48	.4	144	Do.
[4] 7	1,037–1,052	June 1, 1939	415	17	.14	12	3.5	147	3.9	278	15	78	1.1	44	Do.
8	1,193–1,222	June 8, 1939	494	13	.13	7	3.0	[3] 178	20	362	16	47	1.4	30	Do.
[4] 8	1,661–1,676	June 13, 1939	1,353	12	[2] 2	5	1	422	30	582	2	286	----------	16	A. J. Hartsook.
8	1,666–1,706	June 10, 1939	997	14	.05	6.1	2.3	[3] 397	7.9	594	.8	268	3.4	25	E. W. Lohr.
8	1,832–1,850	June 12, 1939	613	16	.05	5.2	1.9	[3] 243	12	495	1.1	82	2.2	21	Do.
[4] 9	1,399–1,414	June 18, 1939	960	7	[2] 2	4	1	303	24	414	1	208	----------	14	A. J. Hartsook.
9	1,506–1,526	do	1,649	14	.10	10	5.2	[3] 647	4.9	643	.6	645	2.5	46	E. W. Lohr.
[4] 10A	757–772	Aug. 6, 1939	390	4	[2] 1	15	2	99	12	211	10	41	----------	46	A. J. Hartsook.

[1] Depth from which samples were taken, in feet below surface.
[2] Iron and aluminum oxides.
[3] Calculated.
[4] Sample taken after well was completed.

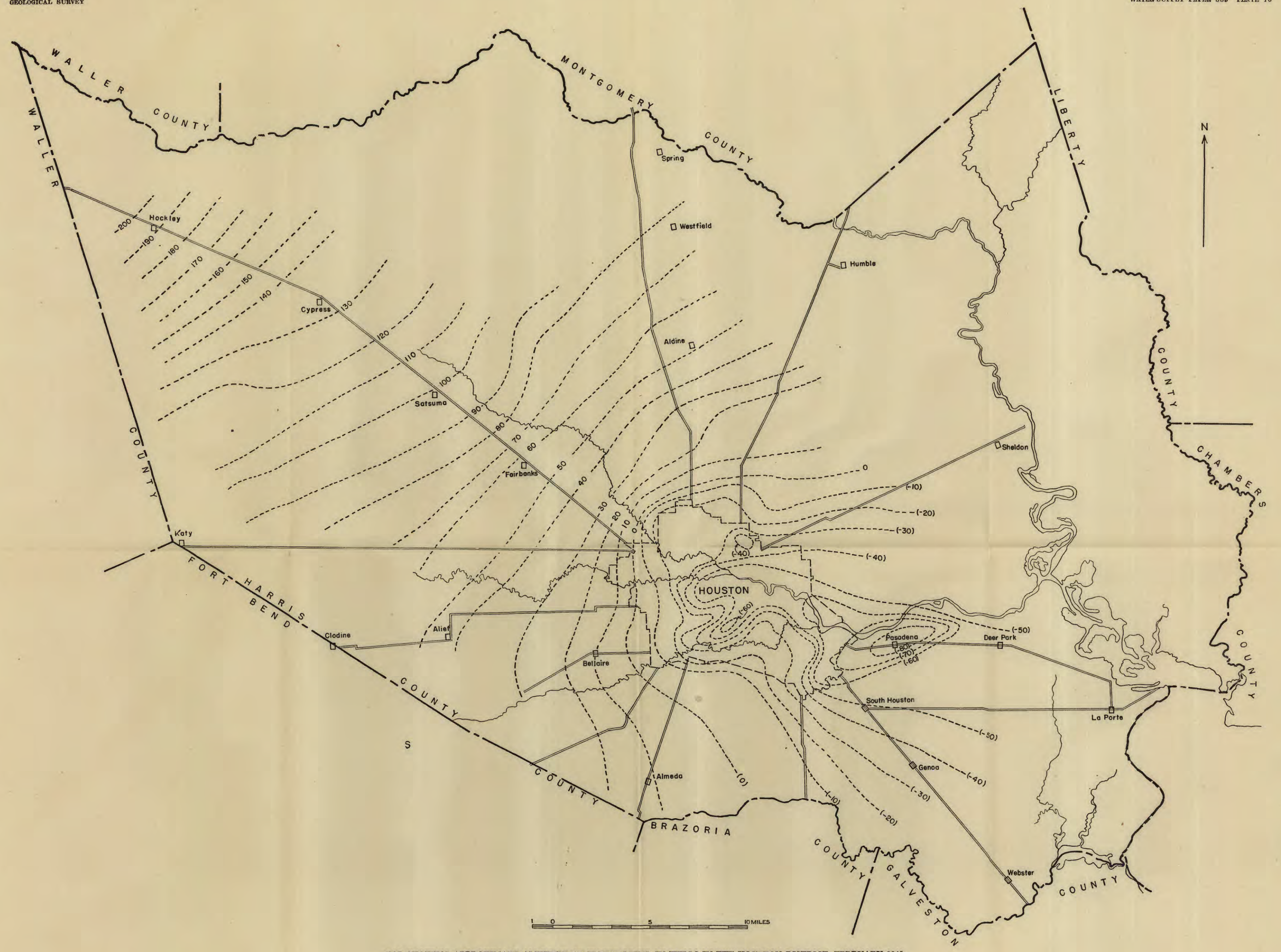
INDEX



MAP OF HARRIS COUNTY AND ADJOINING PARTS OF FORT BEND AND WALLER COUNTIES, TEXAS, SHOWING LOCATION OF WATER WELLS.



MAP OF HOUSTON, TEXAS, AND VICINITY, SHOWING LOCATION OF WATER WELLS.



MAP SHOWING APPROXIMATE ALTITUDE OF WATER LEVEL IN WELLS IN THE HOUSTON DISTRICT, FEBRUARY 1940.