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EASTLAND COUNTY, TEXAS

Records of wells, drillers' logs,
water level measurements,
analyses of water from wells, streams,
and lakes, and map showing locations.

* * *

WORKS PROGRESS ADMINISTRATION

GROUND-WATER SURVEY

PROJECT 6013-5361

J. Howard Samuell,
Project Superintendent

* * *

Analyses made, map prepared, data
assembled, and report mimeographed by

WORKS PROGRESS ADMINISTRATION

PROJECT 6507-5112

* * *

Sponsored by the State Board of Water Engineers with
the Bureau of Industrial Chemistry of The University
of Texas and the U. S. Geological Survey cooperating.

* * *

Austin, Texas
Dec. 15, 1937

EASTLAND COUNTY, TEXAS

* * *

Introduction
by
Samuel F. Turner
Associate Hydraulic Engineer
U. S. Geological Survey

The purpose of this survey was to obtain information concerning existing wells and springs and the quantity and quality of water they yield, and to put down test holes where additional information was needed. Since the only water available in some parts of Eastland County is that collected in lakes and streams, water samples for chemical analysis were collected from typical lakes and streams.

This project was part of a statewide Works Progress Administration project known as a "Statewide Inventory of Water Wells," sponsored by the State Board of Water Engineers. The Division of Ground Water of the U. S. Geological Survey cooperated in the technical direction of the project and the Bureau of Industrial Chemistry of The University of Texas furnished laboratory space and equipment and supervised the chemical analyses. The city officials of Eastland rendered valuable assistance by furnishing truck transportation and office space.

The analyses were made by chemists employed on Works Progress Administration Project 6507-5112 at Austin, Texas, sponsored by the State Board of Water Engineers. This release was typed and assembled by typists and draftsmen employed on this project.

The field work in Eastland County was started on March 21, 1937, and was completed July 9, 1937. This work was done as Project 6013-5361 and the first part was under the direction of District 13 of the Works Progress Administration, Abilene, Texas, but due to revision of the districts, the remaining work was completed under the direction of District 7, Fort Worth, Texas. J. Howard Samuell, a geologist, was project superintendent. Mr. Samuell should be given credit for his great interest in the work and for the many extra hours he spent on the project. The office of the Works Progress Administration in both the Abilene and Fort Worth Districts made this work possible by their constant help and cooperation.

This release contains the well and spring records and well logs obtained by the project superintendent, logs of the test holes drilled by the W. P. A. labor, water level measurements, descriptions of lakes and streams that were sampled, and the chemical analyses of water from privately owned wells, springs, test holes, lakes, and streams. Locations of all wells, springs, test holes, lakes, and the places where the streams were sampled are shown on the map in the back of the release.

The test wells were drilled by W.P.A. labor using a soil auger, drop auger, churn drill, and a sand bucket. Samples were collected at one foot intervals by the well driller in charge of the party. The project superintendent studied these samples and compiled the logs.

Records of wells and springs in Eastland County, Texas
 (All wells are drilled unless otherwise noted in "Remarks" column.)
 (See "Logs of W. P. A. test wells" for all records of test wells.)

No.	Distance from Cisco	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
f/ 2	9 miles north	386, con. S ₂	S.F.R.R. Co.	Elliott & Bacon	Black Diamond Oil Co.	--	--	--
3	5½ miles northwest	489, NW ₁ NE ₁	do.	Edgar Harris	Harry Wyatt	1929	200 196-m	5- 3/16
6	4 miles northeast	65, NW ₁ SW ₁	H.& T.C.R.R.Co., blk. 4	C. N. Fee	O. N. Ramsower	1935	150 95-m	5
8	1½ miles northeast	80, NW ₁ NE ₁	do.	C. H. Fee	do.	1926	150 100-m	5
f/ 9	1½ miles north	84, NW ₁ NW ₁	do.	M. V. Hoyt	Anna Belle Oil Co.	--	3,818	--
13	3 miles east	62, NE ₁ NW ₁	do.	Dr. C. C. Jones	--	1915	-- 155-m	5
14	4½ miles east	61, SE ₁ SE ₁	do.	Carl Kimbrough	Harvey Ramsower	1926	24 24-m	36
15	3½ miles east	25, NW ₁ NW ₁	do.	Jess Noble	Aubry Ramsower	1920	150 152-m	5½
16	1½ miles east	45, NE ₁ NW ₁	do.	W. F. Smith	--	--	170 149-m	5½
f/ 21	7 miles west	Labor 3170 NE ₁	T. E. & L. Co.	W. F. Pippen	--	--	4,997	--
23	4½ miles west	7, NW ₁ NW ₁	B. B. B.& C. Co.	G. M. Waters	-- Fagan	1900	29 34-m	42
24	2½ miles west	--	do.	G. Riddle	--	1910	30 20-m	42
26	1½ miles southeast	66, NW ₁ SW ₁	H.& T.C.R.R.Co., blk. 3	R. T. Porter	--	1919	50 48-m	6
27	1½ miles southeast	65, NE ₁ NW ₁	do.	R. H. Walker	Aubry Ramsower	1931	65 62-m	5
28	2 miles southeast	65, SE ₁ NW ₁	do.	E. C. Duncan	do.	1930	209 170-m	5
32	4 miles southeast	48, NW ₁ SW ₁	do.	Frank Swan	--	1911	22 23-m	36
f/ 34	7½ miles southwest	129, NW ₁ NW ₁	do.	D. M. Anglin	J. Elmer Thomas	--	606	--
35	8½ miles southwest	128, SW ₁ SE ₁	do.	A. J. Olsen	--	1895	30 19-m	42
36	9 miles southwest	127, NW ₁ SE ₁	do.	W. T. Rutherford	--	1910	35 27-m	42
37	9½ miles southwest	9, --	Van Winkle	John Delaney	John Delaney	1895	55 29-m	60
38	9 miles southwest	126, SW ₁ SW ₁	H.& T.C.R.R.Co., blk. 3	Ingram heirs	--	1935	16-20 20-m	36
39	9½ miles southwest	4, --	A. T. Burnley	S. N. Keith	Joe Coleman	1932	14 14-m	48
40	10½ miles southwest	9, N ₂	do.	D. B. Pardue	L. C. Evans	1935	15 18-m	36
41	do.	9, S ₂	do.	J. R. Poplin	Press Bryant	1887	85 69-m	42

a/ Measured depths indicated by "m"; otherwise depths are reported.

b/ Measuring point was usually top of casing, top of pipe clamp, top of pump base or top of well curb.

c/ B, bucket; C, cylinder; E, electric; G, gasoline, A, air lift, H, hand; W, windmill. Number indicated horsepower.

Records obtained by J. Howard Samuell, Project Superintendent
 (Chemical analyses of water from these wells and springs are in the table of analyses.)

No.	Height of measuring point above ground (ft.) b/	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power c/	Use of water d/	Supply graphic situation	Remarks
2	--	--	--	None	N	--	Oil test. See log.
3	1.3	160.2	May 3, 1937	C,W	D,S	S	Hilltop Steel casing. Water reported in sand.
6	0.3	90.4	April 9, 1937	C,W	S	F	Hillside Galvanized casing. Water reported in sand.
8	0.6	89	do.	C,W	D,S	S	Level Do.
9	--	--	--	None	N	--	Oil test. See log.
13	1	135	April 9, 1937	C,W	S	F	Hilltop Galvanized casing.
14	2	10.3	May 5, 1937	B,H	D,S	S	Level Dug well. Concrete curb; brick casing.
15	0	96.1	do.	C,W	D,S	S	Hillside Galvanized casing. Water reported in sand.
16	2	31.2	do.	None	N	S	do. Do.
21	--	--	--	None	N	--	Oil test. See log.
23	2.5	8.8	May 17, 1937	B,H	D,S	S	Level Dug well. Rock curb and casing.
24	3.8	8.8	do.	B,H	D,S	S	Hilltop Dug well. Concrete curb; rock casing. Water reported in sand.
26	0.5	7	May 10, 1937	C,W	D,S	S	Level Steel casing. Water reported in sand.
27	0.3	16	do.	C,W	D,S,I	S	do. Concrete block curb; galvanized casing.
28	0.3	29	do.	C,W	D,S	S	Hilltop Galvanized casing.
32	1.7	15.6	do.	B,H	D,S	S	Level Dug well. Rock curb and casing. Water reported in sand.
34	--	--	--	None	N	--	Oil test. See log.
35	2.6	9.8	May 17, 1937	B,H	D,S	S	Level Dug well. Wood curb; rock casing.
36	2.6	12.6	do.	B,H	D,S	S	do. Dug well. Brick curb; rock casing.
37	3.2	25.2	do.	B,H	D,S	S	do. Dug well. Wood curb; 6 feet brick casing at top.
38	2	13.4	do.	B,H	D,S	S	do. Dug well. Concrete curb; rock casing. Water reported in sand.
39	2	9.8	May 18, 1937	B,H	D,S	S	Hillside Dug well. Wood curb; no casing.
40	3	15.2	do.	B,H	D,S	S	Creek bank Dug well. Wood curb; galvanized casing, top to bottom.
41	3	65.5	do.	B,H	D,S	S	Hilltop Dug well. Wood curb; rock casing, 30 to 69 feet.

d/ D, domestic; I, irrigation; P, public; S, stock; N, not used.

e/ Reported supply: S, strong; F, fair; W, weak; N, no supply.

f/ No water sample collected for analysis.

g/ Water level reported.

Records of wells and springs in Eastland County--Continued

No.	Distance from Cisco	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
42	8½ miles southwest	116, NE ¹ -NE ¹	H. & T.C.R.R.Co., blk. 3	W. N. Compton	Paul Philley	1936	20 19-m	42
43	8 miles southwest	112, NE ¹ -NE ¹	do.	A. N. Simpson	A. N. Simpson	1929	112 90-m	5
44	7½ miles south	99, NW ¹ -NE ¹	do.	C. B. Cochran	Adam Merkitt	1910	21 22-m	42
45	do.	100, SE ¹ -SE ¹	do.	W. N. Hall	--	1887	-- 45-m	48
46	do.	94, NW ¹ -NE ¹	do.	E. P. Shaefer	--	1890	50 41-m	48
47	7 miles south	80, SE ¹ -SE ¹	do.	Frank Hagerman	Sam Hitt	1897	187 163-m	5
48	5½ miles south	61, NE ¹ -NE ¹	do.	C. G. Reich	--	1926	50 50-m	5
49	6½ miles south	69, NE ¹ -NE ¹	do.	Howard Stephenson	--	1916	95 94-m	5
51	7 miles south	51, SW ¹ -SW ¹	do.	T. L. Lasater	J. R. McKinnery	1927	30 31-m	56
52	7½ miles southeast	31, SE ¹ -NW ¹	do.	Chas. Gilbert	--	1918	20 7-m	12
53	8 miles southeast	31, SE ¹ -NE ¹	do.	E. L. Sims	John Clark	1923	111 112-m	5½
54	8½ miles south	58, NE ¹ -NE ¹	do.	A. Rich	A. Rich	1935	25 28-m	60
55	9 miles south	57, NE ¹ -NE ¹	do.	J. B. Webb	J. B. Webb	1932	9 8-m	48
57	10 miles south	54, NW ¹ -SW ¹	do.	Chas. Walker	--	1900	-- 10-m	36
58	10½ miles south	34, SW ¹ -SW ¹	do.	S. F. Collins	Ghormley Bros.	1934	8 8-m	48
f/ 59	11½ miles south	2, SW ¹ -SE ¹	Antonio Miller	H. Massaman	--	--	-- 12-m	24
61	11 miles south	29, SW ¹ -SW ¹	Mary Ann Clark, blk. 29	W. L. Curtis	W. L. Curtis	1932	16 17-m	36
62	12 miles south	--	Mary Ann Clark, blk. 6	A. M. Townsend	--	1912	57 58-m	5
63	11½ miles south	--	Mary Ann Clark, blk. 7	Joel Reed	Joel Reed	1927	25 18-m	42
64	12½ miles south	--	Moses Allen	N. E. Mitchell	D. P. Mitchell	1910	15 15-m	60
65	11½ miles southwest	--	Abraham Winfrey, blk. 6	E. L. Laminack	E. L. Laminack	1906	40 37-m	42
66	12½ miles southwest	--	Abraham Winfrey, blk. 4	J. M. McCann	--	1895	30 34-m	42
67	13 miles southwest	--	Abraham Winfrey, blk. 1	First Nat'l Bank, Cross Plains, Texas	--	--	-- 32-m	48
68	13½ miles southwest	--	Wyatt Hickman	W. E. Lusk	Bob Black	1890	44 30-m	42
69	14 miles southwest	18, NW ¹ -NW ¹	James Lahee	F. M. Hill	P. L. Bush	1936	18 18-m	48
70	14½ miles southwest	--	V. Sayers	R. A. Seal	George Erwin	1910	41 42-m	48
71	do.	--	Murphy Burgess	H. Harris	Bill Murdock	1916	112 107-m	5

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Sup- ply e/	Topo- graphic situa- tion	Remarks
		Depth below measuring point (ft.)	Date of measurement					
42	2.8	14.8	May 17, 1937	B,H	S	S	Level	Dug well. Wood curb; no casing.
43	0	15.6	do.	C,W	D,S	S	do.	Galvanized casing, top to bottom.
44	2.4	9.4	do.	B,H	D,S	S	do.	Dug well. Wood curb; rock casing.
45	2.6	9.5	do.	B,H	--	S	do.	Dug well. Concrete curb; rock casing.
46	0.5	25.1	do.	C,W	D,S	S	Hilltop	Dug well. Wood curb; 12 feet rock casing at top.
47	1.2	8.5	do.	B,H	S	S	do.	Tile curb; galvanized casing, top to bottom. Water reported
48	0.5	30.7	May 10, 1937	C,W	D,S	S	Level	Galvanized casing. in sand.
49	3	37.6	do.	B,H	D,S	--	Hilltop	Do.
51	2	21.6	do.	C,W	P	S	do.	Dug well. Brick curb; brick casing, 0 to 3 feet.
52	--	4.0	Apr. 27, 1937	C,W	N	S	do.	
53	3.6	74	do.	B,H	D,S	S	Level	Galvanized casing. Water reported in sand.
54	2	25.2	May 10, 1937	B,H	D,S	W	do.	Dug well. Concrete block curb; brick casing, 0 to 14 feet.
55	1.2	3.9	do.	B,H	D,S	S	Near dry creek	Dug well. Rock curb and casing.
57	2	6.4	do.	B,H	D,S	S	Level	Do.
58	3	4.9	May 14, 1937	B,H	D,S	S	Creek bank	Dug well. Wood curb; no casing.
59	2	7.2	May 11, 1937	None	N	W	Hillside	Dug well. Wood curb; rock casing, top to bottom.
61	0.5	7.1	May 19, 1937	None	N	S	Near dry creek	Dug well. Rock curb and casing.
62	0.2	26.8	do.	C,H	S	S	Hilltop	Galvanized casing. Water reported in sand.
63	2.5	9.8	do.	B,H	D,S	S	Level	Dug well. Galvanized curb; rock casing.
64	2.5	7.6	May 18, 1937	B,H	D,S	W	do.	Do.
65	2	33.8	do.	C,W	D,S	S	do.	Dug well. Wood curb; no casing.
66	2.5	31.6	do.	B,H	D,S	S	Hilltop	Dug well. Wood curb; rock casing.
67	0.5	16.6	do.	C,W	D,S	S	Level	Dug well. Wood curb; no casing. Water reported in sand.
68	0.8	28.2	do.	C,W	D,S	S	do.	Dug well. Rock curb; no casing.
69	2	12.8	do.	B,H	D,S	S	do.	Dug well. Galvanized curb; rock casing.
70	2.8	40.6	do.	B,H	D,S	S	do.	Dug well. Wood curb; no casing.
71	1.6	51	May 19, 1937	C,W	D,S	S	Hilltop	Galvanized casing, top to bottom. Water reported in sand.

Records of wells and springs in Eastland County--Continued

No.	Distance from Cisco	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
72	15½ miles southwest	971, NW cor.	George Click	Mrs. S. B. Webb	--	1910	75 97-m	5
73	16 miles southwest	971, NW ₁ ¹	do.	do.	--	1916	85 69-m	5
74	16 miles south	--	do.	H. L. Vestal	--	1920	60 55-m	48
75	16½ miles south	--	do.	Mrs. Mattie Webb	--	1910	90 58-m	42
77	18 miles southwest	774, NW ₁ ¹ SW ₁ ¹	T. Benson	T. S. Parker	--	1900	30 24-m	36
78	17½ miles south	--	W. Thompson	D. V. Armstrong	--	1935	-- 28-m	5
79	18½ miles south	774, SW ₁ ¹ SE ₁ ¹	T. Benson	Marion Harvey	John Gooch	1897	48 34-m	60
80	20 miles south	798, blk. 7	John M. McGloin	Higginbothman Bros.	--	--	-- 10-m	42
81	18½ miles south	--	Pioneer Townsite	Pioneer School	W. P. A. Dist. 13	1936	24 26-m	48
83	do.	--	do.	Miss C. B. Covert	Leffert Covert	1935	28 25-m	42
84	19 miles south	--	do.	L. L. Mead	S. B. DuPriest	1950	35 25-m	48
85	do.	--	L. Pamplin	J. W. Foster	M. B. Nix	1895	50 49-m	48
86	do.	20, SW ₁ ¹ SW ₁ ¹	E. T. R. R. Co.	Doss Alexander	Jack Stagner	1890	35 36-m	42
87	do.	--	L. Pamplin	A. L. Dillard	A. L. Dillard	--	-- 30-m	42
88	18½ miles south	20, SW ₁ ¹ SE ₁ ¹	E. T. R. R. Co.	J. W. Foster	George Speckles	1917	18 18-m	42
89	do.	--	J. Holley	M. B. Nix	M. B. Nix	1905	42 35-m	42
90	do.	18, SW ₁ ¹ SW ₁ ¹	E. T. R. R. Co.	E. Pinard	E. Pinard	1935	25 28-m	42
91	do.	18, SE ₁ ¹ SW ₁ ¹	do.	C. A. Barker	W. M. Gardner	1900	90 91-m	48
92	19½ miles south	--	R. M. Crume	R. Crane	--	--	-- 41-m	42
94	18½ miles south	1, NW ₁ ¹ NW ₁ ¹	I. & G.N.R.R.Co.	J. T. Woodruff	--	--	-- 100-m	42
95	18 miles south	15, SW ₁ ¹ SW ₁ ¹	E. T. R. R. Co.	H. L. King	--	--	150 141-m	5
96	18½ miles south	13, SW ₁ ¹ NW ₁ ¹	E. T. R. R. Co., blk. 2	Mrs. B. F. Tune	Lee Clark	1920	100 100-m	5
97	do.	13, NE ₁ ¹ NE ₁ ¹	do.	Mrs. George Barnes	--	1920	40 39-m	36
f/100	19½ miles south	27, NE ₁ ¹ SE ₁ ¹	do.	J. M. Erby	J. M. Erby	1925	30 30-m	60
101	19 miles south	28, NW ₁ ¹ SE ₁ ¹	do.	N. E. Tranham	--	--	30 22-m	42
102	18½ miles south	28, SW ₁ ¹ NE ₁ ¹	do.	City of Rising Star	City of Rising Star	1933	56 56-m	60
103	do.	do.	do.	do.	do.	1929	40 43-m	48

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.)	Water Level		Pump and power c/	Use of water d/	Supply graphic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
72	0.5	77.4	May 19, 1937	C,W	D,S	S	Level Galvanized casing, top to bottom. Water reported in sand.
73	0.5	62.4	do.	B,H	S	S	Hillside Do.
74	2.6	46.4	do.	C,W	D,S	S	do. Dug well. Wood curb; no casing.
75	2.5	54.7	do.	C,W	D,S	S	Hilltop Dug well. Brick curb; brick casing, 12 to 15 $\frac{1}{2}$ feet.
77	1	19.5	May 13, 1937	C,W	D,S	S	Level Dug well. Brick curb; 3 feet brick casing at top.
78	1	14.8	May 19, 1937	B,H	D,S	S	do. Steel curb; galvanized casing.
79	3	8.3	May 13, 1937	C,-	D,S	S	do. Dug well. Wood curb; no casing.
80	3.2	6.6	May 19, 1937	B,H	D,S	S	Creek bank Dug well. Wood curb and casing.
81	2	25.5	May 13, 1937	C,W	P	S	Level Dug well. Wood curb; steel casing, 0 to 18 feet; brick
83	2.5	23.8	do.	B,H	D,S	S	do. Dug well. Wood curb; no casing.
84	2	20.7	do.	C,W	D,S	F	Hilltop Dug well. Wood curb; 6 $\frac{1}{2}$ feet galvanized casing at top. Water
85	2	24.8	do.	B,H	D,S	S	do. Dug well. Reported in sand. Wood curb; no casing.
86	2	26.3	do.	C,W	D,S	S	Level Dug well. Brick curb; rock casing.
87	2	27.1	do.	B,H	D,S	S	do. Dug well. Wood curb; 13 feet wood casing at top.
88	2.5	17.2	do.	None	N	S	do. Dug well. Wood curb; no casing.
89	1.5	28.8	do.	C,W	D,S	S	Hilltop Dug well. Wood curb and casing.
90	2	25.8	do.	B,H	D,S	S	do. Dug well. Wood curb; no casing.
91	1	60.7	May 12, 1937	C,W	D,S	S	do. Dug well. Concrete curb; rock casing.
92	2.5	21	do.	None	N	S	Hillside Do.
94	0	75.4	do.	C,W	D,S	S	Hilltop Dug well. Wood curb; no casing.
95	0.5	120	do.	C,H	D,S	S	do. Galvanized casing, top to bottom. Water reported in sand.
96	0.7	63.3	do.	C,W	D,S	S	Level Concrete block curb; galvanized casing, top to bottom.
97	0.3	34.9	do.	C,W	D,S	S	Hilltop Dug well. Concrete block curb; 8 feet rock casing at top.
100	1.6	25.5	do.	B,H	D,S	S	Level Dug well. Wood curb; no casing. Located in Brown County.
101	2.5	12.3	do.	B,H	D,S	S	do. Dug well. Brick curb and casing.
102	0.5	22.4	do.	C,E, 15	P	S	do. Dug well. Concrete block curb; 47 feet steel casing at top.
103	--	17.3	do.	C,E,5	P	S	do. Dug well. Concrete curb; no casing.

Records of wells and springs in Eastland County--Continued

No.	Distance from Cisco	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
105	18½ miles south	13, NE ¹ NE ¹	B.B.B.&C.R.R.Co.	W. L. Boggs	W. L. Boggs	1916	42 25-m	8
106	do.	29, NW ¹ NW ¹	do.	W. T. Nunnally	--	1910	-- 20-m	36
108	17½ miles south	11, SE ¹ NE ¹	E. T. R. R. Co., blk. 2	J. T. McBeth	T. R. Cox	1925	85 73-m	5
109	17 miles south	27, SE ¹ SW ¹	do.	Dr. W. S. Carter	Tom Cox	1928	76 77-m	--
111	do.	27, SW ¹ SE ¹	do.	W. Armstrong	--	--	-- 51-m	42
112	16½ miles south	27, SW ¹ NE ¹	do.	Mrs. B. Watkins	--	1933	35 51-m	36
113	do.	38, SE ¹ SW ¹	do.	W. G. Wadkins	--	1907	-- 31-m	48
114	15½ miles south	12, SW ¹ SW ¹	James Jett	C. G. Shultz, Jr.	Bob Carter	1936	59 58-m	6
116	14½ miles south	10, SW ¹ SW ¹	do.	Mrs. J. H. Graham	--	1906	-- 29-m	36
117	14 miles south	10, NW ¹ NW ¹	do.	R. N. Haddon	--	1910	-- 27-m	36
118	do.	16, SE ¹ SE ¹	do.	R. C. Jackson	--	--	20 18-m	48
f/119	do.	16, --	do.	do.	Rainbow's End Oil Co.	--	3,010	--

No.	Distance from Eastland	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
f/201	8 miles northwest	456, SE ¹ NE ¹	S. P. R. R. Co.	L. E. Turner	O. N. Ramsower	1925	180 180-m	6
204	6½ miles northwest	38, NW ¹ NE ¹	H. & T.C.R.R.Co.	Mrs. L. A. Ramsower	do.	1928	275	6
205	6 miles northwest	38, SW ¹ SW ¹	do.	Dan Childress	do.	1926	165 114-m	5
206	do.	52, SE ¹ SE ¹	do.	Reagan School	do.	1927	-- 70-m	5
208	5½ miles northwest	35, NE ¹ SW ¹	do.	T. E. Castleberry	O. N. Ramsower	1933	220	6
211	5 miles north	21, NW ¹ NE ¹	do.	Carl Kimbrough	--	--	240 200+-m	5
213	4½ miles north	16, NW ¹ NW ¹	do.	T. C. Harbin	-- McFarland	1930	216	5
214	do.	9, NW ¹ SW ¹	do.	Morton Valley School	--	--	160	6
215	4 miles north	10, NW ¹ NW ¹	do.	E. D. Houston	Joe Tow	1929	160 88-m	5

a/ Measured depths indicated by "m"; otherwise depths are reported.

b/ Measuring point was usually top of casing, top of pipe clamp, top of pump base or top of well curb.

c/ B, bucket; C, cylinder; E, electric; G, gasoline, A, air lift; H, hand; W, windmill; number indicated horsepower.

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
105	1.5	18.6	May 20, 1937	C,W	D,S,I	S	Level	Galvanized casing. Water reported in sand.
106	2.5	14	do.	B,H	D,S	S	Hilltop	Dug well. Wood curb; rock casing.
108	0.6	58	May 11, 1937	C,W	D,S	S	Hillside	Galvanized casing.
109	0	53.3	do.	C,W	D,S,I	S	Hilltop	Concrete block curb.
111	1.5	17.8	do.	C,W	D,S,I	S	Level	Dug well. Wood curb; rock casing.
112	3	21.7	do.	B,H	D,S	S	do.	Do.
113	2.5	11.6	do.	B,H	D,S	S	do.	Do.
114	0.3	55.6	do.	C,W	D,S	S	Hilltop	Concrete curb; steel casing, top to bottom.
116	2	18.9	do.	C,W	D,S,I	S	Level	Dug well. Rock curb and casing.
117	2.4	20.8	do.	B,H	D,S	S	Hilltop	Do.
118	2.6	11.8	do.	B,H	D,S	F	Hilltop [Dug well. Wood curb; steel casing, 10 to 20 feet. near creek.]	Dug well. Wood curb; steel casing, 10 to 20 feet.
119	--	--	--	None	N	N	--	Oil test. See log.

No.	Height of measuring point above ground (ft.) b/	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
201	--	35	Feb. 8, 1937	C,W	D,S,I	S	Level	Galvanized casing. Water reported in sand.
204	0.5	150	Mar. 7, 1937	C,W	D,S	S	do.	Do.
205	0.1	76	Mar. 9, 1937	C,W	D,S	S	Hilltop	Do.
206	1	66	do.	C,W	P	S	Hillside	Do.
208	0.2	106	Apr. 7, 1937	C,W	D,S	S	Level	Galvanized casing, top to bottom. Water reported in sand.
211	0.6	177	do.	B,H	D,S	S	Hilltop	Steel casing.
213	0.1	29.6	do.	C,W	D,S	S	Level	Galvanized casing.
214	0	128	do.	C,W	P	S	do.	Steel casing, 0 to 40 feet.
215	0.6	37.4	do.	C,W	D,S	W	do.	Galvanized casing, top to bottom. Adjacent oil test reported fresh water at 300 foot.

d/ D, domestic; I, irrigation; P, public; S, stock; N, not used.

c/ Reported supply: S, strong; F, fair; W, weak; N, no supply.

f/ No water sample collected for analysis.

g/ Water level reported.

Records of wells and springs in Eastland County--Continued

No.	Distance from Eastland	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
220	3 miles north	10, SW ₁ ¹ SW ₄ ¹	H.& T.C.R.R.Co.	J. W. Jones	O. N. Ramsower	1935	200	5-3/16
f/222	5½ miles north	5, SW ₄ ¹	do.	W. L. Dolley	State Oil Corp. & Duquesne Oil Corp.	--	3,585	--
223	5 miles northeast	--	J. C. Littleton	John Littleton heirs	--	--	200	6
225	5½ miles northeast	--	S. M. Hale	C. M. England	Andy Madding	1906	40 35-m	36
226	6 miles northeast	2, NW ₁ ¹ NW ₄ ¹	W. H. Harenbeck	J. Maynard	--	--	26-m	36
227	6½ miles northeast	--	T. & N.O.R.R.Co.	Colony School	--	1926	13 12-m	8
228	7½ miles northeast	--	B. H. Epperson	Homer Danley	Beck & Sides	1930	80 71-m	6
229	8 miles northeast	--	do.	Mrs. F. Christmas	John Lester	1919	-- 22-m	42
230	9 miles northeast	--	A. J. Beck	Claude Erhler	A. J. Beck	--	65 49-m	42
231	do.	--	J. P. Rohus	L. Kirkpatrick	Frank Dupree	--	55 52-m	6
233	4 miles northeast	--	John York	B. C. Whitling	E. A. Norton	1926	36 35-m	5
234	4½ miles northeast	--	do.	J. F. Mosely	--	--	50 34-m	5
235	4 miles east	--	Olden Townsite	C. L. Langston	E. A. Norton	--	35 34-m	5
237	do.	--	do.	A. A. Norton	do.	1922	38 36-m	5
238	3½ miles east	--	do.	Olden School	--	1921	85 85-m	6
239	do.	--	do.	do.	--	--	-- 50-m	5
240	do.	--	do.	J. H. Mann	E. A. Norton	1932	30 25-m	5
241	3 miles east	5, NE ₁ ¹ NW ₄ ¹	E. T. R. R. Co., blk. 6	J. D. Yielding	-- McFarland	1928	80 70-m	6
245	3½ miles east	--	R. H. Hancock	Mrs. L. E. Bourland	-- Waggonor	1906	38 42-m	5
246	3½ miles east	--	McClellan Co. School Land, P. O. Leagues 3 & 4, blk. 66	P. O. Wood	--	1909	40 41-m	5
248	1 mile south	14, NW ₁ ¹ SW ₄ ¹	E. T. R. R. Co., blk. 6	Jack Tennel	--	1901	-- 15-m	48
254	¾ mile north	--	do.	R. F. Jones	R. F. Jones	1926	14 18-m	7
262	5 miles west	46, NW ₁ ¹ NW ₄ ¹	H.& T.C.R.R.Co., blk. 3	John Hart	--	1926	-- 198-m	5
263	4 miles west	45, NW ₁ ¹ NW ₄ ¹	do.	C. C. Street	C. C. Street	1927	25 13-m	48
267	4 miles southwest	45, SW ₂ ¹ SW ₁ ¹	do.	Mrs. C. Owen	--	1920	100 75-m	5½
268	4½ miles southwest	5, SW ₂ ¹ SW ₁ ¹	do.	B. O. Robinson	--	1896	30 23-m	48
271	5 miles southwest	7, NW ₁ ¹ NW ₄ ¹	do.	Mrs. A. L. Mayhew	E. J. Harrison	1937	10 12-m	--

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Sup- ply e/ d/	Topo- graphic situa- tion	Remarks
		Depth below measur- ing point (ft.)	Date of measurement					
220	0.7	42.4	Apr. 7, 1937	C,W	D,S	S	Level	Steel casing. Water reported in sand.
222	--	--	--	None	N	--	--	Cil test. See log.
223	0	74.4	Apr. 15, 1937	C,H	N	S	Level	Brick curb; galvanized casing.
225	1	30.7	do.	C,W	--	S	Hillside	Dug well. Rock curb and casing.
226	2	12.3	do.	B,H	D,S	S	Level	Dug well. Wood curb; rock casing.
227	0	6.6	do.	C,W	P	S	do.	Concrete block curb; galvanized casing.
228	2	20.9	June 3, 1937	B,H	D,S	S	do.	Wood curb; galvanized casing, top to bottom.
229	2	20.6	do.	B,H	D,S	S	do.	Dug well. Rock curb; 6 feet iron casing at top.
230	1.8	28.2	do.	B,H	D,S	S	do.	Dug well. Rock curb and casing.
231	1.5	14	do.	C,W	D,S	W	do.	Wood curb; galvanized casing, top to bottom.
233	0	30.8	Apr. 15, 1937	C,W	D,S	S	do.	Galvanized casing.
234	1	13.2	do.	B,H	D,S	W	do.	Galvanized casing, top to bottom. Water reported in sand.
235	0.7	26.6	Apr. 16, 1937	B,H	N	W	do.	Galvanized casing.
237	2.5	30	do.	B,H	D	S	do.	Wood curb; galvanized casing, top to bottom.
238	0.7	--	Apr. 15, 1937	C,E, ^a	P	S	do.	Concrete block curb; steel casing, top to bottom.
239	0	14.6	do.	C,H	P	S	do.	Concrete block curb; galvanized casing.
240	1.7	18.9	do.	B,H	D	S	do.	Wood curb; galvanized casing.
241	2.2	40.9	do.	C,W,& B,H	D,S	S	do.	Wood curb; steel casing, top to bottom.
245	2	15.8	Apr. 14, 1937	C,W	D,S	S	Hilltop	Wood curb; galvanized casing.
246	0.6	33.8	do.	C,W	D,S	S	Level	Galvanized casing, top to bottom.
248	3	10.6	May 6, 1937	None	N	S	Leon Creek valley	Dug well. Concrete curb; rock casing.
254	0.7	8.8	Apr. 7, 1937	C,H	D	S	Level	Galvanized casing.
262	0.3	102.2	Apr. 9, 1937	C,W	D,S	S	Hilltop	Do.
263	0	12.8	May 6, 1937	None	S	W	Level near dry creek	Dug well. Rock curb and casing.
267	0.4	60.7	May 5, 1937	C,W	D,S	S	Hilltop	Galvanized casing, top to bottom.
268	0	9.1	do.	None	N	S	Creek bottom	Dug well. Rock curb and casing.
271	2.5	11.1	do.	B,H	D,S,I	W	--	Steel casing, 0 to 7 feet.

Records of wells and springs in Eastland County--Continued

No.	Distance from Eastland	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
273	2½ miles south	20, NW ₁ SW ₁	Nancy Ussury	Mrs. C. U. Connelle	--	--	-- 30-m	12½
274	3 miles southeast	14, SE ₁ NE ₁	H.& T.C.R.R.Co., blk. 2	R. L. Jones	--	1920	40 41-m	5
275	3½ miles southeast	14, cen. W line	do.	do.	W. S. Barber	1917	40 40-m	36
276	3½ miles southeast	--	do.	Mrs. W. C. McGough	--	--	Spring	--
277	7 miles southeast	--	McClellan Co. School Land, Leagues 3 & 4, blk. 13	Kizziar Estate	Early Hall	1908	64 58-m	5
278	8½ miles southeast	21, NE ₁ SW ₁	H.& T.C.R.R.Co., blk. 1	R. McNeeley	R. McNeeley	--	-- 25-m	--
279	9 miles southeast	20, NE ₁ NW ₁	do.	D. P. Holliday	--	1915	35 25-m	48
280	7½ miles southeast	--	McClellan Co. School Land, Leagues 3 & 4, blk. 4	Dr. W.E. Kimbal	W. H. Ley	1926	-- 16-m	48
281	6 miles southeast	--	D. H. Harbin	B. H. Harbin	B. H. Harbin	1927	25 27-m	48
282	5½ miles southeast	10, SW ₁ SE ₁	H.& T.C.R.R.Co., blk. 2	Homer White	O. G. Reese	1932	20 18-m	--
283	4½ miles southeast	11, SW ₁ SW ₁	do.	J. A. Hallmark	J. A. Hallmark	1906	40 39-m	36
284	4¾ miles southeast	15, NE ₁ NE ₁	do.	Mrs. C. L. Yancy	--	1914	-- 43-m	48
285	4½ miles south	--	do.	J. B. Caudle	J. B. Caudle	1935	-- 19-m	36
286	5½ miles south	16, NW ₁ NE ₁	do.	P. F. Turner	--	--	-- 35-m	5½
287	4½ miles south	--	W. Mitchell	Finis Johnson	H. A. Collins	--	-- 29-m	36
288	4¾ miles south	15, SW ₁ NW ₁	H.& T.C.R.R.Co., blk. 2	Flatwood School	H. Harbin	1926	35 37-m	56
289	5 miles south	25, NE ₁ NE ₁	do.	S. V. Lyerla	S. V. Lyerla	1890	-- 35-m	48
290	3½ miles south	27, NE ₁ SE ₁	do.	J. V. Harbin	-- McFarland	1931	52 51-m	6
291	4 miles south	do.	do.	do.	Arkansas Fuel Oil Co.	1920	37 31-m	36
292	do.	27, SE ₁ SW ₁	do.	Sam Coon	--	--	-- 34-m	36
293	4½ miles south	29, NE ₁ NE ₁	do.	M. W. Grieger	Gus Harbin	1890	45 31-m	--
294	do.	28, SE ₁ SE ₁	do.	A. C. Justice	J. S. Butler	1906	-- 37-m	36
295	do.	28, SE ₁ SW ₁	do.	Mrs. W. B. Samford	--	1896	-- 9-m	60
296	4½ miles south	29, NW ₁ NN ₁	do.	L. A. Hightower	--	--	-- 28-m	48
f/298	5 miles south	26, SW ₁ SW ₁	do.	do.	M. K. Gates	--	1,321	--
299	do.	29, SE ₁ SE ₁	do.	Lon Palmer	Lon Palmer	--	-- 27-m	36
300	do.	30, NE ₁ NE ₁	do.	M. D. Evans	--	--	-- 28-m	36

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
		Depth below measurement point (ft.)	Date of measurement					
273	2.1	12.8	May 7, 1937	C,W	S	S	Hillside	Steel casing, 0 to 8 feet.
274	0.2	13.9	do.	B,H	D,S	S	Level	Concrete block curb; galvanized casing.
275	2.2	38.5	do.	C,W	S	W	do.	Dug well. Brick curb and casing.
276	--	Flows	do.	None	D,S	S	Creek bottom	Estimated flow, 20 gallons a minute from 3 openings in sand.
277	0.7	7	Apr. 29, 1937	C,W	S	W	Level	Wood curb; galvanized casing.
278	3	12.8	do.	C,W	D,S	S	Hillside	Dug well. Wood curb and casing.
279	2.6	17.8	do.	C,W	D,S	S	Level	Dug well. Wood curb; 6 feet rock casing.
280	3	7.2	do.	B,H	D,S	S	do.	Dug well. Rock curb and casing.
281	2.6	22.2	do.	B,H	S	--	do.	Dug well. Brick curb; 12 feet brick casing at top.
282	2.5	15.6	do.	B,H	D,S	S	do.	Dug well. Wood curb; no casing.
283	3	24.8	May 7, 1937	B,H	D,S	S	do.	Dug well. Concrete curb; no casing.
284	2.9	24	do.	B,H	D,S	S	Hilltop	Dug well. Wood curb; no casing.
285	3	12.4	do.	B,H	D,S	S	Level	Dug well. Concrete curb; rock casing.
286	0.3	14.8	Apr. 29, 1937	C,W	D,S	S	do.	Cast iron curbing; galvanized casing. Water reported in sand.
287	2.4	14.2	Apr. 28, 1937	B,H	D,S	S	do.	Dug well. Brick curb; brick casing.
288	--	17.9	do.	B,H	P	S	do.	Dug well. Concrete block curb; brick casing, 0 to 12 feet.
289	1.2	16	do.	C,W	D,S	S	do.	Dug well. Wood curb; rock casing.
290	0.2	24.8	May 7, 1937	C,W	D,S	S	Hilltop	Galvanized casing, top to bottom.
291	1.5	5.5	do.	B,H	S	S	Near dry branch	Dug well. Concrete curb and casing.
292	3	24.4	Apr. 28, 1937	B,H	S	S	Level	Dug well. Concrete curb; brick casing, top to bottom. Water
293	0.2	14.5	do.	C,H,& G,A	D,S,I	S	do.	Dug well. reported in sand. Wood curb; rock casing.
294	3	27.5	do.	B,H	D,S	S	do.	Dug well. Brick curb and casing.
295	4	5.6	do.	B,H	D,S	S	Near dry creek	Dug well. Wood curb; no casing.
296	2.7	22.1	Apr. 27, 1937	B,H	D,S	S	Level	Dug well. Wood curb; rock casing, 0 to 6 feet.
298	--	--	--	None	N	N	--	Oil test. See log.
299	3	15	Apr. 29, 1937	None	N	S	Hillside	Dug well. Wood curb; rock casing.
300	3.4	15.6	do.	B,H	S	S	Hilltop	Dug well. Brick curb and casing.

Records of wells and springs in Eastland County--Continued

No.	Distance from Eastland	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
301	5½ miles south	25, SW ₄ ¹ NW ₄ ¹	H. & T.C.R.R.Co., blk. 2	Ernest La Foon	Jacob Lyerla	1896	20 18-m	48
302	6 miles south	25, SW ₄ ¹ SW ₄ ¹	do.	Jacob Lyerla	do.	--	-- 35-m	48
303	do.	30, SE ₄ ¹ SE ₄ ¹	do.	T. A. Byrd	--	1900	50 52-m	36
304	7 miles south	25, SW ₄ ¹ SW ₄ ¹	do.	D. N. Taylor	Weldon Feuter	1936	35 39-m	5½
305	do.	32, NE ₄ ¹ NW ₄ ¹	do.	J. L. James	J. L. James	1935	53 45-m	36
307	6½ miles south	31, SE ₄ ¹ NW ₄ ¹	do.	M. Farm Hurst	--	1906	-- 53-m	36
308	6 miles south	30, NE ₄ ¹ SW ₄ ¹	do.	Pat McNeil	--	1929	15 17-m	24
309	5 miles south	30, NE ₄ ¹ NW ₄ ¹	do.	J. S. Turner	--	1886	-- 49-m	48
310	do.	29, SE ₄ ¹ SW ₄ ¹	do.	T. F. Murrell	--	--	-- 43-m	36
311	do.	--	W. B. Samford	W. F. Reagan	M. H. Byrd	1926	28 29-m	36
312	do.	--	do.	W. H. Boon	Bud Wood	1924	21 21-m	36
313	5 miles southwest	24, NE ₄ ¹ SW ₄ ¹	B. Ridens	J. H. Haynes	--	--	-- 28-m	36
315	5½ miles southwest	26, SE ₄ ¹ SE ₄ ¹	Mangum Townsite	Mrs. P. L. Mangum	--	--	-- 56-m	36
317	7 miles south	43, NE ₄ ¹ SW ₄ ¹	H. & T.C.R.R.Co., blk. 2	Elmer Gilbert	--	--	90 83-m	5
318	7½ miles south	44, NE ₄ ¹ NW ₄ ¹	do.	Alvin Thurman	--	--	20 20-m	--

No.	Distance from Gorman	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
401	13 miles west	11, NW ₄ ¹ NW ₄ ¹	H. & T.C.R.R.Co., blk. 3	J. T. Hale	Turkmeat & Witherspoon	1920	100	5
402	13½ miles west	18, NE ₄ ¹ NE ₄ ¹	do.	J. S. Turner	--	1935	-- 28-m	48
403	do.	18, SW ₄ ¹ NW ₄ ¹	do.	R. L. Tucker	-- McFarland	1928	92 88-m	6
404	13 miles west	18, SE ₄ ¹ NE ₄ ¹	do.	W. A. Hale	-- Adams	1918	96 80-m	5
405	12 miles west	45, NW ₄ ¹ NW ₄ ¹	H. & T.C.R.R.Co., blk. 2	D. S. Campbell	D. C. Campbell	1918	16 19-m	36
406	10 miles northwest	32, SE ₄ ¹ SW ₄ ¹	do.	Henry Collins	--	1906	90 47-m	36
408	9½ miles west	33, SE ₄ ¹ NW ₄ ¹	do.	City of Carbon	P. W. A.	1933	-- 13-m	36

a/ Measured depths indicated by "-m"; otherwise depths are reported.

b/ Measuring point was usually top of casing, top of pipe clamp, top of pump base or top of well curb.

c/ B, bucket; C, cylinder; E, electric; G, gasoline; A, air lift; H, hand; W, windmill; number indicated horsepower.

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
		Depth below measurement point (ft.)	Date of measurement					
301	2.5	12	May 6, 1937	B,H	D,S	S	Level	Dug well. Concrete curb; rock casing.
302	4	23.2	do.	B,H	D,S	S	Hillside	Dug well. Wood curb; rock casing. Water reported in sand.
303	3	35.2	do.	B,H	D,S	S	Hilltop	Do.
304	1.3	34.3	do.	B,H	D,S	S	Level	Galvanized casing.
305	2	44	Apr. 13, 1937	None	D	S	do.	Dug well. Concrete and rock curb; no casing.
307	3	21.8	Apr. 12, 1937	B,H	D,S	S	do.	Dug well. Rock curb; no casing.
308	1.9	14.2	do.	B,H	D,S	S	do.	Dug well. Wood curb; rock casing.
309	3	37.9	do.	C,W	D,S	S	Hilltop	Dug well. Brick curb; 10 foot rock casing at top.
310	2.7	28.2	Apr. 26, 1937	C,W	D,S	S	Level	Dug well. Rock casing, 0 to 10 feet. Water reported in sand.
311	3.2	26.5	do.	B,H	D	S	Hilltop	Dug well. Wood curb; rock casing, 0 to 16 feet.
312	--	16.9	do.	B,H	D,S	S	Level	Dug well. Concrete curb; brick casing.
313	0.2	13.8	do.	C,W	D,S	S	do.	Dug well. Rock casing, top to bottom.
315	2.7	37	do.	B,H	N	--	Hillside	Dug well. Wood curb; rock casing.
317	--	57.2	Apr. 27, 1937	B,H	D	W	Hilltop	Galvanized casing, top to bottom.
318	--	7.6	do.	B,H	N	S	Creek bank	Dug well. Water reported in sand.

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
		Depth below measurement point (ft.)	Date of measurement					
401	1.5	28.5	May 5, 1937	C,W	S,I	S	Level	Galvanized casing. Water reported in sand.
402	2.6	27.3	do.	B,H	D,S	W	do.	Dug well. Wood curb; no casing.
403	1.5	65.6	Apr. 27, 1937	C,W	S	S	do.	Galvanized casing, top to bottom.
404	0.5	--	do.	C,W	D,S	S	Hillside	Do.
405	2.2	11.8	do.	B,H	D,S	S	Hilltop	Dug well. Rock curb and casing.
406	3.2	34.7	Apr. 12, 1937	B,H	D,S	S	Hillside	Dug well. Wood curb; brick casing.
408	2.3	7.2	do.	B,H	P	S	Level	Dug well. Concrete curb; brick casing.

d/ D, domestic; I, irrigation; P, public; S, stock; N, not used.

e/ Reported supply: S, strong; F, fair; W, weak; N, no supply.

f/ No water sample collected for analysis.

g/ Water level reported.

Records of wells and springs in Eastland County--Continued

No.	Distance from Gorman	Section	Survey and block	Owner	Driller	Date com- pleted	Depth of well (ft.) a/	Diam- eter of well (in.)
409	9 miles west	33, SW ¹ SE ¹	H.& T.C.R.R.Co., blk. 2	Mrs. J. A. Hearn	John Adam	1908	60 53-m	6
410	9½ miles west	34, NW ¹ NW ¹	do.	W. H. Gilbert	Skinner & Moore	1934	20 18-m	36
412	10 miles west	37, NW ¹ NE ¹	do.	I. A. Dingler heirs	--	1917	30 19-m	42
413	do.	37, NE ¹ SW ¹	do.	W. S. Maxwell	Walter Puett	1913	50 41-m	42
414	do.	36, NE ¹ NW ¹	do.	Buck Flowers	--	1895	40 37-m	42
415	do.	36, SW ¹ NE ¹	do.	W. W. Martin	--	1900	75 69-m	5
417	do.	36, SW ¹ SW ¹	do.	Babe Lanier	--	1927	75 69-m	5
418	11 miles west	48, NW ¹ NW ¹	do.	M. B. Martin	--	--	9-m	42
419	12½ miles west	15, SE ¹ SE ¹	H.& T.C.R.R.Co., blk. 3	J. T. Poe	J. T. Poe	1912	14 9-m	42
420	13 miles west	--	J. M. Grigsby	Ed Sherrill	-- Soan	1933	70 67-m	5
423	7½ miles west	20, SW ¹ SW ¹	H.& T.C.R.R.Co., blk. 2	C. G. Stubblefield	C. G. Stubblefield	1915	40 37-m	36
424	6½ miles west	--	Luke Bryan	W. T. Duncan	--	1917	-- 14-m	36
f/426	4½ miles west	1, SW ¹ NE ¹	Deaf & Dumb Asylum Lands	W. Boon	--	--	-- 80-m	5
429	1½ miles west	27, SE ¹ NE ¹	H.& T.C.R.R.Co., blk. 1	J. C. Caraway	W. J. Overton	1910	40 39-m	42
430	1 mile west	--	do.	D. Jobe	--	--	-- 14-m	36
431	1½ miles south	46, NW ¹ NW ¹	H.& T.C.R.R.Co., blk. 2	A. F. McMullen	--	--	60 44-m	6
433	¾ mile southwest	65, SW ¹ SW ¹	Deaf & Dumb Asylum Lands	City of Gorman	--	1910	-- 81-m	--
434	At Gorman	--	Gorman Townsite	do.	W. H. Bradford	1911	120 93-m	8½
435	½ miles northeast	63, SW ¹ NE ¹	Deaf & Dumb Asylum Lands	Mrs. Adelene Moats	--	--	-- 51-m	6
436	1 mile northeast	2, SW ¹ SW ¹	H.& T.C.R.R.Co., blk. 1	Mrs. J. M. Moats	H. W. Seay	1910	60 48-m	5
437	1½ milcs northeast	2, NW ¹ SE ¹	do.	P. Thomas	--	1917	-- 30-m	36
439	2 miles northeast	--	Deaf & Dumb Asylum Lands	R. D. Parker	--	1900	-- 45-m	--
440	2½ miles northeast	66, SE ¹ NE ¹	do.	Oral Browning	--	--	Spring	--
441	2 miles north	--	H.& T.C.R.R.Co., blk. 1	Albert Taylor	--	1912	-- 56-m	5
442	2½ miles north	1, NW ¹ NW ¹	do.	H. O. Files	--	1910	50 42-m	5
443	3 miles northeast	--	D. J. Andrus	M. Jones	--	1902	-- 38-m	5
444	3 miles northeast	--	Theresa Tyler	George Snyder	--	1902	60 34-m	5

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
		Depth below measurement point (ft.)	Date of measurement					
409	0.7	36	Apr. 12, 1937	C,W	D,S	S	Hillside	Galvanized casing.
410	2.5	14.2	May 14, 1937	B,H	S	S	Level	Dug well. Brick curb and casing, top to bottom.
412	2.3	11.9	do.	C,W	D,S	S	do.	Dug well. Wood curb; brick casing.
413	2.5	12.6	do.	B,E	D,S	S	do.	Do.
414	3	17.5	do.	C,H	D,S,I	S	do.	Do.
415	0.8	27	do.	C,W	S	S	do.	Galvanized casing. Water reported in sand.
417	3	28.5	do.	B,H	D,S	W	Hillside	Do.
418	1.6	3.9	do.	None	N	S	Edge of dry branch	Dug well. Rock curb and casing.
419	1.7	4.9	do.	C,W	D,S	S	Level	Dug well. Wood curb and casing.
420	0.9	19.8	do.	B,H	D,S	S	Hilltop	Galvanized casing.
423	1.5	32.5	Apr. 12, 1937	C,W	D,S	S	do.	Dug well. Wood curb; brick casing.
424	2.5	6.5	Apr. 15, 1937	B,H	D,S	S	Hillside	Dug well. Rock curb and casing.
426	0.3	52	Apr. 12, 1937	C,W	N	F	Level	Galvanized casing.
429	0.9	20.9	do.	C,W	D,S	S	do.	Dug well. Wood curb; no casing.
430	1.5	6.5	do.	C,W	D,S	S	Hillside	Do.
431	0.5	25	May 27, 1937	C,W	D,S	S	do.	Wood curb; galvanized casing. Located in Comanche County.
433	0	60.7	Apr. 13, 1937	C,E,5	P	S	--	Dug well. Concrete curb; brick casing.
434	0	56.3	Apr. 12, 1937	C,G,-	P	S	Level	100 feet steel casing at top.
435	1	43.2	Apr. 19, 1937	B,E	--	S	do.	Galvanized casing.
436	0.8	39.6	Apr. 15, 1937	B,H	D,S	S	Hilltop	50 feet galvanized casing at top.
457	2.3	25.8	do.	B,H	D,S	S	do.	Dug well. Wood curb; rock casing, top to bottom.
439	1	40.2	Apr. 19, 1937	C,W	D,S	S	do.	Dug well. Steel curb.
440	--	Flows	do.	None	N	S	Near creek bottom	Concrete curb. Measured flow, 33 gallons a minute from 1
441	0.3	34.1	do.	C,W	D,S	S	Hilltop	Concrete opening in limestone curb; galvanized casing, top to
442	1	29.6	do.	C,H	D,S,I	S	Hillside	Galvanized casing, top to bottom.
443	0.2	27.2	do.	C,H	D,S	S	do.	Galvanized casing, top to bottom.
444	0.2	13.4	do.	C,W	D,S,I	S	do.	Wood curb; galvanized casing.

Records of wells and springs in Eastland County--Continued

No.	Distance from Gorman	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
445	3 miles northeast	--	Theresa Tyler	Grandview School	--	1927	-- 47-m	5
446	3½ miles northeast	--	do.	C. M. Prestidge	--	1902	60 44-m	5
447	3½ miles northeast	--	do.	Mrs. Tom Brightwell	James Arnold	1902	45 38-m	36
448	4 miles northeast	--	do.	J. M. Westmoreland	J. M. Westmoreland	1902	-- 21-m	42
449	do.	--	do.	T. M. Goodwin	W. C. Thomas	1907	27 21-m	42
450	4½ miles northeast	--	do.	W. F. Rogers	Malstead Moop	1922	-- 21-m	36
451	4¾ miles north	--	do.	W. P. Westmoreland	--	1902	-- 23-m	48
452	3½ miles northeast	--	W. De Moss	E. W. Townsend	--	1917	90 90-m	5
454	4 miles northeast	--	do.	Pat Peak	Pat Peak	1925	-- 24-m	36
457	6 miles northeast	--	J. Salinas	Almon Bearden Estate	--	1910	-- 34-m	36
458	6½ miles northeast	--	J. Curbella	J. T. Jones	--	1900	-- 43-m	36
f/460	8 miles northeast	--	Desdemona Townsite	City of Desdemona	J. H. Jackson	1937	76	5- 3/16
461	do.	--	do.	do.	--	1935	76	6- 5/8
462	7½ miles northeast	--	N. H. Kuykendall	Mrs. Bobbie I. Terry	Gallagher & Lawson	1937	128	24
463	6½ miles east	5, NW ₁ ¹ ,NE ₁ ¹	H.& B.B.R.R. Co.	Mrs. S. Snodgrass	--	1918	-- 38-m	42
464	do.	54, SW ₁ ¹ ,SW ₁ ¹	L. Birdsall	W. N. Koonce	-- Bradford	1937	30 35-m	5
465	6 miles east	56, SW ₁ ¹	E. Houston	G. J. Perry	--	--	Spring	--
466	do.	do.	do.	do.	-- Bradford	1927	30 30-m	5
467	7 miles southeast	--	J. P. Stephenson	J. J. Holleman	--	--	25 18-m	42
468	7½ miles southeast	--	William Ship	W. F. Duke	--	--	-- 36-m	6
469	8½ miles southeast	--	do.	W. L. F. Boyd	--	--	80 59-m	6
470	10 miles southeast	--	--	City of DeLeon	-- Bradford	1920	105	8
471	9 miles southeast	14, SE ₁ ¹ ,SE ₁ ¹	H.& T.C.R.R.Co., blk. 2	J. W. Tate	do.	1926	-- 11-m	6
472	8½ miles southeast	16, con. S line	H.& T.C.R.R.Co., blk. 1	Mrs. M. J. Cunor Estate	--	1900	60 69-m	42
473	7 miles southeast	9, SE ₁ ¹ ,NW ₁ ¹	Nathaniel Green	J. T. Quinn	-- Bradford	--	30 31-m	6

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Sup- ply e/	Topo- graphic situa- tion	Remarks
		Depth below measuring point (ft.)	Date of measurement					
445	1.5	27.4	Apr. 19, 1937	C,H	P	S	Hillside	Steel curb; galvanized casing.
446	2	30.8	do.	C,J,H	D,S	S	Hilltop	Galvanized casing, top to bottom.
447	3	21.5	do.	C,W	D,S,I	S	do.	Dug well. Brick curb; 3 feet brick casing at top.
448	2.5	11.4	do.	B,H	D,S	S	Level	Do.
449	4	7.8	do.	B,H	D,S	S	do.	Dug well. Wood curb; rock casing, top to bottom.
450	2.5	17.8	do.	B,H	D,S	S	do.	Dug well. Wood curb; brick casing, top to bottom.
451	3.4	17.5	do.	B,H	--	S	Hilltop	Dug well. Wood curb; no casing.
452	1.5	17	Apr. 13, 1937	B,H	D,S	W	Level	Galvanized casing, top to bottom.
454	1.5	18.4	do.	C,W	D,S	S	Hilltop	Dug well. Concrete curb; rock casing, top to bottom.
457	3.5	29.4	do.	B,H	D,S	S	Level	Dug well. Wood curb; no casing.
458	2.5	30.6	Apr. 14, 1937	C,W	D,S	S	do.	Dug well. Rock curb; no casing.
460	1.4	33.3	Apr. 13, 1937	C,G,5	P	S	do.	Steel casing, top to bottom.
461	1.2	33.3	do.	C,E,3	P	S	do.	Do.
462	--	23	May 28, 1937	None	N	S	Hillside	Incomplete oil test. See log. Located in Comanche County.
463	3.5	26	do.	B,H	D,S	S	Level	Dug well. Wood curb; rock casing. Water reported in sand. Located in Comanche County.
464	0.5	16	do.	C,H	D,S	S	Hillside	Galvanized casing, top to bottom. Located in Comanche County.
465	--	Flows	do.	None	S	S	Creek bank	Estimated flow, 20 gallons a minute from 1 opening in sand. Located in Comanche County.
466	1.2	17.8	do.	None	N	S	Hillside	Galvanized casing, top to bottom. Located in Comanche County.
467	2.4	7.8	do.	B,H	D,S	S	Level	Dug well. Brick curb; 10 foot brick casing at top. Located
468	0.5	14.8	do.	C,W	D,S	S	Hillside	Galvanized in Comanche County. casing, top to bottom. Water reported in sand. Located in
469	0.5	50	do.	C,W	D,S	S	Hilltop	Comanche County. Do.
470	1	40	May 21, 1937	C,E,15	P	S	do.	Concrete block curb; steel casing. Located in Comanche County.
471	0.5	7	May 27, 1937	C,W	D,S	S	do.	Wood curb; cast iron casing. Located in Comanche County.
472	1	65	May 21, 1937	C,W	D,S	S	Hillside	Dug well. Wood curb; 30 foot rock casing at top. Located in
473	0.5	24	May 27, 1937	C,W	D,S	S	Hilltop	Wood curb; Comanche County. galvanized casing, top to bottom. Located in Comanche County.

Records of wells and springs in Eastland County--Continued

No.	Distance from Gorman	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
474	7 $\frac{1}{2}$ miles south	15, NE $\frac{1}{4}$ NE $\frac{1}{4}$	H. & T.C.R.R.Co., blk. 2	Mrs. Joe Patterson	--	--	120 116-m	6
475	6 $\frac{1}{2}$ miles southeast	54, SE $\frac{1}{4}$ NE $\frac{1}{4}$	William Ship	J. S. Singleton	--	1925	100 57-m	5
476	5 miles southeast	41, SE $\frac{1}{4}$ SW $\frac{1}{4}$	H. & T.C.R.R.Co., blk. 2	J. I. Lightfoot	--	--	60 37-m	42
477	4 $\frac{1}{2}$ miles southeast	42, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	R. M. Higginbotham	--	1925	80 60-m	5
478	3 miles southeast	50, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	L. Woods	--	1910	30 29-m	42
479	3 $\frac{1}{2}$ miles south	34, NE $\frac{1}{4}$ NE $\frac{1}{4}$	Deaf & Dumb Asylum Lands	C. C. McMullen	--	1917	7 10-m	42
480	4 miles south	35, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Mrs. G. T. Sloan	--	--	40 38-m	42
481	5 miles south	33, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Mrs. B. L. Woody	--	1906	-- 101-m	5
482	7 miles south	13, NW $\frac{1}{4}$ NW $\frac{1}{4}$	H. & T.C.R.R.Co., blk. 2	E. Pounds	--	--	-- 62-m	5
483	6 miles south	9, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	City of Dunster	--	1906	82 41-m	5
484	6 $\frac{1}{2}$ miles south	9, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Dunster School	--	--	-- 53-m	5
485	8 $\frac{1}{2}$ miles southwest	52, NW $\frac{1}{4}$ NW $\frac{1}{4}$	Deaf & Dumb Asylum Lands	S. H. Gray	-- Bradford	1934	108 101-m	5
486	10 $\frac{1}{2}$ miles southwest	49, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	City of Sipe Spring	--	1895	20 18-m	42
487	9 $\frac{1}{2}$ miles southwest	--	Joseph Rubarth	M. F. Greenwood	Sun Oil Co.	--	2,450	--
488	11 miles west	53, NE $\frac{1}{4}$ SW $\frac{1}{4}$	P. A. Barnhill	Mrs. R. S. Maxwell	--	1895	290	5
490	12 miles west	--	J. Carr	W. R. Laird	R. Hayse	1923	48 45-m	5
492	13 miles southwest	33, SE $\frac{1}{4}$ SW $\frac{1}{4}$	H. & T.C.R.R.Co., blk. 2	Bob Edwards	-- Killon	1912	22 18-m	48
494	13 $\frac{1}{2}$ miles southwest	32, NE $\frac{1}{4}$ SW $\frac{1}{4}$	E. T. & R. R.Co.	R. W. Higginbotham	-- Abel	1910	40 39-m	42
495	do.	31, NE $\frac{1}{4}$ SE $\frac{1}{4}$	H. & T.C.R.R.Co., blk. 2	J. M. Higginbotham	--	1910	45 43-m	5
496	14 miles southwest	7, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Dr. T. B. Busbee	--	--	-- 93-m	5
498	do.	7, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	H. V. Hill	J. D. Boggs	1912	60 66-m	5
499	14 $\frac{1}{2}$ miles southwest	7, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. T. Harris	J. T. Harris	1934	12 13-m	42

a/ Measured depths indicated by "-m"; otherwise depths are reported.

b/ Measuring point was usually top of casing, top of pipe clamp, top of pump base or top of well curb.

c/ B, bucket; C, cylinder; E, electric; G, gasoline, A, air lift; H, hand; W, windmill; number indicated horsepower.

No.	Height of measuring point above ground (ft.) b/	Water Level (ft.)	Depth below measuring point	Date of measurement	Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
474	--	88.5		May 27, 1937	C,W	D,S	S	Hilltop	Galvanized casing, top to bottom. Water reported in sand. Located in Comanche County.
475	0.2	41		May 21, 1937	C,W	D,S	S	do.	Concrete block curb; galvanized casing. Located in Comanche
476	3	28		do.	C,W	D,S	S	Level	Dug well. Rock curb [County. and casing. Located in Comanche
477	0.5	34.8		do.	C,W	D,S	S	Hillside	Galvanized casing, top [County. to bottom. Located in Comanche
478	2.2	14.6		do.	B,H	D,S	S	Level	Dug well. Brick curb [County. and casing. Located in Comanche
479	1.5	5.6		May 27, 1937	B,H	D,S	W	Hillside	Dug well. Concrete [County. curb; rock casing, top to bottom. Located in Comanche County.
480	1.6	28.8		do.	B,H	D,S	S	Level	Dug well. Rock curb and casing. Located in Comanche County.
481	1.4	59.1		May 26, 1937	C,W	D,S	S	Hilltop	Galvanized casing. Water reported in sand. Located in Comanche
482	0.5	30		May 27, 1937	C,W	D,S	S	do.	Do. [County.
483	2.2	25.6		May 26, 1937	C,H	P	S	Level	Do.
484	0	44.6		do.	C,W	F	S	Hilltop	Concrete block curb; galvanized casing. Located in Comanche
485	0.5	56		do.	C,W	D,S	S	do.	Concrete block curb; [County. steel casing. Located in
486	3.2	10		do.	C,-,-	P	S	Level	Dug well. [Comanche County. Concrete curb; no casing. Located in Comanche County.
487	--	--	--	None	N	--	--	--	Oil test. See log.
488	0.8	25		May 20, 1937	--	N	S	Hillside	Galvanized casing, top to bottom.
490	0.4	14		do.	--	S	W	Flat	Do.
492	1	12		do.	C,W	D,S	S	do.	Dug well. Wood curb; no casing.
494	1.2	19.4		do.	C,W	D,S	S	do.	Dug well. Concrete curb; rock casing.
495	0.5	29.5		do.	C,W	D,S	S	do.	Galvanized casing, top to bottom.
496	0.2	52.1		do.	C,W	D,S	S	do.	Do.
498	0.8	13.2		do.	C,H	S	S	do.	Do.
499	2	9		do.	C,W	S	S	do.	Dug well. Brick curb; rock casing.

d/ D, domestic; I, irrigation; P, public; S, stock; N, not used.

e/ Reported supply: S, strong; F, fair; W, weak; N, no supply.

f/ No water sample collected for analysis.

g/ Water level reported.

Records of wells and springs in Eastland County--Continued

No.	Distance from Ranger	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
601	3 miles northwest	--	A. J. Beck	Willie Langford	Ross Barnes	1906	150 91-m	6
603	2½ miles north	--	-- Stubblefield	Mrs. H. James	T. M. Cook	1917	10 10-m	42
605	2½ miles north	--	Guadalupe College	Rocky Point Pentecostal Church	L. A. Sides	--	-- 172-m	6
606	2 miles north	--	E. Estes	E. B. Hill	C. C. Putnam	--	32 29-m	42
f/608	1¾ miles north	--	E. Estes, abstract 1128	E. C. Ward	L. A. Sides	1931	200	5
610	1¼ miles northwest	--	S. Standifer	G. W. Rose	do.	1935	205 167-m	6
611	2 miles west	--	Mark Haley	J. F. Dreinhofer	--	1920	33 29-m	5½
612	1¾ miles west	--	do.	Mrs. N. E. Works	Mrs. N. E. Works	1935	20 25-m	--
613	1½ miles west	--	do.	Mrs. S. A. Sawyer	Mrs. S. A. Sawyer	1935	25 24-m	36
616	2¾ miles southwest	--	Eliz. Finley	B. E. Rigby	J. A. Pritchard	1931	20	--
f/617	3½ miles south	--	do.	L. A. Galloway	Texas Pacific Coal & Oil Co.	--	3,374	--
618	2½ miles south	--	do.	Mrs. G. W. Terry	--	1915	180	5- 3/16
621	½ mile southwest	--	F. Blundell	W. M. Myers	-- Smith	1918	213 174-m	5
623	1 mile east	--	James Leahea	R. H. Sheppard	--	1917	180 162-m	6
624	1½ miles east	--	Jessie Bledsoe, abstract 19	Haden Neal	--	--	40 29-m	42
625	2½ miles east	--	James Leahea	J. M. Winsett	--	--	Spring	--
626	2 miles east	--	do.	D. Barton	--	--	60 56-m	5
628	2½ miles east	--	N. A. Moore	J. R. Erwin	--	1935	-- 137-m	6
f/634	8½ miles southeast	--	Jno. Foster	C. E. Allen	Texas Pacific Coal & Oil Co.	--	3,095	--
635	5 miles southeast	--	Frederick Scranton	J. J. Daffern	J. J. Daffern	1933	20 22-m	42
636	6 miles southeast	--	E. L. Weeks	Willis Barton	--	--	50 32-m	42
637	7 miles southeast	--	Thos. A. Howell	A. H. Dean	Tom Week	--	45 30-m	42
638	8 miles southeast	--	do.	Geo. Barton	--	--	20 16-m	42
639	10 miles southeast	--	David S. Richardson	A. E. Martin	--	--	-- 57-m	42
640	11 miles southeast	--	do.	Mrs. E. E. Williams	Ervin Ryan	1906	37 36-m	42
641	12 miles southeast	--	B. Davidson	Bob Killinghurst	--	--	60 61-m	42
642	12 miles south	--	David S. Richardson	Dr. G. T. Blackwell	A. D. Lewis	1929	35 32-m	36

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power c/	Use of water d/	Supply e/	Topographic situation	Remarks
601	1.5	21.2	June 3, 1937	B,H	D,S	W	Hilltop	Wood curb; galvanized casing.
603	2.8	4.6	June 2, 1937	B,H	D,S	S	do.	Dug well. Wood curb; no casing.
605	1.2	21	do.	B,H	F	S	Creek bank	Wood curb; galvanized casing.
606	0.2	8.2	do.	B,H	D,S	W	do.	Dug well. Wood curb; no casing.
608	0.5	137	g/	C,W	D,S	W	Flat	Concrete block curb; galvanized casing.
610	1.5	134	June 2, 1937	B,H	D,S	W	Hillside	Wood curb; galvanized casing, 0 to 152 feet.
611	0.3	27	May 4, 1937	C,W	D,S,I	S	Flat	Concrete block curb; galvanized casing, top to bottom.
612	1.4	23.4	do.	C,W	D,S	F	do.	Dug well. Concrete curb; no casing.
613	--	21.8	do.	B,H	D	S	do.	Dug well. Wood curb; no casing.
616	0	12.3	do.	C,W	D,S	S	do.	Do.
617	--	--	--	None	N	--	--	Oil test. See log.
618	0.7	122	Apr. 16, 1937	C,H	D,S	W	Hillside	Steel casing.
621	0.6	150	do.	C,W	D,S	S	--	Wood block curb; galvanized casing.
623	1.5	90	June 2, 1937	C,W	S	W	Flat	Wood block curb; steel casing.
624	1.5	13.5	June 17, 1937	C,W	D,S	S	Hilltop	Dug well. Brick curb and casing.
625	--	Flows	do.	None	D,S	S	Creek bank	Estimated flow, 45 gallons a minute from 1 fissure in lime.
626	1.2	35.8	June 2, 1937	C,W	D,S	S	Flat	Wood curb; galvanized stone casing.
628	0.2	114	do.	C,W	S,I	W	Hilltop	Steel casing, top to bottom. Water reported in sand.
634	--	--	--	None	N	--	--	Oil test. See log.
635	2.2	19.8	June 17, 1937	B,H	S	W	Flat	Dug well. Rock curb and casing.
636	2.5	22.8	do.	C,W	D,S	S	do.	Dug well. Concrete curb; 10 feet brick casing at top.
637	2.5	17.4	do.	B,H	D,S	S	Slope	Dug well. Brick curb; 10 feet rock casing at top.
638	3	7.8	do.	B,H	S	S	Flat	Dug well. Wood curb; no casing. Water reported in sand.
639	2.8	10.5	do.	--	N	S	do.	Do.
640	2.8	26.2	do.	C,W	D,S	S	Hilltop	Dug well. Brick curb; 10 feet brick casing at top.
641	--	43.1	do.	B,H	D,S	S	do.	Dug well. Wood curb; 6 feet rock casing at top.
642	1.8	29.6	Apr. 14, 1937	--	--	S	do.	Dug well. Brick curb and casing.

Records of wells and springs in Eastland County--Continued

No.	Distance from Ranger	Section	Survey and block	Owner	Driller	Date completed	Depth of well (ft.) a/	Diameter of well (in.)
644	11 miles south	--	McLennan Co. School Land, league 1	Jack Blackwell	--	--	-- 30-m	5
645	10 $\frac{1}{2}$ miles south	--	do.	A. H. Lane	Scrap Jackson	1933	68 54-m	6
f/646	10 miles south	--	do.	Jno. Alvis	--	1927	-- 48-m	5- 3/16
647	do.	--	do.	J. A. Hart	J. A. Hart	1932	-- 23-m	36
649	8 $\frac{1}{2}$ miles south	--	McLennan Co. School Land, league 1, blk. 1.	Alameda School	Frank Mahari	1912	-- 23-m	36
650	do.	--	McLennan Co. School Land, league 2, blk. 1.	R. H. Myrick	R. H. Myrick	1930	20 21-m	36
651	7 miles south	--	McLennan Co. School Land, league 2, blk. 16	Jess Blackwell	--	1930	100 92-m	5
653	11 $\frac{1}{2}$ miles south	9, NW $\frac{1}{2}$ NW $\frac{1}{4}$	H.& T.C.R.R.Co.	M. J. Timmon	--	--	-- 16-m	48
657	9 miles south	--	Harvey Kendrick	Triumph School	--	1923	20 19-m	36
658	8 $\frac{1}{2}$ miles south	--	Harvey Kendrick, blk. 8	W. T. Duncan	Red McFarland	1930	278	8
660	9 miles south	--	Harvey Kendrick	Mrs. B. Crawley	--	--	-- 48-m	5
661	8 miles south	--	Harvey Kendrick, blk. 11	O. T. Hazard	--	1900	65	5

a/ Measured depths indicated by "-m"; otherwise depths are reported.

b/ Measuring point was usually top of casing, top of pipe clamp, top of pump base or top of well curb.

c/ B, bucket; C, cylinder; E, electric; G, gasoline; A, air lift; H, hand; W, windmill; number indicated horsepower.

J. Howard Samuell, Project Superintendent

No.	Height of measuring point above ground (ft.) b/	Water Level		Pump and power c/	Use of water d/	Sup- ply e/	Topo- graphic situa- tion	Remarks
		Depth below measuring point (ft.)	Date of measurement					
644	1.5	20.8	Apr. 19, 1937	B,H	D,S	S	Hillside	Galvanized casing, top to bottom.
645	0.8	48	do.	B,H	D,S	S	Hilltop	Steel casing. Water reported in sand.
646	0.8	45.1	do.	C,W	S	W	do.	Do.
647	2.3	20.2	Apr. 14, 1937	C,G,6	S	F	Flat	Dug well. Concrete curb; brick casing.
649	0.5	13.1	Apr. 16, 1937	C,W	P	S	do.	Do.
650	2	13.1	do.	C,W	D,S	S	Hilltop	Dug well. Brick curb and casing.
651	2.2	40.8	do.	B,H	D	W	Flat	Galvanized casing.
653	3	9.6	Apr. 29, 1937	B,H	D,S	S	Hillside	Dug well. Wood curb; no casing.
657	2.5	11	Apr. 14, 1937	B,H	P	F	Flat	Dug well. Concrete curb and casing.
658	0	65	g/	C,G,5	S	S	do.	Galvanized casing. Water reported in sand.
660	0.4	43.8	Apr. 14, 1937	C,W	--	W	do.	Do.
661	2	35	g/	C,W	D,S	F	do.	Do.

d/ D, domestic; I, irrigation; P, public; S, stock; N, not used.

e/ Reported supply: S, strong; F, fair; W, weak; N, no supply.

f/ No water sample collected for analysis.

g/ Water level reported.

Water level measurements of observation wells in Eastland County, Texas
 (Table of well records herewith gives full descriptions of these wells.)

Date of measure- ments 1937 a/	Time	Depth to water (feet)	Date of measure- ments 1937 a/	Time	Depth to water (feet)	Date of measure- ments 1937 a/	Time	Depth to water (feet)
<u>Well 102</u>								
City of Rising Star. Library well, $18\frac{1}{2}$ miles south of Cisco. Measuring point is top of concrete slab, 6 inches above ground. Nearest pumping well is about 500 feet east.								
May 12	10:00 a.m.	22.4	May 15	10:20 a.m.	31.4	Apr. 20	12:05 p.m.	59.5
13	10:05 a.m.	37.8	16	10:00 a.m.	32.3	21	6:00 a.m.	49.6
14	10:10 a.m.	38.4	17	9:00 a.m.	16.3	21	5:15 p.m.	62.4
15	10:00 a.m.	38.2	18	9:00 a.m.	32.2	22	6:00 a.m.	49.1
16	9:20 a.m.	37.2	19	9:10 a.m.	33.7	22	9:30 a.m.	59.1
17	10:00 a.m.	38	20	9:10 a.m.	33.1	23	5:30 a.m.	48.7
18	9:30 a.m.	37.4	21	9:00 a.m.	33.4	23	4:30 p.m.	58.1
19	9:10 a.m.	37.3	22	9:10 a.m.	32.1	24	5:30 a.m.	50.5
20	9:00 a.m.	37.1	23	9:10 a.m.	33.8	24	5:20 p.m.	60.8
21	9:10 a.m.	36.1	24	9:10 a.m.	32.6	25	6:00 a.m.	50.7
22	9:00 a.m.	45.1	25	9:10 a.m.	33.7	25	10:00 a.m.	60.8
23	9:00 a.m.	46	June 1	9:00 a.m.	32.2	26	6:00 a.m.	49.7
24	9:10 a.m.	46.1	2	9:00 a.m.	33.4	26	4:00 p.m.	58.9
25	9:00 a.m.	38	3	9:00 a.m.	33.7	27	6:00 a.m.	49.9
26	9:10 a.m.	37.1	4	9:00 a.m.	16.2	27	1:00 p.m.	59.1
27	9:00 a.m.	38.2	5	9:00 a.m.	16.1	28	6:00 a.m.	49.1
28	9:00 a.m.	45.6	6	9:10 a.m.	32.2	28	2:15 p.m.	61.8
29	9:00 a.m.	45.5	7	9:20 a.m.	14.7	29	6:00 a.m.	50
30	6:20 p.m.	31.5	8	9:10 a.m.	14.2	29	3:00 p.m.	61.1
31	6:20 p.m.	30.6	9	9:30 a.m.	13.1	30	6:00 a.m.	48.7
June 1	6:20 p.m.	16.4	10	9:00 a.m.	14.7	30	1:30 p.m.	60.1
2	6:20 p.m.	30.4	11	10:00 a.m.	14	May 1	6:00 a.m.	50.2
3	6:20 p.m.	15.4	<u>Well 433</u>					
4	6:20 p.m.	31.8	City of Gorman. City well. Measuring point is level with ground, at elevation of 1,193 feet. Nearest pumping well is about 500 feet northwest.					
5	6:20 p.m.	30.2	Apr. 13	10:30 a.m.	60.7	1	9:00 p.m.	62.7
6	6:20 p.m.	17.4	13	3:00 p.m.	60.7	2	6:30 a.m.	51.0
7	6:20 p.m.	30.2	14	6:00 a.m.	50.7	2	10:15 a.m.	59.7
8	6:10 p.m.	29.1	14	5:00 p.m.	60.7	3	6:00 a.m.	50.7
9	8:10 p.m.	28.6	15	5:00 a.m.	50	3	3:00 p.m.	62.7
10	9:00 p.m.	27.9	15	12:20 a.m.	60.1	4	6:00 a.m.	50.7
11	6:00 p.m.	29.1	16	5:30 a.m.	49.1	4	7:00 p.m.	62.1
<u>Well 103</u>								
City of Rising Star. City well no. 3, $18\frac{1}{2}$ miles south of Cisco. Measuring point is top of curb 4 inches above concrete floor. Nearest pumping well is about 500 feet west.								
May 12	10:20 a.m.	17.3	16	2:30 p.m.	54.6	5	5:30 a.m.	50.1
13	10:20 a.m.	27.9	17	6:00 a.m.	49.1	6	10:00 a.m.	60.7
14	10:10 a.m.	30.2	17	7:00 p.m.	60.1	6	6:00 a.m.	51.7
			18	5:30 a.m.	49	29	4:00 p.m.	61.7
			18	9:00 a.m.	59	30	6:00 a.m.	51.4
			19	5:30 a.m.	48.8	30	11:00 p.m.	60.3
			19	2:30 p.m.	52.6	31	5:30 p.m.	50.7
			20	7:00 a.m.	50.1	31	12:00 a.m.	60.2
						June 1	5:30 a.m.	51.5
						1	2:00 p.m.	61.5
						2	6:00 a.m.	50.5
						2	2:00 p.m.	60.6
						3	6:00 a.m.	50.6
						3	7:00 p.m.	60.1
						4	5:30 a.m.	49.9

(Continued on next page)

Water level measurements of observation wells in Eastland County--Continued

Date of measure- ments 1937 a/	Time	Depth to water (feet)	Date of measure- ments 1937 a/	Time	Depth to water (feet)	Date of measure- ments 1937 a/	Time	Depth to water (feet)
<u>Well 433 -- Continued</u>			<u>Well 433 -- Continued</u>			<u>Well 433 -- Continued</u>		
June 4	12:00 a.m.	59.7	June 13	6:00 a.m.	50.7	June 21	6:00 a.m.	50.5
5	5:30 a.m.	50.6	13	3:00 p.m.	60.1	21	7:00 p.m.	60.6
5	3:00 p.m.	61.2	14	6:00 a.m.	50.5	22	6:00 a.m.	50.5
6	5:30 a.m.	49.1	14	7:00 p.m.	59.5	22	3:30 p.m.	60
6	11:00 a.m.	60.1	15	6:00 a.m.	50.3	23	5:30 a.m.	51.2
7	4:30 a.m.	50.5	15	5:00 p.m.	60.8	23	6:00 p.m.	60.1
7	1:00 p.m.	60.7	16	6:00 a.m.	50.5	24	6:00 a.m.	50.7
8	6:00 a.m.	49.7	16	4:00 p.m.	60.8	24	4:00 p.m.	60.9
8	2:00 p.m.	60.1	17	6:00 a.m.	50.6	25	6:00 a.m.	50.8
9	6:00 a.m.	49.4	17	4:25 p.m.	60.8	25	5:40 p.m.	60.9
9	2:00 p.m.	60.7	18	5:45 a.m.	51	26	6:00 a.m.	50.7
10	6:00 a.m.	49.7	18	7:30 p.m.	60.7	26	8:00 p.m.	61.7
10	3:00 p.m.	60.1	19	6:00 a.m.	50.9	27	6:00 a.m.	50.8
11	6:00 a.m.	50.2	19	6:30 p.m.	60.9	27	6:00 p.m.	60.1
11	3:00 p.m.	60.1	20	6:20 a.m.	50.7	28	6:00 a.m.	51.4
12	6:00 a.m.	50.3	20	4:00 p.m.	60.7	28	8:00 p.m.	61.2
12	9:00 p.m.	60.9						

Table of Drillers' Logs, Eastland County, Texas

	Thickness (feet)	Depth (feet)
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Driller's log of well 2

Black Diamond Oil Company, Elliott and Bacon #1. 9 miles north of Cisco.

Black surface materials	1	1
Yellow clay	9	10
White lime	21	31
Black lime	17	48
Blue shale	12	60
Brown sand and gravel	40	100
Red slate	40	140
Red rock	35	175
White shale	15	190
White lime	10	200
Brown shale	20	220
White lime	80	300
White sand	20	320
White shale	20	340
White lime	20	360
White slate	10	370
White lime	20	390
Black slate	10	400
White lime	40	440
Black slate	50	490
White lime	20	510
Black slate	20	530
White lime	70	600
White slate	10	610
White lime	30	640
White slate	10	650
White lime	130	780
White slate	20	800
White lime	90	890
White slate	20	910
Black slate	110	1020
White lime	180	1200
White slate	10	1210
White lime	30	1240
White slate	20	1260
White sand	35	1295
White lime	15	1310
White sand	20	1330
Black slate	20	1350
White lime	80	1430
White slate	10	1440
White lime	30	1470
White slate	10	1480
White lime	25	1505
White slate	5	1510
White sand	10	1520
White slate	80	1600
White lime	60	1660
Brown slate	40	1700
White sand	65	1765
White slate	15	1780
Red rock	437	2217
White slate	23	2240
TOTAL DEPTH		?

	Thickness (feet)	Depth (feet)
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Driller's log of well 9

Anna Belle Oil Company, M. V. Hoyt #1.
1½ miles north of Cisco.

Surface materials	20	20
Shale	6	26
Gray lime	10	36
White sand	10	46
Blue shale	54	100
Gray lime	46	146
Gray water sand	35	181
Pink shale	10	191
Hard gray lime	10	201
Soft dark-colored shale	26	227
Soft gray shale	14	241
Soft gray lime	19	260
Dark-colored shale	40	300
Hard gray lime	20	320
Blue shale	20	340
Soft black shale	10	350
Pink shale	10	360
Hard gray lime	20	380
Soft blue shale	20	400
Hard gray lime	10	410
Soft pink shale	20	430
Soft blue shale	10	440
Soft dark-colored shale	20	460
Soft gray lime	10	470
Pink shale	25	495
Soft gray water sand	15	510
Hard gray lime	20	530
Pink shale	15	545
Soft gray water sand	15	560
Soft pink shale	10	570
Soft gray sand	10	580
Blue shale	20	600
Pink shale	50	650
Blue shale	5	655
Hard brown lime	4	659
Soft red shale	11	670
Brown lime	15	685
Soft brown shale	50	735
Hard brown lime	10	745
Soft blue shale	10	755
Soft dark-colored shale	15	770
Sandy gray shale	20	790
Soft black shale	20	810
Sandy gray shale	25	835
Soft gray sand	15	850
Soft blue shale	15	865
Hard pink lime	30	895
Moderately hard pink lime	25	920
Soft blue shale	2	922
Hard brown lime	8	930
Soft blue shale	55	985
Soft white water sand	15	1000
Hard lime	30	1030

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Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Log of well 9--Continued</u>		
Black shale	5	1035
Blue shale	65	1100
Soft gray water sand	20	1120
Blue shale	80	1200
Soft gray sand	30	1230
Soft dark-colored shale	40	1270
Hard gray lime	5	1275
Soft pink shale	5	1280
Hard gray lime	20	1300
Soft dark-colored shale	15	1315
Hard light-colored lime	10	1325
Soft dark-colored shale	15	1340
Gray lime	5	1345
Gray shale	10	1355
Soft gray lime	5	1360
Gray shale	30	1390
Moderately hard gray lime	20	1410
Soft sand	15	1425
Gray shale	25	1450
Pink shale	10	1460
Sandy gray shale	25	1485
Soft gray sand	10	1495
Soft dark-colored shale	5	1500
Hard light-colored lime	20	1520
Soft light-colored shale	60	1580
Sandy gray shale	10	1590
Moderately hard gray lime	5	1595
Soft gray shale	5	1600
Moderately hard gray lime	25	1625
Sandy blue shale	15	1640
Soft light-colored sand	20	1660
Soft black shale	65	1725
Moderately hard white lime	30	1755
Soft white shale	45	1800
Moderately hard lime	5	1805
Soft white shale	30	1835
Dark-colored shale	10	1845
Sandy gray shale	55	1900
Gray water sand	30	1930
Sandy gray shale	4	1934
Hard gray lime	5	1939
Gray shale	31	1970
Soft light-colored sand	45	2015
TOTAL DEPTH		3818

Driller's log of well 21

Roxana Petroleum Company, W. C. Pippen #1.
7 miles west of Cisco.

Surface materials	3	3
Lime	22	25
Blue shale	5	30
Brown shale	15	45
Hard sand	5	50
Blue shale	6	56

	Thickness (feet)	Depth (feet)
<u>Log of well 21--Continued</u>		
Brown shale	32	88
Hard blue sand	7	95
Soft white sand	20	115
White sand	5	120
Chalk	6	126
Pink shale	5	131
Hard shell	2	133
Blue shale	32	165
White shale	22	187
White slate	18	205
Blue shale	4	209
White lime	2	211
Black shale	4	215
White shale	20	235
Brown shale	6	241
Blue shale	9	250
Brown shale	13	263
White sand	37	300
Blue shale	5	305
White sand	10	315
White shale	5	320
Blue shale	45	365
White sand	25	390
White lime	8	398
White shale	14	412
White sand	14	426
Blue shale	4	430
White lime	6	436
Blue shale	7	443
Blue sand	14	457
Blue shale	13	470
Green shale	5	475
White shale	5	480
White lime	6	486
White shale	14	500
Blue shale	90	590
Brown shale	15	605
Hard sand	7	612
Gray shale	13	625
Blue shale	40	665
Black shale	15	680
Hard white lime	9	689
Blue shale	14	703
Gray lime	10	713
Blue shale	17	730
Sand	23	753
Blue shale	9	762
White sand	28	790
Blue shale	5	795
Blue lime	7	802
Blue shale	3	805
Blue sand	10	815
White lime	10	825

(Continued on next page)

Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Log of well 21--Continued</u>		
Blue shale	55	880
White lime	4	884
Blue shale	54	938
Red rock	6	944
Blue shale	20	964
White lime	9	973
Blue shale	34	1007
Gray sand	20	1027
Blue shale	63	1090
Gray lime	6	1096
Blue shale	64	1160
Sand	10	1170
Blue shale	48	1218
White lime	122	1340
Blue shale	40	1380
Blue sand	25	1405
Blue shale	40	1445
Hard gray lime and shells	105	1550
Blue shale	30	1580
Hard gray lime	9	1589
Blue shale	3	1592
White lime	6	1598
Blue shale	7	1605
Hard gray lime	17	1622
Blue shale	9	1631
Hard gray lime	10	1641
Blue shale	4	1645
Hard gray lime	20	1665
Blue shale	5	1670
Hard sand	10	1680
Gray lime	20	1700
Blue shale	40	1740
Gray lime	5	1745
Sandy hard white lime	30	1775
Blue shale	145	1920
Broken lime	10	1930
Blue shale	15	1945
Hard lime	20	1965
Blue shale	95	2060
TOTAL DEPTH		4097

	Thickness (feet)	Depth (feet)
<u>Log of well 34--Continued</u>		
Blue shale	6	124
Red materials	16	140
Blue shale	42	182
Lime	13	195
Brown shale	44	239
Sandy shale	16	255
Red materials	7	262
Sandy shale	13	275
Blue shale	5	280
Lime	3	283
Sandy lime	12	295
Blue shale	3	298
Lime	5	303
Sandy shale	29	332
Red materials	8	340
White lime	12	352
Sandy shale	10	362
Blue shale	40	402
Sandy shale	124	526
Brown shale	8	534
Lime	6	540
Blue shale	21	561
Water sand	6	567
Lime	6	573
Blue shale	22	595
Sandy lime	4	599
Blue shale	7	606
TOTAL DEPTH		606

Driller's log of well 119

Rainbow's End Oil Company, R. O. Jackson #1. 14 miles south of Cisco.

Sand and clay	10	10
Blue shale	10	20
White lime	10	30
Blue shale	30	60
White shale	30	90
Red rock	10	100
White lime	30	130
Blue shale	30	160
White shale	5	165
Water sand	10	175
Blue shale	25	200
White shale	25	225
White lime	10	235
White shale	30	265
Red rock	10	275
White shale	20	295
Water sand	30	325
Blue shale	100	425
White shale	16	441
White lime	47	488
Blue shale	67	555
White lime	12	567

J. Elmer Thomas, D. M. Anglin #1.	7 1/2	
miles southwest of Cisco.		
Surface materials	2	2
Sandy clay	14	16
Lime	1	17
Yellow clay	17	34
Yellow lime	3	37
Brown shale	22	59
Lime	4	63
Blue shale	27	90
Red materials	25	115
Lime	3	118

(Continued on next page)

Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Log of well 119--Continued</u>		
Blue shale	8	575
White shale	2	577
Water sand	8	585
White lime	47	632
White shale	27	659
Brown shale	14	673
Red rock	12	685
White lime	16	701
Blue shale	5	706
Blue shale and shells	37	743
Red rock	9	752
Gray lime	33	785
White shale	40	825
Water sand	8	833
Soft white shale	4	837
Water sand	29	866
Shale and shells	119	985
White lime	12	997
White shale	148	1145
White lime	7	1152
Red shale	16	1168
Gray sand	28	1196
Blue shale	135	1331
White lime	10	1341
White shale	16	1357
White lime	44	1401
Gray shale	6	1407
Sand and shale	4	1411
Red rock	7	1418
Blue shale	28	1446
White lime	3	1449
Water sand	7	1456
Gray shale	46	1502
Black shale	15	1517
Gray shale	31	1548
White lime	4	1552
White shale	35	1587
Pink shale	6	1593
Hard gray lime	2	1595
White shale	121	1716
White lime	6	1722
Water sand	48	1770
Gray shale	40	1810
White lime	3	1813
Brown shale	20	1833
Sand and shale	34	1867
Black shale	13	1880
Gray shale	76	1956
Water sand	10	1966
Blue shale	24	1990
Water sand	11	2001
Gray lime	11	2012
Shale and lime shells	18	2030
Sand and gray shale		

	Thickness (feet)	Depth (feet)
<u>Log of well 119--Continued</u>		
Gray shale	23	2086
Gray water sand	12	2098
Black shale and sand	26	2124
Black shale	14	2138
Gray shale	367	2505
Black shale	82	2587
Gray lime	83	2670
Oil and water sand	9	2679
Black lime	41	2720
Dark sandy lime	4	2724
Black lime	9	2733
Lime and hard black shale	20	2753
Black lime	87	2840
Gray lime	5	2845
Slate and shale	15	2860
Gray lime	5	2865
Soft black lime	35	2900
Black lime	5	2905
Slate, shale, lime, and shells	55	2960
Black lime	50	3010
TOTAL DEPTH		3010

Driller's log of well 222
States Oil Corporation and Duquesne Oil Corporation, W. L. Dolley #4, $5\frac{1}{3}$ miles north of Eastland.

Clay	8	8
Shale	32	40
Shale and shells	66	106
White lime	45	151
Shale	19	170
White water sand	12	182
Shale	59	241
Limestone	89	330
Blue shale	10	340
Lime	20	360
Shale	10	370
Lime	5	375
Shale	45	420
Lime	15	435
Shale	5	440
Lime	25	465
Water in shale	35	500
Lime	15	515
Shale	97	612
Sand	20	632
Shale	44	676
Sand	15	691
Shale	29	720
Lime	15	735
Shale	105	840
Lime	22	862

(Continued on next page)

Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Log of well 222--Continued</u>		
Shale	4	866
Water sand	20	886
Lime	9	895
Shale	50	945
Lime	7	952
Red rock	12	964
Lime	22	986
Slate and shells	54	1040
Red rock	5	1045
White shale	75	1120
Lime	40	1160
White shale	140	1300
Shale and shells	290	1590
Lime	5	1595
Slate	465	2060
Water sand	62	2122
Shale	278	2400
Sand	30	2430
Shale and shells	350	2780
Sandy shale	32	2812
Black slate	223	3035
TOTAL DEPTH		3583

Driller's log of well 298

M. K. Gates, L. A. Hightower #1. 5 miles south of Eastland.

Surface materials	5	5
Sand	10	15
Water sand	5	20
Sand	10	30
Gravel, water	2	32
Sand	18	50
Shale	30	80
Lime	25	105
Shale	5	110
Lime	25	135
Shale	60	195
Lime	65	260
Shale	65	325
Lime	7	332
Shale	38	370
Shale and shells	40	410
Lime	32	442
Shale	85	527
Sandy lime	3	530
Shale	45	575
Lime	15	590
Shale	25	615
Lime	5	620
Shale	10	630
Lime	15	645
Shale	8	653
Lime	14	667
Shale	13	680

	Thickness (feet)	Depth (feet)
<u>Log of well 298--Continued</u>		
Lime	5	685
Shale	12	697
Brown shale	5	702
Lime	5	707
Red rock	13	720
Lime	5	725
Red rock	5	730
Shale	4	734
Sandy lime	4	738
Shale	9	747
Lime, water	20	767
Shale	14	781
Blue shale	99	880
Lime	6	886
Sandy lime	14	900
Sandy shale	35	935
Shale	10	945
Gray shale	10	955
Water sand	17	972
Lime	15	987
Brown shale	8	995
Shale	15	1010
Lime	6	1016
Sandy shale	19	1035
Lime	15	1050
Sandy lime, water	10	1060
Gray shale	7	1067
Red rock	8	1075
Lime	4	1079
Shale	16	1095
Lime	5	1100
Shale	3	1103
Sandy lime	14	1117
Shale	10	1127
Lime	3	1130
Shale	20	1150
Lime	5	1155
Shale	5	1160
Red rock	7	1167
Shale	3	1170
Lime	20	1190
Shale	81	1271
Sand	10	1281
Shale	14	1295
Sandy shale	6	1301
Sand	5	1306
Oil and water	1	1307
Sand	3	1310
Sand and water	11	1321
TOTAL DEPTH		1321

Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 462</u>		
Gallagher and Lawson, Mrs. Bobbie I.		
Terry. $7\frac{1}{2}$ miles northeast of Gorman.		
White sand	30	30
Red rock	5	35
Water sand and gravel	20	55
Gravel, water	2	57
White sand	9	66
Clay and sand	18	84
Yellowish-gray clay	6	90
Sandy clay	5	95
Red clay and gravel	4	99
Lime and shells	3	102
Blue shale	26	128
TOTAL DEPTH		128

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 487</u>		
Sun Oil Company, M. F. Greenwood # 1.	$9\frac{1}{2}$	
miles southwest of Gorman.		
Soil and lime	20	20
Lime	20	40
Light-colored slate	10	50
Lime	10	60
Slate	30	90
Shale	10	100
Slate	12	112
White lime	10	122
Light-colored slate	18	140
Slate	70	210
White lime	10	220
Lime	20	240
Shale	12	252
Slate	208	460
Sand	20	480
Slate	48	528
Red rock	55	583
Lime	32	615
White lime	15	630
Lime	15	645
Broken lime	15	660
Water sand	15	675
Slate	20	695
Gray lime	7	702
Red rock	23	725
Slate	115	840
Lime	15	855
Sandy lime	42	897
Slate	83	980
Sand	20	1000
Slate	25	1025
Sand	19	1044
Water sand	21	1065
Lime	10	1075
Slate	399	1474
Sandy lime	64	1538

	Thickness (feet)	Depth (feet)
<u>Log of well 487--Continued</u>		
Slate	492	2030
Shells and lime	3	2033
Slate	42	2075
Black lime and shells	5	2080
Shale	40	2120
Slate	180	2300
Lime and shells	2	2302
Black shale	69	2371
Black lime	79	2450
TOTAL DEPTH		2450

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 617</u>		
Texas Pacific Coal and Oil Company, L. A.		
Galloway #1. $3\frac{1}{2}$ miles south of Ranger.		
Surface materials	10	10
Blue shale	30	40
Lime	36	76
Dry sand	5	81
Blue shale	49	130
Lime	10	140
Blue shale	24	164
Lime	11	175
Blue shale	17	192
Lime	18	210
Blue shale	44	254
Lime	17	271
Blue shale	41	312
Lime	12	324
Water sand	14	338
Blue shale	14	352
Lime	8	360
Blue shale	31	391
Lime	11	402
Blue shale	38	440
Lime	10	450
Blue shale	103	553
Lime	10	563
Blue shale	98	661
Water sand	11	672
Blue shale	368	1040
Water sand	64	1104
Lime	31	1135
Sandy shale	25	1160
Blue shale	44	1204
Water sand	22	1226
Blue shale	80	1306
Sandy shale	94	1400
Dry sand	42	1442
Blue shale	58	1500
Water sand	63	1563
Sandy shale	22	1585
Sand and lime	57	1642
Water sand	21	1663

(Continued on next page)

Table of Drillers' Logs, Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Log of well 617--Continued</u>		
Blue shale	62	1725
Water sand	31	1756
Blue shale	532	2288
Dry sand	70	2358
Lime and sand	252	2610
Blue shale	190	2800
Black lime	64	2864
Black shale	81	2945
Brown shale	55	3000
Brown lime	21	3021
Black shale	49	3070
Black lime	180	3250
White lime	23	3273
Sand, show of gas	28	3301
Sandy shale	13	3314
Lime and shells	3	3317
Black shale	57	3374
TOTAL DEPTH		3374

Driller's log of well 634

Texas Pacific Coal and Oil Company, C. E.	
Allen #3. 8½ miles southeast of Ranger.	
Yellow materials	25
Shale	65
Pink shale	10
Sandy materials	20
Blue shale	60
Sandy lime	10
Dry sand	25
Sandy shale	105
Gray shale	10
Sandy shale	40
Sandy lime	5
Sand	5
Sandy shells	45
Blue shale	70
Sandy lime	20
Packed water sand	40
Sandy shale	30
Shale	135
Shale and shells	20
Hard lime	10
Shale	15
Sandy lime	5
Water sand	30
Blue shale	20
Broken sand	10
Shale	70
Broken sand	30
Shale	30
Sand	25
Blue shale	20
Sandy shale	60
Hard sand	15

	Thickness (feet)	Depth (feet)
<u>Log of well 634--Continued</u>		
Sandy shale	25	1105
Blue shale	345	1450
Sandy shale	30	1480
Gray shale	70	1550
Broken sand	215	1765
Sandy lime	15	1780
Broken sand	35	1815
Blue shale	20	1835
Broken sand	10	1845
Sandy lime	10	1855
Hard sand	45	1900
Sandy shale	15	1915
Sand	25	1940
Sandy shale	35	1975
Black shale	25	2000
Gray shale	20	2020
Sandy lime	10	2030
Gray shale	115	2145
Sandy lime	10	2155
Brown shale	35	2190
Gray shale	10	2200
Sand, show of oil	10	2210
Sand	45	2255
Broken sand	55	2310
Sand	30	2340
Shale	5	2345
Sandy lime	5	2350
Brown shale	15	2350
Broken sand	45	2410
Hard sand	15	2425
Broken sand	30	2455
Sandy lime	25	2480
Black shale	35	2515
Black lime	10	2525
Black shale	105	2530
Brown shale	95	2725
Blue shale	10	2735
Black shale	260	2995
Black lime	15	3010
Gray lime	5	3015
Sandy lime	10	3025
Sand	35	3060
Broken sand	12	3072
Sandy lime	6	3078
Shale and shells	10	3088
Shale	7	3095
TOTAL DEPTH		3095

Logs of test wells drilled by W. P. A. labor in Eastland County, Texas
Samples examined and classified by J. Howard Samuell,
Project Superintendent.

Thickness (feet)	Depth (feet)
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Well 1

Hillside, north side State Highway 23, at Callahan-Eastland County line, $10\frac{1}{2}$ miles northwest of Cisco.
Brown clay - - - - - 3 | 3
White caliche - - - - - 5 | 8
Limestone - - - - - 8
Water sample collected. May 3, 1937.

Well 4

Level land, north side of State Highway 23,, $5\frac{1}{2}$ miles northwest of Cisco.
Red sand - - - - - 3 | 3
Yellow sandy clay - - - - - 4 | 7
Blue clay - - - - - 1 | 8
Red clay - - - - - 5 | 13
Yellow clay - - - - - 3 | 16
Limestone - - - - - 16
No water sample collected. May 4, 1937

Well 5

Level land, east side State Highway 23,
 $4\frac{3}{4}$ miles north of Cisco.
Brown clay - - - - - 4 | 4
Blue shale - - - - - 4 | 8
Limestone - - - - - 8
No water sample collected. May 3, 1937.

Well 7

Level land, north side U. S. Highway 80,
4 miles east of Cisco.
Brown clay - - - - - 6 | 6
Yellow clay - - - - - 1 | 7
Limestone - - - - - 7
No water sample collected. May 30, 1937.

Well 10

Level land, 1,000 feet north of T. & P.
R.R. Co. tracks, east side State Highway
23, 1 mile north of Cisco.
Yellow clay - - - - - 6 | 6
Blue shale - - - - - 1 | 7
Limestone - - - - - 7
No water sample collected. May 3, 1937.

Well 11

Near creek bank, north side U. S. Highway 80, $2\frac{1}{4}$ miles east of Cisco.
Black clay - - - - - 3 | 3
Clay and gravel - - - - - 3 | 6
Red shale - - - - - 1 | 7
Yellow shale - - - - - 1 | 8
Limestone - - - - - 8
No water sample collected. Mar. 30, 1937.

Thickness (feet)	Depth (feet)
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Well 12

Hillside, north side of U. S. Highway 80,
 $2\frac{1}{4}$ miles east of Cisco.
Black clay - - - - - 3 | 3
Sandy clay - - - - - 1 | 4
Limestone - - - - - 4
No water sample collected. Mar. 30, 1937.

Well 17

Level land, Will Pasmer tract, 1 block
east of wooden overpass of railway, Cisco.
Red clay and gravel - - - - - 3 | 3
Blue clay - - - - - 5 | 8
Yellow sandy clay - - - - - 2 | 10
Hard sandstone - - - - - 10
No water sample collected. Mar. 30, 1937.

Well 18

Level land, east side of U. S. Highway
80, at Cisco city limits, $\frac{3}{4}$ miles west of
Cisco.
Black clay - - - - - 3 | 3
Yellow clay - - - - - 2 | 5
Red clay - - - - - 4 | 9
Blue clay - - - - - 4 | 13
Yellow clay - - - - - 3 | 16
No water sample collected. Mar. 31, 1937.

Well 19

Near railway crossing of creek, north
side U. S. Highway 80, $2\frac{3}{4}$ miles west of
Cisco.
Brown materials - - - - - 2 | 2
Black clay - - - - - 3 | 5
Light brown clay - - - - - 2 | 7
Red gravel and sand - - - - 1 | 8
Red gravel and clay - - - - 1 | 9
Struck water at 6.2 feet.
Water level 4.4 feet below top of ground
2 hours after hole completed.
Water sample collected. Mar. 31, 1937.

Well 20

Level land, north side of U. S. Highway
80, 5 miles west of Cisco.
Black shale - - - - - 4 | 4
Sandy clay - - - - - 6 | 10
Limestone - - - - - 10
No water sample collected. Mar. 31, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
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Well 22

Level land, north side of U. S. Highway 80, at Callahan-Eastland County line, 7 miles west of Cisco.

Black clay	3	3
Light-brown clay	3	6
Yellow sandy clay	2	8
Blue shale	1	9

Struck water at 6.3 feet.
Water level, 4.7 feet below top of ground, 1 hour after hole completed.
No water sample collected. Mar. 31, 1937.

Well 25

Gently sloping hillside, north side State Highway 23, at south city limits of Cisco, 1 mile southeast of Cisco.

Yellow clay	3	3
Gray shale	1	4
Gray sand	1	5
Red sandstone	4	9
Yellow sandstone	2	11
White packed sand	1	12
Yellow sand	3	15

No water sample collected. Apr. 1, 1937.

Well 29

Bottom of dry creek bed, Mrs. Lillie Baugh tract, SE $\frac{1}{4}$ sec. 26, blk. 3, H. & T. C. R.R. Co., Survey, 4 $\frac{1}{3}$ miles southeast of Cisco.

Gravel and clay	3	3
Gravel and blue clay	1	4
Blue shale	1	5
Packed sand	1	6
Blue shale	6	12

No water sample collected. Mar. 5, 1937.

Well 30

Hilltop, Mrs. Lillie Baugh tract, SE $\frac{1}{4}$ sec. 26, blk. 3, H. & T. C. R.R. Co., Survey, 4 $\frac{3}{4}$ miles southeast of Cisco.

Red gravel and clay	12	12
Packed sand	3	15
Water sand	6	21
Red shale	1	22

Struck water at 19.6 feet.
Water level, 18.8 feet below top of ground, 2 hours after hole completed.
Water sample collected. May 5, 1937.

Well 31

Level land, Mrs. Lillie Baugh tract, SE $\frac{1}{4}$ sec. 26, blk. 3, H. & T. C. R.R. Co., Survey, 4 $\frac{3}{4}$ miles southeast of Cisco.

Red sandy clay	2	2
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	Thickness (feet)	Depth (feet)
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Well 31--Continued

Yellow rocky clay	2	4
Blue clay	1	5
Yellow sandy gravel	1	6
Red sandy gravel	1	7
Gravel and sand	1	8
Yellow sand	2	10
Packed sand	1	11
Blue shale	2	13
Sandy gravel	1	14
Water sand	1	15
Yellow sand	.6	21
Blue shale	1	22

Struck water at 14.4 feet.
Water level, 11.0 feet below top of ground, 4 hours after hole completed.
Water sample collected. May 5, 1937.

Well 33

Level land, west side State Highway 23, 4 miles south of Cisco.

Dark-colored clay	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Red clay	8	9 $\frac{1}{2}$
Blue clay	2 $\frac{1}{2}$	12
Hard sandstone	$\frac{1}{4}$	12 $\frac{1}{2}$

No water sample collected. Apr. 1, 1937.

Well 50

Gently sloping hillside, west side State Highway 23, 6 $\frac{1}{2}$ miles south of Cisco.

Sandy clay	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Red clay	11 $\frac{1}{2}$	13
Blue clay	1 $\frac{1}{2}$	14 $\frac{1}{2}$
Limestone		14 $\frac{1}{2}$

No water sample collected. Apr. 1, 1937.

Well 56

Gently sloping terrace, west side State Highway 23, 9 $\frac{1}{2}$ miles south of Cisco.

Red clay	2 $\frac{1}{2}$	2 $\frac{1}{2}$
Yellow clay	$\frac{1}{4}$	3
White caliche	1	4
Light-brown shale	9	13
Red shale	5	18
Blue shale	1 $\frac{1}{2}$	19 $\frac{1}{2}$

No water sample collected. Apr. 1, 1937.

Well 60

Gently sloping hillside, west side State Highway 23, 11 $\frac{1}{2}$ miles south of Cisco.

White sand	2	2
Yellow clay	2	4
Pink sandy clay	5	9

Struck water at 6 feet.
Water level, 5.2 feet below top of ground, 3 hours after hole completed.
No water sample collected. Apr. 5, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
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Well 76

Level land near small draw, north side State Highway 206, at Eastland-Callahan County line, 18 miles southwest of Cisco. Dark-colored sandy materials $2\frac{1}{2}$ | $2\frac{1}{2}$
Black sand- - - - - $3\frac{1}{2}$ 6
White sand- - - - - 9 15
Struck water at 5 feet.
Water level 3 feet below top of ground, 1 hour after hole completed.
Water sample collected. Apr. 5, 1937.

Well 82

Level land, east side State Highway 206, in town of Pioneer across highway from Pioneer brick school building, $18\frac{1}{2}$ miles south of Cisco. Yellow sandy clay- - - - - $3\frac{1}{2}$ | $3\frac{1}{2}$
Blue shale- - - - - $2\frac{1}{2}$ 7
Yellow sand- - - - - 2 9
Blue shale- - - - - $2\frac{1}{2}$ $11\frac{1}{2}$
No water sample collected. Apr. 5, 1937.

Well 93

Level land, north side State Highway 206, half way between Rising Star and Pioneer, $18\frac{1}{2}$ miles south of Cisco. White sand- - - - - 2 2
Red shale- - - - - $5\frac{1}{2}$ $7\frac{1}{2}$
Hard packed sand- - - - - $10\frac{1}{2}$ 18

Well 98

Level land near deep ditch, north side State Highway 206, 5 blocks west of center of Rising Star, $18\frac{1}{2}$ miles south of Cisco. Black sandy materials- - - 5 | 5
Blue sandy clay- - - - - 4 | 9
Water sand and gravel- - - 1 | 10
Struck water at 10 feet.
Water level, 7 feet below top of ground, 2 hours after hole completed.
Water sample collected. Apr. 5, 1937.

Well 99

Level land, west side State Highway 23, at Brown-Eastland County line, 1 mile south of Rising Star, $19\frac{1}{2}$ miles south of Cisco. Light-brown clay- - - - - 3 | 3
Yellow sandy clay- - - - - 4 | 7
Blue sandy clay- - - - - 4 | 11
White packed sandy clay- - 9 | 20

	Thickness (feet)	Depth (feet)
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Well 99--Continued

Struck water at 20 feet.
Water level, 19.7 feet below top of ground, 3 hours after hole completed.
Water sample collected. Apr. 2, 1937.

Well 104

Near creek NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 13, B.B.B. & C. R.R. Co. Survey, north side of road, $\frac{3}{4}$ mile east of Rising Star, $18\frac{1}{2}$ miles south of Cisco. Black sandy materials- - - - - $3\frac{1}{2}$ | $3\frac{1}{2}$
Yellow clay- - - - - $1\frac{1}{2}$ 5
White clay- - - - - 6 11
Struck water at 5 feet.
Water level, 2 feet below top of ground, 1 hour after completed.
Water sample collected. May 29, 1937.

Well 107

Hilltop, north side of Okra-Rising Star road, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, blk. 2, H. & T. C. R.R. Co. Survey, $18\frac{1}{2}$ miles south of Cisco. White sand- - - - - 3 3
Red clay- - - - - 3 6
Yellow clay- - - - - 2 8
White sand- - - - - $5\frac{1}{2}$ $13\frac{1}{2}$
Rock- - - - - 13 $\frac{1}{2}$
No water sample collected. May 29, 1937.

Well 110

Level land, west side State Highway 23, 1 mile north of Rising Star, 17 miles south of Cisco. Red clay- - - - - 4 4
Blue clay- - - - - $1\frac{1}{2}$ $5\frac{1}{2}$
Rock- - - - - $5\frac{1}{2}$
No water sample collected. Apr. 2, 1937.

Well 115

Level land, west side State Highway 23, about 4 miles north of Rising Star, $14\frac{1}{2}$ miles south of Cisco. Sand- - - - - $1\frac{1}{2}$ $1\frac{1}{2}$
Sandy clay- - - - - $2\frac{1}{2}$ 4
Yellow sandy clay- - - - - 3 7
Rock- - - - - 7
Struck water at 6 feet.
Water level, 5.5 feet below top of ground, 4 hours after hole completed.
Water sample collected. Apr. 2, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
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Well 202

Level land, east side State Highway 67, near Eastland-Stephens County line, 8 miles northwest of Cisco.	
Yellow clay	3 $\frac{1}{2}$
Blue clay	2 $\frac{1}{2}$
Red shale	1 $\frac{1}{2}$
Blue shale	2 $\frac{1}{2}$
Red sandy shale	4
Limestone	14
No water sample collected.	Mar. 27, 1937.

Well 203

Gently sloping terrace, east side State Highway 67, 7 $\frac{1}{2}$ miles northwest of Cisco.	
Brown clay	4
Yellow shale	2
Rock	6
No water sample collected.	Mar. 27, 1937.

Well 207

Gently sloping hillside, north side State Highway 67, 6 miles northwest of Cisco.	
Red sand	2
Black clay	1 $\frac{1}{2}$
Yellow clay	3
Blue shale	10 $\frac{1}{2}$
No water sample collected.	Mar. 27, 1937.

Well 209

Level land, C. J. Mansker tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, blk. 4, H. & T. C. R.R. Co. Survey, 3 $\frac{3}{4}$ miles northwest of Cisco.	
Yellow clay	6
Yellow sandy clay	3
Sand rock	6
Hard packed sand	2 $\frac{1}{2}$
No water sample collected.	May 8, 1937.

Well 210

Level land, C. J. Mansker tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, blk. 4, H. & T. C. R.R. Co. Survey, 3 $\frac{3}{4}$ miles northwest of Cisco.	
Yellow clay	2
Gravel	1
Blue clay	3
No water sample collected.	May 8, 1937.

Well 212

Gently sloping hillside, north side State Highway 67, 4 $\frac{3}{4}$ miles north of Cisco.	
Surface materials	1
Blue sandy shale	1
Blue shale	2 $\frac{1}{2}$
Red sand	5

	Thickness (feet)	Depth (feet)
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Well 212--Continued

Sandy clay	1 $\frac{1}{2}$	10
Red sand	1 $\frac{1}{2}$	11 $\frac{1}{2}$
White sand	3 $\frac{1}{2}$	15

No water sample collected. Mar. 26, 1937.

Well 216

Gently sloping hillside, east side State Highway 67, 4 $\frac{3}{4}$ miles north of Eastland.	
Black surface materials	4
Yellow clay	1
Limestone	5
No water sample collected.	Mar. 26, 1937.

Well 217

Hillside, east side State Highway 67, 3 $\frac{3}{4}$ miles north of Eastland.	
Black surface materials	4
Yellow clay	1 $\frac{1}{2}$
Limestone	4 $\frac{1}{2}$
No water sample collected.	Mar. 26, 1937.

Well 218

Gently sloping hillside, east side State Highway 67, 3 $\frac{3}{4}$ miles north of Eastland.	
Surface materials	1 $\frac{1}{2}$
Black clay	2 $\frac{1}{2}$
Limestone	4
No water sample collected.	Mar. 26, 1937.

Well 219

Gently sloping hillside, east side State Highway 67, 3 $\frac{3}{4}$ miles north of Eastland.	
Red clay	2
Yellow clay	4
Red sand	2
Rock	8
Struck water at 8.7 feet.	
Water level, 6.5 feet below top of ground, 1 hour after hole completed.	
Water sample collected.	Mar. 26, 1937.

Well 221

Level land, south side State Highway 80, 4 $\frac{1}{2}$ miles north of Eastland.	
Brown sand	1 $\frac{1}{2}$
Red clay	1
Limestone and gravel	8
Yellow sand and gravel	3 $\frac{1}{2}$
Struck water at 6.8 feet.	
Water level, 4.1 feet below top of ground, 5 hours after hole completed.	
Water sample collected.	May 4, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 224</u>		
Level land, south side State Highway 80, 5½ miles northeast of Eastland.		
Yellow gravel and clay - - - - -	1	½
Sandy gravel - - - - -	7½	8
Gravel - - - - -	3	11
Blue shale - - - - -	1½	12½
Rock - - - - -		12½
No water sample collected. May 4, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 232</u>		
Level land, south side U. S. Highway 80, 7 miles northeast of Eastland.		
Rocky clay - - - - -	3	3
Yellow sandy clay - - - - -	1	4
Rock - - - - -		4
No water sample collected. May 4, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 236</u>		
Level land, south side U. S. Highway 80, east part of town of Olden, 4 miles east of Eastland.		
Sand - - - - -	1½	1½
Yellow sandy clay - - - - -	3	4½
Sandy gravel - - - - -	4½	9
Rock - - - - -		9
Struck water at 7 feet.		
Water level 7.9 feet below top of ground, 1 hour after hole completed.		
Water sample collected. Apr. 6, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 242</u>		
Level land, south side U. S. Highway 80, 3 miles east of Eastland.		
Soil and red gravel - - - - -	2½	2½
Yellow gravel and clay - - - - -	1½	4
Red clay and gravel - - - - -	3	7
Yellow sandy clay - - - - -	3	10
Hard packed sand - - - - -	6	16
No water sample collected. Apr. 6, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 243</u>		
Level land, at bridge over Leon Creek, south side county road from Eastland to Staff, 2 miles east of Eastland.		
Yellow sand - - - - -	1	1
Black clay - - - - -	1	2
Light-brown clay - - - - -	3	5
Blue shale - - - - -	2	7
Yellow sand - - - - -		7
Struck water at 7½ feet.		
Water level, 5.8 feet below top of ground, 4 hours after hole completed.		
Water sample collected. Apr. 29, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 244</u>		
Level land, south side county road from Eastland to Staff, NE ₄ sec.4, E. T. R.R. Co. Survey, 3½ miles east of Eastland.		
Sand - - - - -	1	1
Red clay - - - - -	1½	2½
Yellow sandy clay - - - - -	3	6
Red packed sand - - - - -	2	8
Blue shale - - - - -	2	10
No water sample collected. Apr. 29, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 247</u>		
Level land, south side county road from Eastland to Staff, at Union School near dry creek, 5 miles east of Eastland.		
Sandy gravel - - - - -	3	3
Blue clay - - - - -	2	5
Yellow sandy gravel - - - - -	5	10
Blue clay - - - - -	4	14
Rock - - - - -		14
Struck water at 5 feet.		
Water level, 3 feet below top of ground, 2 hours after hole completed.		
Water sample collected. Apr. 29, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 249</u>		
Level land, west side State Highway 67, 1½ miles southwest of Eastland.		
Black surface materials - - - - -	4	4
Dark-colored clay - - - - -	4	8
Yellow sandy clay - - - - -	6	14
Struck water at 14 feet.		
Water level, 11.5 feet below top of ground, 1 hour after hole completed.		
Water sample collected. Apr. 9, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 250</u>		
Level land, at City Pound, Eastland.		
Surface materials - - - - -	5	5
Yellow sand and gravel - - - - -	10	15
Blue clay - - - - -	2	17
Struck water at 6 feet.		
Water level, 6 feet below top of ground, 2 hours after hole completed.		
Water sample collected. Mar. 25, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 251</u>		
Level land, at City Pound, Eastland.		
Red sandy clay - - - - -	5	5
Black clay - - - - -	2	7
Yellow clay and gravel - - - - -	5	12
Struck water at 5 feet.		
Water level, 4 feet below top of ground, 2 hours after hole completed.		
Water sample collected. Mar. 25, 1937.		

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 252</u>		
Level land, at City Pound, Eastland.		
Black materials - - - - -	1½	1½
Brown clay - - - - -	1½	3
Yellow sandy clay - - - - -	2½	5½
Red sand - - - - -	9½	15
Struck water at 9 feet.		
Water level, 5 feet below top of ground, 2 hours after hole completed.		
Water sample collected. Mar. 25, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 253</u>		
Level land, 200 feet west of railway track, south side U. S. Highway 80, ¼ mile east of Eastland.		
Red clay - - - - -	9	9
Gravel and sand - - - - -	5	14
Struck water at 9 feet.		
Water level, 6 feet below top of ground, 4 hours after hole completed.		
Water sample collected. Apr. 22, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 255</u>		
Level land, 100 feet south of T. & P. R.R. Co., depot at Eastland.		
Black sandy clay - - - - -	9	9
White sand and gravel water -	8	17
Struck water at 9 feet.		
Water level, 6 feet below top of ground, 2 hours after hole completed.		
Water sample collected. Apr. 20, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 256</u>		
Level land, west side State Highway 67, in front of colored Methodist church, 1,000 feet north of T. & P. R.R. Co., depot at Eastland.		
Brown sandy materials - - - - -	6	6
Black sandy clay - - - - -	3	9
Brown sand and clay, water -	2	11
Struck water at 11 feet.		
Water level, 9 feet below top of ground, 4 hours after hole completed.		
Water sample collected. Apr. 21, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 257</u>		
Gently sloping hillside, east side State Highway 67, 1½ miles north of Eastland.		
Red clay - - - - -	2	2
Yellow shale - - - - -	1	3
Limestone - - - - -		3
No water sample collected. Mar. 26, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 258</u>		
Near small draw, east side State Highway 67, 1½ miles north of Eastland.		
Yellow clay - - - - -	11	11
Limestone - - - - -		11

	Thickness (feet)	Depth (feet)
<u>Well 259</u>		
Gently sloping hillside, east side State Highway 67, 1½ miles north of Eastland.		
Yellow shale - - - - -	15	15
Rock - - - - -		15
No water sample collected. Mar. 26, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 260</u>		
Level land, inside old night club build- ing, south side U. S. Highway 80, 2 miles west of Eastland.		
Yellow clay - - - - -	3	3
Blue clay - - - - -	9	12
Limestone - - - - -		12
Struck water at 8 feet.		
Water level, 6 feet below top of ground, 3 hours after hole completed.		
Water sample collected. Mar. 29, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 261</u>		
Gently sloping hillside, north side U. S. Highway 80, 4 miles west of Eastland.		
Red sand - - - - -	5	5
Blue shale - - - - -	2	7
Yellow shale - - - - -	3	10
Blue shale - - - - -	4	14
Hard sandstone - - - - -		14
No water sample collected. Mar. 30, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 264</u>		
Level land near bank of dry creek, C. C. Street tract, NW ¹ NE ¹ sec. 45, blk. 4, H. & T. C. R.R. Co., Survey, 4 miles west of Eastland.		
Brown sandy clay - - - - -	10	10
Gravel and yellow sand - - -	4	14
Struck water at 10.3 feet.		
Water level, 8.2 feet below top of ground, 2 hours after hole completed.		
Water sample collected. May 6, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 265</u>		
Level land near bank of dry creek, C. C. Street tract, SE ¹ NW ¹ sec. 45, blk. 4, H. & T. C. R.R. Co. Survey, 3¾ miles west of Eastland.		
Black sandy soil - - - - -	10	10
Sandy gravel - - - - -	1½	11½
Clay - - - - -	3½	15

(Continued on next page)

Logs of W. P. A. test wells in Eastland County--Continued

Thickness (feet)	Depth (feet)
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Well 265--Continued

Struck water at 9.9 feet.
Water level, 8.5 feet below top of ground,
1 hour after hole completed.
Water sample collected. May 6, 1937.

Well 266

Level land near bank of dry creek, C. C.
Street tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 45, blk. 4, H.
& T. C. R.R. Co. Survey, 3 $\frac{3}{4}$ miles west
of Eastland.

Brown sandy clay- - - - -	7	7
Red sandy clay- - - - -	3	10
Gravel and sand- - - - -	2 $\frac{1}{2}$	12 $\frac{1}{2}$
Yellow sandy clay- - - - -	1 $\frac{1}{2}$	14
Struck water at 12 $\frac{1}{2}$ feet.		
Water level, 11.6 feet below top of ground, 1 hour after hole completed.		
Water sample collected. May 6, 1937.		

Well 269

Level land near dry creek, 1,000 feet
north of Grapevine School, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24,
blk. 3, H. & T. C. R.R. Co. Survey, 4 $\frac{3}{4}$
miles southwest of Eastland.

Black surface materials- - -	5	5
Sand and gravel- - - - -	5	10
No water sample collected. June 2, 1937.		

Well 272

Level land, west side State Highway 67,
2 $\frac{3}{4}$ miles south of Eastland.

Light-colored fine-grained sand and yellow clay- - - - -	1	1
Clay and gravel- - - - -	3	4
Light-colored sand- - - - -	6 $\frac{1}{2}$	10 $\frac{1}{2}$
Water sand- - - - -	3 $\frac{1}{2}$	14
Struck water at 14 feet.		
Water level, 13.6 feet below top of ground, 1 hour after hole completed.		
Water sample collected. Apr. 9, 1937.		

Well 297

Gently sloping hillside, west side State
Highway 67, 4 $\frac{3}{4}$ miles south of Eastland.
White fine-grained sand- - - 4 $\frac{1}{2}$ | 4 $\frac{1}{2}$
Red sand- - - - - 6 $\frac{1}{2}$ | 11
White gravel and sand- - - 8 | 19
Struck water at 8 feet.
Water level, 4.6 feet below top of
ground, 1 hour after hole completed.
Water sample collected. Apr. 26, 1937.

Thickness (feet)	Depth (feet)
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Well 306

Level sandy land, west side State Highway
67, 6 $\frac{1}{2}$ miles south of Eastland.

White sand- - - - -	3	3
Sandy clay- - - - -	2	5
Brown packed sand- - - - -	4 $\frac{1}{2}$	9 $\frac{1}{2}$
White sand- - - - -	6 $\frac{1}{2}$	16

Struck water at 12 feet.
Water level, 10.9 feet below top of
ground, 2 hours after hole completed.
Water sample collected. Apr. 26, 1937.

Well 314

Level land near dry creek bed, southeast
of M. K. & T. R.R. Co. depot at Mangum,
south side of county road, going east from
Mangum, 5 $\frac{1}{2}$ miles south of Eastland.

Black sandy materials- - - - -	3	3
Yellow gravel and clay - - - - -	1 $\frac{1}{2}$	4 $\frac{1}{2}$
Brown sand- - - - -	6	10 $\frac{1}{2}$
Blue shale- - - - -	1 $\frac{1}{2}$	12

Struck water at 10 $\frac{1}{2}$ feet.
Water level, 8.4 feet below top of
ground, 1 hour after hole completed.
Water sample collected. June 2, 1937.

Well 316

Level land, bank of Leon River, NE $\frac{1}{4}$ NE $\frac{1}{4}$
sec. 20, blk. 3, H. & T. C. R.R. Co. Sur-
vey, 7 miles southwest of Eastland.

Black sandy clay- - - - -	11	11
Sandy gravel- - - - -	1	12
Blue sandy clay- - - - -	3 $\frac{1}{2}$	15 $\frac{1}{2}$
Packed sand- - - - -	1 $\frac{1}{2}$	17
Sand- - - - -	1	18

Struck water at 13 feet.
Water level, 12.7 feet below top of
ground, $\frac{1}{2}$ hour after hole completed.
Water sample collected. June 2, 1937.

Well 407

Level land, west side State Highway 67,
north side M. K. & T. R.R. Co. tract at
Carbon, 9 $\frac{1}{2}$ miles northwest of Gorman.

Yellow sand- - - - -	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Yellow sandy clay- - - - -	3 $\frac{1}{2}$	5
Brown sandy clay- - - - -	4 $\frac{1}{2}$	9 $\frac{1}{2}$
White packed sand- - - - -	4 $\frac{1}{2}$	14
Blue shale- - - - -	5	19

No water sample collected. Apr. 26, 1937.

Logs of W. P. A. test well in Eastland County--Continued

	Thickness (feet)	Depth (feet)
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Well 411

Level land, 1.1 mile southwest of Carbon, north side of Okra-Carbon county road, 10 miles west of Gorman.

Yellow sandy clay	7½	7½
Yellow sand	2½	10
White sand	7	17
White sand and gravel	4	21

Struck water at 17 feet.

Water level, 13.9 feet below top of ground, 1 hour after hole completed.
Water sample collected. May 28, 1937.

Well 416

Level land, west side Okra-Carbon county road, 10 miles west of Gorman.

Red sandy clay	2	2
Red shale	2	5
White caliche	5	10
Gravel and sand, water	1	11
Blue clay		11

Struck water at 4 feet.

Water level, 3 feet below top of ground 2 hours after hole completed.
Water sample collected. May 28, 1937.

Well 421

Level land, south bank Sabana Creek, west side of Okra-Carbon road, 10½ miles west of Gorman.

Sand	4½	4½
Gray clay	2½	7
Rock		7

No water sample collected. May 27, 1937.

Well 422

Gently sloping hillside, south side State Highway 67, NE¹/₄SE¹/₄ sec. 21, blk. 2, H. & T. C. R.R. Co. Survey, 8 miles west of Gorman.

Yellow sandy clay	1	1
Red sandy clay	3	4
White sand rock	6	10
Hard sandstone		10

No water sample collected. Apr. 26, 1937.

Well 425

Gently sloping hillside, south side State Highway 67, 6 miles west of Gorman.

Brown clay	4½	4½
Pink gravel and clay	3	7½
Rock		7½

No water sample collected. Apr. 27, 1937.

	Thickness (feet)	Depth (feet)
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Well 427

Level hilltop, south side State Highway 67, 3¾ miles west of Gorman.

Bluish-red gravel		4½
Blue shale		5
Red shale		10½
Yellow sand rock		14½

No water sample collected. Apr. 27, 1937.

Well 428

Level land, south side State Highway 67, 2½ miles west of Gorman.

Clay		1
Caliche		3½
Blue shale		5½
Red shale		6½

No water sample collected. Apr. 27, 1937.

Well 432

Gently sloping hillside, south side State Highway 67, ½ mile southwest of Gorman.

Red sandy clay		3
Blue sandy clay		4
Rock		11

No water sample collected. Apr. 27, 1937.

Well 438

Hilltop, south side Gorman-Desdemona paved road, 2 miles northeast of Gorman.

Red sandy clay		4
Red sand		8

No water sample collected. Apr. 29, 1937.

Well 453

Level land, south side Gorman-Desdemona paved road, 3½ miles northeast of Gorman.

Red sandy clay		6
Hard packed sand		12½

No water sample collected. Apr. 28, 1937.

Well 455

Hilltop, south side Staff-Desdemona road, northeast corner Abraham Smclzer Survey, 6 miles northeast of Gorman.

Blue sandy clay		2
Red clay		10

No water sample collected. Apr. 30, 1937.

Well 456

Steep hillside, south side Gorman-Desdemona road, 5½ miles northeast of Gorman.

Red sandy clay		1
Sand rock		5
Blue sandy shale		6½
Hard rock		6½

No water sample collected. Apr. 28, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

Thickness (feet)	Depth (feet)
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Well 459

Steep hillside just west of Hogg Creek and near west approach to creek bridge, $7\frac{1}{2}$ miles northeast of Gorman.

Sandy clay- - - - -	5	5
Black clay- - - - -	2	7
Red sandy clay- - - - -	4	11
White sand- - - - -	3	14
Sand and gravel, water- -	1	15

Struck water at $14\frac{1}{2}$ feet.

Water level, 12.6 feet below top of ground, 2 hours after hole completed.
Water sample collected. Apr. 28, 1937.

Well 489

Level land near south bank of Elm Creek, west side Carbon-Okra road, 12 miles west of Gorman.

Brown clay- - - - -	3	3
Gray shale- - - - -	2	5
Limestone- - - - -		5

No water sample collected. May 28, 1937.

Well 491

Level land, at Okra, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, blk. 2, H. & T. C. R.R. Co. Survey, $12\frac{1}{2}$ miles west of Gorman.

White caliche- - - - -	$3\frac{1}{2}$	$3\frac{1}{2}$
Yellow clay- - - - -	1	$4\frac{1}{2}$
White caliche- - - - -	5	$9\frac{1}{2}$
Limestone- - - - -		$9\frac{1}{2}$

No water sample collected. May 29, 1937.

Well 493

Level land, SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, blk. 2, H. & T. C. R.R. Co. Survey, 13 miles southwest of Gorman.

Red sand- - - - -	1	1
Red sandy clay- - - - -	$2\frac{1}{2}$	$3\frac{1}{2}$
Yellow sandy clay- - - - -	$1\frac{1}{2}$	5
Caliche and rock- - - - -	$7\frac{1}{2}$	$12\frac{1}{2}$

No water sample collected. May 29, 1937.

Well 497

Gently sloping hillside, SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, blk. 2, H. & T. C. R.R. Co. Survey, 14 miles southwest of Gorman.

Red clay- - - - -	$2\frac{1}{2}$	$2\frac{1}{2}$
Red sand- - - - -	2	$4\frac{1}{2}$
Blue shale- - - - -	$4\frac{1}{2}$	9
Limestone- - - - -		9

Water sample collected. May 29, 1937.

Thickness (feet)	Depth (feet)
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Well 500

Gently sloping land, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7 blk. 2, H. & T. C. R.R. Co. Survey, 15 miles southwest of Gorman.

White sandy clay- - - - -	5	5
Yellow sand- - - - -	1	6
Red shale- - - - -	$3\frac{1}{3}$	$9\frac{1}{2}$
Struck limestone rock at $9\frac{1}{2}$ feet.		

No water sample collected. May 29, 1937.

Well 602

Hilltop, east side of Caddo-Ranger road, at Stephens-Eastland county line, $2\frac{3}{4}$ miles north of Ranger.

Brown sand and gravel- - - - -	$3\frac{1}{3}$	$3\frac{1}{3}$
Limestone- - - - -		$3\frac{1}{3}$

No water sample collected. May 31, 1937.

Well 604

Gently sloping hillside near dry creek, east side of Caddo-Ranger road, $2\frac{1}{2}$ miles north of Ranger.

Blue shale- - - - -	$6\frac{1}{2}$	$6\frac{1}{2}$
White sand and small sand gravel- - - - -	1	$7\frac{1}{2}$
Yellow clay and limestone -	$3\frac{1}{3}$	11
No water sample collected. May 31, 1937.		

Well 607

Gently sloping hillside, east side of Caddo-Ranger road, $1\frac{3}{4}$ miles north of Ranger.

Black surface materials- -	5	5
Yellow clay and gravel- -	$\frac{1}{2}$	$5\frac{1}{2}$
Limestone- - - - -		$5\frac{1}{2}$

No water sample collected. May 31, 1937.

Well 609

Level land near draw, east side Caddo-Ranger road, $1\frac{1}{2}$ miles north of Ranger.

Black clay- - - - -	4	4
Sandy clay and small-sized gravel- - - - -	$7\frac{1}{2}$	$11\frac{1}{2}$
Yellow sand, water- - - - -		$11\frac{1}{2}$

Struck water at 11 feet.

Water level, 9.3 feet below top of ground, 2 hours after hole completed.

Water sample collected. May 31, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

	Thickness (feet)	Depth (feet)
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Well 614

Level land, south side Ranger-Morton Valley road, $1\frac{1}{4}$ miles west of Ranger.
 Red sandy clay - - - - - 4 | 4
 Grayish-red sandy clay - - $8\frac{1}{2}$ | $12\frac{1}{2}$
 Yellow and white packed sand 2 | $14\frac{1}{2}$
 White gravel and sand - - - $5\frac{1}{2}$ | 20
 Struck water at $19\frac{1}{2}$ feet.
 Water level, 18.1 feet below top of ground, 2 hours after hole completed.
 Water sample collected. May 4, 1937.

Well 615

Gently sloping hillside, south side U. S. Highway 80, 3 miles southwest of Ranger.
 Black clay - - - - - $3\frac{1}{2}$ | $3\frac{1}{2}$
 Sandy clay - - - - - $7\frac{1}{2}$ | 11
 Blue sandy shale - - - - - $\frac{1}{2}$ | $11\frac{1}{2}$
 Gravel, water - - - - - $3\frac{1}{2}$ | 15
 Struck water at 9 feet.
 Water level, 8.3 feet below top of ground, 2 hours after hole completed.
 Water sample collected. Apr. 6, 1937.

Well 619

Level land, south side U. S. Highway 80, 1 mile southwest of Ranger.
 Red clay - - - - - 1 | 1
 Yellow clay - - - - - 10 | 11
 Rock - - - - - 11
 No water sample collected. Apr. 6, 1937.

Well 620

Level land, south side U. S. Highway 80, opposite T. & P. R.R. Co. depot at Ranger.
 Blue clay - - - - - 6 | 6
 Blue sandy shale - - - - 8 | 14
 Struck water at $5\frac{1}{2}$ feet.
 Water level, 3.3 feet below top of ground, 2 hours after hole completed.
 Water sample collected. Apr. 6, 1937.

Well 622

Level land, east side Caddo-Ranger road, $\frac{1}{2}$ mile northwest of Ranger.
 Brown clay - - - - - 4 | 4
 Yellow clay - - - - - 5 | 9
 Blue shale - - - - - $\frac{1}{2}$ | $9\frac{1}{2}$
 Limestone - - - - - $9\frac{1}{2}$
 No water sample collected. May 31, 1937.

	Thickness (feet)	Depth (feet)
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Well 627

Level land, south side U. S. Highway 80, 2 miles east of Ranger.
 Black clay - - - - - 1 | 1
 Yellow clay - - - - - $2\frac{1}{2}$ | $3\frac{1}{2}$
 Rock - - - - - $3\frac{1}{2}$
 No water sample collected. Apr. 7, 1937.

Well 630

Gently sloping hillside, south side U. S. Highway 80, 6 miles east of Ranger.
 Brown clay - - - - - 1 | 1
 Red clay and white shale - - $3\frac{1}{2}$ | $4\frac{1}{2}$
 Red shale - - - - - $4\frac{1}{2}$ | 9
 No water sample collected. Apr. 7, 1937.

Well 631

Gently sloping land, south side U. S. Highway 80, 8 miles east of Ranger.
 Black soil - - - - - $3\frac{1}{2}$ | $3\frac{1}{2}$
 Yellow clay and gravel - - $4\frac{1}{2}$ | 8
 Sandy clay - - - - - $4\frac{1}{2}$ | $12\frac{1}{2}$
 Limestone - - - - - $12\frac{1}{2}$
 No water sample collected. Apr. 4, 1937.

Well 632

Level land, east side U. S. Highway 80, at Eastland-Palo Pinto county line, $11\frac{1}{2}$ miles east of Ranger.
 Sandy clay - - - - - 2 | 2
 Blue clay - - - - - $1\frac{1}{2}$ | $3\frac{1}{2}$
 Limestone - - - - - $3\frac{1}{2}$
 No water sample collected. Apr. 8, 1937.

Well 633

Level land, south side U. S. Highway 80, 11 miles east of Ranger.
 Red surface materials - - $3\frac{1}{2}$ | $3\frac{1}{2}$
 Packed sand - - - - - $7\frac{1}{2}$ | 11
 Yellow clay - - - - - 2 | 13
 No water sample collected. Apr. 8, 1937.

Well 643

Gently sloping hillside, southwest part of David S. Richardson Survey, south side of Staff-Desdemona road, 11 miles south of Ranger.
 Red clay - - - - - $2\frac{1}{2}$ | $2\frac{1}{2}$
 Sandy gravel - - - - - $4\frac{1}{2}$ | 7
 Blue clay - - - - - 2 | 9
 Sandy clay - - - - - 2 | 11
 Hard red clay - - - - - 11
 Struck water at 4 feet.
 Water level, 4 feet below top of ground, 1 hour after hole completed.
 Water sample collected. Apr. 30, 1937.

Logs of W. P. A. test wells in Eastland County--Continued

Thickness (feet)	Depth (feet)
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Well 648

Level land, McLennan County School Land, south side Staff-Desdemona road, at Mansco Lake, 10 miles south of Ranger.
Black sandy clay- - - - - $12\frac{1}{2}$ | $12\frac{1}{2}$
Black clay and gravel- - - 6 | $18\frac{1}{2}$
No water sample collected. Apr. 30, 1937.

Well 652

Level land, SE $\frac{1}{4}$ Harvey Kendrick Survey, 1 mile east of Triumph School, south side of Staff-Desdemona road, 9 miles south of Ranger.
Black clay- - - - - $4\frac{1}{2}$ | $4\frac{1}{2}$
Blue shale- - - - - 8 | $12\frac{1}{2}$
Rock- - - - - | $12\frac{1}{2}$
No water sample collected. May 1, 1937.

Well 654

Level land, Harvey Kendrick Survey, 2 miles southeast of Triumph School, $9\frac{1}{2}$ miles south of Ranger.
Brown sand- - - - - 3 | 3
Broken sandy clay- - - - 1 | 4
Yellow sandy clay- - - - 5 | 9
Grayish-yellow shale- - - - 4 | 13
No water sample collected. May 7, 1937.

Well 655

Gently sloping land, A. R. Lawrence tract, southwest of Triumph School, Harvey Kendrick Survey, $9\frac{1}{2}$ miles south of Ranger.
Brown sand- - - - - 2 | 2
White caliche- - - - - 2 | 4
Red sand- - - - - 2 | 6
No water sample collected. May 7, 1937.

Thickness (feet)	Depth (feet)
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Well 656

Level land, Mrs. A. R. Lawrence tract, Harvey Kendrick Survey, southwest of Triumph School, $9\frac{1}{2}$ miles south of Ranger.
Black clay- - - - - 4 | $4\frac{1}{2}$
Caliche- - - - - | $2\frac{1}{2}$ | 7
Sandy clay- - - - - $3\frac{1}{2}$ | $10\frac{1}{2}$
No water sample collected. May 7, 1937.

Well 659

Level land, $\frac{1}{2}$ mile south of Staff, west side of county road, $8\frac{1}{2}$ miles south of Ranger.
Brown sand- - - - - | $1\frac{1}{2}$ | $1\frac{1}{2}$
Red gravel and clay- - - - - | $1\frac{1}{2}$ | 3
Yellow clay- - - - - | $2\frac{1}{2}$ | $5\frac{1}{2}$
Red gravel and sand- - - - - | $1\frac{1}{2}$ | 7
No water sample collected. Apr. 30, 1937.

Well 662

Gently sloping hillside, northeast part of McLennan County School Land, $\frac{1}{2}$ mile northwest of Staff, west side of county road, $7\frac{1}{2}$ miles south of Ranger.
Blue shale- - - - - 7 | 7
Limestone- - - - - | 7
No water sample collected. Apr. 29, 1937.

Samples collected from streams in Eastland County, Texas

No.	Name of stream	Distance from Eastland	Location	Estimated flow in second-feet	Depth of stream (feet)
243a	Leon River	1 $\frac{1}{4}$ miles southeast	SE part sec. 14, blk. 6, E. T. R. R. Co. Sur.	5	6
315a	do.	5 $\frac{1}{2}$ miles southwest	SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, H. & T. C. R. R. Co. Sur.	5	4
No.	Name of stream	Distance from Gorman	Location	Estimated flow in second-feet	Depth of stream (feet)
454a	Leon River	4 $\frac{3}{4}$ miles northeast	Highway bridge NE $\frac{1}{4}$ DeMoss Sur.	20	1

Lakes in Eastland County, Texas

No.	Distance from Cisco	Location	Owner	Name of Lake	Catchment area	
					Area in acres	Topographic situation
5a	3 $\frac{1}{2}$ miles north	Part of secs. 49, 4, 1, 40, 500, S.P.R.R.Co.Sur.	City of Cisco	Lake Cisco	25,600	Steep slope
88a	18 miles south	E $\frac{1}{2}$ sec. 20, blk. 2, E.T.R.R.Co.Sur.	Will Foster	Phillips Oil Co. Lake	2,580	Gently sloping hillsides
No.	Distance from Eastland	Location	Owner	Name of Lake	Catchment area	
					Area in acres	Topographic situation
203a	7 miles northeast	NW $\frac{1}{4}$ sec. 37, H.& T.C.R.R.Co.Sur.	A. L. Thorpe	Thorpe Lake	10	Gently sloping hillsides
242a	2 miles east	SE $\frac{1}{4}$ sec. 1, John House Sur.	City of Eastland	Tullos Lake	3,200	Canyon
243b	2 $\frac{1}{4}$ miles southeast	Secs. 3&13, blk. 6, E.T.R.R.Co.Sur.	Texas Electric Service Co.	Leon Lake	160,000	do.
b/256a	1 $\frac{1}{4}$ miles northwest	Part of secs. 21, 25, 26, blk. 4, H.C.T.C.R.R.Co.Sur.	City of Eastland	Eastland Lake	5,340	Gently sloping hillsides
623a	2 $\frac{1}{4}$ miles northwest	Secs. 9 & 10, W. Boswell and W. C. Sypert Sur.	City of Ranger	Haganan Lake	13,440	Canyon

a/ P, public; D, domestic; Ind, industrial; S, stock; N, not used.

Partial chemical analyses

No.	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Mag-ne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate (HCO_3)	Sul-phate (SO_4)	Chlo-ride (Cl)	Total hardness as CaCO_3 (calculated)
243a	May 25, 1937	719	84	22	147	153	156	255	299
315a	May 5, 1937	--	--	--	--	--	831	300	--
No.	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Mag-ne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate (HCO_3)	Sul-phate (SO_4)	Chlo-ride (Cl)	Total hardness as CaCO_3 (calculated)
454a	Apr. 13, 1937	--	--	--	--	--	228	800	--

J. Howard Samuell, Project Superintendent

(Chemical analyses of water from these lakes are in the table of analyses.)

No.	Dam			Use a/	Remarks		
	Length (feet)	Height (feet)	Material				
5a	1,500	133 ^b	Concrete	P	Sandstone, limestone, and shale bottom and sides. Water clear.		
88a	1,300	28	Earth	D, Ind	Limestone sides; shale bottom. Reported fed by springs in bottom. Reported never failed since built in 1924.		
Dam							
No.	Length (feet)	Height (feet)	Material	Use	Remarks		
203a	600	15	Earth	D,S	Shale bottom and sides. Water clear. Vegetation: mesquite.		
242a	2,640	30	do.	N	Limestone and shale bottom and sides. Water clear. Vegetation: willow, cottonwood, and live oak.		
243b	584	39	Concrete	P, Ind	Reported altitude, 1,411 feet. Water turbid. Supplies boilers only.		
256a	800	40	Earth	P	Sandstone and limestone bottom and sides. Water clear. Vegetation: willow, oak, and mesquite.		
623a	1,000	35	do.	P	Limestone and shale bottom and sides. Water clear. Vegetation: post oak.		

b/ No water sample collected for analysis.

Partial analyses of water from wells in Eastland County, Texas

(Analyzed at The University of Texas under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry, by J. E. Stullken, D. F. Riddell, H. T. Davidson and Floyd H. Ward, Chemists, and J. A. Harmaza, Martin Wieland, and Jack Ramsey, Assistant Chemists. Results are in parts per million. Well numbers correspond to numbers in table of well records.)

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Total hardness as CaCO ₃ (calculated)
3	Edgar Harris	196	May 3, 1937	-	-	-	-	-	272	112	-
6	C.N. Fee	95	Apr. 9, 1937	-	-	-	-	-	468	31	-
8	C.H. Fee	100	do.	1,314	-	-	-	677	133	365	-
13	Dr. C.C. Jones	155	do.	-	-	-	-	-	89	244	-
14	Carl Kimbrough	24	May 5, 1937	-	-	-	-	-	96	160	-
15	Jess Noble	152	do.	-	-	-	-	-	395	58	-
16	W.F. Smith	149	do.	2,134	-	-	-	390	a/	1,160	-
19	W.P.A. test well	9	Mar. 31, 1937	-	-	-	-	-	1,957	1,680	-
22	do.	9	do.	-	-	-	-	-	116	26	-
23	G.M. Waters	24	May 17, 1937	503	-	-	-	329	74	82	-
24	G. Riddle	20	do.	-	-	-	-	-	67	128	-
26	R.T. Porter	48	May 10, 1937	-	-	-	-	-	79	205	-
27	R.H. Walker	52	do.	-	-	-	-	-	44	54	-
28	E.C. Duncan	170	do.	-	-	-	-	-	47	415	-
30	W.P.A. test well	22	May 5, 1937	395	-	-	-	85	54	150	-
31	do.	22	do.	155	-	-	-	55	40	34	-
32	Frank Swan	23	May 10, 1937	1,810	-	-	-	354	300	700	-
35	A.J. Olsen	19	May 17, 1937	-	-	-	-	-	245	445	-
36	W.T. Rutherford	27	do.	378	-	-	-	244	37	80	-
37	John Delaney	29	do.	-	-	-	-	-	19	37	-
38	Ingram heirs	20	do.	297	-	-	-	250	30	32	-
39	S.N. Keith	14	May 18, 1937	347	-	-	-	372	a/	27	-
40	P.B. Pardue	18	do.	-	-	-	-	-	64	94	-
41	J.R. Poplin	69	do.	-	-	-	-	-	a/	24	-
42	W.N. Compton	19	May 17, 1937	421	-	-	-	207	67	100	-
43	A.N. Simpson	90	do.	-	-	-	-	-	115	185	-
44	C.B. Cochran	22	do.	880	-	-	-	429	82	265	-
45	W.N. Hall	45	do.	-	-	-	-	-	252	265	-
46	E.P. Shaefner	41	do.	642	-	-	-	476	96	74	-
47	Frank Hageman	163	do.	-	-	-	-	-	771	590	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Total hardness as CaCO ₃ (calculated)
48	O.G. Reich	50	May 10, 1937	-	-	-	-	-	249	820	-
49	Howard Stephenson	94	do.	732	-	-	-	506	64	145	-
51	T.L. Lasater	31	do.	2,494	-	-	-	360	481	970	-
52	Chas. Gilbert	7	Apr. 27, 1937	-	-	-	-	-	211	160	-
53	E.L. Simms	112	do.	-	-	-	-	-	63	88	-
54	A. Rich	28	May 10, 1937	-	-	-	-	-	375	910	-
55	J.B. Webb	8	do.	-	-	-	-	-	43	52	-
57	Charles Walker	10	do.	-	-	-	-	-	43	32	-
58	S.P. Collins	8	May 14, 1937	428	-	-	-	348	19	74	-
60	W.P.A. test well	10	Apr. 2, 1937	-	-	-	-	-	136	92	-
61	W.L. Curtis	17	May 19, 1937	-	-	-	-	-	340	2,270	-
62	A.M. Townsend	58	do.	-	-	-	-	-	288	1,240	-
63	Joel Reed	18	do.	408	-	-	-	354	28	50	-
64	N.E. Mitchell	15	May 18, 1937	445	-	-	-	409	40	34	-
65	E.L. Luminack	37	do.	-	-	-	-	-	60	102	-
66	J.M. McCann	34	do.	-	-	-	-	-	43	64	-
67	First National Bank (Cross Plains, Texas)	22	do.	352	-	-	-	305	39	30	-
68	W.E. Lusk	30	do.	589	-	-	-	256	95	156	-
69	F.M. Hill	18	do.	813	99	70	123	732	75	86	533
70	R.A. Seal	42	do.	612	-	-	-	427	79	96	-
71	H. Harris	107	May 19, 1937	629	-	-	-	329	64	172	-
72	Mrs. S.B. Webb	97	do.	475	-	-	-	397	40	60	-
73	do.	69	do.	-	-	-	-	-	44	80	-
74	H.L. Vestal	55	do.	1,201	-	-	-	250	134	515	-
75	Mrs. Mattie Webb	58	do.	501	-	-	-	244	67	132	-
76	W.P.A. test well	15	Apr. 5, 1937	-	-	-	-	-	40	138	-
77	T.S. Parker	24	May 13, 1937	223	-	-	-	207	a/	34	-
78	D.V. Armstrong	28	May 19, 1937	-	-	-	-	-	a/	535	-
79	Marion Harvey	34	May 13, 1937	-	-	-	-	-	a/	156	-
80	Higginbotham Bros.	10	May 19, 1937	4,939	-	-	-	403	328	2,650	-
81	Pioneer School	26	May 13, 1937	678	-	-	-	256	28	274	-
83	Miss C.B. Covert	25	do.	-	-	-	-	-	32	38	-
84	L.L. Mead	25	do.	701	-	-	-	415	56	180	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Total hardness as CaCO ₃ (calculated)
85	J.W. Foster	49	May 13, 1937	-	-	-	-	-	32	22	-
86	Doss Alexander	36	do.	-	-	-	-	-	123	220	-
87	A.L. Dillard	30	do.	-	-	-	-	-	39	54	-
88	J.W. Foster	18	do.	-	-	-	-	-	131	150	-
89	M.B. Nix	35	do.	-	-	-	-	-	367	2,170	-
90	E. Pinard	28	do.	166	-	-	-	92	20	40	-
91	C.A. Barker	91	May 12, 1937	-	-	-	-	-	127	210	-
92	R. Crane	41	do.	1,501	-	-	-	244	217	635	-
94	J.T. Woedruff	100	do.	-	-	-	-	-	51	150	-
95	H.L. King	141	do.	-	-	-	-	-	36	86	-
96	Mrs. B.F. Tune	100	do.	-	-	-	-	-	28	108	-
97	Mrs. Geo. Barnes	39	do.	577	-	-	-	232	91	165	-
98	W.P.A. test well	10	Apr. 5, 1937	-	-	-	-	-	a/	3	-
99	do.	26	Apr. 2, 1937	280	-	-	-	244	44	11	-
101	N.E. Frantham	22	May 12, 1937	-	-	-	-	-	16	17	-
102	City of Rising Star	56	do.	-	-	-	-	-	32	90	-
103	do.	43	do.	-	-	-	-	-	82	195	-
104	W.P.A. test well	11	May 29, 1937	-	-	-	-	-	178	650	-
105	W.L. Boggs	25	May 20, 1937	1,899	-	-	-	201	324	815	-
106	W.T. Nunnally	20	do.	-	-	-	-	-	316	470	-
108	J.T. McBeth	73	May 11, 1937	-	-	-	-	-	32	76	-
109	Dr. W.S. Carter	77	do.	767	-	-	-	329	86	240	-
111	W. Armstrong	51	do.	861	-	-	-	336	127	260	-
112	Mrs. B. Watkins	31	do.	-	-	-	-	-	55	188	-
113	W.G. Watkins	31	do.	173	-	-	-	171	12	10	-
114	C.G. Schutz Jr.	58	do.	-	-	-	-	-	221	665	-
116	Mrs. J.H. Graham	29	do.	-	-	-	-	-	209	665	-
117	R.N. Haddon	27	do.	4,032	-	-	-	281	343	2,120	-
118	R.O. Jackson	12	do.	-	-	-	-	-	43	84	-
204	Mrs. L.A. Ramsower	275	Mar. 7, 1937	-	-	-	-	-	430	155	-
205	Dan Childress	114	Mar. 9	3,825	-	-	-	226	1,465	1,000	-
206	Reagan School	70	Apr. 9, 1937	-	-	-	-	-	649	1,035	-
208	T.E. Castleberry	220	Apr. 7, 1937	552	-	-	-	299	137	72	-
211	Carl Kimbrough	200	do.	-	-	-	-	-	171	62	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) calculated	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
213	T.C. Harbin	215	Apr. 7, 1937	664	-	-	-	226	230	98	-
214	Morton Valley School	160	do.	-	-	-	-	-	208	66	-
215	E.D. Houston	88	do.	965	-	-	-	220	438	105	-
219	W.P.A. test well	8	Mar. 26, 1937	-	-	-	-	-	140	98	-
220	J.W. Jones	200	Apr. 7, 1937	-	-	-	-	-	1,298	310	-
221	W.P.A. test well	14	May 4, 1937	-	-	-	-	-	44	216	-
223	John Littleton heirs	200	Apr. 15, 1937	-	-	-	-	-	a/ 5,460	-	-
225	O.M. England	35	do.	554	-	-	-	140	133	160	-
226	J. Maynard	26	do.	-	-	-	-	-	a/ 38	-	-
227	Colony School	12	do.	-	-	-	-	-	15	40	-
228	Homer Danley	71	June 3, 1937	503	-	-	-	165	43	196	-
229	Mrs. F. Christmas	22	do.	-	-	-	-	-	67	66	-
230	Claude Erhler	49	do.	-	-	-	-	-	32	92	-
231	L. Kirkpatrick	52	do.	-	-	-	-	-	174	890	-
233	B.C. Whitling	35	Apr. 15, 1937	-	-	-	-	-	111	520	-
234	J.F. Moseley	34	do.	-	-	-	-	-	1,297	700	-
235	C.L. Langston	34	Apr. 16, 1937	-	-	-	-	-	230	850	-
236	W.P.A. test well	9	Apr. 6, 1937	182	-	-	-	122	40	16	-
237	A.A. Norton	35	Apr. 16, 1937	468	-	-	-	201	22	174	-
238	Olden School	85	Apr. 15, 1937	-	-	-	-	-	72	650	-
239	do.	50	do.	1,107	-	-	-	171	48	575	-
240	J.H. Munn	25	do.	857	-	-	-	256	76	345	-
241	J.D. Yielding	70	do.	-	-	-	-	-	80	380	-
243	W.P.A. test well	7	Apr. 29, 1937	-	-	-	-	-	36	96	-
245	Mrs. L.E. Bourland	42	Apr. 14, 1937	-	-	-	-	-	40	22	-
246	P.O. Wood	41	do.	-	-	-	-	-	32	58	-
247	W.P.A. test well	14	Apr. 29, 1937	-	-	-	-	-	543	1,820	-
248	Jacob Tennel	15	May 6, 1937	-	-	-	-	-	47	275	-
249	W.P.A. test well	14	Apr. 9, 1937	-	-	-	-	-	48	158	-
250	do.	17	Mar. 25, 1937	-	-	-	-	-	515	192	-
251	do.	12	do.	-	-	-	-	-	4,185	6,000	-
252	do.	15	do.	-	-	-	-	-	204	150	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO ₃) (calculated)	Sulphate (SO ₄)	Chloride (Cl)	Total hardness as CaCO ₃ (calculated)
253	W.P.A. test well	14	Apr. 22, 1937	-	-	-	-	-	647	930	-
254	R.F. Jones	18	Apr. 7, 1937	-	-	-	-	-	1,206	920	-
255	W.P.A. test well	17	Apr. 20, 1937	-	-	-	-	-	1,629	980	-
256	do.	11	Apr. 21, 1937	-	-	-	-	-	3,918	5,690	-
260	do.	12	Mar. 29, 1937	335	-	-	-	98	156	22	-
262	Jno. Hart	198	Apr. 9, 1937	1,365	-	-	-	146	200	615	-
263	C.C. Street	13	May 6, 1937	529	-	-	-	476	32	60	-
264	W.P.A. test well	14	do.	-	-	-	-	-	a/	83	-
265	do.	15	do.	-	-	-	-	-	116	650	-
266	do.	14	do.	-	-	-	-	-	185	555	-
267	Mrs. C. Owen	75	May 5, 1937	1,076	-	-	-	427	264	225	-
268	E.O. Robinson	23	do.	-	-	-	-	-	20	8	-
271	Mrs. A.L. Mayhew	12	do.	715	-	-	-	207	76	280	-
272	W.P.A. test well	14	Apr. 9, 1937	-	-	-	-	-	120	108	-
273	Mrs. C.U. Connelle	30	May 7, 1937	-	-	-	-	-	197	1,110	-
274	R.L. Jones	41	do.	-	-	-	-	-	76	110	-
275	do.	40	do.	-	-	-	-	-	158	560	-
276	Mrs. T.C. McGough		do.	-	-	-	-	-	80	230	-
			Spring								
277	Kizziar Est.	58	Apr. 29, 1937	2,655	-	-	-	201	466	1,170	-
278	R. McFeeley	25	do.	-	-	-	-	-	80	295	-
279	D.P. Holliday	25	do.	305	-	-	-	220	40	44	-
280	Dr. W.E. Kimbal	16	do.	-	-	-	-	-	63	180	-
281	B.H. Harbin	27	do.	-	-	-	-	-	111	760	-
282	Homer White	18	do.	-	-	-	-	-	91	90	-
283	J.A. Hallmark	39	May 7, 1937	609	-	-	-	189	72	225	-
284	Mrs. C.L. Yancey	43	do.	684	-	-	-	317	83	196	-
285	J.B. Caudle	18	do.	133	-	-	-	98	a/	34	-
286	P.F. Turner	35	Apr. 29, 1937	-	-	-	-	-	79	245	-
287	Finis Johnson	29	Apr. 28, 1937	637	-	-	-	226	71	225	-
288	Flat Wood School	37	do.	-	-	-	-	-	156	1,390	-
289	S.V. Lyerla	35	do.	336	-	-	-	134	60	90	-
290	J.V. Harbin	51	May 7, 1937	418	-	-	-	299	56	60	-
291	do.	31	do.	562	-	-	-	281	91	130	-
292	Sam Coon	34	Apr. 28, 1937	647	-	-	-	329	30	214	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth to well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3^-)	Sulphate (SO_4^{2-})	Chloride (Cl^-)	Total hardness as CaCO_3 (calculated)
293	M.W. Grieger	31	Apr. 28, 1937	-	-	-	-	-	89	255	-
294	A.C. Justice	37	do.	-	-	-	-	-	67	210	-
295	Mrs. W.B. Samford	9	Apr. 12, 1937	-	-	-	-	-	78	300	-
296	L.A. Hightower	28	Apr. 27, 1937	-	-	-	-	-	137	705	-
297	W.P.A. test well	19	Apr. 26, 1937	281	-	-	-	238	40	19	-
299	Lon Palmer	27	Apr. 29, 1937	-	-	-	-	-	148	505	-
300	M.D. Evans	28	do.	-	-	-	-	-	159	700	-
301	Earnest La Foon	18	May 6, 1937	742	-	-	-	281	118	220	-
302	Jacob Lyerla	35	do.	-	-	-	-	-	24	36	-
303	T.A. Byrd	52	do.	1,950	-	-	-	92	60	1,145	-
304	D.N. Taylor	39	do.	429	-	-	-	293	72	56	-
305	J.L. James	45	Apr. 13, 1937	114	-	-	-	116	a/	12	-
306	W.P.A. test well	16	Apr. 26, 1937	408	-	-	-	464	12	7	-
307	M. Farm Hurst	53	Apr. 12, 1937	-	-	-	-	-	a/	36	-
308	Pat McNeil	17	do.	-	-	-	-	-	85	170	-
309	J.S. Turner	49	do.	949	-	-	-	171	74	450	-
310	T.F. Murrell	43	Apr. 26, 1937	-	-	-	-	-	156	370	-
311	W.F. Reagan	29	do.	-	-	-	-	-	141	805	-
312	V.H. Boon	21	do.	-	-	-	-	-	148	980	-
313	J.H. Haynes	28	do.	-	-	-	-	-	482	185	-
314	W.P.A. test well	12	June 2, 1937	-	-	-	-	-	371	300	-
315	Mrs. P.L. Mangum	56	Apr. 26, 1937	-	-	-	-	-	757	590	-
316	W.P.A. test well	18	June 2, 1937	-	-	-	-	-	1,573	625	-
317	Elmer Gilbert	83	Apr. 27, 1937	-	-	-	-	-	34	64	-
318	Alvin Thurman	20	do.	-	-	-	-	-	1,638	225	-
401	J.T. Hale	100	May 5, 1937	1,769	-	-	-	293	367	645	-
402	J.S. Turner	28	do.	892	-	-	-	512	162	165	-
403	R.L. Tucker	88	Apr. 27, 1937	-	-	-	-	-	690	96	-
404	W.A. Hale	80	do.	-	-	-	-	-	56	46	-
405	D.S. Campbell	19	do.	656	-	-	-	360	89	150	-
406	Henry Collins	47	Apr. 12, 1937	-	-	-	-	-	152	565	-
408	City of Carbon	13	do.	-	-	-	-	-	215	765	-
409	Mrs. J.A. Hearn	53	do.	-	-	-	-	-	100	520	-
410	W.H. Gilbert	18	May 14, 1937	-	-	-	-	-	a/	40	-
411	W.P.A. test well	21	May 28, 1937	-	-	-	-	-	158	66	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued

Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
412	I.A. Dingler heirs	19	May 14, 1937	834	-	-	-	421	152	175	-
413	W.S. Maxwell	41	do.	-	-	-	-	-	71	220	-
414	Buck Flowers	37	do.	1,102	-	-	-	488	148	315	-
415	W.W. Martin	69	do.	1,114	-	-	-	458	108	375	-
416	W.P.A. test well	11	May 28, 1937	-	-	-	-	-	26	124	-
417	Babe Lanier	69	May 14, 1937	-	-	-	-	-	78	250	-
418	M.B. Martin	9	do.	1,249	-	-	-	543	148	380	-
419	J.T. Poe	9	do.	566	-	-	-	415	67	84	-
420	Ed. Sherrill	67	do.	-	-	-	-	-	63	114	-
423	C.G. Stubblefield	37	Apr. 12, 1937	-	-	-	-	-	189	465	-
424	W.T. Duncan	14	Apr. 13, 1937	120	-	-	-	122	a/	13	-
429	J.C. Caraway	39	Apr. 12, 1937	-	-	-	-	-	37	292	-
430	D. Jobe	14	do.	-	-	-	-	-	48	106	-
431	A.F. McMullen	44	May 27, 1937	-	-	-	-	-	72	280	-
433	City of Gorman	81	Apr. 13, 1937	-	-	-	-	-	108	490	-
434	do.	93	Apr. 12, 1937	675	-	-	-	201	68	265	-
435	Mrs. Adelene Moats	51	Apr. 19, 1937	-	-	-	-	-	22	130	-
436	Mrs. J.M. Moats	48	Apr. 13, 1937	-	-	-	-	-	52	128	-
437	P. Thomas	30	do.	-	-	-	-	-	52	104	-
439	R.D. Parker	45	Apr. 19, 1937	-	-	-	-	-	100	255	-
440	Oral Browning Spring	do.	-	-	-	-	-	-	44	120	-
441	Albert Taylor	56	do.	468	-	-	-	-	26	135	-
442	H.O. Files	42	do.	703	-	-	-	268	45	380	-
443	M. Jones	38	do.	971	-	-	-	342	52	395	-
444	George Snyder	34	do.	-	-	-	-	-	84	340	-
445	Grandview School	47	do.	628	-	-	-	311	34	208	-
446	C.M. Prestidge	44	do.	-	-	-	-	-	67	330	-
447	Mrs. Tom Brightwell	38	do.	-	-	-	-	-	45	226	-
448	J.M. Westmoreland	21	do.	189	-	-	-	146	a/	44	-
449	T.M. Goodwin	21	do.	313	-	-	-	140	67	66	-
450	W.F. Rogers	21	do.	-	-	-	-	-	119	650	-
451	W.P. Westmoreland	23	do.	151	-	-	-	146	a/	20	-
452	E.W. Townsend	90	Apr. 13, 1937	-	-	-	-	-	48	196	-
454	Pat Peak	24	do.	-	-	-	-	-	192	310	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
457	Almon Bearden Est.	34	Apr. 13, 1937	602	-	-	-	232	120	155	-
458	J.T. Jones	43	Apr. 14, 1937	660	-	-	-	348	84	162	-
459	W.P.A. test well	15	Apr. 28, 1937	-	-	-	-	-	216	650	-
461	City of Desdemona	76	Apr. 13, 1937	-	-	-	-	-	44	64	-
462	Mrs. Bobbie I. Terry		May 28, 1937	-	-	-	-	-	136	125	-
				128							
463	Mrs. S. Snodgrass	38	do.	-	-	-	-	-	100	220	-
464	W.N. Koonce	35	do.	-	-	-	-	-	84	560	-
465	G.J. Perry	Spring	do.	-	-	-	-	-	104	330	-
466	do.	30	do.	-	-	-	-	-	128	400	-
467	J.J. Holloman	17	do.	248	-	-	-	63	68	64	-
468	W.F. Duke	36	do.	-	-	-	-	-	244	960	-
469	W.L.F. Boyd	59	do.	-	-	-	-	-	116	415	-
470	City of DeLeon	105	May 21, 1937	651	-	-	-	336	72	175	-
471	J.W. Tate	11	May 27, 1937	-	-	-	-	-	40	80	-
472	Mrs. M.J. Cuner Est.	79	May 21, 1937	129	-	-	-	73	32	15	-
473	J.T. Quinn	31	May 27, 1937	-	-	-	-	-	56	30	-
474	Mrs. Joe Patterson	116	do.	549	-	-	-	354	68	104	-
475	J.S. Singleton	57	May 21, 1937	825	-	-	-	293	176	215	-
476	J.L. Lightfoot	37	do.	630	-	-	-	232	112	180	-
477	R.M. Higginbotham	60	do.	930	-	-	-	293	84	365	-
478	Lenard Woods	28	do.	-	-	-	-	-	144	265	-
479	C.C. McMullen	10	May 27, 1937	1,479	-	-	-	482	96	606	-
480	Mrs. G.T. Sloan	38	do.	-	-	-	-	-	819	49	-
481	Mrs. B.L. Woody	101	May 26, 1937	-	-	-	-	-	60	52	-
482	E. Pounds	62	May 27, 1937	583	-	-	-	384	52	124	-
483	City of Duster	41	May 26, 1937	-	-	-	-	-	88	134	-
484	Duster School	53	do.	2,122	-	-	-	378	120	1,050	-
485	S.H. Gray	101	do.	1,689	-	-	-	390	547	380	-
486	City of Sipe Spring	18	do.	-	-	-	-	-	84	48	-
488	Mrs. R.S. Maxwell	290	May 20, 1937	-	-	-	-	-	a/	615	-
490	W.R. Laird	45	do.	1,229	126	199	60	671	32	482	1,133
492	Bob Edwards	18	do.	-	-	-	-	-	174	205	-
494	R.W. Higginbotham	39	do.	-	-	-	-	-	71	1,125	-
495	J.M. Higginbotham	43	do.	1,001	-	-	-	317	355	152	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3^-)	Sulphate (SO_4^-)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
496	Dr. T.B. Busbee	93	May 20, 1937	-	-	-	-	-	51	160	-
498	H.V. Hill	66	do.	-	-	-	-	-	249	690	-
499	J.T. Harris	13	do.	837	-	-	-	573	87	156	-
601	Willie Langford	91	June 3, 1937	-	-	-	-	-	107	113	-
603	Mrs. H. James	10	June 2, 1937	-	-	-	-	-	47	34	-
605	Rocky Point Pente-172 coastal Church	172	do.	-	-	-	-	-	278	56	-
606	E.B. Hill	29	do.	-	-	-	-	-	40	150	-
609	W.P.A. test well	11	May 31, 1937	-	-	-	-	-	115	160	-
610	G.W. Rose	167	June 2, 1937	2,087	-	-	-	604	119	910	-
611	J.F. Dreinhofer	29	May 4, 1937	-	-	-	-	-	511	2,260	-
612	Mrs. N.E. Works	25	do.	-	-	-	-	-	118	405	-
613	Mrs. S.A. Sawyer	24	do.	-	-	-	-	-	126	270	-
614	W.P.A. test well	20	do.	-	-	-	-	-	400	1,580	-
615	do.	15	Apr. 6, 1937	-	-	-	-	-	140	275	-
616	B.E. Rigby	20	Apr. 16, 1937	-	-	-	-	-	34	100	-
618	Mrs. G.W. Terry	180	do.	651	-	-	-	421	108	98	-
620	W.P.A. test well	14	Apr. 6, 1937	-	-	-	-	-	707	240	-
621	W.M. Myers	174	Apr. 16, 1937	1,251	-	-	-	476	78	480	-
623	R.H. Sheppard	162	June 2, 1937	-	-	-	-	-	51	134	-
624	Haden Neal	29	June 11, 1937	-	-	-	-	-	67	60	-
625	J.M. Winsett	Spring	June 17, 1937	-	-	-	-	-	40	70	-
626	D. Barton	56	June 2, 1937	-	-	-	-	-	466	1,135	-
628	J.R. Erwin	137	do.	-	-	-	-	-	122	88	-
635	J.J. Daffin	22	June 17, 1937	-	-	-	-	-	119	230	-
636	Willis Barton	32	do.	585	-	-	-	128	107	210	-
637	A.H. Dean	30	do.	2,197	-	-	-	61	467	950	-
638	George Barton	16	do.	-	-	-	-	-	200	830	-
639	A.E. Martin	57	do.	145	-	-	-	116	a/	32	-
640	Mrs. E.E. Williams	36	do.	-	-	-	-	-	60	415	-
641	Bob Killinghurst	61	do.	386	-	-	-	61	a/	215	-
642	Dr. G.T. Blackwell	32	Apr. 14, 1937	-	-	-	-	-	80	185	-
643	W.P.A. test well	11	Apr. 30, 1937	107	-	-	-	31	40	16	-
644	Jack Blackwell	30	Apr. 19, 1937	1,338	-	-	-	537	297	305	-
645	A.H. Lane	54	do.	-	-	-	-	-	930	710	-

a/ Sulphate less than 10 parts per million.

Partial analyses of water from wells in Eastland County--Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
647	J.A. Hart	23	Apr. 14, 1937	-	-	-	-	-	939	138	-
648	Alameda School	23	Apr. 16, 1937	620	-	-	-	445	63	106	-
650	R.H. Myrick	21	do.	511	-	-	-	482	a/	74	-
651	Jess Blackwell	92	do.	-	-	-	-	-	260	165	-
653	M.J. Timmon	16	Apr. 29, 1937	-	-	-	-	-	130	850	-
657	Triumph School	19	Apr. 14, 1937	409	-	-	-	146	96	98	-
658	W.T. Duncan	278	do.	2,873	-	-	-	439	184	1,440	-
660	Mrs. B. Crawley	48	do.	1,705	-	-	-	214	815	240	-
661	O.T. Hazard	65	do.	864	-	-	-	439	124	210	-

Partial analyses of water from lakes in Eastland County, Texas
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as CaCO_3 (calculated)
5a	City of Cisco	125	May 3, 1937	174	-	-	-	122	40	11	-
88a	Will Foster	26	May 19, 1937	370	-	-	-	195	40	98	-
203a	A.L. Thorpe	10	Apr. 7, 1937	-	-	-	-	-	40	92	-
242a	City of Eastland	15	Apr. 14, 1937	-	-	-	-	-	40	20	-
243b	Texas Electric Service Company	35	do.	729	108	24	123	214	159	210	370
623a	City of Ranger	35	Apr. 16, 1937	199	-	-	-	98	40	40	-

**MAP OF EASTLAND COUNTY, TEXAS
SHOWING LOCATIONS OF WATER WELLS LISTED**

FIELD WORK BY
J. HOWARD SAMUELL
PROJECT SUPERINTENDENT
W.P.A. PROJECT 603-536
BASE COMPILED FROM
BUREAU OF ECONOMIC GEOLOGY
MAP
AND FIELD NOTES

TEXAS BOARD OF
WATER ENGINEERS
ASSISTED BY
U.S. GEOLOGICAL SURVEY

SCALE
0 1 2 3 4 5 MILES

- EXPLANATION -

- WELL WITH HANDPUMP, BUCKET OR BAILER
- WELL WITH WINDMILL OR SMALL POWER PUMP
- WELL WITH PUMPING PLANT - 5 HORSES POWER OR LARGER
- ◊ WELL DRILLED TO TEST FOR OIL OR GAS
- TEST WELL DRILLED BY W.P.A. LABOR
- ◊ UNUSED WELL
- LOCATION WHERE STREAM WAS SAMPLED
- ▲ EARTHEN TANK OR RESERVOIR
- IMPROVED ROAD
- UNIMPROVED ROAD

