



## TEXAS DEPARTMENT OF WATER RESOURCES

REPORT 280

### RECORDS OF WELLS, DRILLERS' LOGS, WATER-LEVEL MEASUREMENTS, AND CHEMICAL ANALYSES OF GROUND WATER IN CHAMBERS, LIBERTY, AND MONTGOMERY COUNTIES, TEXAS, 1975-79

By

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U.S. Geological Survey

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## **ABSTRACT**

Information on major new water wells in Chambers, Liberty, and Montgomery Counties was compiled by the U.S. Geological Survey from 1975 to 1979. This report presents the results of the hydrologic data collection on new large-capacity and other selected wells, including well location and completion data, drillers' logs of the strata penetrated, water levels, and chemical quality of the produced water. These water-well data are supplementary to similar data on older wells in these counties and descriptive evaluations of the ground-water resources which have been published previously.



## TABLE OF CONTENTS

	Page
<b>ABSTRACT</b> .....	iii
<b>INTRODUCTION</b> .....	1
<b>METRIC CONVERSIONS</b> .....	2
<b>WELL-NUMBERING SYSTEM</b> .....	2
<b>SELECTED REFERENCES</b> .....	3

## TABLES

1. Records of Wells in Chambers County.....	4
2. Drillers' Logs of Wells in Chambers County.....	5
3. Water Levels in Wells in Chambers County.....	6
4. Chemical Analyses of Water From Wells in Chambers County .....	9
5. Records of Wells in Liberty County.....	13
6. Drillers' Logs of Wells in Liberty County.....	14
7. Water Levels in Wells in Liberty County .....	15
8. Records of Wells in Montgomery County .....	21
9. Drillers' Logs of Wells in Montgomery County .....	24
10. Water Levels in Wells in Montgomery County .....	36
11. Chemical Analyses of Water From Wells in Montgomery County .....	37

## TABLE OF CONTENTS—Continued

	Page
<b>FIGURES</b>	
1. Map Showing Locations of Wells in Chambers County .....	11
2. Map Showing Locations of Wells in Liberty County.....	19
3. Map Showing Locations of Wells in Montgomery County .....	39

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## INTRODUCTION

Hydrologic data from Chambers, Liberty, and Montgomery Counties, Texas, are being collected in cooperation with the Texas Department of Water Resources to evaluate the ground-water resources of the greater Houston-Galveston region. The data-collection program consists of an inventory of new large-capacity and other selected wells, water-level measurements in observation wells, and a compilation of information on land-surface subsidence.

The hydrologic data are published every 5 years. The first report (Naftel, Fleming, and Vaught, 1976) presents data collected from 1966 to 1974. This report presents records of wells, drillers' logs, water-level measurements, and chemical analyses of ground water collected during 1975-79 (Tables 1-11). Additional information on the geology and hydrology of the area may be found in publications listed in "Selected References."

Most of the chemical analyses presented in this report were determined in the laboratories of the U.S. Geological Survey, but some data were obtained from commercial analyses. Dissolved solids (sum of constituents) and hardness (Ca, Mg), were recalculated to correspond to the Geological Survey reporting methods.

## METRIC CONVERSIONS

The "inch-pound" units used in this report may be converted to metric units by the following conversion factors:

<u>From</u>	<u>Multiply by</u>	<u>To obtain</u>
feet	0.3048	meters (m)
gallons per minute (gal/min)	0.06309	liters per second (l/s)
inches	2.54	centimeters (cm)

## WELL-NUMBERING SYSTEM

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

On the well-location maps (Figures 1-3), only the last three digits of the well number are shown at each well location; the second two digits are shown in the northwest corner of each 7½-minute quadrangle; and the first two digits are shown by the large block numerals 60, 61, 64, and 65.

In addition to the seven-digit well number, a two-letter prefix is used to identify the county. The prefix for Chambers County is DH; for Liberty County, SB; and for Montgomery County, TS.

## **SELECTED REFERENCES**

- Anders, R. B., McAdoo, G. D., and Alexander, W. H., Jr., 1968, Ground-water resources of Liberty County, Texas: Texas Water Devel. Board Rept. 72, 147 p., 20 figs.
- Naftel, W. L., Fleming, Bobbie, and Vaught, Kenneth, 1976, Records of wells, drillers' logs, water-level measurements, and chemical analyses of ground water in Chambers, Liberty, and Montgomery Counties, Texas, 1966-74: Texas Water Devel. Board Rept. 202, 63 p., 3 figs.
- Popkin, B. P., 1971, Ground-water resources of Montgomery County, Texas: Texas Water Devel. Board Rept. 136, 149 p., 29 figs.
- Ratzlaff, K. W., 1982, Land-surface subsidence in the Texas coastal region: Texas Dept. Water Resources Rept. 278, 30 p., 8 figs.
- Wesselman, J. B., 1971, Ground-water resources of Chambers and Jefferson Counties, Texas, with a section on Quaternary geology, by Saul Aronow: Texas Water Devel. Board Rept. 133, 183 p., 28 figs.

Table 1.--Records of Wells in Chambers County

Water Levels : Reported water levels given in feet; measured water levels given in feet and tenths  
 Method of Lift and Type of Power: Sub, submersible; E, electric; N, none. Number indicates horse power  
 Use of Water : D, domestic; P, public supply; Ind, industrial; Irr, irrigation; N, none  
 Water-Bearing Unit : CU, Upper unit of Chicot aquifer; CL, Lower unit of Chicot aquifer; E, Evangeline aquifer

Well	Owner	Driller	Date completed	Depth of well (ft)	Casing		Water bearing unit	Altitude of land surface (ft)	Water level		Method of lift	Use of water	Remarks
					Diameter (in.)	Depth (ft)			Above (+) below land surface datum (ft)	Date of measurement			
DH-64-09-337	City Services Frac-tioners	Katy Drilling Co.	1971	2,196	5	2,194	E	45	--	--	--	Ind	13 feet of screen between 2,097 and 2,113 feet. <i>y</i>
924	Houston Lighting and Power, Cedar Bayou Plant, Well 2	Layne-Texas Co.	1967	409	18 12	342 409	CL	17	120	Nov. 18, 1967	Sub, E 75	Ind	48 feet of screen between 352 and 400 feet. Reported yield 650 gal/min with 43 feet drawdown when drilled. Well listed as DH-64-09-812 in Texas Water Development Board Report 202.
10-713	J. A. Johnson	Gilbert's Water Well Drilling Co.	1975	239	6	239	CU	23	59	Aug. 8, 1975	Sub, E	D	Screen from 229 to 239 feet.
11-605	Chambers County Golf Course	Frankland Well Service Co.	1977	110	6	110	CU	27	16	June 25, 1977	Sub, E	Irr	Screen from 80 to 110 feet. Reported yield 200 gal/min with 50 feet drawdown when drilled.
606	do	do	1976	138	6 4	100 138	CU	27	16	Sept. 1, 1976	Sub, E	Irr	Screen from 118 to 138 feet. <i>y</i>
816	City of Anahuac, Well 3	do	1978	100	6	100	CU	22	24	Mar. 1978	Sub, E	P	Screen from 80 to 100 feet.
26-710	Exxon Company	Exxon Company	--	--	--	--	--	0	102.28	Mar. 8, 1979	N	N	Located in Galveston Bay. Supply well for oil test.
809	do	do	--	--	4	--	CL?	0	89.0	May 28, 1975	N	N	Do.
810	do	do	--	--	--	--	--	0	91	May 8, 1979	N	N	Do.

*y* See Table 2 for Drillers' Logs of Wells.

**Table 2.—Drillers' Logs of Wells in Chambers County**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well DH-64-09-337</b>					
Owner: Cities Service Fractioners			Clay	128	1,295
Driller: Katy Drilling Co.			Sand and rock	84	1,379
Sand and rock	133	133	Clay	63	1,442
Clay	7	140	Sand and rock	23	1,465
Sand	13	153	Clay	25	1,490
Clay	119	272	Sand and rock	45	1,535
Sand	14	286	Clay	24	1,569
Clay	63	349	Sand and rock	73	1,642
Sand and rock	36	385	Clay	255	1,897
Clay	68	453	Sand and rock	44	1,941
Sand and rock	47	500	Clay	30	1,971
Rock	32	532	Sand and rock	16	1,987
Clay	9	541	Clay	148	2,135
Sand and rock	8	549			
Rock	40	589			
Sand and rock	42	631	Owner: Chambers County Golf Course		
Shale	157	788	Driller: Frankland Well Service Co.		
Sand and rock	76	864	Clay	59	59
Shale	229	1,093	Sand	79	138
Sand and rock	74	1,167			
<b>Well DH-64-11-606</b>					

**Table 3.—Water Levels in Wells in Chambers County  
(feet below land surface)**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
<b>Well DH-64-09-301</b>					
Owner: Chambers County WC and ID No. 1, well 5		Owner: Chambers County WC and ID No. 1, well 6		Owner: Houston Lighting and Power Co., Cedar Bayou Plant, well 3	
Elevation: 43		Elevation: 40		Elevation: 24	
Completion Interval: 405-520		Completion Interval: 406-447		Completion Interval: 335-391	
Mar. 3, 1975	128.55	Oct. 6, 1976	151.5	Jan. 13, 1975	142.65
Oct. 14, 1975	126	Mar. 8, 1977	96.5	Feb. 7, 1975	142.83
Feb. 8, 1979	114.38			Mar. 21, 1975	146.12
Oct. 1, 1979	107.49			Apr. 21, 1975	149.08
<b>Well DH-64-09-302</b>					
Owner: Chambers County WC and ID No. 1, well 4		Owner: Houston Lighting and Power Co., Cedar Bayou Plant, well 1		May 23, 1975	150.26
Elevation: 43		Elevation: 13		July 16, 1975	143.54
Completion Interval: 418-521		Completion Interval: 324-394		Aug. 26, 1975	146.6
Mar. 3, 1975	142.5	Jan. 9, 1975	143.0	Sept. 30, 1975	150.37
Mar. 17, 1976	137	Feb. 4, 1975	141.25	Oct. 28, 1975	148.54
Oct. 6, 1976	143	Mar. 18, 1975	146.22	Nov. 18, 1975	148.75
Mar. 8, 1977	136	Apr. 17, 1975	151.45	Dec. 17, 1975	148.41
Oct. 14, 1977	133	May 13, 1975	141.14	Jan. 16, 1976	146.21
Feb. 8, 1979	125.43	July 7, 1975	142.62	Feb. 25, 1976	146.25
Oct. 1, 1979	111.25	Aug. 7, 1975	149.16	Mar. 31, 1976	145.81
		Sept. 9, 1975	152.56	Apr. 29, 1976	147.60
		Oct. 27, 1975	150.91	May 25, 1976	149.54
		Nov. 18, 1975	150.37	Oct. 28, 1976	149.10
<b>Well DH-64-09-307</b>					
Owner: Diamond Alkali well 3		Dec. 17, 1975	151.08	Dec. 8, 1976	149.34
Elevation: 27		Jan. 22, 1976	148.87	Dec. 30, 1976	148.11
Completion Interval: 720-910		Feb. 25, 1976	148.21	Apr. 13, 1977	153.7
Mar. 6, 1975	123.78	Mar. 24, 1976	151.95	May 13, 1977	152.60
Mar. 15, 1978	126.20	Apr. 23, 1976	148.08	June 10, 1977	152.00
Feb. 8, 1979	152.53	May 24, 1976	151.66	Sept. 22, 1977	150.48
Oct. 1, 1979	109.24	Sept. 23, 1976	149.83	Oct. 26, 1977	154.70
		Oct. 26, 1976	151.04	Aug. 1978	136.05
<b>Well DH-64-09-308</b>					
Owner: Diamond Alkali		Dec. 6, 1976	149.67	Aug. 7, 1979	122.75
Elevation: 27		Dec. 28, 1976	150.06	Aug. 31, 1979	120.30
Completion Interval: 149		Mar. 7, 1977	152.6		
Mar. 6, 1975	17.80	Apr. 1, 1977	154.3	<b>Well DH-64-09-924</b>	
Oct. 14, 1975	18.17	May 3, 1977	154.0	Owner: Houston Lighting and Power, Cedar Bayou Plant, well 2	
Oct. 7, 1976	20.46	June 8, 1977	153.83	Elevation: 17	
Mar. 8, 1977	16.98	Nov. 1977	152.40	Completion Interval: 352-400	
Oct. 14, 1977	18.20	Aug. 7, 1979	122.75	Jan. 20, 1975	143.73
Mar. 15, 1978	19.97	Aug. 31, 1979	118.0	Feb. 6, 1975	144.0
Oct. 3, 1978	19.95			Mar. 25, 1975	149.39
Feb. 8, 1979	17.89			Apr. 18, 1975	153.75
Oct. 1, 1979	17.38			May 20, 1975	153.51
				July 11, 1975	146.10

**Table 3.—Water Levels in Wells in Chambers County—Continued**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL				
<b>Well DH-64-09-924—Continued</b>									
Aug. 6, 1975	147.87	Mar. 22, 1978	21.42	Mar. 22, 1978	63				
Sept. 9, 1975	149.25	Feb. 23, 1979	20.0	Feb. 9, 1979	66				
Oct. 27, 1975	152.37	Oct. 2, 1979	19.0						
Nov. 19, 1975	151.58	<b>Well DH-64-11-802</b>		<b>Well DH-64-13-306—Continued</b>					
Dec. 19, 1975	150.83	Owner: City of Anahuac well 1		Owner: Trinity Bay Conservation Dist., well 1					
Jan. 20, 1976	148.7	Elevation: 22 Completion Interval: 80-120		Elevation: 26 Completion Interval: 116-146					
Feb. 25, 1976	148.97	Mar. 5, 1975	21.70	Mar. 5, 1975	78				
Mar. 25, 1976	146.66	Oct. 15, 1975	27.98	Mar. 18, 1976	66				
Apr. 23, 1976	149.51	Mar. 18, 1976	33.64	Mar. 9, 1977	68				
May 25, 1976	151.70	Oct. 6, 1976	29.42	Mar. 22, 1978	74				
Sept. 27, 1976	148.91	Mar. 9, 1977	24.16	Oct. 4, 1978	69.03				
Oct. 27, 1976	156.25	Oct. 20, 1977	26.14	Feb. 9, 1979	66.59				
Dec. 7, 1976	150.38	Feb. 23, 1979	24.0	Oct. 2, 1979	77.46				
Dec. 29, 1976	149.68	Oct. 2, 1979	26.0	<b>Well DH-64-13-601</b>					
Apr. 5, 1977	153.33	<b>Well DH-64-11-816</b>		Owner: Trinity Bay Conservation Dist., well 2					
May 2, 1977	152.60	Owner: City of Anahuac well 3		Elevation: 26 Completion Interval: 117-147					
June 9, 1977	155.75	Elevation: 22 Completion Interval: 80-100		Mar. 5, 1975	76				
Sept. 21, 1977	151.88	Aug. 1978		Feb. 2, 1976	60.30				
Oct. 26, 1977	153.00	Aug. 7, 1979		Oct. 27, 1977	73				
Aug. 1978	138.08	Aug. 31, 1979		Mar. 22, 1978	72				
Aug. 7, 1979	125.25	Oct. 2, 1979		Feb. 9, 1979	69				
Aug. 31, 1979	120.75	<b>Well DH-64-10-401</b>		<b>Well DH-64-11-901</b>					
Owner: Finger Furniture Co.									
Elevation: 37 Completion Interval: 330-871									
Mar. 3, 1975	98.36	Owner: Barringer		<b>Well DH-64-13-701</b>					
Mar. 18, 1976	93.64	Elevation: 22 Completion Interval: 340-350		Owner: Harvey Haynes					
Mar. 8, 1977	82.25	Mar. 5, 1975	31.47	Mar. 5, 1975	21.78				
<b>Well DH-64-11-801</b>									
Owner: City of Anahuac well 2									
Elevation: 22 Completion Interval: 73-113									
Mar. 5, 1975	23.47	Mar. 22, 1978	32.90	Mar. 18, 1976	23.25				
Oct. 15, 1975	20.19	Feb. 9, 1979	33.22	Oct. 7, 1976	24.72				
Mar. 18, 1976	18.79	Oct. 2, 1979	34.24	Mar. 9, 1977	33.10				
Oct. 6, 1976	23.23	<b>Well DH-64-13-306</b>		Oct. 27, 1977	24.87				
Mar. 9, 1977	20.41	Owner: Trinity Bay Conservation Dist., well 3		Mar. 22, 1978	25.33				
Oct. 20, 1977	21.82	Elevation: 27 Completion Interval: 130-199		Oct. 4, 1978	26.19				
		Mar. 18, 1976	55	Feb. 9, 1979	25.75				
		Mar. 9, 1977	60	Oct. 2, 1979	25.87				
		Oct. 27, 1977	78						

**Table 3.—Water Levels in Wells in Chambers County—Continued**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
<b>Well DH-64-17-311</b>					
Owner: Wilburn Bros.					
Elevation: 23		Elevation: Sea level		Elevation: Sea level	
Completion Interval: 78-105		Completion Interval: 457-577		Completion Interval:	
Mar. 3, 1975	20.19	Mar. 28, 1975	46.3	Mar. 10, 1976	108.5
Oct. 15, 1975	20.30	Mar. 9, 1976	52.5	Nov. 3, 1976	107.49
Mar. 17, 1976	20.10	Nov. 3, 1976	54.65	Apr. 27, 1977	105.33
Oct. 6, 1976	19.97	Apr. 27, 1977	51.37	Nov. 17, 1977	109.48
Mar. 8, 1977	22.94	Nov. 17, 1977	53.83	Mar. 14, 1978	109.49
Oct. 14, 1977	20.52	Mar. 14, 1978	51.58	Oct. 31, 1978	108.08
Oct. 3, 1978	20.43	Oct. 31, 1978	54.10	Mar. 8, 1979	102.28
Feb. 8, 1979	20.29	Mar. 8, 1980	52.90	Oct. 3, 1979	83.84
Oct. 1, 1979	19.80				
<b>Well DH-64-18-903</b>					
Owner: Exxon Co., C-50					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval: 457-577		Completion Interval:		Completion Interval:	
Mar. 28, 1975	46.3	Mar. 9, 1976	52.5	Mar. 10, 1976	108.5
Mar. 9, 1976	52.5	Nov. 3, 1976	54.65	Nov. 3, 1976	107.49
Nov. 3, 1976	54.65	Apr. 27, 1977	51.37	Apr. 27, 1977	105.33
Apr. 27, 1977	51.37	Nov. 17, 1977	53.83	Nov. 17, 1977	109.48
Nov. 17, 1977	53.83	Mar. 14, 1978	51.58	Mar. 14, 1978	109.49
Mar. 14, 1978	51.58	Oct. 31, 1978	54.10	Oct. 31, 1978	108.08
Oct. 31, 1978	54.10	Mar. 8, 1979	52.90	Mar. 8, 1979	102.28
Mar. 8, 1979	52.90	Oct. 3, 1979		Oct. 3, 1979	
Oct. 3, 1979					
<b>Well DH-64-26-710</b>					
Owner: Exxon Co., A-145					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval:		Completion Interval:		Completion Interval:	
Mar. 10, 1976	108.5	Mar. 10, 1976	92.1	Mar. 10, 1976	92.1
Nov. 3, 1976	107.49	Nov. 3, 1976	96.40	Nov. 3, 1976	96.40
Apr. 27, 1977	105.33	Apr. 27, 1977	95.94	Apr. 27, 1977	95.94
Nov. 17, 1977	109.48	Nov. 11, 1977	93.78	Nov. 11, 1977	93.78
Mar. 14, 1978	109.49	Mar. 14, 1978	93.68	Mar. 14, 1978	93.68
Oct. 31, 1978	108.08	Oct. 31, 1978	94.97	Oct. 31, 1978	94.97
Mar. 8, 1979	102.28	Mar. 8, 1979	95.03	Mar. 8, 1979	95.03
Oct. 3, 1979	83.84	Oct. 3, 1979	89.58	Oct. 3, 1979	89.58
Oct. 3, 1979					
<b>Well DH-64-26-809</b>					
Owner: Exxon Co., A-94					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval:		Completion Interval:		Completion Interval:	
May 28, 1975	87.0	May 28, 1975	87.0	May 28, 1975	87.0
Mar. 10, 1976	92.1	Mar. 10, 1976	92.1	Mar. 10, 1976	92.1
Nov. 3, 1976	96.40	Nov. 3, 1976	96.40	Nov. 3, 1976	96.40
Apr. 27, 1977	95.94	Apr. 27, 1977	95.94	Apr. 27, 1977	95.94
Nov. 11, 1977	93.78	Nov. 11, 1977	93.78	Nov. 11, 1977	93.78
Mar. 14, 1978	93.68	Mar. 14, 1978	93.68	Mar. 14, 1978	93.68
Oct. 31, 1978	94.97	Oct. 31, 1978	94.97	Oct. 31, 1978	94.97
Mar. 8, 1979	95.03	Mar. 8, 1979	95.03	Mar. 8, 1979	95.03
Oct. 3, 1979	89.58	Oct. 3, 1979	89.58	Oct. 3, 1979	89.58
Oct. 3, 1979					
<b>Well DH-64-17-901</b>					
Owner: Sun Oil Co.					
Elevation: 16		Elevation: 16		Elevation: Sea level	
Completion Interval: -150		Completion Interval: -150		Completion Interval:	
Mar. 6, 1975	27.66	Mar. 18, 1976	26.35	Mar. 10, 1976	92.1
Mar. 18, 1976	26.35	Oct. 7, 1976	30.15	Nov. 3, 1976	96.40
Oct. 7, 1976	30.15	Mar. 9, 1977	30.53	Apr. 27, 1977	95.94
Mar. 9, 1977	30.53	Mar. 22, 1978	31.85	Nov. 11, 1977	93.78
Mar. 22, 1978	31.85	Feb. 9, 1979	33.56	Mar. 14, 1978	93.68
Feb. 9, 1979	33.56	Oct. 2, 1979	32.29	Oct. 31, 1978	94.97
Oct. 2, 1979	32.29			Mar. 8, 1979	95.03
Mar. 8, 1979				Oct. 3, 1979	
Oct. 3, 1979					
<b>Well DH-64-21-205</b>					
Owner: Sun Oil Co.					
Elevation: 16		Elevation: 16		Elevation: Sea level	
Completion Interval: -150		Completion Interval: -150		Completion Interval:	
Mar. 6, 1975	27.66	Mar. 18, 1976	26.35	Mar. 10, 1976	92.1
Mar. 18, 1976	26.35	Oct. 7, 1976	30.15	Nov. 3, 1976	96.40
Oct. 7, 1976	30.15	Mar. 9, 1977	30.53	Apr. 27, 1977	95.94
Mar. 9, 1977	30.53	Mar. 22, 1978	31.85	Nov. 11, 1977	93.78
Mar. 22, 1978	31.85	Feb. 9, 1979	33.56	Mar. 14, 1978	93.68
Feb. 9, 1979	33.56	Oct. 2, 1979	32.29	Oct. 31, 1978	94.97
Oct. 2, 1979	32.29			Mar. 8, 1979	95.03
Mar. 8, 1979				Oct. 3, 1979	
Oct. 3, 1979					
<b>Well DH-64-26-701</b>					
Owner: Exxon Co., A-1					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval: 610-671		Completion Interval: 610-671		Completion Interval:	
May 28, 1975	105.91	May 28, 1975	105.91	May 28, 1975	105.91
May 10, 1976	112.47	May 10, 1976	112.47	May 10, 1976	112.47
Nov. 3, 1976	112.90	Nov. 3, 1976	112.90	Nov. 3, 1976	112.90
Apr. 27, 1977	110.20	Apr. 27, 1977	110.20	Apr. 27, 1977	110.20
Mar. 14, 1978	107.79	Mar. 14, 1978	107.79	Mar. 14, 1978	107.79
Oct. 11, 1978	114.04	Oct. 11, 1978	114.04	Oct. 11, 1978	114.04
Oct. 3, 1979	109.72	Oct. 3, 1979	109.72	Oct. 3, 1979	109.72
Oct. 3, 1979					
Oct. 3, 1979					
<b>Well DH-64-26-810</b>					
Owner: Exxon Co., A-111					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval:		Completion Interval:		Completion Interval:	
Mar. 10, 1976	94.2	Mar. 10, 1976	94.2	Mar. 10, 1976	94.2
Nov. 3, 1976	94.96	Nov. 3, 1976	94.96	Nov. 3, 1976	94.96
Apr. 27, 1977	94.40	Apr. 27, 1977	94.40	Apr. 27, 1977	94.40
Nov. 17, 1977	92.86	Nov. 17, 1977	92.86	Nov. 17, 1977	92.86
Mar. 14, 1978	91.85	Mar. 14, 1978	91.85	Mar. 14, 1978	91.85
Oct. 31, 1978	91.28	Oct. 31, 1978	91.28	Oct. 31, 1978	91.28
Mar. 8, 1979	91.90	Mar. 8, 1979	91.90	Mar. 8, 1979	91.90
Mar. 8, 1979					
Mar. 8, 1979					
<b>Well DH-64-18-605</b>					
Owner: Exxon Co., C-54					
Elevation: Sea level		Elevation: Sea level		Elevation: Sea level	
Completion Interval:		Completion Interval:		Completion Interval:	
Mar. 28, 1975	51.4	Mar. 10, 1976	112.47	Mar. 10, 1976	94.2
Mar. 9, 1976	54.3	Nov. 3, 1976	112.90	Nov. 3, 1976	94.96
Nov. 3, 1976	54.34	Apr. 27, 1977	110.20	Apr. 27, 1977	94.40
Apr. 27, 1977	54.54	Mar. 14, 1978	107.79	Nov. 17, 1977	92.86
Nov. 17, 1977	55.41	Oct. 11, 1978	114.04	Mar. 14, 1978	91.85
Mar. 14, 1978	55.46	Oct. 3, 1979	109.72	Oct. 31, 1978	91.28
Oct. 10, 1978	55.52			Mar. 8, 1979	91.90
Mar. 8, 1979	57.02			Oct. 3, 1979	
Oct. 3, 1979					

Table 4.—Chemical Analyses of Water From Wells in Chambers County  
When no potassium (K) is reported, sodium and potassium are calculated and reported as sodium (Na)  
Water-bearing units: CL, lower unit of Chicot aquifer

Well	Owner	Depth or producing interval	Water-bearing unit	Date	Dissolved silica (SiO <sub>2</sub> ) (mg/l)	Dissolved iron (Fe) (mg/l)	Dissolved manganese (Mn) (mg/l)	Dissolved calcium (Ca) (mg/l)	Dissolved magnesium (Mg) (mg/l)	Dissolved sodium (Na) (mg/l)	Bicarbonate (HCO <sub>3</sub> <sup>-</sup> ) (mg/l)	Carbo-nate (CO <sub>3</sub> <sup>2-</sup> ) (mg/l)	Dissolved sulfate (SO <sub>4</sub> <sup>2-</sup> ) (mg/l)	Dissolved chloride (Cl <sup>-</sup> ) (mg/l)	Dissolved fluoride (F <sup>-</sup> ) (mg/l)	Dissolved nitrate (NO <sub>3</sub> <sup>-</sup> ) (mg/l)	Dissolved orthophosphate (PO <sub>4</sub> <sup>3-</sup> ) (mg/l)	Dissolved boron (B) (mg/l)	Dissolved solids (sum of Ca, Mg, Na, K) (mg/l)	Hardness constituents (Ca, Mg) (mg/l)	Residual sodium (mg/l)	Sodium adsorption ratio (SAR) (mg/l)	Specific conductance (micro-mhos at 25°C)	pH	Temperature (°C)
1/2 BH-64-13-106	Trinity Bay Conservation District, Well 3	130-198	GU	Mar. 13, 1974	15	590.2	40.3	53	9	294	--	437	0	29	299	0.2 4/	--	914	16.9	--	--	1,670	7.40	22	
26-701	Exxon Co., A-1	610-671	CL	May 28, 1975	--	--	--	--	--	--	--	432	0	.0	37	--	--	--	--	--	--	949	8.0	--	
701	do	610-671	CL	Mar. 10, 1976	--	--	--	--	--	--	--	430	0	.4	88	--	--	--	--	--	--	962	8.0	--	
701	do	610-671	CL	Apr. 27, 1977	--	--	--	--	--	--	--	438	0	4.0	88	--	--	--	--	--	--	972	8.1	--	
701	do	610-671	CL	Nov. 17, 1977	--	--	--	--	--	--	--	460	0	.4	84	--	--	--	--	--	--	968	7.9	--	
701	do	610-671	CL	Mar. 14, 1978	--	--	--	--	--	--	--	450	0	.0	88	--	--	--	--	--	--	957	8.0	--	

Analyzed by Edna Wood Laboratories.  
 Total iron (Fe).  
 Total manganese (Mn).  
 Total fluoride (F).



Table 5.--Records of Wells in Liberty County

Water Level : Reported water levels given in feet  
 Method of Lift and Type of Power: E, electric; Sub, submersible; T, turbine  
 Use of Water : Irr, irrigation; D, domestic  
 Water-Bearing Unit : C, Chicot aquifer; E, Evangeline aquifer

Well	Owner	Driller	Date completed	Depth of well (ft)	Casing		Water bearing unit	Altitude of land surface (ft)	Water level		Method of lift	Use of water	Remarks
					Diameter (in.)	Depth (ft)			Above (+) below land surface datum (ft)	Date of measurement			
SB-60-64-607	Roy Seaburg	Layne-Western Co. Inc.	1978	917	20 12	442 917	E, C	76	160	June 22, 1978	T 70	Irr	Casing slotted from 301 to 917 feet. Reported yield 3,046 gal/min with 54 feet drawdown when drilled. <sup>y</sup>
61-42-509	Cypress Lakes	Bussell and Son, Inc.	1977	300	6 4	271 300	E	48	16	May 18, 1977	Sub, E	D	Screen from 280 to 300 feet.

<sup>y</sup> See Table 6 for Drillers' Logs of Wells.

**Table 6.—Drillers' Logs of Wells in Liberty County**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well SB-60-64-607</b>					<b>Well SB-60-64-607—Continued</b>
Owner: Roy Seaburg			Clay	11	636
Driller: Layne-Western Co., Inc.			Sand	15	651
Sand and gravel	31	31	Clay	33	684
Clay	14	45	Sand and rock	42	726
Sand	13	58	Clay	17	743
Clay	5	63	Sand and rock	12	755
Sand	7	70	Clay	16	771
Clay	43	113	Sand and rock	15	786
Sand	99	212	Clay	30	816
Clay	27	239	Sand and rock	5	821
Sand	62	301	Clay	57	878
Clay	54	355	Sand and rock	4	882
Sand	36	391	Clay	35	917
Clay	101	492	Sand	19	936
Sand	23	515	Clay	3	939
Clay	43	558	Sand	53	992
Sand	28	586	Clay	19	1,011
Clay	9	595			
Sand	30	625			

**Table 7.—Water Levels in Wells in Liberty County  
(feet below land surface)**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL
<b>Well SB-60-48-102</b>					
Owner: City of Cleveland, well 1		Owner: E. J. Stoesser, well 2		Owner: M. F. Zalesky	
Elevation: 157		Elevation: 82		Elevation: 70	
Completion Interval: 619-833		Completion Interval: -1,006		Completion Interval: -912	
Mar. 5, 1975	36.64	Mar. 28, 1976	85.61	Mar. 3, 1975	102.49
Mar. 10, 1976	46.33	Mar. 9, 1977	87.57	Mar. 23, 1976	109.04
Mar. 18, 1977	42.00	Sept. 29, 1977	90.55	Mar. 9, 1977	105.19
Oct. 7, 1977	33.00	Mar. 20, 1978	85.63	Sept. 12, 1977	103.07
Mar. 27, 1978	16.00	Sept. 26, 1978	104.49	Mar. 20, 1978	104.28
Feb. 20, 1979	57.72	Feb. 12, 1979	93.69	<b>Well SB-61-33-601</b>	
Sept. 17, 1979	61.71	Sept. 14, 1979	89.63	Owner: C. Die	
<b>Well SB-60-48-302</b>					
Owner: Vernon Elledge, well 2		Owner: Roy Seaburg		Elevation: 126	
Elevation: 153		Elevation: 82		Completion Interval: 130-140	
Completion Interval: -452		Completion Interval: -500		Mar. 6, 1975	53.44
Mar. 6, 1975	28.88	Mar. 3, 1975	83.02	Mar. 10, 1976	55.41
Mar. 28, 1976	28.36	Mar. 28, 1976	86.57	Mar. 18, 1977	53.29
Mar. 17, 1977	25.42	Mar. 9, 1977	77.67	Oct. 7, 1977	57.14
Oct. 7, 1977	26.06	Sept. 29, 1977	91.37	Mar. 27, 1978	55.50
Feb. 20, 1979	39.15	Mar. 20, 1978	77.62	Feb. 15, 1979	56.87
Sept. 17, 1979	21.06	June 26, 1978	95.99	Sept. 18, 1979	56.10
<b>Well SB-60-56-901</b>					
Owner: E. J. Stoesser, well 3		Owner: Roy Seaburg		<b>Well SB-61-33-701</b>	
Elevation: 86		Elevation: 82		Owner: Roy Elledge	
Completion Interval: -1,015		Completion Interval: -500		Elevation: 157	
Mar. 3, 1975	72.66	Mar. 3, 1975	76.06	Completion Interval: -835	
Mar. 9, 1977	61.90	Mar. 9, 1977	72.01	Mar. 6, 1975	38.83
Sept. 29, 1977	85.74	Sept. 29, 1977	83.99	Mar. 18, 1977	43.07
Sept. 27, 1978	90.59	June 26, 1978	89.83	Oct. 7, 1977	43.45
Feb. 20, 1979	75.08	Sept. 12, 1979	87.65	Mar. 27, 1978	40.73
Sept. 12, 1979	86.76	<b>Well SB-60-64-303</b>			
<b>Well SB-60-56-902</b>					
Owner: E. J. Stoesser, well 5		Owner: E. J. Stoesser, well 4		<b>Well SB-61-33-708</b>	
Elevation: 85		Elevation: 83		Owner: Roy A. Morton and Sons	
Completion Interval: -1,040		Completion Interval: -1,017		Elevation: 161	
Mar. 3, 1975	87.27	Mar. 3, 1975	105.98	Completion Interval: -693	
Oct. 29, 1977	98.55	Mar. 9, 1977	104.78	Mar. 6, 1975	37.84
Oct. 27, 1978	106.73	Sept. 24, 1977	117.05	Mar. 18, 1977	37.33
Feb. 20, 1979	94.10	Mar. 20, 1978	105.25	Oct. 7, 1977	42.45
Sept. 12, 1979	97.49	June 25, 1978	125.43	Mar. 27, 1978	41.15
<b>Well SB-60-64-602</b>					
Owner: E. J. Stoesser, well 4		Feb. 12, 1979	115.65	Oct. 2, 1978	58.43
Elevation: 83		Sept. 12, 1979	121.86		
Completion Interval: -1,017					

**Table 7.—Water Levels in Wells in Liberty County—Continued**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL	
<b>Well SB-61-33-708—Continued</b>						
<b>Well SB-61-49-802</b>						
Owner: W. A. Conners						
Feb.	15, 1979	38.86	Elevation: 97		Elevation: 87	
Sept.	14, 1979	40.05	Completion Interval: -760		Completion Interval: -660	
			Mar. 5, 1975	65.55	Mar. 7, 1975	
			Mar. 23, 1976	71.52	Mar. 10, 1976	
<b>Well SB-61-41-101</b>						
Owner: Vernon Elledge						
Elevation: 153						
Completion Interval: -502						
Mar.	6, 1975	32.79	<b>Well SB-61-49-803</b>			
Mar.	10, 1976	32.26	Owner: W. A. Conner			
Mar.	18, 1977	31.70	Elevation: 97		<b>Well SB-61-51-806</b>	
Oct.	7, 1977	33.47	Completion Interval: 150-742		Owner: Morgan Tippett	
Mar.	27, 1978	32.62	Mar. 5, 1975	54.23		
Oct.	2, 1978	37.09	Mar. 23, 1976	63.69	Elevation: 68	
Feb.	20, 1979	31.26	Mar. 9, 1977	54.81	Completion Interval: -624	
Sept.	17, 1979	32.95	Sept. 29, 1977	56.34	Mar. 7, 1975	
			Mar. 22, 1978	54.70	Mar. 14, 1977	
<b>Well SB-61-41-701</b>						
Owner: M. A. Scott						
Elevation: 128						
Completion Interval: -625						
Mar.	5, 1975	49.70	<b>Well SB-61-49-807</b>			
Mar.	28, 1976	52.09	Owner: T. Wilburn			
Mar.	18, 1977	49.12	Elevation: 97		<b>Well SB-61-57-202</b>	
Oct.	7, 1977	56.78	Completion Interval: 65-396		Owner: D. A. Reidland	
Mar.	27, 1978	56.70	Mar. 5, 1975	87.98		
Oct.	2, 1978	60.31	Mar. 23, 1976	106.14	Elevation: 98	
Feb.	20, 1979	54.48	Mar. 9, 1977	90.58	Completion Interval: -816	
Sept.	17, 1979	50.37	Sept. 29, 1977	103.40	Mar. 23, 1976	
			Mar. 22, 1978	84.04	84.89	
<b>Well SB-61-43-801</b>						
Owner: A. L. Erickson						
Elevation: 93						
Completion Interval: -100						
Mar.	18, 1977	43.25	<b>Well SB-61-51-101</b>			
Sept.	30, 1977	44.52	Owner: Dennison			
Mar.	27, 1978	42.84	Elevation: 95		<b>Well SB-61-57-506</b>	
Sept.	28, 1978	47.39	Completion Interval: -1,150		Owner: W. M. Moreau	
Feb.	15, 1979	44.14	Mar. 7, 1975	46.30		
Sept.	14, 1979	43.58	Mar. 10, 1976	46.35	Elevation: 78	
			Mar. 14, 1977	45.79	Completion Interval: -940	
			Sept. 30, 1977	48.75	Mar. 3, 1975	
			Mar. 27, 1978	45.75	114.21	
			Sept. 28, 1978	50.45	Mar. 23, 1976	
			Feb. 15, 1979	46.49	128.22	
			Sept. 14, 1979	46.74		

**Table 7.—Water Levels in Wells in Liberty County—Continued**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		
<b>Well SB-61-57-506—Continued</b>							
Owner: City of Liberty well 3							
Mar. 9, 1977	127.60	Elevation: 32 Completion Interval: 445-562	Mar. 5, 1975	68.60	Elevation: 66 Completion Interval: -1,180		
Sept. 12, 1977	121.03	Mar. 14, 1977	62.80	Mar. 14, 1977	61.78		
Mar. 20, 1978	123.61	Sept. 29, 1977	54.03	Sept. 30, 1977	61.19		
Sept. 26, 1978	124.15	<b>Well SB-61-58-505</b>		Mar. 22, 1978	56.72		
Feb. 8, 1979	111.80	Owner: Charles W. Fisher		Sept. 28, 1978	61.72		
Sept. 12, 1979	117.73	Elevation: 30 Completion Interval: -651		Feb. 12, 1979	58.53		
<b>Well SB-61-57-702</b>							
Owner: J. M. Frost, Jr., well 1							
Elevation: 67 Completion Interval: -800							
Mar. 3, 1975	115.00	Mar. 7, 1975	55.87	<b>Well SB-61-60-902</b>			
Mar. 23, 1976	113.11	Mar. 23, 1976	50.31	Owner: Willis Estate			
Mar. 9, 1977	111.42	Mar. 14, 1977	50.24	Elevation: 492 Completion Interval: 429-492			
Mar. 20, 1978	112.43	Sept. 29, 1977	58.80	Mar. 7, 1975	37.41		
Sept. 26, 1978	119.51	Mar. 22, 1978	63.50	Mar. 14, 1977	35.74		
Feb. 14, 1979	111.45	Sept. 27, 1978	64.13	Sept. 30, 1977	37.33		
Sept. 12, 1979	112.75	Feb. 12, 1979	62.04	Mar. 22, 1978	34.19		
<b>Well SB-61-57-703</b>							
Owner: J. M. Frost, Jr., well 2							
Elevation: 67 Completion Interval: 240-837							
Mar. 3, 1975	118.44	Elevation: 72 Completion Interval: -485	Mar. 7, 1975	54.50	Elevation: 48 Completion Interval: -496		
Mar. 23, 1976	115.23	Mar. 31, 1976	56.58	Mar. 31, 1976	38.57		
Mar. 9, 1977	113.73	Mar. 14, 1977	53.57	Mar. 14, 1977	38.53		
Sept. 12, 1977	122.41	Sept. 30, 1977	51.83	Sept. 30, 1977	44.05		
Mar. 20, 1978	123.30	Feb. 14, 1979	51.42	Feb. 15, 1979	44.57		
Sept. 26, 1978	131.96	<b>Well SB-61-59-106</b>		Sept. 13, 1979	44.02		
Feb. 8, 1979	125.49	Owner: Graves and Portlow		<b>Well SB-64-03-303</b>			
Sept. 12, 1979	125.40	Elevation: 72 Completion Interval: -485		Owner: Howard LaCour			



Table 8.--Records of Wells in Montgomery County

Water level : Reported water levels given in feet; measured water levels given in feet and tenths  
 Method of Lift and Type Power: E, electric; Sub, submersible; T, turbine; J, jet; N, none  
 Use of Water : P, public supply; D, domestic; Irr, irrigation; Ind, industrial; N, none  
 Water-Bearing Unit : C, Chicot aquifer; E, Evangeline aquifer; J, Jasper aquifer; JU, Upper unit of Jasper aquifer

Well	Owner	Driller	Date completed	Depth of well (ft)	Casing		Water bearing unit	Altitude of land surface (ft)	Water level		Method of lift	Use of water	Remarks	
					Diameter (in.)	Depth (ft)			Above (+) below land surface datum (ft)	Date of measurement				
*TS-60-35-905	Stanley Lake Municipal Utilities District	Layne-Texas Co.	1973	765	16 10	512 765	JU	230	39	Sept. 20, 1973	T, E	P	164 feet of screen from 522 to 765 feet. Reported yield of 708 gal/min with 236 feet drawdown when drilled. Test hole drilled to 1,310 feet. <u>y</u>	
36-506	La-Terre Corp. Shadow Bay Subdivision	Bussell and Son, Inc.	1974	497	6 4	393 497	JU	240	55	May 21, 1974	--	P	Screen from 400 to 480 feet. <u>y</u>	
507	Lake Conroe Hills Municipal Utilities District	Layne-Texas Co.	1975	850	16 10	450	JU	256	86	Aug. 13, 1975	T, E	P	185 feet of screen from 550 to 830 feet. Test hole drilled to 1,101 feet.	
*	705	Montgomery County Utilities District No. 8	do	1973	750	16 10	475 750	JU	210	15	July 9, 1973	T, E 100	P	155 feet of screen from 395 to 750 feet. Reported yield 776 gal/min with 9 feet drawdown when drilled. <u>y</u>
706	Municipal Utilities District	Water Resources of Texas	1977	750	16 10	470 750	JU	220	34	Feb. 1977	T, E 100	P	186 feet of screen from 478 to 738 feet. Reported yield 750 gal/min with 60 feet drawdown when drilled. Test hole drilled to 900 feet.	
37-411	John Weisinger-Wood-creek Subdivision	O'Day Drilling Co.	1977	336	6 4	315 336	E	350	160	Dec. 28, 1977	E 10	P	Screen from 315 to 336 feet. Reported yield 150 gal/min when drilled. <u>y</u>	
506	Harry Oxspring	L. M. Patterson	1970	338	4 2	315 338	C	300	126	Jan. 1970	Sub	D	Screen from 328 to 338 feet. Reported yield 30 gal/min when drilled. <u>y</u>	
711	Panorama Municipal Utilities Dist.	Water Resources, Inc.	1977	1,086	12 8	853 1,086	JU	--	130	Nov. 1976	--	P	Reported yield 602 gal/min with 100 feet drawdown when drilled. Test hole drilled to 1,330 feet. <u>y</u>	
805	Texas National Gold and Development	B. J. Swinehart Co., Inc.	1975	896	8 6	724 896	JU	300	130	July 1975	T, E 60	Irr	Casing slotted 60 feet from 731 to 877 feet. Reported yield 350 gal/min with 69 feet drawdown when drilled. <u>y</u>	
908	Touchstone Utilities, Royal Forest Sub-division	do	1972	509	4 2	472 509	E	280	88	Sept. 2, 1972	Sub, E	P	Screen from 490-510 feet. <u>y</u>	
*	43-511	Keenan Water Supply Corp.	Lanford Drilling Co.	1978	389	7 4	341 389	C	308	142	Sept. 1978	Sub, E	P	Screen from 342 to 384 feet. <u>y</u>
44-111	April Sound, Well 3	Con-Tex Water Well Co.	1975	781	6 4	741 781	JU	245	35	June 9, 1975	T, E	Irr	Screen from 747 to 780 feet. Reported yield 500 gal/min when drilled. <u>y</u>	
*	311	Highland Hollow	do	1974	529	6 4	493 529	E	210	100	Apr. 5, 1974	Sub, E	P	Screen from 492 to 520 feet. <u>y</u>
*	45-111	City of Conroe, Well 8	Layne-Texas Co.	1978	1,210	16 10	810 1,210	E	260	146	Nov. 9, 1978	T, E	P	206 feet of screen between 825 and 1,190 feet. Reported yield 1,033 gal/min with 96 feet drawdown when drilled. <u>y</u>
206	Maycon	Weisinger Water Well, Inc.	1978	632	6 4	550 632	E	191	68	June 16, 1978	Sub, E	D	Screen from 582 to 632 feet. Reported yield 300 gal/min when drilled. <u>y</u>	
411	Artesian Oaks Subdivision	Pattesch's Water Well Service	1972	451	4 2	427 451	E	155	7	Feb. 25, 1972	Sub, E	P	Screen from 435 to 451 feet. Reported yield 85 gal/min when drilled. <u>y</u>	
712	City of Conroe	Texas Water Wells, Inc.	1974	1,245	10	1,245	JU	145	7 83	Mar. 8, 1975 Feb. 14, 1977	T, E 100	P	188 feet of screen between 1,020 and 1,236 feet. Reported yield 1,548 gal/min with 105 feet drawdown when drilled. <u>y</u>	
713	Clyde Smith	Con-Tex Water Well Co.	1973	181	6 4	161 181	E	120	4	May 1973	Sub, E	D	Screen from 175 to 185 feet. <u>y</u>	
807	River Plantation	do	1974	186	6 4	156 186	E	125	5	May 1974	Sub, E 15	Irr	Screen from 160 to 190 feet. Fills lake on golf course. <u>y</u>	

Table 8.--Records of Wells in Montgomery County--Continued

Well	Owner	Driller	Date completed	Depth of well (ft)	Casing		Water bearing unit	Altitude of land surface (ft)	Water level		Method of lift	Use of water	Remarks
					Diameter (in.)	Depth (ft)			Above (+) below land surface datum (ft)	Date of measurement			
TS-60-46-505	Deerwood	Weisinger Water Well, Inc.	1978	345	6	318	C(?)	189	46	May 17, 1978	Sub, E	P	Screen from 335 to 345 feet. Reported yield 100 gal/min with 50 feet of drawdown when drilled. <u>y</u>
50-304	Toby Smith	Schoppa Water Well Service	1977	630	6	595	E	269	155	Feb. 9, 1977	--	P	Screen from 590 to 630 feet. <u>y</u>
51-511	O. A. Rickett, Hunters Retreat Subdivision	do	1974	736	4 2	706 736	E	245	140	Feb. 16, 1974	Sub, E	P	Screen from 711 to 736 feet. <u>y</u>
512	O. A. Rickett	do	1977	416	6 4	385 416	E	240	110	March 1977	--	P	Screen from 386 to 416 feet. <u>y</u>
703	Johnnie Clepper, Shady Oaks Subdivision	do	1972	637	4 2	590 637	E	195	115	June 9, 1972	Sub, E	P	Screen from 617 to 637 feet. <u>y</u>
807	A. R. Coe, Jr., Kipling Oaks Subdivision	do	1972	673	4 2	627 673	E	215	110	July 25, 1972	Sub, E	P	Screen from 633 to 673 feet. <u>y</u>
808	Johnnie Clepper, Oak Hills Subdivision	do	1971	221	4 2	199 221	C	227	50	Aug. 11, 1971	Sub, E 5	P	20 feet of screen between 201 to 221 feet. <u>y</u>
52-205	Landcraft, Westwood III Subdivision	Homeview National Residence Development Corp.	1979	300	6 4	250 300	C	211	80	June 17, 1979	Sub, E	P	Screen from 246 to 290 feet. Reported yield 75 gal/min when drilled. <u>y</u>
406	A. Cronin	Schoppa Water Well Service	1971	250	2	250	C	205	55	July 2, 1971	Sub, E 5	D	Screen from 240 to 250 feet. <u>y</u>
* 53-208	Montgomery County Municipal Utility District, No. 15	Layne-Texas Co.	1974	820	16 10	615 820	E	120	61	Apr. 19, 1974	T, E	P	155 feet of screen between 625 and 805 feet. Reported yield 907 gal/min with 83 feet drawdown when drilled. Test hole drilled to 1,004 feet. <u>y</u>
* 209	Montgomery County Municipal Utilities District, No. 39	do	1977	1,000	18 12	650 1,000	E	126	92	May 18, 1977	--	P	Screen from 660 to 880 feet. Reported yield 1,421 gal/min with a drawdown of 188 feet when drilled. <u>y</u>
314	Whispering Oaks	Turbine Pump Services	1970	269	4 2	249 269	E	115	35	Sept. 23, 1970	Sub, E 5	P	20 feet of screen between 250 and 270 feet. Reported yield 100 gal/min with 30 feet drawdown when drilled. <u>y</u>
513	Bullet Concrete	Patterson's Water Well Service	1972	228	4 2	212 228	E	130	46	May 5, 1972	Sub, E 2	Ind	Screen from 218 to 228 feet. Reported yield 60 gal/min when drilled. <u>y</u>
607	J. B. Sand and Gravel	Con-Tex Water Well Co.	1974	235	6 4	216 235	E	95	23	June 1974	Sub, E	Ind	Screen from 220 to 240 feet. Reported yield 500 gal/min when drilled. <u>y</u>
* 709	Montgomery County Municipal District No. 6	Layne-Texas Co.	1973	944	16 10	690 944	E	130	128	Oct. 5, 1973	T, E 100	P	101 feet of screen between 610 and 944 feet. Reported yield 850 gal/min with 176 feet drawdown when drilled. <u>y</u>
710	do	do	1973	1,903	--	--	J	130	Flowing	Sept. 14, 1973	N	N	Screen from 1,468 to 1,485 feet. Flowing 25 gal/min, 19 feet above surface.
711	do	do	1973	1,903	--	--	J	130	Flowing	Sept. 11, 1973	N	N	Screen from 1,670-1,690 feet. Flowing 10 gal/min, 22 feet above surface.
817	Oak Ridge Municipal Utilities District	Texas Water Wells Inc.	1973	998	10	988	E	130	109	Dec. 1, 1973	T, E 150	P	Screen from 718 to 800 feet. Reported yield 1,043 gal/min with 112 feet drawdown when drilled. <u>y</u>
818	Community Development and Construction	Layne-Texas Co.	1973	245	4 2	210 245	E	142	75	May 8, 1975	Sub, E	P	20 feet of screen from 210 to 245 feet. Supplies lake at Lamar Elementary School, Woodlands.
819	Robinson Trailer Courts	Turbine Pump Service	1971	281	4	281	E	145	56	July 5, 1971	Sub, E	P	<u>y</u>

Table 8.--Records of Wells in Montgomery County--Continued

Well	Owner	Driller	Date completed	Depth of well (ft)	Casing		Water bearing unit	Altitude of land surface (ft)	Water level		Method of lift	Use of water	Remarks
					Diameter (in.)	Depth (ft)			Above (+) or below land surface datum (ft)	Date of measurement			
TS-60-53-820	South Montgomery County Municipal Utilities District	Layne-Western Co., Inc.	1977	500	20 12	210 500	E	118	85	May 1977	--	P	278 feet of screen from 215 to 493 feet. Reported yield 1,012 gal/min with 161 feet drawdown when drilled. <u>1/</u>
54-202	D. E. Martin, Pioneer Trails Subdivision	Schoppa Water Well Service	1974	585	4 2	563 585	E	140	40	Apr. 29, 1974	J, E 5	P	Screen from 565 to 585 feet. <u>1/</u>
803	Fountain Bleau Water System, Golden Trails Subdivision	Drago Water Wells	1973	360	4 2	330 360	E	125	67	May 29, 1973	Sub, E	P	Screen from 330 to 360 feet. <u>1/</u>
* 55-312	City of Splendora, Well 2	Lanford Drilling Co., Inc.	1978	1,007	10 4	939 1,007	E	126	37	Sept. 1978	Sub, E 40	P	Screen from 939 to 1,002 feet. Reported yield 300 gal/min with 220 feet drawdown when drilled. <u>1/</u>
509	Montgomery County Municipal Utilities District, No. 16	Layne-Western Co.	1974	587	16 10	370 587	E	101	49	Nov. 1974	T, E	P	Screen from 380 to 580 feet. Reported yield 1,100 gal/min with 53 feet drawdown when drilled. <u>1/</u>
707	New Caney Independent School District	B. J. Swinehart Co., Inc.	1975	370	6 4	323 370	E	102	51	July 26, 1975	Sub, E	P	Screen from 323 to 363 feet. Reported yield 230 gal/min when drilled. <u>1/</u>
806	Jeff Howeth	H and H Water Well Drilling Co.	1973	485	6 4	441 485	E	75	40	Sept. 14, 1973	Sub, E	P	Screen from 455 to 485 feet. <u>1/</u>
61-306	J. S. Norman and H. H. Norman	Layne-Western Co., Inc.	1973	1,059	16 10	600 1,059	E	104	130	Jan. 1974	--	Ind.	Screen from 612 to 1,054 feet. <u>1/</u>
* 63-203	Harris County Utilities District No. 5	Layne-Texas Co.	1976	975	20 12	720 975	E	72	106	Nov. 29, 1976	T, E	P	185 feet of screen from 730 to 955 feet. Reported yield 2,040 gal/min with 35 feet drawdown when drilled. <u>1/</u>

\* See Table 11 for Chemical Analyses of Water From Wells.

1/ See Table 9 for Drillers' Logs of Wells.

**Table 9.—Drillers' Logs of Wells in Montgomery County**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-35-905</b>					
Owner: Stanley Lake Utility District					
Clay	100	100	Top soil	3	3
Sand	7	107	Clay	247	250
Shale	16	123	Sand	16	266
Sand	95	218	Clay	99	365
Shale and sand	16	278	Sand	15	380
Shale	100	378	Clay	16	396
Sand	29	407	Sand	80	476
Shale	19	426			
Sand	31	457			
Shale	31	488	<b>Well TS-60-36-705</b>		
Owner: Montgomery County Utilities District, No. 8					
Driller: Layne-Texas Co.					
Shale and shale streaks	14	502	Shale	29	29
Shale	20	522	Sand	6	35
Sand	78	600	Shale, gumbo	89	124
Shale	2	602	Sand	24	148
Sand	31	633	Shale	8	156
Shale (hard and sticky)	50	683	Sand	93	249
Shale, sandy	11	694	Shale, sandy	127	376
Shale, hard	6	700	Sand	18	394
Shale, hard and fine	52	752	Shale	2	466
Shale	12	764	Shale, sandy	47	513
Shale, hard	12	776	Sand and gravel	78	591
Shale	4	780	Shale	57	648
Shale, hard (brown)	124	904	Sand and shale streaks	88	736
Shale, sandy and lime streaks	27	931	Shale	117	853
Shale, hard	12	943	Sand, shale and lime streaks	26	879
Shale, sandy and lime streaks	53	996	Sand	7	886
Sand and streaks of shale	57	1,053	Shale, sandy	16	902
Sand, hard	10	1,063	Shale, hard	5	907
Sand and shale streaks	96	1,159	Shale, sandy	10	917
Shale, hard	16	1,175	Shale	18	935
Sand and shale streaks	31	1,206	Shale, sandy	23	958
Shale, hard	77	1,288	Shale and lime streaks	38	996
Shale, gumbo	5	1,288	Shale	114	1,110
Shale	22	1,310			

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-37-411</b>					
Owner: John Weisinger, Wood Creek Subdivision			Shale, sandy	64	160
Driller: O'Day Drilling Co.			Shale	20	180
Sand	2	2	Shale, sandy	70	250
Clay	18	20	Sand	100	350
Gravel	20	40	Shale, sandy	450	800
Clay	110	150	Sand	120	920
Rock	1	151	Shale	10	930
Clay	14	165	Sand	30	960
Rock	2	167	Shale	40	1,000
Clay	33	200	Sand	80	1,080
Rock	6	206			
Clay	77	283			
Sand	31	314			
Clay	3	317			
Sand	19	336	Clay	11	11
			Sand	65	76
<b>Well TS-60-37-506</b>					
Owner: Harry Oxspring			Clay	115	191
Driller: L. M. Patterson			Clay and rock	137	328
Clay	12	12	Sand	20	348
Sand	10	22	Clay	9	357
Clay	32	54	Sand	29	386
Rock	2	56	Clay	38	424
Clay	59	115	Sand, fine silty	38	462
Sand	45	160	Clay	74	536
Rock	5	165	Sand	11	547
Clay	40	205	Clay	179	726
Rock	5	210	Sand	23	749
Clay	55	260	Clay	80	829
Rock	2	262	Sand, coarse and gravel	57	886
Clay	18	280	Clay	10	896
Rock	2	282			
Clay	35	317			
Sand	21	338			
			Clay	2	2
<b>Well TS-60-37-711</b>					
Owner: Panorama Municipal Utilities District			Sand	15	17
Driller: Water Resources, Inc.			Clay	14	31
Top soil and clay	10	10	Sand	34	65
Sand, red	17	27	Clay	14	79
Sand and gravel	9	36	Sand	55	134
Sand	60	96	Clay	26	160
				27	187

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-37-908—Continued</b>			<b>Well TS-60-44-111—Continued</b>		
Rock	30	217	Sand, tan	19	300
Sand	19	236	Shale	52	352
Clay	142	378	Shale, sandy	19	371
Sand, shaley	11	389	Sand	10	381
Clay	70	459	Shale, sandy	8	389
Sand	49	508	Sand	17	406
Clay	1	509	Shale with sand streaks	95	501
			Shale, sandy	25	526
<b>Well TS-60-43-511</b>			<b>Well TS-60-44-311</b>		
Owner: Keenan Water Supply Corp.			Shale with sand	35	561
Driller: Lanford Drilling Co., Inc.			Sand	10	571
Sand	3	3	Shale	2	573
Clay and sand	4	7	Sand	20	593
Sand	38	45			
Shale	50	95			
Sand	30	125			
Shale	15	140	Well TS-60-44-311		
Sand	25	165	Owner: Highland Hollow		
Shale and lime	130	295	Driller: Con-Texas Water Well Co.		
Sand	30	325			
Lime and rock	2	327			
Sand, shaley and shale	8	335	Sand, surface and clay	22	22
Sand	50	385	Gravel	30	52
Shale	6	391	Clay	23	75
Shale, sandy and sand	39	430	Sand	20	95
Shale	65	495	Shale and hard streaks	55	150
			Shale, sandy	250	400
<b>Well TS-60-44-111</b>			Sand	8	408
Owner: April Sound, well 3			Shale, sandy	8	416
Driller: Con. Tex Water Well Co.			Sand	40	456
Clay and lime	61	61	Shale and sand streaks	5	461
Sand, cemented and clay	33	94	Shale, sandy	59	520
Clay	37	131	Sand	9	529
Sand	22	153			
Clay	13	166	Well TS-60-45-111		
Sand, broken	14	180	Owner: City of Conroe, well 8		
Clay with sand streaks	8	188	Driller: Layne-Texas Co.		
Sand, broken	26	214			
Shale	12	226	Sand	3	3
Sand	18	244	Clay, red and gravel	27	30
Shale	2	240	Clay	20	50
Sand, gray	35	281	Sand	84	134
			Clay, red	4	138
			Sand	6	144
			Shale, gray and gravel	17	161
			Streaks gray shale	24	185
			Shale and sandstone	16	201
			Shale, brown and gravel, little	33	234

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-45-111—Continued</b>					<b>Well TS-60-45-111—Continued</b>
Shale, gray	20	254	Shale	37	1,308
Sand and hard shale	24	278	Shale, sandy	5	1,313
Shale and sand streaks	15	293	Shale, hard	18	1,331
Sand and hard streaks	5	298	Sand and shale streaks	13	1,344
Shale, gray	14	312	Shale, hard	6	1,350
Shale and sand streaks	14	326	Sand and shale streaks	8	1,358
Shale	36	362	Shale	42	1,400
Sand and shale streaks	4	366			
Shale and sand streaks	85	451			
Shale, sandy	17	468			
Sand and shale streaks	18	486			
Sand and shale streaks	22	508	Clay	40	40
Sand and shale streaks	31	539	Sand	20	60
Shale and sand streaks	7	546	Clay	26	86
Shale, blue, sandy	28	574	Sand	26	112
Sand	18	592	Clay	8	120
Shale	5	597	Sand	10	130
Sand and shale streaks	19	616	Clay	34	164
Shale	24	640	Sand	32	196
Shale and sand streaks	27	667	Shale with streaks of hard, thin sandy	264	460
Sand and shale streaks	18	685	Sand	30	490
Shale, hard blue	61	746	Shale and hard streaks	40	530
Sand and shale streaks	11	757	Sand with streaks, thin	110	640
Shale and shale, sandy	67	824	Shale	182	822
Sand	56	880	Sand	28	850
Shale, sandy	40	920	Shale	18	868
Sand and shale streaks	5	925	Shale	38	906
Shale, sandy	16	941	Shale	111	1,107
Sand and shale streaks	25	966			
Shale and sand streaks	20	986			
Sand	10	996			
Shale and sand streaks	46	1,042			
Sand and shale streaks	32	1,074			
Shale and sandy shale	22	1,096	Clay	12	12
Sand and shale streaks	31	1,127	Sand	58	70
Shale	19	1,146	Clay	10	80
Sand and shale streaks	27	1,173	Rock	1	81
Shale and sand streaks	15	1,188	Clay	59	140
Shale, sandy	41	1,229	Clay with rock breaks	285	425
Shale	37	1,266	Rock, hard	2	427
Sand	5	1,271	Sand, water	24	451

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-45-712</b>					
Owner: City of Conroe			Clay	15	41
Driller: Texas Water Wells, Inc.			Sand, gravel and clay	20	61
Clay	85	85	Clay	35	96
Clay, sandy	20	105	Sand	32	128
Sand	99	204	Sand (good)	13	141
Clay	46	250	Clay	15	156
Clay, sand	10	260	Sand (good)	30	186
Clay	150	410			
Clay, sandy	130	540	<b>Well TS-60-45-807—Continued</b>		
Sand	80	620	Owner: Deerwood		
Clay	50	670	Driller: Weisinger Water Well, Inc.		
Sand	34	704	Clay	35	35
Clay	16	720	Sand	15	50
Sand	70	790	Clay	43	93
Clay	50	840	Sand	87	180
Sand	50	890	Clay	10	190
Clay	120	1,010	Sand	60	250
Sand	86	1,096	Clay	50	300
Clay	6	1,102	Rock	3	303
Sand	36	1,138	Clay	9	312
Clay	22	1,160	Sand	33	345
Sand	76	1,236			
Clay	14	1,250	<b>Well TS-60-50-304</b>		
Sand	40	1,290	Owner: Toby Smith		
Clay	10	1,300	Driller: Schoppa Water Well Service		
<b>Well TS-60-45-713</b>					
Owner: Clyde Smith			Top soil	5	5
Driller: Con-Tex Water Well Co.			Clay	50	55
Clay	6	6	Sand	86	141
Sand and gravel	50	56	Clay	9	150
Shale	23	79	Sand, mixed with clay	10	160
Gravel	7	86	Clay	12	172
Shale	35	121	Sand, mixed, clay and rock	30	202
Sand	60	181	Sand, mixed	8	210
			Clay, mixed and rock	22	232
			Sand, mixed, rock, and clay	30	262
			Clay	8	370
<b>Well TS-60-45-807</b>					
Owner: River Plantation			Rock	2	372
Driller: Con-Tex Water Well Co.			Clay	28	400
Clay	16	16	Rock	14	414
Sand	10	26	Clay	61	475
			Rock	2	477

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-50-304—Continued</b>					
Clay	28	505	Clay	144	384
Rock	36	541	Sand	32	416
Sand	13	554			
Rock, mixed and clay	11	565			
Clay	3	568	Owner: Johnnie Clepper, Shady Oaks Subdivision		
Sand	10	578	Driller: Schoppa Water Well Service		
Rock	17	595	Top soil	5	5
Sand	5	630	Clay	24	29
			Sand	46	75
<b>Well TS-60-51-511</b>					
Owner: D. A. Rickett, Hunters Retreat Subdivision			Clay	20	95
Driller: Schoppa Water Well Service			Sand	28	123
Top soil	3	3	Clay	7	130
Clay	40	43	Sand	62	192
Sand	31	74	Clay	38	230
Clay	46	120	Sand	12	242
Sand	40	160	Clay	23	265
Clay	8	168	Sand	5	270
Sand	35	203	Sand, mixed, rock and clay	135	555
Clay	9	212	Clay	57	327
Sand	14	226	Sand	35	590
Sand, mixed clay and rock	91	317		47	637
Clay	64	381	Well TS-60-51-807		
Sand mixed and rock	32	413	Owner: A. R. Coe, Jr., Kipling Oaks Subdivision		
Clay, hard	151	564	Driller: Schoppa Water Well Service		
Clay, rock, rock mixed	147	711	Top soil	4	4
Sand	25	736	Clay	16	20
			Sand	10	30
<b>Well TS-60-51-512—Continued</b>					
Owner: O. A. Rickett			Clay	60	90
Driller: Schoppa Water Well Service			Sand	64	154
Clay	10	10	Clay	4	158
Sand	10	20	Sand	12	170
Clay	30	50	Clay	15	185
Sand	20	70	Sand	16	201
Clay	51	121	Clay	24	225
Sand	44	165	Sand	8	233
Clay	8	173	Clay	122	355
Sand	30	203	Rock, mixed and clay	9	364
Clay	27	230	Clay	11	375
Sand	10	240	Rock, mixed and clay	10	385
			Clay	205	590

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-51-807—Continued</b>					
Clay, sandy	23	613			
Clay	14	627			
Sand	46	673	Top soil		
			Clay	3	3
			Sand	4	7
<b>Well TS-60-51-808</b>					
Owner: Johnnie Clepper, Oak Hills Subdivision			Clay		
Driller: Schoppa Water Well Service			Sand		
Top soil	5	5	Clay	28	70
Clay	40	45	Sand	35	42
Sand	2	47	Clay	35	105
Clay	18	65	Sand	27	132
Sand	46	111	Shale	18	150
Clay	42	153	Sand	30	180
Sand	68	221	Shale	48	228
			Sand	10	238
			Shale	17	255
			Sand	160	415
<b>Well TS-60-52-205</b>					
Owner: Landcraft Westwood III Subdivision			Sand		
Driller: Homeview Nat. Residence Development Corp.			Shale		
Top soil	2	2	Shale and sandy shale streaks		
Clay	19	21	Sand and sandy shale		
Sand and gravel	19	40	Shale and sand streaks		
Sand	13	53	Sand and shale streaks		
Clay	13	66	Shale and lime		
Sand	6	72	Sand and streaks of shale		
Clay	74	146	Shale		
Sand	62	208	<b>Well TS-60-53-209</b>		
Clay	23	231	Owner: Montgomery Co. Municipal Dist. 39		
Sand	65	296	Driller: Layne-Texas Co.		
Clay	4	300	Top soil	3	3
			Sandy clay	7	10
<b>Well TS-60-52-406</b>					
Owner: A. Cronin			Sand		
Driller: Schoppa Water Well Service			Gravel, coarse		
Top soil	4	4	Sand		
Clay	23	27	Gravel		
Sand	33	60	Clay		
Clay	51	111	Sand and hard streaks		
Sand	40	153	Rock		
Clay	42	195	Shale and shale, sandy		
Sand	23	218	Sand and shale streaks		
Clay	4	222	Sand and shale, sandy		
Sand	28	250	Shale, sandy and shale		
			Sand		

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)		
<b>Well TS-60-53-209—Continued</b>					<b>Well TS-60-53-513—Continued</b>		
Shale and sand streaks	13	337	Sand	20	83		
Sand and sandy shale	17	354	Clay	80	163		
Shale and sand streaks	52	406	Sand	7	170		
Shale, sandy and gravel	11	417	Clay	46	216		
Rock	2	419	Sand, water	8	228		
Sand and hard streaks	17	436					
Shale and sand streaks	84	520					
Sand	6	526	Owner: J. B. Sand and Gravel				
Shale and shale, sandy	104	630	Driller: Con-Tex Water Well Co.				
Sand and shale streaks	64	694	Clay	8	8		
Shale, hard, rock, and sand streaks	14	708	Sand and gravel	23	31		
Sand and shale streaks	32	740	Clay	55	86		
Sand and sandy shale	24	764	Sand with hard streaks	25	111		
Shale, sandy	6	770	Shale	30	141		
Sand and shale streaks	58	828	Sand with hard streaks	30	171		
Sand and shale streaks	16	884	Rock	2	173		
Shale	22	866	Sand	13	186		
Sand and shale	11	877	Sand with hard streaks	5	191		
Shale	13	890	Shale	25	216		
Shale and sandy shale	19	909	Sand	4	220		
Shale and sand	11	920	Rock	1	221		
Shale	15	935	Sand	14	235		
Shale, sandy and shale	15	950	Sand with hard streaks	76	241		
Shale and shale streaks, sandy	50	1,000	<b>Well TS-60-53-709</b>				
			Owner: Montgomery County Municipal Utility District, No. 6				
<b>Well TS-60-53-314</b>					Driller: Layne-Texas Co.		
Owner: Whispering Oaks			Top soil	5	5		
Driller: Turbine Pump Service			Clay	221	226		
Sand	59	59	Sand	338	564		
Clay	10	69	Gravel	30	594		
Sand and gravel	35	104	Sand and shale streaks	86	680		
Clay, sandy and layers of rock	95	199	Sand	10	690		
Clay, tough	50	249	Sand and shale streaks	53	743		
Sand, good	20	269	Sand	127	870		
			Shale	31	901		
<b>Well TS-60-53-513</b>					Sand and shale streaks	227	1,128
Owner: Bullet Concrete			Sand	43	1,171		
Driller: Patterson's Water Well Service			Sand and shale streaks	50	1,221		
Clay	22	22	Shale	47	1,268		
Sand and gravel	33	55	Sand	10	1,278		
Clay	8	63					

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-53-709—Continued</b>			<b>Well TS-60-53-817—Continued</b>		
Shale	162	1,440	Sand and shale	14	708
Shale and sand streaks	110	1,550	Sand	26	734
Shale	89	1,639	Sand and shale	10	744
Sand	41	1,680	Sand	56	800
Shale and sand streaks	29	1,709	Sand	44	844
Shale	21	1,730	Sand	44	888
Shale and sand streaks	70	1,800	Shale	16	904
Shale	103	1,903	Sand	86	990
			Shale	104	1,094
<b>Well TS-60-53-817</b>			Sand and shale	30	1,124
Owner: Oak Ridge Municipal Utilities District			Sand and shale	148	1,272
Driller: Texas Water Wells, Inc.			Sand	22	1,294
Sand and clay	106	106	Shale	80	1,374
Shale	16	122	Sand	20	1,394
Sand	6	128	Sand and shale	46	1,440
Shale	16	144	Sand	84	1,524
Sand	8	152	Shale	90	1,614
Shale	14	166	Sand and shale	30	1,644
Sand	16	182	Shale	20	1,664
Shale	20	202			
Sand and shale	4	206	<b>Well TS-60-53-818</b>		
Sand and shale	8	214	Owner: Community Development and Const.		
Sand and shale	18	232	Driller: Layne-Texas Co.		
Sand and shale	18	250	Soil, sandy	7	7
Sand and shale	42	292	Sand	20	27
Shale	52	344	Clay	4	31
Sand	10	354	Sand	44	75
Sand and shale	22	376	Clay	35	110
Sand and shale	28	404	Sand	7	117
Sand and shale	12	416	Clay	19	136
Sand and shale	14	430	Sand	6	142
Sand	86	516	Clay	22	164
Sand and shale	62	578	Clay, sandy	7	171
Sand	16	594	Clay	42	213
Sand and shale	24	618	Sand	32	245
Sand	16	634			
Sand and shale	16	650	<b>Well TS-60-53-819</b>		
Sand	4	654	Owner: Robinson Trailer Courts		
Sand and shale	20	674	Driller: Turbine Pump Service		
Sand	20	694	Clay	44	44
			Sand and gravel	60	104

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-53-819—Continued</b>					
Clay	9	113			
Clay and sand streaks	10	123			
Sand	10	133	Sand, fine brown	10	10
Clay	41	174	Clay, brown	26	36
Sand, hard	29	203	Sand, fine brown	14	50
Sand and rock	17	220	Clay, yellow	11	61
Clay	34	254	Sand, medium brown	16	77
Sand and gravel	27	281	Clay, yellow	8	85
			Sand, medium light brown	25	110
<b>Well TS-60-53-820</b>					
Owner: South Montgomery Utility District			Clay, yellow	42	152
Driller: Layne-Western Co.			Sand, medium white	18	170
Top soil	1	1	Clay, brown	56	226
Sand	8	9	Sand, medium white and light brown	34	260
Clay	15	24	Clay, yellow and blue	70	330
Sand and gravel	45	69	Sand, medium, coarse light brown	30	360
Clay	10	79			
Sand	30	109	<b>Well TS-60-55-312</b>		
Clay, hard	103	212	Owner: City of Splendora, well 2		
Sand and clay blocks	96	308	Driller: Lanford Drilling Co.		
Clay	51	359	Sand and clay	10	10
Sand	42	401	Shale	60	70
Clay	48	449	Shale and sandy shale	125	195
Sand	39	488	Shale	40	235
Clay	11	499	Sand	25	260
			Shale	35	295
<b>Well TS-60-54-202</b>					
Owner: D. E. Martin, Pioneer Trails Subdivision			Shale, sandy and shale	250	545
Driller: Schoppa Water Well Service			Shale	400	945
Top soil	4	4	Sand	60	1,005
Clay	11	15	<b>Well TS-60-55-509</b>		
Sand	45	60	Owner: Montgomery Co. Municipal Util. Dist.		
Clay	59	119	Driller: Layne-Western Co.		
Sand	36	155	Sand	29	29
Clay	27	182	Clay	40	69
Sand	45	227	Sand and rock	33	102
Clay	20	247	Clay	143	245
Sand	56	303	Sand, hard and rock	25	270
Clay	102	405	Clay	31	301
Sand	6	411	Sand and rock	31	332
Clay	152	563	Clay	23	355
Sand	22	585	Sand and rock	10	365

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-55-509—Continued</b>					
Clay	155	520			
Sand and rock	6	576			
Clay	52	578	Clay	24	24
Sand and rock	75	653	Sand	5	29
Clay	4	657	Clay	2	31
Sand and rock	52	709	Sand	52	83
Clay	14	723	Clay	6	89
Sand and rock	55	778	Sand	15	104
Clay	64	842	Clay	43	147
Sand and rock	22	864	Sand	22	169
Clay	13	877	Clay	22	191
Sand and rock	50	927	Sand	8	199
Clay	43	970	Clay	20	219
Sand and rock	27	997	Sand	10	229
Clay	47	1,044	Clay	26	255
Sand and rock	3	1,047	Sand	74	329
Clay	23	1,070	Clay	59	388
Sand and rock	43	1,113	Sand	13	401
Clay	45	1,158	Clay	24	425
Sand	19	1,177	Sand	59	484
Clay	20	1,197			
Sand and rock	60	1,257			
Clay	29	1,286			
T.D.	12	1,298	Sand, gravel	5	5
<b>Well TS-60-55-707</b>					
Owner: New Caney Independent School District					
Driller: B. J. Swinehart Co., Inc.					
Clay	8	8	Sand and clay strips	35	100
Sand	76	84	Clay	10	110
Clay	8	92	Rock	3	113
Sand	5	97	Clay and sand strips	17	130
Clay, sandy	38	135	Clay and rock	45	175
Sand, clay streaks	80	215	Sand rock	40	215
Sand	14	229	Clay	25	240
Sand, rock	18	247	Sand and rock	15	255
Sand	10	257	Sand and clay strips	35	290
Clay	66	323	Sand and rock breaks	16	306
Sand	46	369	Clay	96	402
Clay	3	372	Rock and sand	31	433
			Clay	22	455

**Table 9.—Drillers' Logs of Wells in Montgomery County—Continued**

	THICKNESS (feet)	DEPTH (feet)		THICKNESS (feet)	DEPTH (feet)
<b>Well TS-60-61-306—Continued</b>					<b>Well TS-60-63-203—Continued</b>
Sand and rock	5	460	Sand	15	35
Clay	30	490	Clay	17	52
Sand and rock	19	509	Sand and fine gravel	78	130
Clay and rock	26	535	Shale and sand streaks	125	255
Clay and sand strips	20	555	Sand and few sand streaks	22	277
Clay and sand	30	585	Shale	48	325
Rock and sand	10	595	Sand	32	357
Clay and sand strips	10	605	Shale	13	370
Sand	5	610	Sand and shale streaks	54	424
Clay and sand	35	645	Shale	25	449
Rock	8	653	Sand and shale streaks	37	486
Sand and clay strips	7	660	Shale with sand streaks	30	516
Rock and sand strips	33	693	Sand and shale streaks	14	530
Sand and clay strips	30	723	Sand with shale streaks	33	563
Sand and clay	28	751	Sand with shale	24	587
Sand	64	815	Shale	133	620
Clay and sand strips	35	850	Shale and lime streaks	7	627
Rock and sand strips	20	870	Sand and shale streaks	20	647
Sand and clay	4	874	Shale, sand streaks and lime	26	673
Sand	11	885	Sand and shale streaks	7	680
Clay and sand strips	30	915	Sand	10	690
Sand and rock breaks	15	930	Shale and lime streaks	5	695
Clay	60	990	Sand and lime streaks	15	710
Sand and clay strips	15	1,005	Shale and sand streaks	17	727
Clay	50	1,055	Sand with shale streaks	120	847
Sand and clay strips	18	1,073	Shale, sandy with sand	49	896
Clay	28	1,101	Sand with shale, sandy	16	1,012
Clay	5	1,106	Shale, hard and sand, streaks	15	1,027
			Sand and shale streaks	7	1,034
<b>Well TS-60-63-203</b>					
Owner: Harris County Utilities District, No. 5			Shale	8	1,042
Driller: Layne-Texas Co.			Shale and sand streaks	8	1,050
Top soil	5	5			
Clay	15	20			

**Table 10.—Water Levels in Wells in Montgomery County**

DATE	WATER LEVEL	DATE	WATER LEVEL	DATE	WATER LEVEL		
<b>Well TS-60-35-202</b>							
Owner: Miss Flower Follett							
Elevation: 327		Elevation: 212		Elevation: 205			
Completion Interval: -107		Completion Interval: 950-1,320		Completion Interval: 1,050-1,238			
Feb. 25, 1975	51.22	Mar. 3, 1975	79	Mar. 3, 1975	66.72		
June 5, 1975	50.84	Mar. 29, 1976	69.26	Sept. 16, 1976	69.86		
Sept. 16, 1975	50.59	Feb. 14, 1977	73	Feb. 14, 1977	65.45		
Dec. 9, 1975	50.77	Feb. 27, 1978	84	Feb. 27, 1978	73.00		
Mar. 17, 1976	50.66	Jan. 24, 1979	107	Jan. 24, 1979	86.30		
June 3, 1976	51.52	June 7, 1979	109	June 7, 1979	83.25		
Sept. 16, 1976	50.47	<b>Well TS-60-45-503</b>					
Dec. 2, 1976	50.63	Owner: City of Conroe, well 4					
Feb. 16, 1977	50.30	Elevation: 214		Elevation: 178			
Sept. 7, 1977	50.09	Completion Interval: 1,099-1,221		Completion Interval: -26			
Jan. 24, 1978	50.30	Feb. 25, 1975	75.53	Feb. 25, 1975	14.49		
June 8, 1978	49.09	Mar. 3, 1975	73.29	June 5, 1975	14.33		
Sept. 5, 1978	50.38	June 5, 1975	81.20	Sept. 15, 1975	16.62		
Jan. 24, 1979	50.48	Aug. 16, 1975	72.14	Dec. 9, 1975	19.83		
June 4, 1979	49.36	Dec. 1975	70.08	Mar. 17, 1976	20.45		
Sept. 27, 1979	49.70	Mar. 17, 1976	71.51	June 3, 1976	15.84		
<b>Well TS-60-37-401</b>							
Owner: City of Willis							
Elevation: 380		Sept. 16, 1976	74.93	Sept. 16, 1976	16.20		
Completion Interval: 282-362		Dec. 2, 1976	72.01	Dec. 2, 1976	12.59		
Feb. 25, 1975	187.04	Feb. 14, 1977	70.54	Feb. 14, 1977	8.99		
<b>Well TS-60-45-501</b>							
Owner: City of Conroe, well 5							
Elevation: 215		June 7, 1977	77.94	June 7, 1977	13.00		
Completion Interval: 910-1,270		Sept. 6, 1977	97.74	Sept. 6, 1977	16.62		
Sept. 16, 1976	91.51	Jan. 24, 1978	81.96	Jan. 24, 1978	16.93		
Feb. 14, 1977	89.31	June 8, 1978	88.35	June 8, 1978	18.09		
Feb. 27, 1978	85.02	Sept. 5, 1978	99.48	Sept. 5, 1978	20.18		
Sept. 12, 1978	96.96	Jan. 24, 1979	90.39	Jan. 24, 1979	17.25		
Jan. 24, 1979	99.48	June 7, 1979	87.05	June 7, 1979	14.14		
		Sept. 27, 1979	97.49	Sept. 25, 1979	12.56		

Table 14.--Chemical Analyses of Water From Wells in Montgomery County  
When no potassium (K) is reported, sodium and potassium are calculated and reported as sodium (Na)  
Water-bearing units: C, Chicot aquifer; E, Evangeline aquifer; JU, upper unit of Jasper aquifer

Well	Owner	Depth or producing water-bearing unit	Date	Dissolved silica ( $\text{SiO}_2$ ) (mg/l)	Dissolved iron ( $\text{Fe}$ ) (mg/l)	Dissolved manganese ( $\text{Mn}$ ) (mg/l)	Dissolved calcium ( $\text{Ca}$ ) (mg/l)	Dissolved magnesium ( $\text{Mg}$ ) (mg/l)	Dissolved sodium ( $\text{Na}$ ) (mg/l)	Dissolved potassium ( $\text{K}$ ) (mg/l)	Bicarbonate ( $\text{HCO}_3^-$ ) (mg/l)	Carbo-bonate ( $\text{CO}_3^{2-}$ ) (mg/l)	Dissolved sulfate ( $\text{SO}_4^{2-}$ ) (mg/l)	Dissolved chloride ( $\text{Cl}^-$ ) (mg/l)	Dissolved fluoride ( $\text{F}^-$ ) (mg/l)	Dissolved orthophosphate ( $\text{PO}_4^{3-}$ ) (mg/l)	Dissolved boron (B) (mg/l)	Dissolved solids (sum of calcium, magnesium, bicarbonate, sulfate, chloride, fluoride, phosphate, boron) (mg/l)	Residual sodium carbonate (Ca, Mg, Na) (mg/l)	Sodium adsorption ratio (SAR) at 25°C	Specific conductance (micro-mhos/cm)	pH	Temperature (°C)	
J 15-40-35-905	Stanley Lake Municipal Utilities District No. 1	522-636 700-750	JU Sept. 25, 1973	< 50 2	30 3	64	5	64	--	281	0	25	42	0.2 4	--	--	374	180	--	--	62.5	7.45	--	
J 36-705	Montgomery County Municipal Utilities District No. 1	485-735	JU July 11, 1973	29	150 2	40 3	53	8	60	--	283	0	24	25	0.2 4	--	--	338	185	--	--	53.0	7.5	--
J 43-511	Kenan Water Supply Corp.	347-389	C Sept. 11, 1978	--	200	10	92 9	17.1	33.1	--	339	0	12.0	60	.3	--	--	303	186	--	--	65.0	7.2	--
J 44-311	Highland Hollow	500-526	E Sept. 16, 1974	21	410 2	< 20 3	70	1.3	47	--	320	0	1.3	40	0.2 4	--	--	361	228	--	--	63.5	7.31	--
J 45-111	City of Camrose Wells 8, 1,189	825-	E Nov. 10, 1978	26	160 2	< 30 3	38	6	84	--	281	0	1.9	38	0.2 4	--	--	349	119	--	--	4.91	7.57	--
J 53-208	Montgomery County Municipal Utility District No. 15	625-805	E Apr. 24, 1974	18	20 2	40 3	26	7	106	--	326	0	2	20	0.3 4	--	--	356	94	--	--	71.1	7.51	--
J 53-209	Montgomery County Municipal Utilities District No. 39	680-880	E May 19, 1977	18	90 2	20 3	40	10	80	--	336	0	1.3	18	0.3 4	--	--	344	141	--	--	59.5	7.6	--
J 55-312	City of Spindletop Well 2	944-1,007	E Oct. 17, 1978	--	190	0	13,600	2.6	126.9	--	312.3	0	1.4	35.5	1.4	--	0	--	4.5	--	--	57.5	7.8	--
J 63-203	Harris County Utilities District No. 5	730-925	E Dec. 2, 1976	20	50 2	20 3	45	4	20	--	168	0	1.2	1.5	0.1 4	--	--	199	127	--	--	33.1	7.73	--

J Analyzed by Edna Wood Laboratories.

Z Total iron (Fe).

M Total manganese (Mn).

F Total fluoride (P).

J Analyzed by Pope Testing Laboratories.

