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WALLER COUNTY, TEXAS

Records of wells, drillers' logs, water analyses,  
and map showing location of wells

\* \* \*

by

Samuel F. Turner and Penn Livingston

Mimeographed by  
WORKS PROGRESS ADMINISTRATION  
PROJECT 10443

\* \* \*

Prepared in cooperation with the United States  
Department of the Interior, Geological Survey.

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Austin, Texas  
April 10, 1939

WALLER COUNTY, TEXAS

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Introduction  
by  
Samuel F. Turner  
Associate Hydraulic Engineer  
United States Department of the Interior  
Geological Survey

This pamphlet contains records of wells in Waller County, Texas, with tables of well logs, well water analyses, and a map which shows all the wells described, each well having a number on the map corresponding to the number assigned to it in the well tables.

The records were obtained in the course of an investigation which was undertaken as part of a statewide study of the underground water resources of Texas. The investigation was made by the State Board of Water Engineers, in cooperation with the U. S. Department of the Interior, Geological Survey. The field work was carried out by Samuel F. Turner and Penn Livingston of the Geological Survey. The analyses were made in the laboratory of the Geological Survey at Washington by Margaret D. Foster. The field tests were made in Houston by Samuel F. Turner.

The well records serve as a guide to land owners and well drillers who may need information regarding wells and pumping plants, the depth to ground water in different parts of the county and the quantity and quality of water yielded by wells. They afford a basis for the more intensive investigation which is now being carried on.

These records were typed, assembled, and mimeographed by employees of Works Progress Administration Project 10443, which is sponsored by the Texas Board of Water Engineers in cooperation with the Geological Survey.

Records of wells in Waller County, Texas  
 (All wells are drilled unless otherwise noted in "Remarks" column.)  
 (Principal water-bearing beds are sand or gravel.)

No.	Distance from Howth	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
1	2 $\frac{1}{4}$ miles west northwest	E. F. O'Connor	E. F. O'Connor	--	23	48	20	3
2	2 miles west northwest	T. D. Woods	W. E. Rinn	--	135	3	--	--
3	do.	do.	H. H. Strickland	--	62	4	--	--
4	1 $\frac{3}{4}$ miles west northwest	E. F. O'Connor	W. E. Rinn	1932	80	4	72	8
5	At Howth	H. Kloecker	--	Old	40	48	--	--
6	$\frac{1}{2}$ mile south	C. E. T. Hicks	W. E. Bush	1932	45	10	--	--
d/ 7	$\frac{1}{2}$ mile east	A. H. Deweese	A. H. Deweese	1931	55	30	49	6
8	2 miles east	Negro church	--	--	30	8	--	--
e/ 10	3 $\frac{1}{2}$ miles north	Weaver Well 1 A. Weaver	Waller Oil Co.	1917	1,363	8 $\frac{1}{2}$	--	--
11	3 $\frac{1}{4}$ miles north northeast	A. Kloecker	--	1900?	40	8	--	--
12	3 miles north northeast	do.	--	--	60	6	--	--
13	2 $\frac{1}{4}$ miles north northeast	-- Sourley	H. H. Strickland	--	50	6	--	--
d/ 14	2 miles north northeast	E. N. Taylor	W. E. Bush	--	57	8	--	--
15	do.	George Bennett	--	--	50	5	--	--
16	2 $\frac{1}{2}$ miles north northeast	-- Sourley	--	--	47	6	--	--
17	2 miles north northeast	H. C. Stephens	--	--	60	36	57	3
18	do.	Charley Marshall	--	--	30	6	--	--
19	2 $\frac{1}{2}$ miles northeast	Vivian Harris	Vivian Harris	--	50	30	--	--
20	6 miles northeast	--	--	--	60	30	--	--
No.	Distance from Joseph (Bradbury's Gin)	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
51	5 $\frac{1}{2}$ miles northwest	W. E. Cook	W. E. Cook	--	60	8	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; W, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

Records obtained by Penn Livingston and Samuel F. Turner  
(See "Table of field tests" for tests of hardness, chloride and sulphate.)

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
1	--	--	--	B,H	D,S	Dug well.
2	--	--	--	J,W	D,S, Ind	
3	--	--	--	J,H	D,S	
4	--	--	--	J,H	D,S	
5	--	--	--	J,G, $1\frac{1}{2}$	D,S	Reported salt water in abandoned 35-foot well 100 yards north.
6	--	--	--	--	--	Well just finished, casing and pump not installed.
7	--	--	--	J,H	D,S	Dug well lined with tile.
8	--	--	--	B,H	D,S	
10	--	--	--	None	N	Oil test. See partial log.
11	$\frac{1}{2}$	24.0	Apr. 14, 1931	B,H	S	Reported all wells close as having bad water.
12	--	--	--	B,H	D,S	
13	--	--	--	B,H	D,S	Temperature 70° F.
14	--	--	--	B,H	D,S	Do.
15	--	--	--	J,H	D,S	
16	--	--	--	B,H	D,S	
17	--	--	--	B,H	D,S	Dug well.
18	--	--	--	B,H	D,S	
19	--	--	--	B,H	D,S	Dug well lined with tile.
20	--	--	--	B,H	D,S	Do.

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
51	--	--	--	B,H	D,S	Water is reported as hard in rainy sea- son and soft in dry season.

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Sur-  
vey Water-Supply Paper 190, 1907.

g/ Reported by driller.

## Records of Wells in Waller County--Continued

No.	Distance from Joseph (Bradbury's Gin)	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
52	4 $\frac{1}{2}$ miles northwest	A. Karsteter	--	1916	50	8	--	--
53	4 $\frac{3}{4}$ miles west northwest	-- Dawson	-- Imhoff	--	110	8	--	--
54	4 $\frac{3}{4}$ miles west	R. A. Hooker	--	--	60	4	--	--
e/ 55	4 miles west	T. F. Maxwell well 2	Ron Oil Co.	1926	1,200	--	--	--
56	1 $\frac{1}{2}$ miles west northwest	School (Fields)	--	--	40	4	--	--
57	1 mile west	R. H. Jones	--	--	36	12	--	--
58	At Joseph	W. A. Bradbury	Andrew Bradbury	--	90	4	--	--
d/ 59	do.	do.	--	1915	20	12	--	--
60	7 miles northeast	Cordell's Mill	Andrew Bradbury	1915	150	6	--	--
61	do.	John Rodgeson	John Rodgeson	--	67	6	--	--
62	3 $\frac{3}{4}$ miles east northeast	F. F. Smeigi	F. F. Smeigi	1932	51	2	--	--
63	2 $\frac{1}{2}$ miles east	T. B. Stephenson	--	--	52	6	--	--
64	4 miles east	T. S. Dinkins	--	Old	42	36	--	--
d/ 65	4 $\frac{1}{2}$ miles east	J. H. Turpin	J. H. Turpin	--	50	8	--	--
66	4 miles southeast	Lisle McPherson	Andrew Bradbury	1923	86	4	--	--
67	4 $\frac{1}{2}$ miles southeast	J. H. Turpin	J. H. Turpin	1924	21	8	--	--

No.	Distance from Hempstead	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
101	4 miles northwest	Giddings Est.	--	Old	125	6	--	--
102	1 $\frac{3}{4}$ miles northwest	G. W. Heard	--	Old	62	36	--	--
e/ 103	3 miles north	Roy Chapman Well 1	W. P. Morris	--	2,640	--	--	--
104	2 $\frac{1}{2}$ miles north	-- Beard	--	--	40+	6	--	--
105	4 $\frac{1}{2}$ miles east northeast	H. M. Cooke	--	Old	60	12	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T, turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; W, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

## Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
52	--	--	--	B,H	D,S	
53	--	--	--	J,H	D,S	
54	--	--	--	J,G, 3	D,S	
55	--	--	--	--	--	Oil test. See partial log.
56	--	--	--	J,H	D	
57	--	--	--	B,H	D,S	
58	--	--	--	J,G, 3	D,S, Ind	Water used for boilers at gin.
59	--	--	--	B,H	D,S	
60	--	--	--	J,H	D,S	At Fetzer.
61	--	--	--	J,H	D,S	Do.
62	--	48	Aug. 10, 1932	None	--	New well, pump not yet installed.
63	--	--	--	B,H	D,S	
64	--	--	--	J,H	D,S	Dug well.
65	--	--	--	B,H	D,S	
66	--	--	--	J,W	D,S	
67	--	--	--	B,H	D,S	

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
101	--	--	--	J,W	D,S	
102	--	--	--	B,H	D,S	Very old dug well, lined with brick.
103	--	--	--	--	--	Oil test. See partial log.
104	--	--	--	J,W	S	
105	--	--	--	B,H	D,S	

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Survey Water-Supply Paper 190, 1907.

g/ Reported by driller.

PUBLIC WATER SUPPLIES

COUNTY: Waller

CITY: Brookshire

POPULATION: \_\_\_\_\_

SOURCE OF INFORMATION: \_\_\_\_\_

OWNERSHIP: \_\_\_\_\_

SOURCE OF SUPPLY: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

PUMPSAGE: MINIMUM: \_\_\_\_\_

MAXIMUM: \_\_\_\_\_

AVERAGE: \_\_\_\_\_

STORAGE: SURFACE RESERVOIR: \_\_\_\_\_

ELEVATED TANK: \_\_\_\_\_

TREATMENT: \_\_\_\_\_

SAMPLED, DATE: \_\_\_\_\_ TEMPERATURE: \_\_\_\_\_

NUMBER OF CUSTOMERS: DOMESTIC: \_\_\_\_\_

INDUSTRIAL: \_\_\_\_\_

REMARKS: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

DATA COLLECTED BY: \_\_\_\_\_ DATE: \_\_\_\_\_

## Records of wells in Waller County--Continued

No.	Distance from Hempstead	Owner	Driller	Date com- plete- d	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							to top of bed (ft.)	Thickness (ft.)
106	At Hempstead	E. T. Hitt	H. H. Strickland	--	95	6	--	--
d/107	do.	B. R. Rohms	do.	--	85	4	--	--
d/108	do.	Texas-Louisiana Power Co.	Layne-Texas Co.	1930	868	--	212 481	60 33
e/109	do.	do.	G. Jarkiecke	1897	1,100+	8	683	36
110	$\frac{1}{2}$ mile south southwest	J. S. Weatherford	-- Phillips	1910?	50	8	--	--
111	$\frac{1}{2}$ mile south southeast	Hempstead Cemetery	H. H. Strickland	1928	168	6	--	--
112	$1\frac{1}{2}$ miles east southeast	Southern Pacific Ry.	Andrew Bradbury	1914	180	10	--	--
e/113	$2\frac{1}{2}$ miles east southeast	--	--	Old	55	6	50	5
114	do.	-- MacDonald	D. D. Feagin	--	85	4	--	--
d/115	3 miles east southeast	D. D. Feagin	do.	1899	38	12	--	--
e/116	do.	do.	--	1931	30	3	29	1
e/117	$4\frac{1}{2}$ miles east southeast	Mrs. H. L. Milam	--	1931	20	3	--	--
118	$4\frac{3}{4}$ miles east southeast	do.	H. H. Strickland	1926	60	4	--	--
d/119	5 miles east	Prairie View State College	Layne-Texas Co.	1930	576	12 $\frac{1}{4}$	--	--
d/120	do.	do.	do.	1920	571	6	483 550	50 21
e/121	do.	do.	--	Old	600+	4	--	--
122	$3\frac{1}{2}$ miles south southwest	J. J. Perry	--	--	50	30	--	--
123	3 miles south	--	--	--	40	30	--	--
124	$3\frac{1}{4}$ miles south	Mrs. Bob Robinson	--	Old	70	4	--	--
125	5 miles south	Judge Hardy	--	--	--	--	--	--
126	do.	do.	--	--	50	10	--	--
127	6 miles south	do.	H. H. Strickland	--	65	4	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T, turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; W, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

## Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
106	--	--	--	J, E, $\frac{1}{2}$	Ind	
107	1	54.6	Apr. 14, 1931	J, E, $\frac{1}{2}$	D, S	
108	--	--	--	T, E, 15	P	Each water-bearing stratum tested, see table of analyses.
109	$\frac{1}{2}$	5.6	Apr. 14, 1931	A, F, --	P	Had a flow of 100 gallons a minute prior to 1907. g/
110	--	--	--	J, W	D, S	
111	--	--	--	J, H	D	
112	1	2.5	Nov. 7, 1931	J, H	D, RR	
113	--	--	--	J, H	D, S	First water stratum at 25 feet not used.
114	--	--	--	J, H	D, S	Very weak supply of water.
115	1	24.8	May 13, 1931	J, W	D, S	
116	0	29.0	Nov. 7, 1931	None	N	Test well drilled by Geological Survey.
117	$\frac{1}{2}$	4.4	May 28, 1931	None	N	Do.
118	1	43.5	Apr. 13, 1931	J, W	D, S	At Prairie View.
119	--	--	--	T, E, 25	P	
120	--	--	--	A, -	P	Casing; 571 feet of 6-inch casing. Screens set at 519 to 529 and 550 to 571 feet.
121	--	--	--	A, -	P	
122	1	46.0	Aug. 3, 1932	J, W	D, S	Dug well.
123	--	--	--	B, H	D, S	Do.
124	--	--	--	J, W	D, S	
125	--	--	--	J, E	D, S	Flow of 15 gallons a minute prior to 1907. Reported, f/ stopped flowing 3 years ago.
126	--	--	--	B, H	D, S	
127	--	--	--	J, W	D, S	

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Survey Water-Supply Paper 190, 1907.

g/ Reported by driller.

## Records of wells in Waller County--Continued

No.	Distance from Waller	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
e/151	3 $\frac{1}{4}$ miles west	-- Stokes	--	Old	68	8	--	--
e/152	3 miles west	--	--	1931	20	3	10	10
e/153	1 mile west	G. O. Vaught	--	--	65	4	--	--
154	do.	W. D. Weaver	W. D. Weaver	Old	58	5	51	7
155	4 $\frac{1}{2}$ miles west southwest	L. L. Menke	A. Bradbury	1910	105	4	98	7
156	4 miles west southwest	do.	B. D. Weaver	1928	148	6	140	8
157	2 $\frac{3}{4}$ miles southwest	--	--	--	80	4	--	--
158	1 mile south	W. H. Carter Well 1	Dome Oil Co.	--	3,527	--	--	--
d/159	3 $\frac{1}{2}$ miles south	R. S. Montgomery	Harry Bennett	--	28	6	--	--
160	4 $\frac{1}{4}$ miles south southwest	W. F. Brumby	B. D. Weaver	--	81	6	--	--
e/161	5 $\frac{1}{2}$ miles south	Jack Means	Elmer Gray	Old	50	12	--	--
d/162	6 miles south	Clyde Fuller	do.	1924	65	8	--	--
163	6 miles south southwest	F. H. Wawarofsky	do.	1919	54	9	27	27
164	6 $\frac{1}{2}$ miles south southwest	W. F. Pohl	Jim White	1926	60	4	--	--
165	6 $\frac{1}{4}$ miles south southwest	W. O. Wawarofsky	do.	--	55	14	--	--
166	6 $\frac{1}{2}$ miles southwest	Frank Wawarofsky	Andrew Bradbury	1920	104	4	--	--
167	7 miles southwest	E. C. Boethe	B. D. Weaver	--	63	4	--	--
168	7 $\frac{1}{2}$ miles southwest	H. Boethe Est.	do.	--	54	4	--	--
e/169	8 miles southwest	H. Lass	--	--	1,018	--	--	--
170	7 miles southwest	Lizzie Davis	--	--	60	6	--	--
171	do.	H. A. Dodd	H. H. Strickland	1916	62	4	--	--
172	7 $\frac{1}{4}$ miles southwest	do.	W. D. Weaver	1928	60	4	--	--
173	8 miles southwest	do.	--	Old	50	4	--	--
e/174	9 miles southwest	John R. Young Well 1	--	--	--	--	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T, turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; V, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

## Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) <u>a/</u>	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power <u>b/</u>	Use of water <u>c/</u>	Remarks
151	$\frac{1}{2}$	43.3	May 28, 1931	B,H	D,S	
152	$\frac{1}{2}$	3.5	do.	None	N	Test well drilled by Geological Survey.
153	--	--	--	J,W	D,S	
154	1	13.2	May 28, 1931	J,W	D,S	Well originally 45 feet deep but was deepened for better water.
155	--	--	--	J,W	S	Screen, 4-inch Stancliff, $4\frac{1}{2}$ feet long at bottom.
156	--	--	--	J,W	D,S,I	Screen, 4-inch Stancliff, 4 feet long at bottom.
157	--	--	--	J,W	D,S	
158	--	--	--	--	--	Oil test. See partial log.
159	--	--	--	J,W	D,S	
160	--	--	--	J,W	D,S	Two similar wells.
161	--	--	--	None	N	Well caved in and now being repaired.
162	1	50	July 28, 1932	B,H	D,S	
163	--	--	--	J,W	D,S	Water in gravel.
164	--	--	--	J,H	D,S	
165	--	--	--	J,W	D,S	Tile casing. Water in gravel.
166	--	--	--	J,W	D,S	
167	--	--	--	J,W	D,S	
168	--	--	--	J,W	D,S	
169	--	--	--	--	--	Oil test, see log.
170	--	--	--	J,W	D,S	
171	--	--	--	J,W	D,S	Formerly had a dug well 35 feet deep.
172	--	--	--	J,W	D,S	
173	--	--	--	J,W	D,S	
174	--	--	--	--	--	Oil test. See partial log.

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Survey Water-Supply Paper 190, 1907.

g/ Reported by driller.

## Records of wells in Waller County--Continued

No.	Distance from Waller	Owner	Driller	Date com- plete	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
175	9½ miles southwest	F. S. Styers	--	1905	32	4	--	--
176	10½ miles southwest	F. A. Holik	-- Bennett	1899	57	12	--	--
177	13 miles southwest	Fritz Frey	--	--	48	30	--	--
178	12 miles southwest	M. E. Kerr	A. Bradbury	1924	45	6	--	--
179	11½ miles southwest	H. Lass	Harry Bennett	1926	738	6	690	42
180	9 miles south southwest	John Bonner	-- Bennett	1876	60	24	--	--
181	8 miles south southwest	-- Frey	--	--	70	4	--	--
182	8½ miles south southwest	G. A. Menke	--	--	68	4	--	--
183	10 miles south southwest	J. B. Adams	W. M. Wenzel	--	37	10	--	--
184	do.	A. Miller	-- Bennett	--	74	4	70	4

No.	Distance from Katy	Owner	Driller	Date com- plete	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
e/201	16 miles west northwest	J. R. Garrett	Garrett Well 1	1927	840	--	--	--
202	12 miles west northwest	Mrs. J. B. Adams	--	--	1	--	--	--
203	do.	do.	W. M. Wenzel	--	20	6	--	--
204	do.	Will Clemons	--	Old	35	8	--	--
205	11½ miles west northwest	Mrs. G. T. Patterson	--	--	30	1½	--	--
206	11½ miles west northwest	G. L. Buller, Sr.	--	--	20	6	--	--
207	12 miles west	Texas Construc- tion Materials Co.	Thos. Haskit	1931	54	6	49	5
208	7½ miles west	Geo Harrison	do.	1930	82	6	58	24
e/209	do.	do.	-- Schulty	1901	66	5	--	--
221	7½ miles north northwest	Harry Hebert	Harry Hebert	1930	524	16	80 286 358 383 478	70 40 15 22 43

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T, turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; W, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

## Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
175	--	--	--	J,W	D,S	
176	--	--	--	J,W	D,S	
177	--	--	--	J,W	D,S	
178	--	--	--	J,W	D,S	
179	--	+	--	F,C,G	S,I	Water stood 7 feet above ground when first drilled and flowed 30 gallons a minute. Barely flowed in Sept., 1931.
180	--	--	--	B,H	D,S	
181	--	--	--	J,W	S	Weak supply of water.
182	1	63.0	July 28, 1932	J,W	S	
183	--	32.0	do.	B,H	D,S	
184	--	--	--	J,W	D,S	

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
201	--	--	--	--	--	Oil test, see log.
202	--	+	July 28, 1932	Non	D,S	Spring in Iron's Creek valley. Estimated flow 5 gallons a minute.
203	3	18	do.	B,H	D,S	
204	1	25	do.	B,H	N	Strong sulphur smell.
205	--	--	--	J,H	D,S	
206	--	--	--	J,H	D,S	
207	--	--	--	J,E, $1\frac{1}{2}$	D	
208	--	--	--	J,E, 3	P	At Brookshire. Water in gravel.
209	--	--	--	J,E,W	P	At Brookshire.
221	5	49.8	Feb. 10, 1931	T,E, 75	I	Temperature 72° F. Yield 1,510 gallons a minute, Aug. 18, 1932. Casing; 150 feet of 16-inch and 374 feet of 12-inch. Screens set at 110 to 150, 286 to 326, 358 to 375, 385 to 405 and 478 to 518 feet

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Survey Water-Supply Paper 190, 1907.

g/ Reported by driller.

Records of wells in Waller County--Continued

No.	Distance from Katy	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Principal water- bearing bed	
							Depth to top of bed (ft.)	Thick- ness (ft.)
c/222	7 miles northwest	T. B. Tucker	--	Old	--	26	--	--
223	6 $\frac{3}{4}$ miles northwest	do.	Layne-Texas Co.	1928	767	16	114 167 304 328 426 465	26 30 19 14 16 22
224	5 $\frac{1}{2}$ miles northwest	L. E. Morrison	--	--	--	--	592 691	41 22
225	do	do.	Layne-Texas Co.	1929	643	24	-- 160 204 313	-- 11 10 36
c/226	4 $\frac{1}{4}$ miles northwest	Campbell & Jones	W. M. Justman	1930	470	16	385 527	60 48
c/227	6 miles west northwest	American Rice Milling Co.	Layne-Texas Co.	1927	900	--	605	15
c/228	7 $\frac{1}{2}$ miles west northwest	Morris Gassner	do.	1908	432	24	-- 62 360 80 120	-- 102 60 35 30
c/229	4 $\frac{1}{8}$ miles west northwest	C. J. Ritter	do.	1906	464	9- 5/8	-- 206 375 413 87	-- 12 15 19 15
d/230	3 miles west northwest	Francis Young	-- Olsen	1922	273	26	388 429	32 12
231	5 miles west	Texas Co., Pipe Line	--	--	--	--	449 70	15 153
c/232	4 $\frac{1}{4}$ miles west	Shell Pipe Line Corp.	--	1929	128	6	233	40
c/233	3 $\frac{1}{4}$ miles west	John Alt	--	1927	256	12	-- 130 210	-- 40 46
234	2 miles west	John Cope	I. W. Lawson	1909	545	24	-- 98 172 471	-- 47 50 44
c/235	do.	do.	do.	1932	--	--	--	--
236	1 $\frac{1}{4}$ miles west northwest	W. J. Alderson	--	1904	174	48	--	--
c/237	$\frac{3}{4}$ mile west northwest	J. A. Bartlett	I. W. Lawson	1909	545	24	--	--

a/ Bench mark is point from which water-level measurement was made and was usually top of casing, top of pump base or top of water pipe clamp.

b/ T, turbine; A, air; C, centrifugal; J, jack; B, rope and bucket; E, electric; G, gasoline engine (includes tractors); F, fuel oil engines; W, windmill; H, hand.

c/ P, public; I, irrigation; Ind, industrial; RR, railroad; D, domestic; S, stock; N, not used.

## Penn Livingston and Samuel F. Turner

No.	Height of bench mark above (+) ground (ft.) a/	Water level Below bench mark (ft.)	Date of measure- ment	Pump and kind and amount of power b/	Use of water c/	Remarks
222	1	47.8	Apr. 28, 1931	None	N	
223	$\frac{1}{2}$	49.2	Feb. 10, 1931	T,E, --	I	Temperature 71° F. Estimated yield 1,400 gallons a minute, June 12, 1931. Casing; 115 feet of 16-inch, 93 feet of 12-inch and 8-inch to bottom. Screens set at 117 to 145, 165 to 198, 304 to 343, 425 to 445, 467 to 488, 596 to 630 and 693 to
224	--	--	--	J,H	D,S	Shallow well for domestic use. 714 feet.
225	--	52 <sup>a/</sup>	Apr. 1929	T,E, 60	I	Yield 950 gallons a minute, Aug. 18, 1932. Casing; 125 feet of 24-inch, and 12-inch to bottom. Screens set at 155 to 165, 201 to 211, 321 to 341, 381 to 443, 529
226	--	--	--	T,E	D,S,I	Yield to 572 and 607 to 628 feet. 1,910 gallons a minute, August 23, 1931.
227	--	--	--	None	N	
228	0	55.5	Sept. 30, 1931	None	N	Reported yield when drilled, 905 gallons a minute. g/ Casing; 60 feet of 24-inch and 9 5/8-inch to bottom. Screened at 80 to 100, 133 to 152, 207 to 227, 377 to
229	--	--	--	None	N	Casing; 464 396 and 416 to 432 feet. feet of 9 3/8-inch. Screens set at 88 to 102, 340 to 420, 429 to 464 feet. Well reported as caved and abandoned.
230	--	--	--	T,F, --	I	Yield, 470 gallons a minute, Aug. 1, 1932. Casing; 68 feet of 26-inch and 12-inch to
231	--	--	--	J,E, --	Ind	bottom.
232	--	--	--	J,E, 5	Ind	
233	--	--	--	T,E, 40	I	Casing; 256 feet of 12-inch. Screens set at 130 to 170 and 210 to 256 feet. Yield, 1,080 gallons a minute, Aug. 11, 1932.
234	$\frac{1}{2}$	46.7	Mar. 12, 1931	T,E, 30	I	Yield 560 gallons a minute, Aug. 11, 1932. Casing; 65 feet of 24-inch, 159 feet of 12-inch and 292 feet of 8 $\frac{1}{4}$ -inch set at 516 feet. Screens set at 106 to 142, 182
235	--	--	--	--	--	New well to 219 and 454 to 511 feet. being drilled to replace well 234 which
236	--	--	--	T,E, 30	D,S,I	Casing; 60 feet of 48-inch, has caved. with one 8 $\frac{1}{4}$ -inch and one 11 5/8-inch well in bottom of bit. Yield, 510 gallons a
237	--	--	--	T,E, 40	I	Yield, 430 a minute, Aug. 18, 1932. gallons a minute, Aug. 10, 1932.

d/ For analysis of water see under well number in table of analyses.

e/ No field tests made on water from this well.

f/ Taylor, T. U., Underground waters of Coastal Plain of Texas; U. S. Geological Survey Water-Supply Paper 190, 1907.

g/ Reported by driller.

Records of field tests of samples from wells in Waller County, Texas  
 (Analyzed by Samuel F. Turner. Parts per million. For records  
 of wells see corresponding numbers in well tables.)

Well No.	Owner	Date of collection	Depth of well (ft.)	Hardness as CaCO <sub>3</sub> a/	Chloride (Cl)	Sulphate (SO <sub>4</sub> ) b/
1	E. F. O'Connor	-	23	400	170	10
2	T. D. Woods	-	135	90	15	5
3	do.	-	62	360	100	5
4	E. F. O'Connor	-	80	360	65	10
5	H. Kloecker	-	40	200	230	25
6	C. E. T. Hicks	-	45	180	250	20
7	A. H. Deweese	-	55	380	330	15
8	Negro church	-	30	410	380	45
11	A. Kloecker	Apr. 14, 1931	40	2,000	2,500	400
12	do.	-	60	500	190	15
13	-- Spurley	-	50	75	50	10
14	E. M. Taylor	-	57	1,000	800	40
15	George Bennett	-	50	85	25	3
16	-- Spurley	-	47	550	400	25
17	H. C. Stephens	-	60	750	700	70
18	Charley Marshall	-	30	400	150	20
19	Vivian Harris	-	50	500	240	10
20	-	-	60	400	175	20
51	W. E. Cook	-	60	100	70	3
52	A. Karsteter	-	50	85	75	5
53	-- Dawson	-	110	75	20	3
54	R. A. Hooker	-	60	70	40	1
56	School (Fields)	-	40	85	85	7
57	R. H. Jones	-	36	30	30	7
58	W. A. Bradbury	-	90	35	35	2
59	do.	-	20	80	60	30
60	Cordell's Mill	-	150	200	50	10
61	John Rodgeson	-	67	210	270	7
62	F. F. Sneigi	Aug. 10, 1932	51	140	80	20
63	T. B. Stephenson	-	52	200	220	2
64	T. S. Dinkins	-	42	270	230	40
65	J. H. Turpin	-	50	280	360	20
66	Lisle McPherson	-	86	110	30	5
67	J. H. Turpin	-	21	170	80	35
101	Giddings Est.	-	125	125	15	10
102	G. W. Heard	-	62	150	65	7
104	-- Beard	-	40+	110	65	5
105	H. M. Cooke	-	60	35	20	10
106	E. T. Hitt	-	95	150	230	10
107	B. R. Rhems	Apr. 14, 1931	85	210	70	8
108	Texas-Louisiana Power Co.	-	868	85	55	1
110	J. S. Weatherford	-	50	320	220	35
111	Hempstead Cemetery	-	168	250	70	5
112	Southern Pacific R.R.	Nov. 7, 1931	180	150	25	10
114	-- MacDonald	-	85	55	20	10
115	D. D. Feagin	May 13, 1931	38	65	40	20
118	Mrs. H. L. Milam	Apr. 15, 1931	60	75	40	5
119	Prairie View State College	-	576	-	-	-
122	J. J. Perry	Aug. 3, 1932	50	330	100	25

a/ Hardness as calcium carbonate by the soap method.

b/ Sulphate by turbidity method and may be as much as 25 per cent in error.

Records of field tests of samples from wells in Waller County--Continued

Well No.	Owner	Date of collection	Depth of well (ft.)	Hardness as CaCO <sub>3</sub> a/	Chloride (Cl)	Sulphate (SO <sub>4</sub> ) b/
123	-	-	40	550	210	15
124	Mrs. Bob Robinson	-	70	300	75	2
125	Judge Hardy	-	-	150	150	50
126	do.	-	50	450	130	200
127	do.	-	65	330	100	120
154	W. D. Weaver	May 28, 1931	58	130	115	1
155	L. L. Menke	-	105	40	30	2
156	do.	-	148	30	25	1
157	-	-	80	95	20	1
158	W. H. Carter Well 1	-	3,527	-	-	-
159	R. S. Montgomery	-	28	30	20	5
160	W. M. Brumby	-	81	45	35	1
162	Clyde Fuller	July 28, 1932	65	60	40	1
163	F. H. Wawarofsky	-	54	40	20	1
164	W. M. Pohl	-	60	15	20	2
165	F. C. Wawarofsky	-	55	30	20	1
166	Frank Wawarofsky	-	104	140	20	1
167	E. C. Boethe	-	63	150	20	3
168	H. Boethe Est.	-	54	190	70	5
170	Lizzie Davis	-	60	180	70	3
171	M. A. Dodd	-	62	15	12	1
172	do.	-	60	45	15	1
173	do.	-	50	120	35	2
175	F. S. Styers	-	32	160	50	3
176	F. A. Holik	-	57	220	25	5
177	Fritz Frey	-	48	280	140	2
178	M. E. Kerr	-	45	290	130	15
179	H. Lass	-	738	210	140	35
180	John Bonner	-	60	75	45	1
181	-- Frey	-	70	45	25	5
182	G. A. Menke	July 28, 1932	68	50	30	3
183	J. B. Adams	do.	37	60	90	1
184	A. Miller	-	74	115	40	2
202	Mrs. J. B. Adams	do.	1	140	9	5
203	do.	do.	20	450	20	8
204	Will Clemons	do.	35	750	130	5
205	Mrs. G. T. Patterson	-	30	200	18	10
206	G. L. Buller, Sr.	-	20	600	160	40
207	Texas Construction Materials Co.	-	54	450	110	40
208	Geo. Harrison	-	82	200	150	5
221	Harry Hebert	Feb. 10, 1931	524	180	50	5
223	T. B. Tucker	do.	767	140	55	5
224	L. E. Morrison	-	-	170	65	2
225	do.	Apr., 1929	643	160	55	10
230	Francis Young	-	273	180	55	5
231	Texas Co., Pipe Line	-	-	180	100	5
234	John Cope	Mar. 12, 1931	545	150	70	15
236	W. J. Alderson	-	174	240	65	2

a/ Hardness as calcium carbonate by the soap method.

b/ Sulphate by turbidity method and may be as much as 25 per cent in error.

Analyses of water from wells in Waller County, Texas

Well No.	Owner	Date of collection	Depth of well (ft.)	Total dissolved solids (calc.)	Silica (SiO <sub>2</sub> )	Iron (Fe)	Cal-cium (Ca)	Magne-sium (Mg)
7	A. H. Deweese	Aug. 2, 1933	55	-	-	-	-	-
14	E. M. Taylor	Aug. 19, 1932	57	1,604	-	0.07	376	24
59	W. A. Bradbury	Aug. 5, 1933	20	114	-	-	8	5.5
65	J. H. Turpin	do.	50	-	-	-	-	-
107	B. R. Rehms	Aug. 19, 1932	85	237	-	0.21	58	6.1
108-A	Texas Louisiana Power Co.	Jan. 2, 1930	2/485- 518	517	29	3/15	40	11
108-B	do.	Jan. 6, 1930	2/687- 723	451	-	3/20	50	7.5
115	I. I. Feagin	Aug. 2, 1933	38	139	-	0.13	15	6.1
119	Prairie View State College	1930	576	309	10	-	34	11
120	do.	Mar. 24, 1928	571	415	33	-	36	5.5
159	R. S. Montgomery	Aug. 9, 1933	28	66	-	0.72	2.8	1.6
162	Clyde Fuller	Aug. 19, 1932	65	115	-	0.12	8.0	5.1
230	Francis Young	Aug. 1, 1932	273	240	-	0.02	63	5.9

1/ Sum of constituents reported.

2/ Collected while drilling; total depth of well 868 feet.

(Parts per million. Well numbers correspond to numbers in table of records of wells.)

Well No.	Sodium and potassium (Na-K) (calc.)	Bicarbonate ( $\text{HCO}_3$ )	Sulphate ( $\text{SO}_4$ )	Chloride (Cl)	Nitrate ( $\text{NO}_3$ )	Total hardness as $\text{CaCO}_3$	Analyst
7	-	89	12	340	11	363	Margaret D. Foster
14	189	35 <sup>c</sup>	71	770	0.25	1,038	Do.
59	24	31	7.8	30	23	43	Do.
65	-	40	8	388	313	321	Do.
107	25	168	7	53	5.3	170	Do.
118-A	138	390	6.7	85	-	145	Curtis Laboratories
118-B	115	372	10	66	-	156	Do.
115	21	23	9.3	30	46	63	Margaret D. Foster
119	70	255	23	56	-	130	National Supply Co.
120	111	336	30	34	-	113	International Filter Co.
159	19	18	9.9	18	6.3	14	Margaret D. Foster
162	29	48	2	41	6.0	41	Do.
230	24	22 <sup>a</sup>	2	37	0.15	182	Do.

<sup>a/b</sup> Iron and aluminum oxides.

Table of Drillers' Logs, Waller County, Texas

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Driller's log of well 10</u>					
A. Weaver Number 1.					
Sand	-	-	2	2	
Clay	-	-	10	12	
Rock	-	-	2	14	
Clay	-	-	5	17	
Gypsum	-	-	3	20	
Rock	-	-	1	21	
Clay	-	-	9	30	
Gypsum	-	-	3	33	
Clay and rock	-	-	104	137	
Gumbo	-	-	33	170	
Rock	-	-	2	172	
Hard shale	-	-	16	188	
Sand	-	-	19	207	
Gumbo	-	-	3	210	
Shale	-	-	8	218	
Sand	-	-	8	226	
Shale, gumbo and rock	-	-	65	291	
Gypsum	-	-	2	293	
Sand	-	-	27	520	
Gumbo	-	-	6	326	
Hard shale	-	-	14	340	
Rock	-	-	4	344	
Shale and gumbo	-	-	129	473	
Gypsum	-	-	12	485	
Hard sand	-	-	20	505	
Rock	-	-	4	509	
TOTAL DEPTH	-	-		1363	
<u>Driller's log of well 55</u>					
W. F. Maxwell Number 2.					
Sand and clay	-	-	16	16	
Sand	-	-	6	22	
Sandy clay	-	-	96	118	
Clay and boulders	-	-	22	140	
Gumbo	-	-	204	344	
Hard sand	-	-	10	354	
Gumbo	-	-	18	372	
Hard sand	-	-	11	383	
Gumbo	-	-	25	408	
Hard sand	-	-	10	418	
Gumbo	-	-	78	496	
TOTAL DEPTH	-	-		1200	
<u>Driller's log of well 103</u>					
Roy Chapman Number 1.					
Clay	-	-	20	20	
Sand	-	-	20	40	
Clay	-	-	30	70	
Sand	-	-	35	105	
Clay	-	-	45	150	
Black rock	-	-	4	154	
Clay	-	-	35	187	
Sand and shells	-	-	73	260	
Shale	-	-	85	345	
<u>Driller's log of well 103--Continued</u>					
Sand	-	-	-	59	404
Shale	-	-	-	36	44
Sand and gravel	-	-	-	30	47
Gummy shale	-	-	-	60	53
Sand	-	-	-	30	56
Shale	-	-	-	54	614
Gumbo	-	-	-	46	630
Shale	-	-	-	68	728
Hard sand	-	-	-	6	734
Gumbo	-	-	-	36	77
Broken chalk and rock	-	-	-	20	79
Shale	-	-	-	215	1005
Sand, strong gas showing	-	-	-	20	1025
Gummy shale	-	-	-	8	1035
Broken chalk and sand	-	-	-	8	1041
Sandy shale	-	-	-	64	1105
Sand	-	-	-	32	1137
Sandy shale	-	-	-	18	1155
Sand	-	-	-	10	1165
Sandy shale	-	-	-	35	1200
TOTAL DEPTH	-	-	-	264	
<u>Driller's log of well 108</u>					
Texas-Louisiana Power Co., owner.					
Soil	-	-	-	2	2
Clay	-	-	-	47	49
Coarse sand	-	-	-	38	87
Clay	-	-	-	20	107
Fine sand	-	-	-	12	119
Clay	-	-	-	8	127
Soft rock	-	-	-	9	136
Clay	-	-	-	34	170
Rock	-	-	-	1	171
Clay	-	-	-	8	179
Rock	-	-	-	1	180
Sand	-	-	-	31	211
Rock	-	-	-	1	212
Sand, hard layers test No. 1	-	-	-		
static level 5 feet	-	-	-	60	272
Rock	-	-	-	1	273
Gumbo	-	-	-	84	357
Sand	-	-	-	19	376
Gumbo	-	-	-	12	388
Sand	-	-	-	14	402
Gumbo	-	-	-	26	428
Sand	-	-	-	19	447
Gumbo	-	-	-	34	481
Sand, test No. 2 static	-	-	-		
level 63 feet	-	-	-	33	514
Gumbo	-	-	-	169	683
Sand, test No. 3 static	-	-	-		
level 45 feet	-	-	-	36	719
Gumbo	-	-	-	149	868

## Table of Drillers' Logs, Waller County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Driller's log of well 120</u>					
Prairie View State College Number 2.					
Surface soil	-	-	2'	20	
Red sand	-	-	60	80	
Clay	-	-	22'	300	
Soft rock	-	-	1	301	
Packed sand	-	-	30	331	
Clay	-	-	23	354	
Hard rock	-	-	1	355	
Clay	-	-	90	445	
Rock (?)	-	-	38	483	
Sand	-	-	5	535	
Clay	-	-	17	550	
Sand	-	-	21	571	
<u>Driller's log of well 158</u>					
H. Carter Number 1.					
Surface sand	-	-	10	10	
Clay	-	-	40	50	
Sand	-	-	30	80	
Gravel	-	-	5	85	
Gumbo	-	-	19	104	
Sand	-	-	51	155	
Gumbo	-	-	80	235	
Shale and sand	-	-	39	274	
Gumbo	-	-	42	316	
Sand	-	-	41	357	
Gumbo	-	-	83	440	
Rock	-	-	5	445	
Gumbo	-	-	8	453	
Rock	-	-	12	465	
Gumbo	-	-	25	488	
Shale	-	-	14	502	
Gumbo	-	-	137	639	
Rock	-	-	1	640	
Gumbo	-	-	60	700	
Shale and boulders	-	-	45	745	
Gumbo	-	-	303	1048	
Boulders	-	-	20	1068	
Gumbo	-	-	41	1109	
Sand and shale	-	-	21	1130	
Shale streaked with sand	-	-	15	1145	
Gumbo	-	-	286	1431	
Gypsum	-	-	8	1439	
Rock	-	-	2	1441	
Shale, rock and gypsum	-	-	59	1500	
Water sand	-	-	35	1535	
Shale and boulders	-	-	40	1575	
TOTAL DEPTH	-	-		3527	
<u>Driller's log of well 169</u>					
H. Laas oil test.					
Yellow clay	-	-	24	24	
Red clay	-	-	19	43	
Water sand, flowed	-	-	121	164	
Sand rock	-	-	21	185	
Blue gumbo	-	-	58	243	
Dry sand	-	-	12	255	
Blue gumbo	-	-	16	271	
Sand and boulders	-	-	63	334	
Blue gumbo, and sand rock	-	-	228	562	
Sandy shale	-	-	7	569	
<u>Driller's log of well 169--Continued</u>					
Sand and shale	-	-	-	10	579
Blue gumbo	-	-	-	1	583
Sand and shale	-	-	-	6	589
Blue gumbo	-	-	-	22	611
Sand and shale	-	-	-	59	671
Blue gumbo	-	-	-	12	682
Gray sand	-	-	-	9	691
Gray lime rock	-	-	-	8	699
Blue gumbo	-	-	-	70	769
Blue sand	-	-	-	12	781
Blue gumbo	-	-	-	114	895
Sandy shale	-	-	-	7	92
Blue gumbo	-	-	-	8	51
Hard sand rock	-	-	-	13	925
Sand and shale	-	-	-	4	927
Blue gumbo	-	-	-	5	952
Sand and shale	-	-	-	7	939
Blue sand	-	-	-	25	964
Blue gumbo	-	-	-	21	985
Blue sand	-	-	-	5	99
Blue gumbo	-	-	-	18	1008
Blue sand	-	-	-	10	1018
White shale	-	-	-	--	1018
<u>Driller's log of well 174</u>					
John R. Young Number 1.					
Surface soil	-	-	-	25	25
Sand	-	-	-	10	35
Water sand	-	-	-	12	47
Clay	-	-	-	2	49
Sand	-	-	-	7	56
Clay	-	-	-	5	61
Gravel and sand	-	-	-	18	79
Clay	-	-	-	17	96
Gumbo	-	-	-	8	104
Sand and boulders	-	-	-	10	114
Gumbo	-	-	-	12	126
Hard sand	-	-	-	17	143
Gumbo	-	-	-	15	158
Sand	-	-	-	26	184
Gumbo	-	-	-	31	215
Sticky shale	-	-	-	14	229
Sand	-	-	-	23	252
Gumbo	-	-	-	30	282
Sand	-	-	-	1	283
Gumbo and boulders	-	-	-	13	296
Gumbo	-	-	-	11	307
Sand	-	-	-	1	308
Hard sand	-	-	-	7	315
Gumbo	-	-	-	27	342
Sandy shale and boulders	-	-	-	29	371
Rock	-	-	-	2	373
Hard sand	-	-	-	3	376
Gumbo	-	-	-	35	411
Brown gumbo	-	-	-	82	493
Gray sand	-	-	-	11	54
Soft water sand	-	-	-	22	526
Gumbo	-	-	-	9	535
Hard sand	-	-	-	5	541
Blue gumbo and shale	-	-	-	26	566
Gumbo	-	-	-	55	621
Blue-gray soft sand	-	-	-	42	663
Boulders and gumbo	-	-	-	37	701
Sand and shale	-	-	-	7	707

(Continued on next page)

## Table of Drillers' Logs, Waller County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)				
<u>Driller's log of well 174--Continued</u>									
Lo gh harl gumbo	-	51	758	Gumbo	-				
Gumbo and lime	-	26	784	Gumbo and lime	-				
Hard rough sand	-	9	793	Gravel	-				
Gumbo	-	81	873	Gumbo	-				
Hard sand rock	-	3	876	Sand	-				
Sand and boulders	-	43	919	Gumbo and lime	-				
Hard gumbo	-	89	1'08	Hard packed sand	-				
TOTAL DEPTH	-	-	2028	Soft sand	-				
<u>Driller's log of well 179</u>									
H. Laas, owner.				Hard packed sand	-				
Clay	-	18	18	Gumbo, lime and shale	-				
Sand	-	16	34	Lime rock	-				
Red clay	-	2	36	Blue shale, lime and brown					
Coarse sand	-	35	71	gumbo	-				
Gravel	-	5	76	1'6	731				
Clay, rock and shale	-	64	140	Blue sandy shale and lime	18				
Gravel and sand	-	35	175	Blue gumbo and lime	-				
Clay	-	3	178	Lime and sandy shale	-				
Rock, sand and gravel	-	4	182	Sandy lime rock and					
Clay	-	6	188	pyrites	-				
Sand	-	3	191	4	846				
Rock and blue gumbo	-	6	197	Blue sandy shale	-				
Rock and sand	-	25	220	3	819				
Sand, shale and gumbo	-	60	280	Sticky shale	-				
White sand	-	20	3'0	4	813				
Blue gumbo	-	110	410	Packed sand	-				
Hard rock	-	1	411	4	817				
Blue sand	-	36	447	Bluc shale	-				
Hard lime rock	-	1	448	23	841				
Red sand and clay	-	38	486	<u>Driller's log of well 225</u>					
Green sand	-	2	488	L. E. Morrison, owner.					
Hard lime	-	24	512	Sandy soil	-				
Gray sandy shale	-	178	69	2	2				
Sand	-	42	732	Clay	-				
Blue gumbo	-	2	734	15	17				
Blue sand	-	4	738	Sand	-				
White gumbo	-	--	738	41	27				
<u>Driller's log of well 201</u>									
J. R. Garrett, Number 1.				Clay	-				
Clay	-	20	20	27	54				
Sand	-	18	38	Coarse sand	-				
Clay	-	10	48	25	79				
Sand	-	15	63	Clay	-				
Red gumbo	-	12	75	10	89				
Yellow gumbo	-	20	95	Sand and gravel	-				
Gravel	-	4	99	12	1'1				
Gumbo	-	36	135	Gumbo and clay	-				
Sand	-	6	141	35	136				
Gumbo	-	25	166	Rock	-				
Blue shale	-	4	170	3	139				
Lime rock	-	6	176	Tough gumbo	-				
Gravel	-	6	182	21	130				
Lime rock	-	15	197	sand and coarse gravel	-				

(Continued on next page)

-2-

Table of Drillers' Logs, Waller County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Driller's log of well 225--Continued</u>					
Sand	-	-	-	12	499
Gumbo	-	-	-	8	507
Sand	-	-	-	10	517
Gumbo	-	-	-	10	527
Coarse packed sand, good	-	-	-	48	575
Gumbo and shale	-	-	-	30	605
Sand	-	-	-	15	624
Rock	-	-	-	1	621
Sand and rock	-	-	-	22	643
<u>Driller's log of well 234--Continued</u>					
Sand and gravel					
Clay	-	-	-	-	9
Pack sand	-	-	-	-	12
Tough clay	-	-	-	-	6
Sand and gravel	-	-	-	-	50
Boulders and clay	-	-	-	-	6
Honey-combed rock	-	-	-	-	32
Sand	-	-	-	-	10
Honey-combed rock and clay	-	-	-	-	86
Sand	-	-	-	-	29
Shale	-	-	-	-	54
Hard sand and rock	-	-	-	-	32
Sand and gravel	-	-	-	-	44
Gumbo	-	-	-	-	30
					545

