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ROBERTS COUNTY, TEXAS

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

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Work Projects Administration Project 13673

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Analyses made and report mimeographed by
WORK PROJECTS ADMINISTRATION
Project 10443

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sponsored by the State Board of Water Engineers with the United States Department of the Interior, Geological Survey, and the Bureau of Industrial Chemistry of The University of Texas operating.

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Austin, Texas
November 5, 1940

ROBERTS COUNTY, TEXAS

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Introduction

By

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United States Geological Survey

This publication contains records of 330 wells, 22 springs, and 143 test wells, drillers' logs of 3 wells, and 248 chemical analyses of water obtained from water wells in Roberts County, Texas.

On September 12, 1939, the Work Projects Administration started an inventory of the water resources of the county with a project sponsored by the State Board of Water Engineers in cooperation with the Federal Geological Survey, with C. R. Follett as project superintendent. In November Mr. Follett resigned to accept a position with the Board of Water Engineers, and was replaced by C. V. Foster, who completed the project in May, 1940. The duration of the project was unusually long because of a severe winter which made transportation difficult.

The analyses were made by chemists employed on Work Projects Administration Project 10443 under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry of The University of Texas, and E. W. Lohr, Chemist of the Quality of Water Division of the Geological Survey; the Bureau of Industrial Chemistry furnished laboratory space and equipment. This release was typed by typists employed on that project.

The records serve as a guide to land owners, well drillers, and others who need information regarding wells and springs, the depth to ground water in different parts of the county, and the quantity and chemical character of the water yielded by wells and springs. They afford a basis for the more intensive investigation that is now being carried on by the State Board of Water Engineers in cooperation with the Geological Survey. The purpose of this investigation is to determine the distribution and extent of available ground-water supplies and the safe yield of the underground reservoirs.

These projects are a part of a State-wide investigation of the underground water resources of Texas, and are sponsored by the Texas State Board of Water Engineers in cooperation with the United States Department of the Interior, Geological Survey. Acknowledgment of their cordial interest and cooperation is due the 16th field office of the Work Projects Administration and the commissioners of Roberts County.

Records of wells and springs in Roberts County, Texas
(All wells are drilled unless otherwise noted in "Remarks" column)

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/ 1	2 miles northeast	--	--	State Highway Department	--	1931	93	4
2	4½ miles southwest	123, NW¼NE¼	blk. M-2 B. S. & F.	M. W. O'Loughlin	--	--	86	10
d/ 3	--	--	--	--	--	--	62	--
5	28 miles northwest	37, SE¼S½	blk. A H. & G. N.	W. I. Whitsell	--	Old	82	4½
10	28½ miles northwest	35, NE¼N½	do.	C. S. Lipps	--	1939	61	5
11	do.	27, SW¼SW¼	do.	do.	--	--	31	4½
d/ 12	do.	do.	do.	do.	--	--	15	--
d/ 13	27¼ miles northwest	26, SW¼N½	do.	W. I. Whitsell	--	--	83	--
14	26½ miles northwest	24, SE¼N½	do.	Woods King	--	--	65	4½
d/ 15	26 miles northwest	15, SE¼N½	do.	W. I. Whitsell	--	--	Spring	--
d/ 16	do.	15, middle of E side	do.	do.	--	Old	98	4½
d/ 17	25½ miles northwest	13, cen. S side	do.	do.	--	--	42	5
24	29½ miles northwest	158, SE¼SW¼	blk. C G. & M.	do.	--	--	96	5
d/ 25	30½ miles northwest	159, cen. W½E½	do.	do.	--	--	Spring	--
d/ 26	25 miles northwest	10, cen. W½	blk. A H. & G. N.	Bell Ranch	--	Old	52	6
d/ 27	24½ miles northwest	7, N½S½	do.	do.	--	--	Tank	--
28	do.	7, NW¼N½	do.	do.	--	--	82	4½
29	24 miles northwest	7, SE¼N½	do.	C. S. Lipps	--	1939	85	6
30	23½ miles northwest	5, S½W½	do.	do.	--	--	41	6
d/ 36	23 miles northwest	--, NW¼NE¼	O. T. Brown sur.	W. I. Whitsell	--	--	45	6¼
38	20 miles northwest	2, --	blk. 46 H. & T. C.	Mrs. P. A. Worley	--	--	28	6¼
d/ 39	do.	do.	do.	do.	--	Old	26	4¼
d/ 40	do.	do.	P. Born sur.	Osborne Est.	--	Old	45	4½

a/ Measuring point was usually top of casing, top of pipe clamp or top of well curb; it was above ground level unless below ground indicated by minus (-) sign.
b/ B, bucket; C, cylinder; W, windmill; G, gasoline; E, electric; H, hand; number indicates horsepower.

See "Logs of W. P. A. test wells" for all records of test wells
(Chemical analyses of water from these wells are in the table of analyses)

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
1	1.5	7.2	July 8, 1937	C,H	None	Creek bottoms	Steel casing. Furnished water while building 14 miles of concrete highway. Published in "Water Supply Paper.
2	3.0	74.8	July 9, 1937	C,W	S	In valley	Steel casing. Published in Water Supply Paper.
3	0.8	41.2	May 13, 1938	C,W	S	do.	Do.
5	--	--	--	C,W	S	River bottoms	Galvanized iron casing.
10	2.0	26.8	Apr. 25, 1940	C,W	S	Gentle slope	Galvanized iron casing. Supplies water for 150 head of stock.
11	2.0	11.3	do.	C,W	D,S	do.	Galvanized iron casing.
12	1.0	12.1	do.	C,H	D	do.	Dug well.
13	1.0	48.3	do.	C,W	S	do.	Galvanized iron casing.
14	--	--	--	C,W	D,S	do.	Do.
15	--	--	--	--	S	Creek bottoms	Reported flow, 15 gallons a minute from seeps. White deposits around
16	0.5	14.6	Nov. 8, 1939	C,W	None	In valley	Steel casing. openings.
17	0.3	31	e/	C,W	S	River bottoms	Do.
24	--	--	--	C,W	S	Gentle slope	Galvanized iron casing.
25	--	--	--	--	S	Creek bank	Dry when visited. Reported sometimes flows 30 gallons a minute from
26	0.5	32.6	Nov. 8, 1940	C,W	S	Gentle slope	Steel casing. sandstone.
27	--	--	--	--	S	In draw	
28	--	--	--	C,W	S	Creek bank	Galvanized iron casing.
29	--	--	--	C,W	S	do.	Do.
30	1.0	22.2	Mar. 6, 1940	C,W	D,S	River bottoms	Galvanized iron casing. Supplies water for 125 head of cattle.
36	1.8	20.4	Oct. 10, 1939	C,W	S	do.	Steel casing.
38	--	--	--	C,W	S	In valley	Do.
39	0.5	15.6	Oct. 23, 1939	C,N	None	do.	Steel casing. Well 38 is 25 feet northwest.
40	2.0	40.5	do.	C,N	None	do.	Steel casing.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
41	20 miles northwest	60 NW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. H B. B. B. & C.	J. D. Lard	--	--	48	4 $\frac{1}{2}$
d/ 42	do.	do.	do.	do.	--	--	Spring	--
d/ 43	do.	6, NW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. B H. & G. N.	do.	--	--	15	4
d/ 44	do.	do.	do.	do.	--	--	15	4
45	19 $\frac{1}{2}$ miles northwest	do.	do.	do.	--	--	Spring	--
46	19 miles northwest	7, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	--	Spring	--
d/ 47	17 $\frac{1}{2}$ miles northwest	1, SW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. A-4 C. I. F.	do.	--	Old	--	1 $\frac{1}{4}$
48	14 $\frac{1}{2}$ miles northwest	6, SE $\frac{1}{4}$ SE $\frac{1}{4}$	B. B. B. & C.	J. L. Wells	--	--	77	4 $\frac{1}{2}$
49	13 $\frac{1}{2}$ miles northwest	8, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. F. Rasor	--	Old	93	4 $\frac{1}{2}$
d/ 50	15 $\frac{1}{2}$ miles northwest	55, NE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. C G. & M.	Ledrick Bros.	Chicken Creek Oil Co.	1939	6,845	--
51	do.	do.	do.	do.	Shorty Haskell	1931	200	10
d/ 52	16 $\frac{1}{4}$ miles northwest	8, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. A-5 E. L. & R. R.	do.	--	--	33	5
53	19 miles northwest	38, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. C G. & M.	Texas-Mexico Land & Cattle Co.	--	--	238	6
d/ 54	17 miles northwest	7, SE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. A-5 E. L. & R. R.	Ledrick Bros.	--	Old	--	36
d/ 55	16 $\frac{1}{2}$ miles northwest	do.	do.	do.	--	Old	--	1 $\frac{1}{4}$
d/ 56	17 miles northwest	58, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. C G. & M.	do.	--	1924	5,975	--
d/ 57	19 miles northwest	34, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	E. J. Dunigan, Jr.	1939	--	10
d/ 58	do.	do.	do.	do.	do.	1939	5,425	--
59	do.	1, SE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. A-5 E. L. & R. R.	do.	--	Old	--	4 $\frac{1}{2}$
d/ 60	20 $\frac{1}{2}$ miles northwest	29, NE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. C G. & M.	Mrs. P. A. Worley	--	--	191	6 $\frac{1}{4}$
61	21 $\frac{1}{2}$ miles northwest	30, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	230	6
62	do.	14, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	Old	300	6
63	do.	2, SW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. C H. & G. N.	do.	--	--	172	6 $\frac{1}{4}$
64	do.	1, cen. E $\frac{1}{2}$	blk. H	do.	--	--	--	6 $\frac{1}{2}$
65	22 miles northwest	8, --	blk. 46 H. & T. C.	do.	--	--	Spring	--
66	23 miles northwest	10, cen.	do.	Mrs. P. A. Worley	--	--	28	6 $\frac{1}{4}$

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
41	1.5	32.3	e/	C,W	D,S	In valley	Steel casing.
42	--	--	--	--	--	Hilltop	Reported water used to flow through 2-inch pipe from sand and gravel.
43	--	--	--	--	None	In valley	Fails in drought.
44	1.1	10.8	Oct. 23, 1940	C,H	D,S	Creek bank	Steel casing.
45	--	--	--	--	S	do.	Estimated flow, 20 gallons a minute from many seeps in sand along Indian
46	--	--	--	--	S	do.	Estimated flow, one gallon a minute from many seeps along Indian
47	--	--	--	C,H	None	Creek bottoms	Creek.
48	--	--	--	C,W	D,S	In valley	Steel casing.
49	--	90	e/	C,W	D,S	do.	Do.
50	--	--	--	--	--	Hilltop	Oil test. See log.
51	--	160	e/	C,G	D,Ind	do.	Supplied water for oil test. Steel casing.
52	--	--	--	C,W	S	Creek bottoms	Steel casing.
53	2.0	215.0	e/	C,W	S	Gentle slope	Do.
54	--	--	--	C,H	None	Creek bottoms	Dug well. Caved above water level.
55	--	--	--	C,H	None	do.	Steel casing. Filled up.
56	--	--	--	--	--	do.	Oil test.
57	--	--	--	--	--	Hilltop	Supplied water for oil test.
58	--	--	--	--	--	--	Oil test. See log.
59	--	--	--	C,H	D,S	In valley	Steel casing.
60	0.5	140.6	Nov. 16, 1940	C,W	S	Gentle slope	Do.
61	--	--	--	C,W	S	Ridge-top	Do.
62	--	--	--	C,W	S	Hill-side	Do.
63	0.6	134.8	Nov. 16, 1939	C,W	S	do.	Do.
64	--	--	--	C,W	D,S	Gentle slope	Do.
65	--	--	--	--	S	Creek bottoms	Reported seeps supply pool with water.
66	1.1	17.6	Nov. 16, 1939	C,W	S	do.	Steel casing.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/ 67	23 miles northwest	10, cen.W	blk. 46 side H. & T. C.	Mrs. P. A. Worley	--	Old	18	4 $\frac{1}{2}$
68	do.	18, NE $\frac{1}{4}$ SW $\frac{1}{4}$	blk. C G. & M.	do.	--	Old	175+	--
69	24 miles northwest	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. D E. L. & R. R.	do.	--	Old	180	--
c/ 70	do.	do.	do.	do.	--	--	26	4
71	23 $\frac{1}{2}$ miles northwest	3, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	Buz Fay	1939	120+	6
72	24 $\frac{1}{2}$ miles northwest	9, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. C G. & M.	do.	--	Old	239	6
73	25 miles northwest	6, SW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. 44 H. & G. N.	Texas-Mexico Land & Cattle Co.	--	Old	225+	--
74	23 $\frac{1}{2}$ miles northwest	42, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. C G. & M.	do.	--	Old	280+	7
75	24 $\frac{1}{2}$ miles northwest	center	G. S. Ross sur.	do.	--	Old	--	6
76	26 miles northwest	3, SW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. F H. & G. N.	J. W. Morrison	--	Old	--	5
77	do.	36, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. 44 H. & G. N.	Texas-Mexico Land & Cattle Co.	--	Old	--	6
78	25 $\frac{1}{2}$ miles northwest	center	do.	do.	--	--	--	6
79	27 $\frac{1}{2}$ miles northwest	27, near cen.	blk. 46 H. & T. C.	do.	--	--	Spring	--
80	29 miles northwest	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	J. Lewis sur.	J. W. Morrison	--	Old	36	4 $\frac{1}{2}$
d/ 81	28 $\frac{1}{2}$ miles northwest	3, NW $\frac{1}{4}$	Ed Bandholtz sur.	do.	--	--	26	36
82	do.	do.	do.	do.	--	--	25+	4 $\frac{1}{2}$
83	do.	--	A. Barclay sur.	do.	--	Old	50+	4 $\frac{1}{2}$
84	do.	--	do.	do.	--	1939	80	6
d/100	20 miles north	136, NW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. 42 H. & T. C.	A. H. Tandy	--	Old	52	5
101	do.	149, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	A. A. Parsell	--	Old	23	6 $\frac{1}{4}$
d/102	do.	152, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	F. D. Wells	--	Old	52	4 $\frac{1}{2}$
103	21 miles north	153, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	W. R. Hill	--	Old	60	4 $\frac{1}{2}$
104	22 miles north	147, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	83	4
d/105	24 miles north	156, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	A. A. Parsell	--	--	Spring	--
106	21 $\frac{1}{2}$ miles north	154, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. R. Hill	--	Old	118	6 $\frac{1}{2}$
107	20 miles north	160, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	A. A. Parsell	-- Massey	--	50	6

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
67	--	--	--	None	None	River bottoms	Steel casing.
68	--	--	--	C,W	S	Flat	
69	--	--	--	C,W	D,S,I	Ridge-top	Steel casing. Irrigates trees and garden.
70	1.0	6.9	Oct. 9, 1939	C,H	D,S	Creek bottoms	Steel casing.
71	--	--	--	C,W	S	Gentle slope	Do.
72	1.5	221.9	Oct. 9, 1939	C,W	S	Sand-hill	Steel casing. Pumping when measured.
73	--	--	--	C,W	S	Side of draw	
74	--	--	--	C,W	D,S	Side of ridge	Steel casing.
75	--	--	--	C,W	S	Sand-hill	Do.
76	--	--	--	C,W	S	do.	Do.
77	--	--	--	C,W	S	do.	Do.
78	--	--	--	C,W, G,2	--	do.	Do.
79	--	--	--	--	S	Head of draw	Reported flow, 100 gallons a minute from many seeps in sand and gravel.
80	0.3	14.2	Oct. 25, 1939	C,W	S	Creek bottoms	Steel casing. Known as "Garden Springs." Reported weak supply.
81	0.5	17.6	do.	C,H	D,S	In valley	Galvanized iron casing.
82	--	--	--	C,W	D,S	do.	Steel casing. 8 feet south of well 81.
83	--	--	--	C,W	S	Creek bottoms	Steel casing.
84	--	25	e/	C,W	S	do.	Steel casing. 300 yards south of well 83.
100	1.0	9.5	Oct. 10, 1939	C,W	S	River banks	Steel casing. Well in Hemphill County.
101	--	--	--	C,W	S	In valley	Steel casing.
102	0.5	12.7	Oct. 10, 1939	C,W	S	River bottoms	Do.
103	--	--	--	C,W	D,S	In valley	Do.
104	--	46	e/	C,W	S	do.	Do.
105	--	--	--	--	S	Head of canyon	Flows well during wet season.
106	--	109	e/	C,W	S	Edge of draw	Steel casing.
107	--	--	--	C,W	D,S	In valley	Galvanized iron casing.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
108	20 miles north	165, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. 42 H. & T. C.	A. A. Parsell	-- Massey	1907	27	6
109	do.	177, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Mrs. -- Morrison	--	--	58	6
110	21 miles north	178, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Tandy Sisters	--	--	55	6
111	20 $\frac{1}{2}$ miles north	184, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	R. B. Killebrew	--	--	54	6
112	21 miles north	189, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	--	44	6
113	20 $\frac{1}{3}$ miles north	197, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Tandy Sisters	--	--	19	--
117	21 $\frac{1}{2}$ miles north	201, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	R. B. Killebrew	--	--	36	5 $\frac{1}{2}$
118	22 $\frac{1}{2}$ miles north	207, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	33	4 $\frac{1}{2}$
d/119	do.	do.	do.	do.	--	--	--	4
122	22 miles north	220, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	43	6
123	21 $\frac{1}{2}$ miles northwest	221, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Tandy Sisters	--	Old	23	6
124	22 $\frac{1}{2}$ miles northwest	1, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T. White sur.	W. I. Whitsell	--	--	76	6
127	22 miles northwest	-- SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	--	--
128	19 miles north	187, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. 42 H. & T. C.	F. McMordie	--	--	--	--
129	do.	198, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	D. D. Payne	--	Old	35	--
d/130	do.	199, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	Old	29	4 $\frac{1}{2}$
131	18 miles north	--	Clay County School Land	W. T. Hammond	--	-- Spring	--	--
132	do.	--	do.	do.	--	Old	--	--
133	do.	--	do.	do.	--	Old	19	6
d/135	17 $\frac{1}{2}$ miles north	--	do.	do.	Roco Oil Co.	--	440	--
136	15 $\frac{1}{2}$ miles northwest	96, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. C G. & M.	A. G. Hammond	--	--	--	--
137	14 miles northwest	97, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	44	4 $\frac{1}{2}$
138	13 miles northwest	69, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	--	152	6
139	14 miles northwest	80, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	1938	199	6
143	13 $\frac{1}{2}$ miles north	90, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. H. Jones	--	Old	37	6
144	12 miles north	89, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	F. McMordie	--	Old	47	5

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
108	2	21.1	Feb. 29, 1940	C,W	S	In valley	Galvanized iron casing to bottom. Supplies water for 100 head of cattle.
109	--	--	--	C,W	D,S	Gentle slope	Galvanized iron casing. Supplies water for 150 head of cattle.
110	1.0	47.1	Mar. 14, 1940	C,W	S	In draw	Galvanized iron casing. Supplies water for 250 head of cattle.
111	0.7	47.3	Feb. 29, 1940	C,W	S	do.	Galvanized iron casing. Supplies water for 50 head of cattle.
112	1.0	37.1	do.	C,W, G, 2 $\frac{1}{2}$	D,S	Gentle slope	Galvanized iron casing. Supplies water for 120 head of cattle.
113	0.3	12.4	Oct. 10, 1939	C,W	S	do.	
117	--	--	--	C,W	S	do.	Galvanized iron casing.
118	1.0	21.5	Mar. 8, 1940	C,W	S	do.	Do.
119	--	--	--	C,W	S	do.	Galvanized iron casing. 100 feet north of well 118. Well sanded up.
122	2.0	20.5	Feb. 29, 1940	C,W	D,S	do.	Galvanized iron casing. Supplies water for 8 head of horses.
123	2.0	14.5	e/	C,W	S	do.	Galvanized iron casing. Supplies water for 120 head of cattle.
124	3.0	65.8	Mar. 6, 1940	C,W	S	do.	Galvanized iron casing.
127	--	--	--	C,W	S	River bottoms	
128	--	--	--	--	--	River	Sample from Canadian River.
129	--	--	--	C,W	D,S	River valley	
130	2.5	17.7	Oct. 17, 1939	C,W	S	do.	Steel casing.
131	--	--	--	--	S	Creek banks	Reported flow, 20 gallons a minute from seeps along creek.
132	--	--	--	C,W	S	Creek bottoms	
133	0.0	10.4	Oct. 17, 1939	C,H	D,S	do.	Steel casing.
135	--	--	--	--	--	--	Oil test.
136	--	--	--	C,W	S	In valley	
137	--	--	--	C,W	S	Edge of draw	Steel casing.
138	1.0	136.7	Nov. 24, 1939	C,W	S	do.	Steel casing. Pumping when measured.
139	--	--	--	C,W	S	In valley	Steel casing.
143	3.0	31.7	Oct. 17, 1939	C,W	S	do.	Steel casing. Pumping when measured.
144	1.1	45.9	Oct. 30, 1939	C,W	S	do.	Do.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
145	9 $\frac{1}{2}$ miles north	77, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. B-1 H. & G. N.	N. H. Read	--	Old	33+	5
146	10 $\frac{3}{4}$ miles north	86, NE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. C G. & M.	F. McMordie	--	Old	131	4 $\frac{1}{2}$
147	14 miles north	8, SW $\frac{1}{2}$ NE $\frac{1}{4}$	blk. A-1 E. L. & R. R.	do.	--	Old	153	5
148	15 miles north	11, SE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	--	111	5
149	do.	125, cen. NE $\frac{1}{4}$	7 blk. C G. & M.	do.	--	Spring	--	--
150	do.	9, SE $\frac{1}{4}$ SW $\frac{1}{4}$	A-2 E. L. & R. R.	do.	--	Old	34	6
152	16 miles north	7, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	Old	18	4 $\frac{1}{2}$
155	17 miles north	2, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	D. D. Payne	--	--	31+	4 $\frac{1}{2}$
156	17 $\frac{1}{2}$ miles north	5, SE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	F. McMordie	--	--	30	--
d/162	18 miles north	123, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	--	17	30
163	do.	do.	do.	do.	--	--	56	4 $\frac{1}{2}$
d/164	do.	123, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	Gulf Refining Co.	1939	1,000+	--
d/165	17 $\frac{1}{2}$ miles north	18, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. A-1 E. L. & R. R.	do.	--	1939	167	6
166	18 miles north	174, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. 42 H. & T. C.	F. M. Chambers	--	Spring	--	--
167	18 $\frac{1}{2}$ miles north	174, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	--	33	6- 3/8
168	17 miles north	17, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. A-1 E. L. & R. R.	F. McMordie	--	--	20	4 $\frac{1}{2}$
169	16 $\frac{1}{2}$ miles north	15, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	--	24	5
d/170	17 $\frac{1}{2}$ miles north	27, SE $\frac{1}{2}$ NE $\frac{1}{4}$	E. Polley sur.	G. A. Mahler	--	Old	19	4 $\frac{1}{2}$
171	do.	N cen. W side	J. C. Shule sur.	Mrs. M. Waterfield	--	Old	42	4 $\frac{1}{2}$
172	17 miles north	--, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	Spring	--	--
173	16 miles north	115, SE $\frac{1}{2}$ SW $\frac{1}{4}$	blk. C G. & M.	G. A. Mahler	--	Spring	--	--
d/174	14 miles north	109, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	Gibson Oil Corp.	--	4,185	--
175	12 $\frac{1}{2}$ miles north	6, NW $\frac{1}{4}$ SW $\frac{1}{4}$	B. S. & r.	A. C. Taylor	--	Old	80+	4 $\frac{1}{2}$
176	10 $\frac{1}{2}$ miles north	5, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	1878	80	3 $\frac{1}{2}$
177	10 miles north	80, NE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. B-1 H. & G. N.	do.	--	Spring	--	--
178	11 $\frac{1}{2}$ miles north	4, NW $\frac{1}{4}$ NE $\frac{1}{4}$	B. S. & F.	do.	--	1939	269	4 $\frac{1}{2}$

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
145	--	--	--	C,W	S	Gentle slope	Steel casing.
146	2.0	110.7	Oct. 30, 1939	C,W	S	do.	Do.
147	1.4	108.2	do.	C,W	S	Side of draw	Steel casing. Pumping when measured.
148	--	--	--	C,W	S	Creek bottoms	Steel casing.
149	--	--	--	--	S	Head of draw	Reported flow, 5 gallons a minute from red sandstone.
150	0.8	17.5	Nov. 3, 1939	C,W	S	Creek bottoms	Steel casing.
152	1.2	16.1	Oct. 31, 1939	C,W	S	do.	Do.
155	--	--	--	C,W	S	In valley	Do.
156	2.0	18.2	Oct. 27, 1939	C,W	S	Creek bottoms	Pumping when measured.
162	--	--	--	C,W	D,S	do.	Dug well. Wood casing.
163	--	--	--	C,W	S	In valley	Steel casing. Pumping when measured.
164	--	--	--	--	--	Ridge-top	Geophysical test.
165	1.0	115.4	Oct. 27, 1939	C,G, 6	S	Gentle slope	Steel casing. Well used when filling trench silo.
166	--	--	--	--	S	Creek bottoms	Supplies water to pool 75 feet in diameter.
167	1.5	16.6	Nov. 1, 1939	C,W	S	do.	Steel casing.
168	1.0	9.8	Oct. 28, 1939	C,W	S	do.	Steel casing. Pumping when measured.
169	--	--	--	C,W	S	do.	Steel casing.
170	3.0	17.8	Oct. 15, 1939	C,W	S	do.	Do.
171	--	--	--	C,W	S	In valley	Steel casing.
172	--	--	--	--	--	Creek bank	Reported flow, 10 gallons a minute from sand in west bank of Wagon
173	--	--	--	--	S	In draw	Reported slight flow from Creek sandstone.
174	--	--	--	--	--	Side of ridge	Oil test. See log.
175	--	--	--	C,W	S	In draw	Steel casing.
176	--	--	--	C,W	D,S	do.	Do.
177	--	--	--	--	S	Side of canyon	Reported slight flow from sandstone in canyon wall about 40 feet above
178	1.0	231.1	Sept. 30, 1939	C,W	S	Side of bridge	Steel casing. canyon floor.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
200	8 $\frac{1}{4}$ miles northeast	59, NW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. B-1 H. & G. N.	J. H. Whitson	--	Old	147	5 $\frac{1}{2}$
201	8 $\frac{1}{4}$ miles northeast	58, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	-- Spring		--
202	6 $\frac{3}{4}$ miles northeast	34, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Citizens National Bank	--	--	189	4 $\frac{1}{2}$
203	do.	28, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	103	4 $\frac{1}{2}$
204	4 $\frac{3}{4}$ miles north	5, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	B. F. A. Byrum	--	--	--	--
d/205	4 miles north	37, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. M-2 H. & G. N.	F. W. Osborne	--	Old	68	5
206	4 $\frac{1}{2}$ miles north	6, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. B-1 H. & G. N.	B. F. A. Byrum	--	--	--	4 $\frac{1}{2}$
d/207	4 $\frac{1}{4}$ miles north	7, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	--	--	6
d/208	5 $\frac{3}{4}$ miles north	24, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	N. H. Read	Lee Chisum	Old	375	5
209	6 $\frac{1}{2}$ miles north	37, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Amarillo Livestock Co.	do.	1909	400+	6
d/210	8 miles north	56, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	298	5
211	7 miles north	37, NE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. B-2 H. & G. N.	N. H. Read	--	--	--	7
212	5 $\frac{1}{2}$ miles north	23, NW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. B-1 H. & G. N.	do.	--	--	Tank	--
213	5 $\frac{1}{2}$ miles north	23, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	Tank	--
214	5 miles northwest	9, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Mrs. J. O. Burnett	--	--	Tank	--
215	4 miles northwest	99, SE $\frac{1}{4}$ SW $\frac{1}{4}$	blk. M-2 B. S. & F.	H. J. McCuiston	--	--	509	4 $\frac{1}{2}$
216	do.	99, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Mrs. J. O. Burnett	--	--	432	4 $\frac{1}{2}$
217	3 $\frac{3}{4}$ miles northwest	100, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	R. L. Simmons	Lee Chisum	1919	377	4 $\frac{1}{2}$
218	5 miles northwest	131, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. R. Cowan	--	--	350	5
219	6 miles northwest	3, E end	blk. X C. W. Nickel	B. P. Seitz	Frank Neal	--	440	4 $\frac{1}{2}$
220	5 $\frac{1}{4}$ miles northwest	10, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. B-1 H. & G. N.	M. K. Heare	--	--	326	6
221	6 miles northwest	10, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. B. Talley	--	1908	415	4 $\frac{1}{2}$
d/222	8 $\frac{1}{2}$ miles northwest	42, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	M. W. McCuiston	--	Old	--	5

✓ Measuring point was usually top of casing, top of pipe clamp or top of well curb; it was above ground level unless below ground indicated by minus (-) sign.

c/ B, bucket; C, cylinder; W, windmill; G, gasoline; E, electric; H, hand; number indicates horsepower.

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
200	--	--	--	C,W	S	In valley	Steel casing.
201	--	--	--	--	S	In draw	Reported flow, 5 gallons a minute from seeps in sandstone.
202	1.3	167.7	Oct. 19, 1939	C,W	S	Side of draw	Steel casing.
203	--	--	--	C,W	S	In valley	Do.
204	--	--	--	C,W	S	Creek bottoms	
205	1.0	64.5	Oct. 18, 1939	C,W	S	do.	Steel casing.
206	--	--	--	C,W	S	Side of ridge	Do.
207	--	--	--	C,W	S	Gentle slope	Do.
208	1.5	335.8	Sept. 28, 1939	None	None	In draw	Do.
209	--	--	--	C,W	D,S,I	Ridge-top	Steel casing. Irrigates garden.
210	1.0	285.4	Sept. 28, 1939	None	None	Edge of draw	Steel casing.
211	--	--	--	C,W	S	Gentle slope	Do.
212	--	--	--	--	S	In draw	Earth tank about 1/3 acre in area and maximum depth of 10 feet formed by an earth dam across draw.
213	--	--	--	--	S	do.	Earth tank about 1/4 acre in area and maximum depth of 10 feet formed by an earth dam across draw.
214	--	--	--	--	S	do.	Do.
215	--	--	--	C,W	D,S	Gentle slope	Galvanized iron casing.
216	--	--	--	C,W	D,S	do.	Do.
217	--	337	e/	C,W	D,S	do.	Galvanized iron casing. Well drilled to 447 feet but cased back to
218	--	306	e/	C,W, G,2	D,S,	Flat	Galvanized iron casing. 337 feet.
219	--	325	e/	C,W	D,S	Gentle slope	Galvanized iron casing to bottom.
220	2.0	294.6	Dec. 18, 1939	C,W	D,S	do.	Galvanized iron casing.
221	--	--	--	C,W	D,S	do.	Galvanized iron casing to bottom.
222	--	--	--	C,W	S	Ridge-top	Steel casing.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/223	9½ miles northwest	48, SE½SE¼	blk. B-1 H. & G. N.	T. S. Hanna	--	--	428	6-5/8
224	10 miles northwest	73, SW½SW¼	do.	N. H. Martin	--	Old	395	4½
225	10 miles northwest	74, SE½SE¼	do.	W. R. Ewing	--	--	397	4½
d/226	11 miles northwest	47, NE½NE¼	do.	J. F. Roson	--	Old	--	4½
227	12 miles northwest	46, NW½NW¼	do.	do.	--	Old	143	5
d/228	10 miles northwest	44, SW½SW¼	do.	N. H. Read	--	Old	186	4½
229	11 miles northwest	2, NW½SW¼	blk. 2 I. & G. N.	Miami Land & Cattle Co.	--	Old	234+	4
d/230	do.	do.	do.	do.	--	Old	234	4
231	8½ miles west	95, SW½NW¼	blk. M-2 B. S. & F.	Alfred Cowan	--	--	370±	5
232	5½ miles west	160, NE½NE¼	do.	C. R. Cowan	--	--	256	4½
d/233	7 miles west	165, NW½SW¼	do.	W. R. Cowan	Lee Chisum	1910	400+	--
234	8 miles west	200, SE½NE¼	do.	John Haggard	do.	Old	400±	--
235	9½ miles southwest	6, NE½NE¼	blk. 2 I & G. N.	Mrs G. N. McCuistion	--	Old	400±	4½
236	9½ miles west	8, NE½NW¼	do.	Ellis Locke	--	1912	434	5
237	8 miles west	201, SE½NE¼	blk. M-2 B S & F	W. H. Gay	--	1911	394	4½
d/238	9 miles west	8, SE½SE¼	blk. 2 I. & G. N.	W. B. Kitchens	--	Old	--	5
d/239	10 miles west	9, NW½SW¼	do.	S. D. Shartzler	--	1925	467	5½
240	do.	10, NW½NW¼	do.	J. P. Osborne	--	1912	420	4½
241	10½ miles west	11, NW½SW¼	do.	do.	--	1914	380	5
1/242	10½ miles west	12, NW½SE¼	do.	E. D. Hobart	--	--	125	6
1/243	11 miles southwest	222, SE½NW¼	blk. M-2 B. S. & F.	J. E. Welton	--	1890	30	48
244	do.	222, cen.	do.	do.	--	--	Spring	--
245	10¼ miles southwest	222, SE½NW¼	do.	do.	--	--	Spring	--
246	10½ miles southwest	222, NW½NE¼	do.	do.	--	1919	265	4½
1/247	do.	do.	do.	do.	--	1899	20	48
1/248	10 miles southwest	205, SW½SW¼	do.	M. W. O'Loughlin	--	--	Spring	--

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
223	--	--	--	C,G, $\frac{1}{4}$	D,S	Gentle slope	Steel casing. Supplies water for 40 head of stock.
224	--	335	e/	C,W	D,S	do.	Galvanized iron casing, lower 10 feet perforated. Supplies water for
225	--	--	--	C,W	D,S	do.	Galvanized about 125 head of stock. iron casing. Supplies water for
226	--	--	--	None	None	Flat	Well filled. about 60 head of stock.
227	3.0	119.9	Oct. 13, 1939	C,W	S	Creek bank	Steel casing. Pumping when measured.
228	0.6	145.8	do.	C,W	D,S	In valley	Steel casing.
229	2.0	275.9	Sept. 20, 1939	C,W	S	Gentle slope	Do.
230	--	--	--	None	None	do.	Steel casing. Well 229 is 50 feet southeast.
231	--	--	--	C,W	D,S	Side of ridge	Steel casing.
232	--	208	e/	C,W	S	In draw	Galvanized iron casing.
233	--	--	--	C,W	D,S	--	
234	--	--	--	C,W	D,S	Flat	
235	--	--	--	C,W	D,S	Side of ridge	Steel casing. Supplies water for about 100 head of cattle.
236	--	386	e/	C,W	D,S	Gentle slope	Galvanized iron casing.
237	--	--	--	C,W	D,S	Flat	
238	--	--	--	C,W	D,S	do.	Galvanized iron casing.
239	--	--	--	C,W	D	do.	Do.
240	--	370	e/	C,W	S	Gentle slope	Do.
241	--	358	e/	C,W, E,2	D,S	do.	Do.
242	1.0	110.2	Sept. 18, 1939	C,W	S	Ridge-top	Steel casing.
243	1.0	20.0	do.	C,H	D,S	Creek bottoms	Dug well. 3-foot concrete casing at top. Reported weak supply.
244	--	--	--	--	S	Creek bank	Reported slight flow from seeps in Red Deer Creek bank, which never
245	--	--	--	--	S	do.	Reported slight flow from fails. sand and gravel in Red Deer Creek
246	--	165	e/	C,W	D,S	In valley	Steel bed, which never fails. casing.
247	--	--	--	--	None	do.	Dug well. Caved and filled.
248	--	--	--	--	--	Creek bed	Dry. Reported to have flowed several years ago.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in)
249	9 $\frac{1}{2}$ miles southwest	205 NW $\frac{1}{2}$ NE $\frac{1}{2}$	blk. M-2 B. S. & F.	M. W. O'Loughlin	--	--	Spring	--
250	9 $\frac{3}{4}$ miles southwest	188 NW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	do.	--	Old	167	5
253	7 $\frac{1}{2}$ miles southwest	170 SE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	Mrs. Beulah Edge	--	Old	--	6
d/254	7 $\frac{1}{2}$ miles west	190 SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	--	Old	200	6
255	do.	191 NE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	N. M. Maddox	--	--	Tank	--
260	7 miles west	168 SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	E. C. Meador	--	Old	398	4 $\frac{1}{2}$
268	6 $\frac{3}{4}$ miles west	167 SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	Mrs. Beulah Edge	--	1912	392	4 $\frac{1}{2}$
269	5 $\frac{1}{2}$ miles west	158 NE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	L. A. Maddox	Lee Chisum	Old	395	4 $\frac{1}{2}$
270	4 $\frac{1}{2}$ miles west	135 NE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	W. L. Brown	do.	1909	209	4 $\frac{1}{2}$
d/271	6 $\frac{1}{4}$ miles southwest	155 SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Sante Fe R. R.	--	1925	130	4 $\frac{1}{2}$
275	5 $\frac{1}{2}$ miles southwest	138 NE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	M. W. O'Loughlin	Lee Chisum	1899	350	5
d/277	6 miles southwest	139 SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	-- Schenck	1923	2,300	--
d/278	4 $\frac{1}{2}$ miles southwest	123 NW $\frac{1}{2}$ NE $\frac{1}{2}$	blk. M-4 B. S. & F.	do.	--	Old	--	4 $\frac{1}{2}$
279	do.	105 NE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	F. A. Talley	--	1939	--	6
284	5 miles southwest	104 SE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	--	1904	150	--
290	2 $\frac{1}{2}$ miles southwest	93 SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	M. W. O'Loughlin	--	Old	--	6 $\frac{1}{2}$
295	2 $\frac{1}{2}$ miles southwest	104 NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	-- Noblett	--	--	62	--
d/296	3 $\frac{1}{4}$ miles west	126 SW $\frac{1}{2}$ SE $\frac{1}{2}$	do.	J. P. Osborne	--	--	147	5
297	2 $\frac{1}{4}$ miles west	102 SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	H. A. Gill	--	1938	196	--
298	2 miles west	102 NE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	do.	--	--	93	--
d/299	2 $\frac{1}{2}$ miles northwest	102 NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	--	--	116	4 $\frac{1}{2}$
310	1 $\frac{1}{2}$ miles west	94 SW $\frac{1}{2}$ NE $\frac{1}{2}$	do.	J. P. Osborne	Frank Lard	1939	138	12
311	do.	do.	do.	do.	--	--	160	4 $\frac{1}{2}$
d/312	do.	94 SW $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	--	--	80	--

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
249	--	--	--	--	--	In canyon	Slight flow.
250	0.5	121.8	Sept. 19, 1939	C,W	S	In valley	Steel casing. Pumping when measured.
253	--	--	--	C,W	D,S	do.	
254	1.5	56.5	Sept. 19, 1939	C,W	S	In canyon	Steel casing.
255	--	--	--	--	S	Creek bed	Earth tank about 5 acres in area and 15 feet maximum depth formed by earth
260	--	--	--	C,W	D,S	Edge of draw	Steel dam across small creek. casing.
268	--	--	--	C,W	D,S	Flat	Galvanized iron casing.
269	--	--	--	C,W	D,S	do.	
270	--	--	--	C,W	D,S	In valley	Steel casing.
271	2.0	103.7	Sept. 16, 1939	C,H	None	do.	Steel casing. Well formerly used by grain elevator.
275	--	290	e/	C,W	D,S	Creek bottoms	Steel casing.
277	--	--	--	--	--	Ridge-top	Oil test.
278	--	--	--	N	None	In valley	Filled to top.
279	--	--	--	C,W	S	do.	Steel casing.
284	--	40	e/	C,W	--	do.	
290	--	--	--	C,W	S	Gentle slope	Steel casing, 5-inch inside 6 $\frac{1}{2}$ -inch at top.
295	1.0	57.4	Sept. 25, 1939	C,W	D,S	In valley	
296	3.0	122.6	Sept. 21, 1939	C,W	S	In draw	Steel casing, 3 $\frac{1}{2}$ -inch inside 5-inch at top.
297	--	--	--	C,W	S	Gentle slope	Supplies water for 70 head of cattle.
298	--	--	--	C,W	D,S,I	do.	Supplies water for about 30 head of stock.
299	--	--	--	C,W	S	do.	Galvanized iron casing.
310	--	50	e/	T,E, 20	S,I	In valley	Steel casing, bottom 60 feet perforated. Water from sand and gravel at 78 to 138 feet. Other water at 50 feet. Reported 80 yards of gravel added to well. Reported yield, 500 gallons a minute. Known
311	2.0	43.6	Sept. 25, 1939	C,W	S	do.	Steel casing. Measured as Well 3. when well pumping.
312	--	--	--	C,W	D,S	do.	

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/313	1 $\frac{1}{2}$ miles west	94, SW $\frac{1}{2}$ NE $\frac{1}{2}$	blk. M-4 B. S. & F.	J. P. Osborne	-- Mathis	1938	112	18
d/314	do.	94, SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	do.	1938	108	--
315	In Miami	71, NE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. M-2 H. & G. N.	J. O. Duniven	J. O. Duniven	1930	55	60
d/316	do.	71, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	do.	1931	78	60
317	do.	71, NE $\frac{1}{4}$ NW $\frac{1}{2}$	do.	A. J. Nickel	A. J. Nickel	1930	58	60
318	do.	do.	do.	Mrs Billie Loughlin	--	1934	--	60
d/319	do.	71, NW $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Wes. Byers	--	1935	--	60
d/320	do.	do.	do.	Panhandle Power & Light Co.	--	1924	64	54
d/321	do.	do.	do.	do.	Lee Chisum	1915	70	8
d/322	do.	do.	do.	do.	do.	1923	155	5- 5/8
d/323	do.	do.	do.	do.	do.	1919	70	4 $\frac{1}{2}$
324	do.	71, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Roberts County	--	--	97	60
d/325	do.	62, SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	A. S. Casey	A. S. Casey	1925	65	3 $\frac{1}{2}$
326	do.	62, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	Mrs. -- Wade	Lee Chisum	--	69	4 $\frac{1}{2}$
327	do.	62, SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	R. L. Howard	--	--	66	4 $\frac{1}{2}$
d/328	do.	71, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Mrs. J. E. George	--	1905	83	5

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
313	0.5	45.8	Sept. 25, 1939	N	None	In valley	Drilled for irrigation. Caved and abandoned. Known as Well 2.
314	--	--	--	N	None	do.	Was drilled as test well for irrigation. Known as Well 1.
315	--	30	e/	Cf, E	D, S, I	do.	Irrigates 4 acres. Top 30 feet dug and cased with concrete; 4½-inch perforated steel casing from 30 feet to bottom. Reported yield, 80 gallons a minute.
316	--	--	--	--	--	do.	Top 36 feet dug and cased with concrete; 42 feet of 4½-inch steel casing; with bottom 35 feet perforated. Formerly used for irrigation.
317	2.0	25.6	Sept. 25, 1939	Cf, E, 3	I	do.	Top 26 feet dug and cased with concrete; 32 feet of 6-inch perforated steel casing in bottom. Water reported from sand and gravel; 43 to 58 feet. Irrigated 3 acres in 1939 has irrigated 8 acres. Reported yield, 100 gallons a minute. Temperature 62° F.
318	--	--	--	C, H	D, S	do.	Top 20 feet dug and cased with galvanized iron; 10-inch steel casing to bottom. Well formerly used for irrigation.
319	--	--	--	Cf, E	D, S, I	do.	Dug well. Concrete casing at top and steel casing in bottom.
320	--	41	e/	Cf, E, 5	D	Creek bank	Top 42 feet dug and cased with concrete two wells drilled in bottom; one has 10 feet of 8-inch screen, other has 22 feet of 4½-inch screen. Water reported from sand and gravel at 41 to 48 feet and 53 to 64 feet. "Red Beds" reported at 74 feet. Supplies water for City of Miami. Reported drawdown 14 feet at 130 feet.
321	0	36.7	Sept. 27, 1939	C, E, 1½	P	do.	Cased with 70 feet of steel casing and screen, plugged at bottom. Reported water from sand and gravel at 36 to 60 feet.
322	1.0	37.4	do.	N	None	do.	74 feet of steel casing bottom 35 feet perforated.
323	1.5	38.0	do.	C, E	P	do.	Steel casing to bottom. Perforated and wrapped with wire.
324	--	--	--	Cf, E	D, I	Gentle slope	Dug and drilled well. Reported yield, 125 gallons a minute. Supplies water for courthouse and
325	--	54	e/	C, W, H	D	do.	Galvanized iron casing; bottom 9 feet perforated.
326	1.3	64.8	Jan. 17, 1940	C, W	D, S	--	Galvanized iron casing.
327	2.0	43.2	do.	C, W	D	Gentle slope	Do.
328	2.0	64.9	Jan. 19, 1940	C, W	I	do.	Do.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/329	In Miami	71, NE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. M-2 H. & G. N.	A. W. Gill	--	--	104	5
d/330	do.	do.	do.	Ollie Lyons	--	--	108	5
d/331	1 mile east	62, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. M. Gill	--	--	Spring	--
d/332	1 mile northeast	63, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Miami Cemetery	--	--	--	4 $\frac{1}{2}$
342	$\frac{1}{2}$ mile north	63, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. Burnett	-- Coffee	1903	40	4 $\frac{1}{2}$
343	1 mile north	70, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	Lee Chisum	--	90	4
344	2 miles north	69, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	F. W. Osborne	--	--	--	--
345	1 $\frac{1}{2}$ miles northeast	64, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	67	5
346	2 $\frac{1}{4}$ miles northeast	64, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	--	120	6
358	1 $\frac{1}{2}$ miles northeast	40, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. F. Christopher	--	Old	--	4 $\frac{1}{2}$
359	2 $\frac{1}{4}$ miles northeast	40, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	P. A. Nelson	--	1890	96	6
360	3 miles northeast	34, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Bob McCoy	--	--	90	4 $\frac{1}{2}$
362	do.	38, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	F. W. Osborne	--	Old	--	5
363	3 $\frac{1}{2}$ miles northeast	38, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	Old	--	--
364	4 $\frac{3}{4}$ miles northeast	12, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	B. F. A. Byrum	L. Chisum	Old	29	6
d/365	5 $\frac{1}{4}$ miles northeast	12, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	do.	Old	17?	4 $\frac{1}{2}$
369	4 $\frac{3}{4}$ miles northeast	13, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Bob McCoy	--	--	64	4 $\frac{1}{2}$
382	6 $\frac{1}{2}$ miles northeast	1, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. B-1 H. & G. N.	National Bank of Commerce	--	Old	23	4 $\frac{1}{2}$
385	6 miles northeast	78, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. A-2 H. & G. N.	Mrs. C. Coffee	-- Broughs	1931	106	4 $\frac{1}{2}$
386	5 $\frac{3}{4}$ miles northeast	10, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Bob McCoy	--	Old	96	4 $\frac{1}{2}$
d/387	5 miles east	17, --	D. Kilehen sur.	J. H. Fitch	--	Old	18	36
388	do.	7, SE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. M-2 H. & G. N.	J. M. Gill	--	Old	20?	36
d/389	4 $\frac{1}{2}$ miles east	17, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	A. W. Gill	--	--	Spring	--
d/390	3 $\frac{3}{4}$ miles east	16, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. M. Gill	Lee Chisum	Old	160+	4 $\frac{1}{2}$
d/391	2 $\frac{1}{2}$ miles east	32, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	A. W. Gill	do.	--	80?	4 $\frac{1}{2}$
d/392	2 $\frac{1}{4}$ miles east	31, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	Murphy et al	1927	650	--

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
329	--	--	--	C,W	I	--	Galvanized iron casing.
330	--	--	--	C,W	I	Gentle slope	Galvanized iron casing. Irrigates garden.
331	--	--	--	--	S	In canyon	Dry at present. Reported water seeps from sandstone outcrop in wet season.
332	--	--	--	C,W	I	Hilltop	Steel casing.
342	--	20	e/	C,W	D,S	In valley	Do.
343	2.0	69.8	Oct. 21, 1939	C,W	S	Side of draw	Do.
344	--	--	--	C,W	S	--	
345	0.8	36.4	Sept. 25, 1939	C,W	S	In valley	Steel casing.
346	1.0	45.3	Oct. 20, 1939	C,W	S	In draw	Do.
358	2.0	12.0	Jan. 31, 1940	C,W	S	Flat	Galvanized iron casing.
359	--	66	e/	C,W	D,S,I	Gentle slope	Cased with 85 feet of galvanized iron at top. Supplies water for 70 head of cattle and garden.
360	--	--	--	C,W	D,S	do.	Galvanized iron casing.
362	--	--	--	C,W	D,S,I	do.	Steel casing. Irrigates vegetable garden.
363	--	--	--	C,W	S	In valley	
364	0.5	23.5	Jan. 16, 1940	C,W	D,S	Flat	Galvanized iron casing.
365	1.8	9.2	Jan. 17, 1940	C,W	S	Creek bank	Do.
369	--	--	--	C,W	S	Gentle slope	Do.
382	1.0	16.6	Dec. 4, 1939	C,W	D,S	In valley	Do.
385	--	--	--	C,W	D,S	Gentle slope	Do.
386	--	--	--	C,W	S	do.	Do.
387	0.0	17.0	Oct. 2, 1939	C,W	S	In draw	Dug well. 23 feet galvanized casing at top.
388	--	--	--	C,W	S	do.	Dug well. Reported weak supply.
389	--	--	--	--	S	Creek bank	Does not flow during dry periods.
390	--	--	--	C,W	S	In valley	Steel casing.
391	--	--	--	C,W	S	--	Steel casing. Reported weak supply.
392	--	--	--	--	--	Ridge-top	Oil test.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/393	2 $\frac{1}{4}$ miles east	31, NW $\frac{1}{2}$ NW $\frac{1}{2}$	blk. M-2 H. & G. N.	A. W. Gill	Lee Chisum	1927	300+	6- 5/8
d/394	2 $\frac{1}{4}$ miles southeast	do.	do.	do.	do.	Old	300+	4 $\frac{1}{2}$
395	2 $\frac{1}{4}$ miles southeast	42, NE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	do.	do.	Old	300+	4 $\frac{1}{2}$
396	3 $\frac{1}{2}$ miles southeast	30, NE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	do.	Old	245+	4 $\frac{1}{2}$
397	5 miles southeast	5, SE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	do.	do.	Old	268	4 $\frac{1}{2}$
398	6 $\frac{1}{4}$ miles southeast	--	--	R. B. Mathers	--	1909	260	4 $\frac{1}{2}$
d/399	6 $\frac{1}{2}$ miles southeast	3, SW $\frac{1}{2}$ NE $\frac{1}{2}$	do.	E. Clements	--	Old	374	4 $\frac{1}{2}$
d/400	5 miles southeast	19, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	R. B. Mathers	Lee Chisum	Old	--	4 $\frac{1}{2}$
d/401	do.	do.	do.	do.	do.	Old	344	4 $\frac{1}{2}$
402	do.	19, NW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	Frank Lard	1937	405	4 $\frac{1}{2}$
403	2 $\frac{1}{4}$ miles south	73, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	J. D. Bodenschatz	--	-- Spring		--
d/404	do.	73, SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	--	-- Spring		--
d/405	3 $\frac{1}{2}$ miles south	74, NE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	First State Bank	J. T. Whitlock	1934	2,690	--
d/406	do.	do.	do.	do.	do.	1934	3,500+	--
d/407	do.	do.	do.	do.	do.	1939	4,450+	--
408	do.	do.	do.	do.	J. T. Whitlock & C. S. Seiber	1934	409	6
409	3 $\frac{1}{2}$ miles south	74, SE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	Lee Chisum	Old	400+	4 $\frac{1}{2}$
d/410	4 $\frac{1}{2}$ miles south	75, SW $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Mrs. G. Severtson	do.	1908	358	5
411	4 $\frac{1}{2}$ miles south	58, SW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	Chisum Bros.	do.	1909?	106	6
422	5 miles south	76, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Mart Cunningham	do.	Old	375+	5
d/500	11 $\frac{1}{2}$ miles west	36, SE $\frac{1}{2}$ SE $\frac{1}{2}$	blk. 2 I. & G. N.	J. M. Daugherty	--	--	Tank	--
503	10 $\frac{3}{4}$ miles west	14, NE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	J. Lewis	--	1912	401	4 $\frac{1}{2}$
504	10 $\frac{1}{4}$ miles west	15, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	J. L. Seibers	L. Chisum	1905	415	4 $\frac{1}{2}$
505	10 $\frac{1}{2}$ miles west	16, NW $\frac{1}{2}$ SE $\frac{1}{2}$	do.	Talley & Palaski	--	Old	408	5
506	10 $\frac{3}{4}$ miles west	18, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	P. Pennington	F. Neal	1916	427	4 $\frac{1}{2}$
d/507	11 $\frac{1}{4}$ miles west	33, SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	J. H. Kelly	-- Thomas	Old	450+	6

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
393	--	--	--	N	None	Ridge-top	Casing pulled and well abandoned.
394	--	--	--	N	None	In draw	Steel casing. Filled to 20 feet.
395	--	275	e/	C,W	S	do.	Steel casing.
396	--	--	--	C,W	S	do.	Do.
397	--	265+	e/	C,W	S	do.	Do.
398	--	246	e/	C,W	D,S	do.	Steel casing. Reported weak supply.
399	1.5	341.9	Oct. 5, 1939	C,W	D,S	Ridge-top	Steel casing.
400	--	--	--	N	None	Gentle slope	Caved and filled.
401	1.0	366.6	Oct. 15, 1939	N	None	do.	Steel casing.
402	--	375	e/	C,W	D,S	Ridge-top	Steel casing to bottom.
403	--	--	--	--	--	Head of canyon	Reported slight flow from numerous seeps.
404	--	--	--	--	S	do.	Reported slight flow from one seep.
405	--	--	--	--	--	Side of draw	Oil test. "Red Beds" reported at 500+ feet.
406	--	--	--	--	--	Ridge-top	Do.
407	--	--	--	--	--	do.	Oil test. Still drilling.
408	--	300	e/	C,G, 5	Ind	Side of draw	Steel casing. Reported pumped 100 gallons a minute. Used for drilling
409	--	--	--	C,W	D,S	Ridge-top	Steel casing. oil test.
410	0.5	348.2	Oct. 3, 1939	C,W	D,S	do.	Do.
411	1.0	103.0	do.	C,W	D,S	In draw	20 feet of steel casing at top.
422	--	--	--	C,W	D,S	Gentle slope	Steel casing.
500	--	--	--	--	S	In draw	Earth tank formed by earth dam 17 feet high.
503	--	--	--	C,W	D,S	Gentle slope	Galvanized iron casing.
504	--	300	e/	C,W	D,S	Flat	Do.
505	--	--	--	C,W	D,S	do.	Do.
506	--	382	e/	C,W	D,S	do.	Do.
507	1.0	368.0	Oct. 4, 1939	C,W	D,S	Gentle slope	Steel casing. Known as "Bone Pile Well."

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
508	11 $\frac{3}{4}$ miles west	33, SE $\frac{1}{4}$ SW $\frac{1}{4}$	blk. 2 I. & G. N.	C. L. Broadus	-- Haskell	1914	509	6
509	12 miles west	34, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	W. D. Allen	Lee Chisum	1912	432	4 $\frac{1}{2}$
510	do.	42, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	G. W. Hodges	--	1917	475	5
511	14 miles west	60, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Beulah Edge	Lee Chisum	Old	478	5 $\frac{1}{2}$
d/512	14 $\frac{1}{2}$ miles west	66, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	M. W. O'Loughlin	--	Old	448	--
513	13 $\frac{3}{4}$ miles west	61, cen.	do.	N. M. Maddox	--	Old	400+	4 $\frac{1}{2}$
517	13 $\frac{1}{2}$ miles west	40, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	-- Foreman	--	Old	366	6 $\frac{1}{2}$
525	13 $\frac{3}{4}$ miles west	62, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	W. M. Craven	--	Old	480	5
526	14 miles west	62, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	B. C. Rogers	Lee Chisum	Old	407	5
527	14 $\frac{1}{2}$ miles west	65, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	G. M. Cooper	H. Haskell	1923	390	5 $\frac{1}{2}$
528	15 miles west	64, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	R. J. Sailor	--	1930	400?	4 $\frac{1}{2}$
529	14 $\frac{1}{2}$ miles west	63, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. G. Lyons	--	1910	500	5
530	16 miles west	88, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	T. M. Osborne	H. Haskell	1920	385	5 $\frac{1}{2}$
531	17 miles west	91, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	G. T. Montgomery	Sam Thomas	1914	447	4 $\frac{1}{2}$
532	17 $\frac{1}{2}$ miles west	91, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	C. W. Osborne	--	Old	400+	5
d/533	16 $\frac{3}{4}$ miles west	90, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	L. P. Yoder	--	--	--	4 $\frac{1}{2}$
534	17 $\frac{3}{4}$ miles west	115, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	E. W. Hogan	--	--	488	4 $\frac{1}{2}$
535	do.	73, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Worley Est.	--	Old	400	6
536	19 miles west	116, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. E. Seitz	Sam Thomas	1914	420	4
537	18 $\frac{1}{2}$ miles west	117, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. L. Thomas	Lee Chisum	--	473	4 $\frac{1}{2}$
538	do.	117, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	H. A. Talley	do.	--	495	5
539	18 miles west	113, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. McConnell	--	Old	406	4 $\frac{1}{2}$
545	18 $\frac{1}{2}$ miles west	111, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	--	--	--	280	4 $\frac{1}{2}$
d/546	20 miles west	136, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Orphans Home	--	Old	344	7
547	21 miles west	147, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	O. Theis	--	Old	200+	6
d/548	20 miles west	145, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Orphans Home	--	Old	--	5

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
508	--	340	e/	C,W	D,S	Flat	Galvanized iron casing.
509	--	352	e/	C,W	D,S	--	Do.
510	--	--	--	C,W	D,S	Gentle slope	Do.
511	--	418	e/	C,W	D,S	Flat	Steel casing.
512	--	--	--	C,W	D,S	do.	Well abandoned.
513	--	--	--	C,W	D,S	Gentle slope	Steel casing. 10-inch casing outside of 4 $\frac{1}{2}$ -inch casing at top.
517	--	--	--	C,W	D,S	Flat	Steel casing to bottom.
525	--	--	--	C,W	D,S	do.	Galvanized iron casing.
526	--	377	e/	C,W	D,S	Gentle slope	Do.
527	--	--	--	C,W	D,S	Flat	Steel casing.
528	--	--	--	C,W	D,S	--	Do.
529	--	400	e/	C,W	D,S	Flat	Galvanized iron casing.
530	--	--	--	C,W	D,S	do.	Do.
531	--	380	e/	C,W	D,S	do.	
532	--	300+	e/	C,W	D,S	do.	Steel casing.
533	--	--	--	C,W	--	Gentle slope	Galvanized iron casing.
534	--	--	--	C,W	D,S	do.	Do.
535	--	--	--	C,W	D,S	do.	Do.
536	--	392	e/	C,W	D,S	do.	Galvanized iron casing to bottom.
537	--	--	--	C,W	D,S	do.	Galvanized iron casing.
538	--	--	--	C,W	D,S	do.	Do.
539	--	--	--	C,W	D,S	do.	Do.
545	--	--	--	C,W	D,S	do.	Steel casing.
546	--	324.0	e/	C,W	S	Ridge-top	Do.
547	0.2	195.4	Nov. 21, 1939	C,W	--	Gentle slope	Do.
548	--	--	--	C,W	S	do.	Do.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/549	21 miles west	145, SE $\frac{1}{2}$ SW $\frac{1}{4}$	blk. 2 I. & G. N.	Orphans Home	--	Old	342	6
550	21 $\frac{1}{2}$ miles west	165, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	--	Tank	--
551	24 miles west	193, NW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	B. F. Price	--	Old	180	6
552	do.	193, NE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	1938?	148	6 $\frac{1}{4}$
553	do.	191, NE $\frac{1}{2}$ SW $\frac{1}{4}$	do.	T. J. Price	--	Old	133	6
554	23 $\frac{1}{2}$ miles west	189, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	--	--	6 $\frac{1}{4}$
555	24 miles west	188, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	W. D. Price	--	Old	200+	6
556	23 $\frac{1}{2}$ miles west	187, cen.	do.	O. Theis	--	1939	336	6
557	25 $\frac{1}{2}$ miles west	202, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	Old	152	6
d/558	23 miles west	177, SW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	do.	--	Old	123	6
559	22 $\frac{1}{2}$ miles west	176, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	200+	6
560	21 miles west	149, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	1916	414	6
561	do.	151, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	300+	6
562	18 miles west	108, SE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	A. Combs	--	Old	180	6
d/563	14 miles west	58, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Miami Land & Cattle Co.	--	Old	336	4 $\frac{1}{2}$
564	13 miles west	44, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	Shorty Haskell	1933	300+	6-5/8
d/565	do.	do.	do.	do.	--	Old	303	5
566	11 $\frac{1}{2}$ miles west	31, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	500+	4 $\frac{1}{2}$
567	17 $\frac{3}{4}$ miles west	20, cen. NE $\frac{1}{4}$	do.	Mrs. G. N. McChristian	--	Old	400+	5
568	13 $\frac{1}{2}$ miles west	46, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Miami Land & Cattle Co.	--	Old	174	6
569	13 miles west	47, SE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	G. G. Frashier	--	Old	400+	4 $\frac{1}{2}$
d/570	12 $\frac{1}{2}$ miles northwest	27, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Miami Land & Cattle Co.	--	--	Spring	--
571	13 miles northwest	27, NW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	do.	--	--	Spring	--
c/572	12 $\frac{1}{2}$ miles northwest	24, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	do.	--	Old	136	6
d/573	14 miles northwest	26, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	Old	253	6
574	15 miles northwest	52, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	G. G. Frashier	--	Old	47	4 $\frac{1}{2}$

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topographic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
549	0.5	308.2	Nov. 17, 1939	C,W	S	Ridge-top	Steel casing.
550	--	--	--	--	S	In draw	Earth tank of about 1/8-acre area formed by dam 15 feet high across
551	0.7	144.2	Nov. 14, 1939	C,W	S	Creek valley	Steel casing. draw.
552	1.1	136.4	do.	C,W	S	do.	Steel casing. Measured when pumping.
553	--	--	--	C,W	S	Side of draw	Steel casing.
554	--	--	--	C,W	S	Gentle slope	Do.
555	0.4	196.3	Nov. 17, 1939	C,W	S	do.	Do.
556	--	--	--	C,W	S	do.	Steel casing to bottom.
557	1.0	127.2	Nov. 21, 1939	C,W	S	Creek valley	Steel casing.
558	2.4	90.8	Nov. 17, 1939	C,W	S	Creek bottoms	Do.
559	0.3	118.0	do.	C,W	S	do.	Do.
560	--	325	e/	C,W	D,S	Gentle slope	Do.
561	1.0	169.5	Nov. 21, 1939	C,W	S	do.	Do.
562	2.5	164.2	Oct. 13, 1939	C,W	S	In draw	Do.
563	2.0	324.6	Oct. 4, 1939	N	None	Gentle slope	Do.
564	--	--	--	C,W	S	Ridge-top	Do.
565	--	--	--	N	None	do.	Do.
566	--	--	--	C,W	D,S,I	do.	Steel casing. Irrigates trees and garden.
567	--	--	--	C,W	S	In valley	Steel casing. Supplies water for 300 head of cattle.
568	--	--	--	C,W	S	do.	Steel casing.
569	--	--	--	C,W	D,S	In draw	Do.
570	--	--	--	--	S	do.	Reported flows in wet weather, but fails in drought.
571	--	--	--	--	S	do.	Reported slight flow from under roots of cottonwood tree.
572	1.5	90.9	Nov. 15, 1939	C,W	S	In valley	Steel casing.
573	1.0	224.7	do.	C,W	S	Gentle slope	Do.
574	--	--	--	C,W	S	Creek bottoms	Do.

Records of wells and springs in Roberts County--Continued

No.	Distance from Miami	Section	Block and survey	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/575	15 miles west	73, NE $\frac{1}{2}$ NE $\frac{1}{4}$	blk. 2 I. & G. N.	Miami Land & Cattle Co.	--	Old	94	4 $\frac{1}{2}$
d/576	14 $\frac{1}{4}$ miles west	73, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	247	6
d/577	16 miles west	80, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	G. G. Frashier	--	Old	200+	4 $\frac{1}{2}$
d/578	16 $\frac{1}{2}$ miles west	78, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	--	4
579	17 miles northwest	76, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Texas Mexico Land & Cattle Co.	--	Old	102	5
580	18 miles west	100, SE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	Old	--	6
581	do.	107, NW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	do.	--	Old	--	--
582	22 miles west	154, SW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	O. Theis	--	Old	122	6
d/583	24 miles west	180, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	do.	--	Old	105	6
584	25 miles west	204, SE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	do.	--	Old	154	6
d/585	26 miles west	206, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	do.	--	Old	277	6
586	27 miles west	207, SE $\frac{1}{2}$ SW $\frac{1}{4}$	do.	--	--	Old	--	6

a/ Measuring point was usually top of casing, top of pipe clamp or top of well curb; it was above ground level unless below ground indicated by minus (-) sign.

b/ B, bucket; C, cylinder; W, windrill; G, gasoline; E, electric; H, hand; number indicates horsepower.

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Topo graphic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
575	3.0	61.1	Oct. 4, 1939	C,W	S	Creek bottoms	Steel casing.
576	1.0	233.8	do.	N	None	Ridge-top	Do.
577	--	--	--	C,W	S	In draw	Do.
578	--	--	--	C,W	S	Creek bottoms	Do.
579	0.5	81.1	Nov. 15, 1939	C,W	S	Flat	Do.
580	--	--	--	C,W	S	In draw	Do.
581	--	--	--	C,W	S	Side of ridge	
582	1.0	65.5	Nov. 20, 1939	C,W	S	Gentle slope	Steel casing.
583	2.2	57.0	do.	C,W	S	Creek bottoms	Do.
584	--	--	--	C,W	S	Gentle slope	Do.
585	1.0	206.4	Nov. 21, 1939	C,W	S	do.	Do.
586	--	--	--	C,W	S	Ridge-top	Do.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Table of Drillers' Logs, Roberts County, Texas

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 50</u>		
Ledrick Bros., tract, drilled by the Chicken Creek Oil Co., NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 55, G. & M. sur., blk. C, 15 $\frac{1}{2}$ miles northwest of Miami.		
Sand - - - - -	12	12
Chocolate-colored clay -	93	105
Sandstone - - - - -	12	117
Water sand - - - - -	18	135
Sandstone - - - - -	30	165
Water sand - - - - -	6	171
Sandstone - - - - -	10	181
Water sand - - - - -	9	190
Sandstone - - - - -	35	225
Gyp rock - - - - -	20	245
Quicksand - - - - -	15	260
Sand rock - - - - -	30	290
Gyp rock - - - - -	15	305
Quicksand - - - - -	15	320
Sandstone - - - - -	50	370
Red rock - - - - -	25	395
Sand - - - - -	15	410
Red clay - - - - -	5	415
Sand - - - - -	20	435
Red clay - - - - -	5	440
Red beds - - - - -	650	1090
Salt and red shale - -	670	1760
Red and blue shale with gyp shells - - - - -	390	2150
Blue shale and gyp shells	248	2398
TOTAL DEPTH - - - - -		6845
CASING RECORD: 120 feet of 20-inch; 300 feet of 15 $\frac{1}{2}$ -inch; 1,000 feet of 12 $\frac{1}{2}$ -inch; 2,470 feet of 10 $\frac{1}{4}$ -inch; 4,870 feet of 8 $\frac{1}{4}$ -inch; 5,060 feet of 6-5/8-inch; 5,340 feet of 5-3/16-inch, and 6,375 feet of 3-inch casing.		

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 58</u>		
Ledrick Bros., tract, drilled by E. J. Dunigan, Jr., NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 34, G. & M. sur., blk. C, 19 miles northwest of Miami.		
Sand - - - - -	342	342
Sand and gravel - - - -	148	490
Red beds - - - - -	150	640
Gyp - - - - -	12	652
Red beds - - - - -	19	671
Gyp - - - - -	94	765
Hard gyp - - - - -	25	790
Shale, sand, rock, and red beds - - - - -	110	900
Salt and gyp shells - -	175	1075
Red beds and gyp - - -	305	1380
Salt and gyp shells - -	130	1510
Shale and gyp - - - -	400	1910

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 58--Continued</u>		
Shale, salt, and gyp- -	160	2070
TOTAL DEPTH - - - - -		5425
CASING RECORD: 652 feet of 12 $\frac{1}{2}$ -inch; 1,150 feet of 10-inch, and 3,625 feet of 7-inch casing.		

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 174</u>		
G. A. Mahler tract, drilled by the Gibson Oil Corp., SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 109, G. & M. sur., blk. C, 14 miles north of Miami.		
Sand - - - - -	185	185
Red mud - - - - -	10	195
Sand - - - - -	175	370
Quicksand - - - - -	95	465
Sand - - - - -	34	499
Quicksand - - - - -	9	508
Red clay - - - - -	4	512
Quicksand - - - - -	18	530
Sand - - - - -	24	554
Red clay - - - - -	4	558
Yellow mud - - - - -	19	577
Red sand - - - - -	63	640
Red mud - - - - -	22	662
Red sand - - - - -	63	725
Sand - - - - -	40	765
Sandy red clay - - - -	95	860
Gyp - - - - -	48	908
Brown shale - - - - -	47	955
Salt - - - - -	40	995
Gyp - - - - -	55	1050
Red rock salt - - - - -	25	1075
Gyp - - - - -	15	1090
Salt - - - - -	40	1130
Red rock - - - - -	20	1150
Red rock salt - - - - -	55	1205
Red rock - - - - -	145	1350
Salt - - - - -	25	1375
Red rock - - - - -	75	1450
Gyp - - - - -	20	1470
Red rock - - - - -	20	1490
Gyp - - - - -	10	1500
Red rock- - - - -	45	1545
Salt - - - - -	15	1560
Red rock - - - - -	40	1600
Lime - - - - -	10	1610
Blue mud - - - - -	15	1625
Red rock - - - - -	35	1660
Salt - - - - -	115	1775
Gyp lime - - - - -	25	1800
TOTAL DEPTH - - - - -		4185
CASING RECORD: 100 feet of 20-inch; 679 feet of 15 $\frac{1}{2}$ -inch; 864 feet of 12 $\frac{1}{2}$ -inch; 2,250 feet of 10-inch, and 3,015 feet of 5 $\frac{1}{2}$ -inch casing.		

Logs of test wells drilled by W. P. A. labor in Roberts County, Texas

	Thickness (feet)	Depth (feet)
<u>Well 6</u>		
River bottoms, W. I. <u>Whitsell tract</u> , S ¹ E ¹ / ₂ sec. 35, blk. A, H. & G. N. sur., 27 ¹ / ₂ miles northwest of Miami.		
Sandy brown top soil - - -	2	2
Fine sandy silt - - -	3	5
Sandy red clay - - -	5	10
Red clay and sand - - -	3	13
Sand, red clay, and small gravel - - - - -	1	14
Brown sand and small gravel	1	15
Brown sand, some gravel	7	22
Sandy red clay - - -	8	30
Struck water at 21 feet. Water level, 22 feet below ground level, 31 hours after hole completed. April 13, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 7</u>		
In valley, W. I. <u>Whitsell tract</u> , W ¹ S ¹ / ₂ sec. 35, blk. A, H. & G. N. sur., 27 ¹ / ₂ miles northwest of Miami.		
Sandy grayish-brown soil	3	3
Fine-grained red sand -	3	6
Fine-grained red sand and clay - - - - -	4	10
Medium brown sand - -	1	11
Fine-grained red sand -	1	12
Sandy brown clay - - -	8	20
Sand and sticky red clay	4	24
Sand and red clay - -	7	31
Struck water at 13 feet. Water level, 15 feet below ground level, 31 hours after hole completed. April 13, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 8</u>		
In draw, W. I. <u>Whitsell tract</u> , W ¹ E ¹ / ₂ sec. 35, blk. A, H. & G. N. sur., 650 feet north of well 7.		
Sandy grayish-brown silt	2	2
Fine-grained red sand -	3	5
Fine-grained red sand, some red clay - - - - -	3	8
Fine-grained red sand -	6	14
Sand and sandy chocolate-colored clay- - - -	3	17
Sticky red clay - - -	3	20
Sand and sandy red clay	2	22
Loose red sand - - -	4	26
Struck water at 12 feet. Water level, 14 feet below ground level, 32 hours after hole completed. April 16, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 9</u>		
In draw, W. I. <u>Whitsell tract</u> , E ¹ S ¹ / ₂ sec. 35, blk. A, H. & G. N. sur., 150 feet		

	Thickness (feet)	Depth (feet)
<u>Well 9--Continued</u>		
north of well 8.		
Fine-grained sandy soil	2	2
Coarse-grained sand and gravel - - - - -	3	5
Soft red sand, some clay	3	8
Brown sand - - - - -	4	12
Sandy red clay - - -	4	16
Sandy red clay and sand	3	19
Coarse-grained red sand	6	25
Coarse-grained brown sand	2	27
Struck water at 16 feet. April 16, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 13</u>		
River bottoms, W. I. <u>Whitsell tract</u> , center E ¹ / ₂ sec. 13, blk. A, H. & G. N. sur., 25 ¹ / ₂ miles northwest of Miami.		
Fine-grained sandy brown silt	4	4
Fine-grained brown sand	8	12
Brown sand - - - - -	2	14
Fine-grained red sand -	3	17
Fine-grained brown sand	4	21
Sandy red clay - - -	4	25
Red sand, some clay - -	9	34
Sticky gray clay - - -	1	35
Fine-grained sand and gray clay - - - - -	1	36
Coarse-grained red sand	3	39
Struck water at 22 feet. March 29, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 19</u>		
River bottoms, W. I. <u>Whitsell tract</u> , center sec. 13, blk. A, H. & G. N. sur., 25 ¹ / ₂ miles northwest of Miami.		
Fine-grained sand and gray silt - - - - -	3	3
Fine-grained brown sand	10	13
Fine-grained red sand -	2	15
Fine-grained brown sand	3	18
Brown sand, some clay -	2	20
Sand and sandy red clay	4	24
Fine-grained red sand -	2	26
Sand and sandy red clay	9	35
Red sand and hard gray clay	1	36
Sand and sandy gray clay	1	37
Struck water at 21 feet. March 29, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 20</u>		
In canyon, W. I. <u>Whitsell tract</u> , center W ¹ / ₂ sec. 13, blk. A, H. & G. N. sur., 850 feet north of well 19.		
Silty brownish-gray top soil	1	1
Fine-grained sand - -	9	10
Sandy brown clay and sand	2	12
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
<u>Well 20--Continued</u>		
Sandy red clay - - -	8	20
Sandy red clay and sand	5	25
Sand, some red clay - -	3	28
Struck water at 21 feet. March 29, 1940.		

<u>Well 21</u>		
In Government canyon, W. I. Whitsell tract, $\frac{1}{2}$ sec. 13, blk. A, H. & G. N. sur., 26 miles northwest of Miami.		
Sandy grayish-brown loam	4	4
Sandy dark-brown loam -	2	6
Sandy reddish-brown clay	5	11
Soft red sand and white sandstone - - - - -	2	13
Sandy red clay - - -	5	18
Medium brown sand, some brown clay - - - - -	3	21
Sandy red clay - - -	6	27
Sand, some clay (washing)	1	28
Struck water at 19 feet. April 1, 1940.		

<u>Well 22</u>		
In sink, W. I. Whitsell tract, $\frac{1}{2}$ sec. 13, blk. A, H. & G. N. sur., 800 feet north of well 21.		
Sandy brown clay - - -	3	3
Fine-grained brownish-gray silt - - - - -	3	6
Fine-grained brown sand	4	10
Fine-grained red sand -	10	20
White sand - - - - -	1	21
Fine-grained red sand -	6	27
Fine-grained yellow sand	4	31
Struck water at 29 feet. April 1, 1940.		

<u>Well 23</u>		
In sink, W. I. Whitsell tract, $\frac{1}{2}$ sec. 13, blk. A, H. & G. N. sur., 200 feet west of well 22.		
Fine-grained sandy gray silt	4	4
Fine-grained brown sand	6	10
Fine-grained red sand -	11	21
Red sand - - - - -	6	27
Sand and sandy brown clay	7	34
Sand, some clay - - -	10	44
Coarse-grained sand - -	2	46
Struck water at 35 feet. April 2, 1940.		

<u>Well 31</u>		
River bottoms, Bob Sheets tract, $\frac{1}{2}$ sec. 5, blk. A, H. & G. N. sur., $23\frac{1}{2}$ miles northwest of Miami.		
Sandy brownish-gray top soil	2	2
Medium red sand - - -	4	6

	Thickness (feet)	Depth (feet)
<u>Well 31--Continued</u>		
Red sand and clay - -	4	10
Fine-grained red sand -	3	13
Sandy brown clay - - -	12	25
Struck water at 14 feet. March 22, 1940.		

<u>Well 32</u>		
River bottoms, Bob Sheets tract, center $\frac{1}{2}$ sec. 5, blk. A, H. & G. N. sur., $23\frac{1}{2}$ miles northwest of Miami.		
Sandy brown top soil -	2	2
Sandy gray loam and gray clay	3	5
Sandy gray clay and brown sand - - - - -	3	8
Sandy fine brown silt -	1	9
Sand and sandy brown clay	2	11
Brown sand, some clay -	9	20
Medium brown sand - -	3	23
Small gravel, gray clay, and coarse-grained sand -	1	24
Sand, some gray clay -	2	26
Struck water at 24 feet. March 22, 1940.		

<u>Well 33</u>		
In valley, W. I. Whitsell tract, $S\frac{1}{2}$ sec. 5, blk. A, H. & G. N. sur., $23\frac{1}{2}$ miles northwest of Miami.		
Sandy brownish-gray top soil	2	2
Fine-grained soft brown sand	2	4
Fine-grained sand and silt	2	6
Fine-grained reddish-brown sand - - - - -	6	12
Medium brown sand - -	3	15
Coarse-grained sand - -	4	19
Sandy brown clay - - -	17	36
Sand, clay and small gravel	3	39
Struck water at 15 feet. March 25, 1940.		

<u>Well 34</u>		
In valley, W. I. Whitsell tract, $S\frac{1}{2}$ sec. 4, blk. A, H. & G. N. sur., 23 miles northwest of Miami.		
Sandy red clay and top soil	1	1
Sandy reddish-brown silt	2	3
Fine-grained red sand -	1	4
Medium brown sand - -	1	5
Sandy brown clay - - -	5	10
Fine-grained brown water sand	2	12
Sand and sandy red clay	12	24
Fine-grained red sand (washing) - - - - -	1	25
Struck water at 6 feet. Water level, 7 feet below ground level, 21 hours after hole completed. March 21, 1940.		

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

	Thickness (feet)	Depth (feet)
<u>Well 35</u>		
In draw, W. I. Whitsell tract, N ¹ S ¹ sec. 1, blk. A, H. & G. N. sur., 1,600 feet east of well 34.		
Sand and gray clay - -	1	1
Sand and sandy brown clay	2	3
Sand and fine silty brown clay - - - - -	2	5
Medium red sand - - -	2	7
Brown sand and sandy brown clay - - - - -	10	17
Sand, some red clay - -	3	20
Sandy red clay - - -	14	34
Red sand and clay - -	1	35
Struck water at 8 feet. Water level, 9 feet below ground level, 14 hours after hole completed. March 21, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 37</u>		
River bottoms, W. I. Whitsell tract, NE ¹ SE ¹ of O. T. Brown sur., 22 ¹ / ₂ miles northwest of Miami.		
Sandy brown top soil - -	1	1
Medium red sand - - -	2	3
Sandy brownish-red clay	6	9
Coarse-grained water sand	3	12
Sand and sandy gray clay	9	21
Sandy gray clay - - -	3	24
Sandy red clay - - -	1	25
Sandy brown clay - - -	1	26
Sand and gray clay - -	1	27
Struck water at 9 feet. Water level, 6 feet below ground level, 17 hours after hole completed. March 19, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 114</u>		
Flat, R. B. Killebrew tract, SE ¹ SE ¹ sec. 201, blk. 42, H. & T. C. sur., 21 miles north of Miami.		
Sandy gray top soil - -	2	2
Fine-grained brownish-gray sand - - - - -	3	5
Fine-grained brown sand	4	9
Sticky gray clay - - -	2	11
Medium brown sand - -	3	14
Sand and sandy red clay	4	18
Coarse-grained sand and gravel - - - - -	2	20
Coarse-grained sand - -	4	24
Struck water at 10 ¹ / ₂ feet. March 7, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 115</u>		
In valley, R. B. Killebrew tract, SW ¹ SE ¹ sec. 201, blk. 42, H. & T. C. sur., 800 feet west of well 114.		

	Thickness (feet)	Depth (feet)
<u>Well 115--Continued</u>		
Sandy gray top soil - -	1	1
Fine-grained gray sand -	1	2
Fine-grained brown sand	4	6
Sand and sandy red clay	3	9
Fine-grained sand - - -	5	14
Sandy red clay - - - -	3	17
Water sand, some clay -	3	20
Medium yellow sand - -	3	23
Sand, some gray silt - -	2	25
Quicksand - - - - -	1	26
Struck water at 11 feet. March 2, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 116</u>		
In sink, R. B. Killebrew tract, SW ¹ SE ¹ sec. 201, blk. 42, H. & T. C. sur., 800 feet west of well 115.		
Fine-grained brown sand	6	6
Sand and sandy brown clay	3	9
Fine-grained brown sand	5	14
Sand and sandy red clay	5	19
Coarse-grained brown sand (washing) - - - - -	4	23
Struck water at 11 feet. March 8, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 120</u>		
Gentle slope, R. B. Killebrew tract, SE ¹ SW ¹ sec. 213, blk. 42, H. & T. C. sur., 21 ¹ / ₂ miles north of Miami.		
Sandy brownish-gray top soil	2	2
Fine-grained brown sand	4	6
Fine-grained brown sand and small gravel - - -	1	7
Coarse-grained brown sand and small gravel - -	2	9
Fine-grained brown sand and small gravel - - -	3	12
Sand, red clay, and small gravel - - - - -	1	13
Soft red sand - - - -	3	16
Coarse-grained sand and red clay - - - - -	13	29
Struck water at 16 feet. March 14, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 121</u>		
Gentle slope, R. B. Killebrew tract, SW ¹ SE ¹ sec. 213, blk. 42, H. & T. C. sur., 21 ¹ / ₂ miles north of Miami.		
Sandy brownish-gray soil	1	1
Fine-grained brown sand	2	3
Fine-grained sand, some small gravel - - - - -	5	8
Medium brown sand - -	3	11
Sandy brown clay and sand	12	23
Struck water at 16 feet. March 14, 1940.		

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

	Thickness (feet)	Depth (feet)
<u>Well 125</u>		
Gentle slope, W. I. Whitsell tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. White sur., 22 $\frac{1}{2}$ miles northwest of Miami.		
Sandy gray top soil - -	2	2
Fine silt and brownish-gray clay - - - - -	1	3
Fine-grained brown sand	2	5
Sandy brown clay - - -	2	7
Fine-grained brown sand	2	9
Sandy brown clay and sand	3	12
Fine-grained red sand -	6	18
Medium red sand and caliche	2	20
Sand, caliche, and gravel	6	26
March 19, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 126</u>		
Gentle slope, W. I. Whitsell tract, NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. White sur., 750 feet south of well 125.		
Sandy gray clay and top soil	2	2
Sandy gray clay and red sand	2	4
Fine-grained brown sand, some gray clay - - - - -	2	6
Sandy grayish-black clay	2	8
Sandy gray and brown clay	1	9
Sandy brown clay and sand	2	11
Fine-grained reddish-brown sand - - - - -	10	21
Fine to coarse buff-colored sand, small gravel -	5	26
March 19, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 140</u>		
Creek bed, F. McMordie tract, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 90, blk. C, G. & M. sur., 13 $\frac{1}{2}$ miles north of Miami.		
Sandy brown top soil -	2	2
Coarse-grained sand, some caliche rocks - - -	3	5
Coarse-grained sand, gravel, and caliche rocks - -	1	6
Brownish-red sand, caliche, and some clay binder -	6	12
Sandy red clay - - -	5	17
Sandy red clay, water bearing	4	21
Coarse-grained pink sand	3	24
Reddish-brown gumbo - -	4	28
Struck water at 18 feet. Water level, 18 feet below ground level, $\frac{1}{2}$ -hour after hole completed. November 6, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 141</u>		
In valley, F. McMordie tract, SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 90, blk. C, G. & M. sur., 13 $\frac{1}{2}$ miles north of Miami.		

	Thickness (feet)	Depth (feet)
<u>Well 141--Continued</u>		
Sandy brown top soil -	2	2
Silty pink sand and caliche	7	9
Coarse-grained sand and caliche gravel - - -	5	14
Yellow sand - - - -	4	18
Struck water at 16 $\frac{1}{2}$ feet. Water level, 17 feet below ground level, 1 hour after hole completed. November 4, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 142</u>		
In valley, F. McMordie tract, SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 90, blk. C, G. & M. sur., 13 $\frac{1}{2}$ miles north of Miami.		
Silty reddish-brown sand	4	4
Sandy brown loam - - -	8	12
Pink sand and caliche rocks	6	18
Coarse-grained sand and caliche rocks - - -	3	21
Rock - - - - -		21
November 4, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 151</u>		
In valley, F. McMordie tract, SW $\frac{1}{4}$ sec. 9, blk. A-2, E. L. & R. R. sur., 15 miles north of Miami.		
Sandy brown top soil -	3	3
Sandy brown loam - - -	3	6
Silty pink sand and caliche	7	13
Silty coarse-grained pink sand and caliche - - -	16	29
Pink sand, water bearing	3	32
Struck water at 29 feet. November 3, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 153</u>		
Horse Creek Valley, F. McMordie tract, NE $\frac{1}{4}$ sec. 5, blk. A-2, E. L. & R. R. sur., 17 miles north of Miami.		
Silty brown sand, top soil	2	2
Fine-grained silty pink sand and caliche rocks - -	6	8
Coarse-grained sand and gravel - - - - -	3	11
Sandy reddish-brown clay and rocks - - - - -	3	14
Red sand, some clay binder	4	18
Medium coarse-grained red sand - - - - -	3	21
Sandy red clay - - - -	3	24
Red clay - - - - -	4	28
Sandy red clay - - - -	2	30
Struck water at 18 feet. Water level, 20 feet below ground level, 1/12-hour after hole completed. November 1, 1939.		

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

	Thickness (feet)	Depth (feet)
<u>Well 154</u>		
Horse Creek bottoms, F. McMordie tract, NE $\frac{1}{4}$ sec. 5, blk. A-2, E. L. & R. R. sur., 400 feet east of well 153.		
Sandy brown loam - - -	5	5
Sandy reddish-brown clay and caliche - - - - -	2	7
Sandy red clay - - -	5	12
Coarse-grained sand and gravel - - - - -	2	14
Light-red clay - - -	4	18
Medium coarse-grained sand	5	23
Struck water at 12 feet. Water level, 12 feet below ground level, 1/6-hour after hole completed. November 1, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 157</u>		
Horse Creek bottoms, F. McMordie tract, SE $\frac{1}{2}$ NE $\frac{1}{2}$ sec. 1, blk. A-2, E. L. & R. R. sur., 18 miles north of Miami.		
Silty windblown soil - -	4	4
Sandy brown loam - - -	1	5
Silty sand, a little clay binder - - - - -	4	9
Sandy light-red clay - -	4	13
Medium sand, water bearing	10	23
Struck water at 13 feet. Water level, 13 feet below ground level, 3 hours after hole completed. October 27, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 158</u>		
West side of Horse Creek valley, F. McMordie tract, SE $\frac{1}{2}$ NE $\frac{1}{2}$ sec. 1, blk. A-2, E. L. & R. R. sur., 18 miles north of Miami.		
Silty blow sand - - -	6	6
Sandy brown loam - - -	2	8
Silty pink sand - - -	3	11
Coarse-grained sand and gravel - - - - -	2	13
Medium sand - - - - -	10	23
Coarse-grained sand - -	3	26
Struck water at 16 feet. Water level, 16 feet below ground level, 6 hours after hole completed. October 28, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 159</u>		
Horse Creek valley, F. McMordie tract, SE $\frac{1}{4}$ NE $\frac{1}{2}$ sec. 1, blk. A-2, E. L. & R. R. sur., 18 miles north of Miami.		
Silty sand - - - - -	5	5
Sandy brown loam - - -	2	7
Silty coarse-grained sand	4	11
Coarse-grained sand and gravel - - - - -	3	14

	Thickness (feet)	Depth (feet)
<u>Well 159--Continued</u>		
Coarse-grained sand - -	10	24
Struck water at 24 feet. October 28, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 160</u>		
Horse Creek valley, F. McMordie tract, SE $\frac{1}{4}$ NE $\frac{1}{2}$ sec. 1, blk. A-2, E. L. & R. R. sur., 18 miles north of Miami.		
Silty brown sand - - -	5	5
Sandy brown loam - - -	4	9
Red sand, some clay binder	3	12
Red sand - - - - -	3	15
Medium sand - - - - -	10	25
Struck water at 18 feet. Water level, 13 feet below ground level, 1/6-hour after hole completed. October 28, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 161</u>		
River bottoms, F. McMordie tract, SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 187, blk. 42, H. & T. C. sur., 18 miles north of Miami.		
Fine silty top soil - -	6	6
Medium coarse-grained pink sand - - - - -	4	10
Medium coarse-grained reddish-brown sand -	3	13
Sandy brown loam - - -	1	14
Coarse-grained light-brown sand - - - - -	1	15
Brown, black, red, and green gumbo, very variable -	6	21
Coarse-grained brown sand	1	22
Black gumbo - - - - -	1	23
Coarse-grained brown sand	2	25
Water level, 15 feet below ground level, 1 hour after hole completed. October 31, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 251</u>		
Red Deer Creek valley, B. Edges tract, SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 189, blk. M-2, B. S. & F. sur., 9 $\frac{1}{2}$ miles southwest of Miami.		
Sandy hard gray clay - -	4	4
Sandy brown clay - - -	3	7
Light-brown sand - - -	7	14
Coarse-grained brown sand and gravel - - - - -	6	20
Sand and gravel - - -	4	24
Medium sand, some river gravel - - - - -	20	44
Medium white sand and gravel	3	47
Coarse-grained river sand	12	59
Coarse-grained sand and light-gray clay - -	8	67
Coarse-grained brown sand	3	70
December 15, 1939.		

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

	Thickness (feet)	Depth (feet)
<u>Well 252</u>		
Edge of sink, E. F. Jackson tract, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 132, blk. M-2, B. S. & F. sur., 775 feet south of well 251.		
Sandy gray top soil - -	1	1
Fine-grained brown sand	9	10
Fine-grained brown sand, some sandy white lime	12	22
Fine-grained brown sand	27	49
Coarse-grained sand, some small gravel - - -	6	55
Sand and heavy gravel -	3	58
December 18, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 256</u>		
In draw, E. C. Meador tract, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 168, blk. M-2, B. S. & F. sur., 6 $\frac{1}{2}$ miles west of Miami.		
Sandy gray clay - - -	1	1
Sandy red clay - - -	34	35
Sandy red clay and white sandstone - - -	10	45
Sandy red clay and caliche	15	60
December 6, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 257</u>		
In sink, E. C. Meador tract, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 168, blk. M-2, B. S. & F. sur., 400 feet north of well 256.		
Sandy gray clay - - -	3	3
Sandy red clay - - -	18	21
Sandy red clay and caliche	5	26
Sandy red clay - - -	2	28
Sandy red clay and caliche	1	29
Reddish-brown clay and caliche - - -	3	32
Sandy red clay and soft white limestone - - -	8	40
Sandy red clay with sandy lime spots - - -	6	46
Caliche, some sandy red clay	1	47
December 6, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 258</u>		
In sink, E. C. Meador tract, SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 168, blk. M-2, B. S. & F. sur., 300 feet east of well 256.		
Sandy gray clay - - -	4	4
Sandy red clay - - -	24	28
Sandy brownish-red clay and lime - - -	2	30
Sandy brick-red clay, some soft lime - - -	9	39
Sandy brown clay with lime spots - - -	4	43

	Thickness (feet)	Depth (feet)
<u>Well 258--Continued</u>		
Sandy red clay, limc, and white sand - - -		
	7	50
Sandy white lime and red clay	4	54
Caliche and red clay -	1	55
December 12, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 259</u>		
In draw, E. C. Meador tract, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 168, blk. M-2, B. S. & F. sur., 500 feet east of well 256.		
Sandy gray clay - - -	2	2
Sandy red clay - - -	19	21
Sandy red clay and caliche	2	23
Sandy red clay - - -	6	29
Sandy brown clay and soft lime - - -	2	31
Sandy red clay and lime	5	36
Sandy gray clay - - -	5	41
Sandy red clay and lime	6	47
December 12, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 261</u>		
South edge of sink, side of County Road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 157, blk. M-2, B. S. & F. sur., 6 miles west of Miami.		
Sandy brown top soil -	2	2
Silty grayish-brown clay	6	8
Caliche and red clay -	19	27
September 16, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 262</u>		
Gentle slope, side of County Road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 157, blk. M-2, B. S. & F. sur., 6 miles west of Miami.		
Silty brown top soil -	2	2
Silty reddish-brown clay	1	3
Pink powder caliche -	6	9
Caliche and red clay -	17	26
September 19, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 263</u>		
In sink, side of County Road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 157, blk. M-2, B. S. & F. sur., 6 miles west of Miami.		
Gummy brown top soil -	3	3
Silty, sandy reddish-brown clay with rust spots -	12	15
Silty grayish-brown clay with rust spots - -	8	23
Silty red clay - - -	20	43
September 15, 1939.		

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

	Thickness (feet)	Depth (feet)
<u>Well 264</u>		
In sink, side of County Road, NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 157, blk. M-2, B. S. & F. sur., 200 feet north of well 263.		
Gummy brown top soil -	4	4
Sandy reddish-brown clay with rust spots - -	12	16
Yellowish-gray clay with rust spots - - - -	4	20
Silty light-red clay -	28	48
Red clay, some caliche -	3	51
Silty red clay - - -	3	54
Powder and rock caliche, some red clay - - -	10	64
September 15, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 265</u>		
In sink, side of County Road, NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 157, blk. M-2, B. S. & F. sur., 200 feet north of well 264.		
Gummy brown top soil -	4	4
Sandy reddish-brown clay with rust spots - -	11	15
Silty brownish-gray clay with rust spots - -	5	20
Sandy gray clay - - -	2	22
Silty red clay - - -	20	42
Silty bright-red clay -	3	45
Caliche powder and rocks, some red clay - - -	15	60
September 14, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 266</u>		
In sink, side of County Road, NW corner sec. 157, blk. M-2, B. S. & F. sur., 6 miles west of Miami.		
Brown top soil - - -	2	2
Silty, sandy reddish-brown clay with caliche spots	5	7
Silty, sandy brown clay	9	16
Sandy gray clay with rust spots - - - - -	2	18
Fine silty sand - - -	3	21
Silty red clay with rust spots - - - - -	14	35
Silty red clay - - -	5	40
September 15, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 267</u>		
In draw, side of County Road, NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 157, blk. M-2, B. S. & F. sur., 200 feet east of well 268.		
Sandy brown top soil -	2	2
Silty, sandy reddish-brown clay - - - - -	11	13

	Thickness (feet)	Depth (feet)
<u>Well 267--Continued</u>		
Silty red clay - - -	14	27
Red clay and caliche -	6	33
September 15, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 272</u>		
Red Deer Creek valley, M. W. O'Loughlin tract, NE $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 155, blk. M-2, B. S. & F. sur., 6 miles southwest of Miami.		
Sandy brown top soil -	1	1
Fine-grained brown sand	2	3
Sandy gray clay - - -	4	7
Sandy brown clay - - -	9	16
Medium-grained sand - -	2	18
Sand and small gravel -	3	21
Sand and brown clay - -	2	23
Sand and river gravel -	3	26
Rock - - - - -		26
December 20, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 273</u>		
Red Deer Creek valley, M. W. O'Loughlin tract, NW $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 138, blk. M-2, B. S. & F. sur., 5 $\frac{3}{4}$ miles southwest of Miami.		
Sandy gray soil - - -	3	3
Sandy brown clay - - -	7	10
Fine-grained brown sand	4	14
Sand and small gravel -	14	28
Sand, red clay, and small gravel - - - - -	3	31
Medium sand, some small gravel - - - - -	2	33
Sand and soft lime - -	14	47
January 2, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 274</u>		
Red Deer Creek valley, M. W. O'Loughlin tract, NE $\frac{1}{2}$ NW $\frac{1}{2}$ sec. 138, blk. M-2, B. S. & F. sur., 5 $\frac{1}{2}$ miles southwest of Miami.		
Sandy brown soil and clay	4	4
Fine-grained brown sand and clay - - - - -	3	7
Sandy dark-brown clay -	3	10
Fine-grained brown sand and clay - - - - -	6	16
Medium brown sand - -	4	20
Medium to coarse sand, some gravel - - - - -	2	22
Sand and soft white lime	4	26
Medium brown sand - -	4	30
Rock - - - - -		30
January 4, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 276</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 138, blk. M-2, B. S. & F.		
(Continued on next page)		

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 Logs of F. P. A. test wells in Roberts County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 276--Continued</u>		
sur., $5\frac{1}{2}$ miles southwest of Miami.		
Sticky grayish-brown top soil	2	2
Sand and fine gray silt	3	5
Coarse-grained red sand	3	8
Coarse-grained brown sand	5	13
Medium brown sand	3	16
Medium sand and small gravel	2	18
Coarse-grained red sand	2	20
Sand and sandy red clay	3	23
Coarse-grained brown sand	2	25
March 9, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 280</u>		
Flat, B. F. Talley tract, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 105, blk. M-2, B. S. & F. sur., $3\frac{1}{2}$ miles southwest of Miami.		
Fine-grained brown sand	3	3
Sand and clay	1	4
Sand and river gravel	6	10
Sand and sandy red clay	4	14
Sand and gray clay	1	15
Medium sand and small gravel	5	20
Yellow sand, some gravel	3	23
Coarse-grained brown sand	6	29
Sand and gravel	3	32
January 5, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 281</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 105, blk. M-2, B. S. & F. sur., $3\frac{1}{2}$ miles southwest of Miami.		
Gray sandy top soil	2	2
Sandy brown loam	1	3
Fine-grained reddish-brown sand and soft lime	4	7
Sandy red clay	6	13
Fine-grained red sand	5	18
Sandy red clay	2	20
Coarse-grained sand and mixed gravel	5	25
March 4, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 282</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 105, blk. M-2, B. S. & F. sur., south of Highway 60, $3\frac{1}{2}$ miles southwest of Miami.		
Sandy gray top soil	2	2
Sand and gray clay	1	3
Fine-grained brown sand and small gravel	5	8
Sandy brownish-red clay	2	10
Soft red sand	2	12
Sandy reddish-brown clay	9	21

	Thickness (feet)	Depth (feet)
<u>Well 282--Continued</u>		
Medium red sand	2	23
Sand and red clay	13	36
Sandy red clay, some soft white lime	2	38
Fine-grained brown sand	6	44
Coarse-grained sand	2	46
March 5, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 283</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 105, blk. M-2, B. S. & F. sur., $3\frac{1}{2}$ miles southwest of Miami.		
Sandy gray top soil	2	2
Sand, some brown clay and lime	1	3
Fine-grained brown sand and hard white lime	2	5
Fine-grained red sand	3	8
Sandy brown clay	2	10
Red sand, mixed hard white lime	3	13
Fine-grained red sand	6	19
Red sand and clay	1	20
Sandy reddish-brown clay	6	26
Medium sand and gravel	1	27
Sandy red clay and gravel	1	28
Sandy gray clay	7	35
Sandy brown clay	6	41
March 5, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 285</u>		
In draw, M. W. O'Loughlin tract, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 93, blk. M-2, B. S. & F. sur., south of Highway 60, $3\frac{3}{4}$ miles southwest of Miami.		
Sandy gray top soil	2	2
Fine-grained brown sand and gray clay	3	5
Medium brown sand, lime spots	4	9
Sand and gray clay	6	15
Fine-grained brown sand	4	19
Sand, small gravel, and caliche	3	22
Sandy red clay	4	26
Sand and coarse river gravel	3	29
February 29, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 286</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 105, blk. M-2, B. S. & F. sur., south of Highway 60, $3\frac{3}{4}$ miles southwest of Miami.		
Sandy gray clay and soil	1	1
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
<u>Well 286--Continued</u>		
Sandy grayish-brown clay	2	3
Fine-grained brown sand and caliche - - - - -	3	6
Medium sand, mixed small gravel - - - - -	4	10
Red sand and sandy clay	3	13
Medium to coarse sand -	1	14
Sand, clay, and small gravel	4	18
Sand and sandy red clay	1	19
Red sand and gravel - -	24	43
Coarse-grained red sand and gravel - - - - -	9	52
March 1, 1940.		

<u>Well 287</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 92, blk. M-2, B. S. & F. sur., 500 feet east of well 286.		
Sandy gray top soil - -	3	3
Fine-grained sand and gray clay - - - - -	2	5
Fine-grained brown sand and small gravel - - -	6	11
Fine-grained red sand -	23	34
Sand, gravel, and hard caliche - - - - -	1	35
March 1, 1940.		

<u>Well 288</u>		
Gentle slope, M. W. O'Loughlin tract, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 92, blk. M-2, B. S. & F. sur., 3 $\frac{1}{2}$ miles southwest of Miami.		
Sandy gray top soil - -	2	2
Sandy brown clay and lime	1	3
Fine-grained brown sand, caliche, and gravel -	4	7
Fine-grained red sand -	3	10
Sandy reddish-brown clay	7	17
Medium brown sand - -	2	19
Sandy brown clay - - -	13	32
Soft brown sand and mixed clay - - - - -	4	36
Fine-grained brown sand	4	40
Sandy red clay and lime	4	44
Soft red sand - - - -	3	47
Medium brown sand - -	2	49
Soft red sand - - - -	2	51
Fine-grained brown sand	1	52
March 1, 1940.		

<u>Well 289</u>		
Ridgetop, M. W. O'Loughlin tract, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 92, blk. M-2, B. S. & F. sur., 3 $\frac{1}{2}$		

	Thickness (feet)	Depth (feet)
<u>Well 289--Continued</u>		
miles southwest of Miami.		
Sandy gray top soil - -	1	1
Sandy red clay - - -	3	4
Fine-grained red sand -	6	10
Fine-grained sand and red clay - - - - -	2	12
Sandy red clay - - -	3	15
Sand, sandy brown clay, and small gravel - - -	1	16
Sandy brown clay - - -	1	17
Brown sand, some clay -	5	22
Red sand, hard white line, and small gravel - -	9	31
March 1, 1940.		

<u>Well 291</u>		
Gentle slope, M. W. O'Loughlin tract, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 93, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles southwest of Miami.		
Sandy gray top soil - -	2	2
Medium brown sand and brown clay - - - - -	1	3
Medium brown sand - -	2	5
Medium sand, clay, and soft white lime - - - -	5	10
Sandy gray clay - - -	2	12
Sandy brown clay - - -	1	13
Soft red sand - - - -	7	20
Medium brown sand - -	4	24
Coarse-grained sand and small gravel - - -	2	26
February 28, 1940.		

<u>Well 292</u>		
Gentle slope, M. W. O'Loughlin tract, SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 93, blk. M-2, B. S. & F. sur., 1 $\frac{1}{4}$ miles southwest of Miami.		
Sandy gray top soil - -	1	1
Fine-grained brown sand and fine gray clay - - -	5	6
Sandy brown clay and soft white lime - - - -	9	15
Medium sand and sandy brown clay - - - - -	5	20
Sandy brown clay and caliche	2	22
Fine-grained brown sand	6	28
Fine-grained brown sand and sandy red clay - - -	1	29
Sandy red clay - - -	3	32
Sand and heavy gravel -	2	34
February 28, 1940.		

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

	Thickness (feet)	Depth (feet)
<u>Well 293</u>		
Gentle slope, M. W. O'Loughlin tract, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 93, blk. M-2, B. S. & F. sur., 1 $\frac{1}{4}$ miles southwest of Miami.		
Sandy gray clay - - -	1	1
Fine-grained brown sand	1	2
Medium sand and sandy white lime - - - - -	5	7
Sandy brown clay - - -	3	10
Sandy gray clay - - -	5	15
Medium red sand and sandy brown clay - - - - -	2	17
Coarse-grained sand and river gravel - - - - -	6	23
Sand and gravel - - -	4	27
Sandy red clay - - -	3	30
February 27, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 294</u>		
Gentle slope, M. W. O'Loughlin tract, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 93, blk. M-2, B. S. & F. sur., 700 feet north of well 293, south of Highway #60.		
Sandy gray clay and lime	2	2
Sandy brown clay - - -	1	3
Medium brown sand and sandy lime spots - - - - -	2	5
Loose brown sand and clay	7	12
Sand and sandy gray clay	5	17
Coarse-grained sand and river gravel - - - - -	2	19
Red sand and sandy white lime - - - - -	6	25
Red sand - - - - -	3	28
Sand and sandy white lime	3	31
Fine-grained red sand -	2	33
Red sand and sandy white lime - - - - -	3	36
February 27, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 300</u>		
Flat, T. L. Morris tract, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 95, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Sandy dark-brown top soil	3	3
Sand, gravel, and caliche	4	7
Fine-grained loose brown sand - - - - -	3	10
Medium sand and mixed brown clay - - - - -	6	16
Sand and caliche - - -	3	19
Sandy brown clay - - -	4	23
Sand and gravel - - -	3	26
Caliche, some sand - -	2	28
February 23, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 301</u>		
Gentle slope, T. L. Morris tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 95, B. S. & F. sur., 1 mile west of Miami.		
Sandy dark-brown top soil	2	2
Sandy brown clay - - -	3	5
Sand, caliche and gravel	4	9
Sandy brown clay - - -	6	15
Fine-grained brown sand-	4	19
Medium brown sand - - -	5	24
Sandy white lime and gravel	3	27
Sand, gravel, and some brown clay - - - - -	4	31
Sand and caliche - - -	2	33
February 26, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 302</u>		
Creek bottoms, J. P. Osborne tract, NE $\frac{1}{2}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Fine-grained silty sand	2	2
Coarse-grained sand and gravel - - - - -	4	6
Coarse-grained silty sand	3	9
Coarse-grained sand and gravel - - - - -	5	14
Silty, brown sandy alluvial deposits - - - - -	10	24
Fine-grained sand, some clay (water bearing) -	4	28
Sandy reddish-brown clay	11	39
Struck water at 24 $\frac{1}{2}$ feet. Water level, 24 feet below ground level, 1 hour after hole completed. September 28, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 303</u>		
Creek bottoms, J. P. Osborne tract, NE $\frac{1}{2}$ sec 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Silty, sandy brown top soil	2	2
Fine-grained silty sand -	5	7
Coarse-grained silty sand	5	12
Coarse-grained silty sand and gravel - - - - -	7	19
Gummy brown clay - - -	2	21
Coarse-grained sand - -	4	25
Struck water at 23 $\frac{1}{2}$ feet. Water level, 23 feet below ground level, 2 hours after hole completed. September 28, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 304</u>		
In valley, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		

(Continued on next page)

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

	Thickness (feet)	Depth (feet)
<u>Well 304--Continued</u>		
Silty brown sandy top soil	2	2
Reddish-brown silty sand	12	14
Dark reddish-brown silty sand	20	34
Medium coarse-grained water sand	4	38
Struck water at 36 feet. Water level, 36 feet below ground level, 5 hours after hole completed. September 28, 1939.		

<u>Well 305</u>		
In valley, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Sandy reddish-brown top soil	9	9
Silty light-red sand	8	17
Coarse-grained sand, some small gravel	10	27
Sandy light-red clay	3	30
Medium sand, water bearing	5	35
Tight-packed gray clay, rusty spots	5	40
Coarse-grained sand, water bearing	3	43
Struck water at 23 feet, water level, 29 feet below ground level, 5 hours after hole completed. September 29, 1939.		

<u>Well 306</u>		
In valley, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Sandy reddish-brown soil	13	13
Fine-grained light-red silty sand	9	22
Coarse-grained sand and gravel	3	25
September 30, 1939.		

<u>Well 307</u>		
Gentle slope, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Sandy brown top soil	10	10
Fine-grained silty sand	9	19
Coarse-grained sand, rocks, and gravel	8	27
September 30, 1939.		

<u>Well 308</u>		
North side of Red Deer Creek, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Sandy reddish-brown top soil	6	6

	Thickness (feet)	Depth (feet)
<u>Well 308--Continued</u>		
Fine-grained silty sand	27	33
Coarse-grained silty sand, (water at 40 feet)	7	40
Struck water at 39 feet. Water level, 39 feet below ground level, 1/6-hour after hole completed. October 2, 1939.		

<u>Well 309</u>		
North side of Red Deer Creek, J. P. Osborne tract, NE $\frac{1}{4}$ sec. 94, blk. M-2, B. S. & F. sur., 1 $\frac{1}{2}$ miles west of Miami.		
Reddish-brown top soil	3	3
Sandy reddish-brown clay	10	13
Silty reddish-brown sand, some clay	3	16
Sandy reddish-brown clay	6	22
Silty light-red fine-grained sand	4	26
Sandy reddish-brown clay	3	29
Sandy blackish-colored clay	3	32
Sandy gray clay	2	34
Coarse-grained clear sand	4	38
Struck water at 37 feet. Water level, 37 feet below ground level, 1/6-hour after hole completed. October 2, 1939.		

<u>Well 333</u>		
Flat, M. Gill tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 1 mile east of Miami.		
Sandy gray top soil	1	1
Sandy brown clay	5	6
Sandy brownish-gray clay	1	7
Sandy brown clay and lime	3	10
Soft brown sand, white lime spots	4	14
Sandy buff-colored clay, loose sand, and gray clay	7	21
Sandy white lime, some clay	2	23
Sandy brown clay	27	50
Struck water at 28 feet. Water level, 29 feet below ground level, 42 hours after hole completed. February 10, 1940.		

<u>Well 334</u>		
Flat, M. Gill tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 800 feet east of well 202.		
Sandy gray clay	2	2
Sandy gray loam	1	3
Soft fine-grained sand and clay	3	6
Sand with soft buff spots of caliche	4	10
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
<u>Well 334--Continued</u>		
Fine-grained sand, some brown clay and soft white lime - - - - -	8	18
Brown sand and lime - -	2	20
Sand and sandy gray clay -	4	24
Medium brown sand - - -	1	25
Sandy gray clay and lime -	5	30
Fine to medium brownish-red sand - - - - -	5	35
Sand and caliche - - -	2	37
Red sand, gray clay, and caliche - - - - -	6	43
Sandy brownish-gray clay, gravel, and white lime -	6	49
Water level, 41 feet below ground level, 42 hours after hole completed. February 12, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 335</u>		
Gentle slope, M. Gill tract, NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 1 mile east of Miami.		
Sandy gray top soil - -	2	2
Sandy brownish-gray clay -	1	3
Sandy brown clay - - -	1	4
Fine-grained sand and white lime - - - - -	4	8
Sandy brown clay - - -	3	11
Sandy brown clay and white lime - - - - -	1	12
Sandy brown clay - - -	4	16
Sandy brown clay and white lime - - - - -	3	19
Sandy brown clay - - -	4	23
Sandy gray clay - - - -	1	24
Sandy brownish-gray clay and white lime - - -	4	28
Sandy reddish-brown clay -	9	37
Sandy reddish-gray clay -	2	39
Sandy reddish-brown clay -	2	41
Sandy reddish-brown clay and gravel - - - - -	2	43
Sandy brown clay - - -	6	49
Struck water at 31 feet. Water level, 32 feet below ground level, 22 hours after hole completed. February 12, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 336</u>		
Gentle slope, M. Gill tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 1 mile east of Miami.		
Sandy brown top soil and lime	2	2
Sandy brownish-black clay and lime - - - - -	1	3

	Thickness (feet)	Depth (feet)
<u>Well 336--Continued</u>		
Sandy brown clay - - -	2	5
Sandy brown clay and white lime - - - - -	4	9
Brown sand, clay, and white lime - - - - -	16	25
Brown sand and caliche -	1	26
Sandy gray clay - - - -	4	30
Sandy gray clay and lime -	7	37
Sandy reddish-brown clay and red sand - - - -	2	39
Sandy brownish-gray clay -	11	50
Water level, 45 feet below ground level, 23 hours after hole completed. February 12, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 337</u>		
Gentle slope, M. Gill tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 1 mile east of Miami.		
Sandy brownish-gray top soil	1	1
Sand and mixed clay - -	3	4
Sand and caliche - - -	3	7
Sandy brown clay and caliche	4	11
Red sand and sandy brown clay	3	14
Sandy brown clay and white lime - - - - -	4	18
Sandy brownish-black clay with caliche spots - -	6	24
Sandy brown clay and caliche	1	25
Reddish-brown sand and lime	3	28
Sandy brown clay and caliche	2	30
Red sand and caliche - -	1	31
Sand and caliche - - -	1	32
Red sand and caliche - -	1	33
Sandy brown clay and caliche	5	38
Sandy light-gray clay - -	5	43
Sandy gray clay and rust-colored sand - - - -	2	45
Struck water at 44 feet. February 13, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 338</u>		
Gentle slope, M. Gill tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 63, blk. M-2, H. & G. N. sur., 800 feet south of W. P. A. test well 337.		
Sandy gray top soil - -	1	1
Sandy gray clay - - - -	1	2
Sandy brown clay - - -	2	4
Sand, some white lime - -	4	8
Red sand, mixed lime and clay - - - - -	4	12
Sandy brown clay - - -	14	26
Sandy brownish-black clay	4	30

(Continued on next page)

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

	Thickness (feet)	Depth (feet)
<u>Well 338--Continued</u>		
Sandy brown clay - - -	10	40
Coarse-grained sand - -	6	46
February 13, 1940.		

<u>Well 339</u>		
Creek bank, C. F. Christopher tract, SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 40, blk. M-2, H. & G. N. sur., 1 $\frac{1}{4}$ miles east of Miami.		
Sandy gray soil - - -	3	3
Sand and clay - - -	3	6
Fine-grained brown sand -	5	11
Fine-grained sand and buff- colored clay - - -	2	13
Sandy reddish-brown clay -	2	15
Sandy red clay - - -	1	16
Reddish-brown sand - - -	11	27
Fine-grained brown sand -	2	29
Medium brown sand - - -	1	30
Coarse-grained sand and caliche - - -	2	32
February 15, 1940.		

<u>Well 340</u>		
Gentle slope, C. F. Christopher tract, SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 40, blk. M-2, H. & G. N. sur., 1 $\frac{1}{4}$ miles east of Miami.		
Sandy gray top soil - -	2	2
Sandy light-brown clay -	2	4
Sandy buff-colored clay -	1	5
Fine-grained reddish-brown sand - - -	2	7
Sand and caliche - - -	2	9
Fine-grained reddish-brown sand - - -	2	11
Sandy brown clay - - -	3	14
Fine to medium brown sand	5	19
Sand, brown clay, and caliche	2	21
Medium brown sand - - -	5	26
Sandy brown clay - - -	4	30
Hard caliche and sand - -	1	31
February 14, 1940.		

<u>Well 341</u>		
Gentle slope, C. F. Christopher tract, NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 40, blk. M-2, H. & G. N. sur., 1 $\frac{1}{4}$ miles northwest of Miami.		
Sandy gray top soil - -	2	2
Sand and gray clay - - -	3	5
Fine-grained brown sand -	6	11
Sand and small gravel - -	3	14
Medium brown sand - - -	4	18
Sand and gravel - - -	3	21
Sandy brown clay - - -	4	25
Sand and heavy gravel - -	3	28

	Thickness (feet)	Depth (feet)
<u>Well 341--Continued</u>		
Rock - - -	-	28
February 15, 1940.		

<u>Well 347</u>		
In valley, F. W. Osborne tract, west edge sec. 39, blk. M-2, H. & G. N. sur., 2 miles northeast of Miami.		
Fine-grained silty sand, windblown - - -	10	10
Sandy brown loam - - -	2	12
Silty and coarse-grained sand - - -	4	16
Sandy reddish-brown clay and caliche pebbles - -	3	19
Medium red sand, water bearing - - -	3	22
Black gummy clay - - -	5	27
Reddish-brown gumbo - -	30	57
Struck water at 19 feet. Water level, 19 feet below ground level after hole completed. October 18, 1939.		

<u>Well 348</u>		
In valley, F. W. Osborne tract, west edge sec. 39, blk. M-2, H. & G. N. sur., 2 miles northeast of Miami.		
Silty light-brown windblown sand - - -	12	12
Sandy brown loam - - -	3	15
Silty fine-grained pink sand	4	19
Sandy reddish-brown clay -	3	22
Coarse-grained, clean water bearing sand and gravel	2	24
Brown sticky gumbo - - -	1	25
Coarse-grained water bearing sand and gravel - - -	6	31
Sandy reddish-brown clay and caliche - - -	11	42
Water level, 23 feet below ground level, 22 hours after hole completed. October 18, 1939.		

<u>Well 349</u>		
In valley, F. W. Osborne tract, west side of NW $\frac{1}{4}$ sec. 39, blk. M-2, H. & G. N. sur., 2 miles northeast of Miami.		
Silty windblown sandy soil	5	5
Sandy brown loam - - -	3	8
Sandy reddish-brown loam -	3	11
Sandy brown loam - - -	4	15
Pink sand - - -	8	23
Coarse-grained clean sand and gravel - - -	2	25
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
<u>Well 349--Continued</u>		
Struck water at 24 feet. October 20, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 350</u>		
In valley, F. W. Osborne tract, west edge of sec. 39, blk. M-2, H. & G. N. sur., 400 feet north of well 349.		
Sandy brown top soil - -	2	2
Silty pink windblown sand	3	5
Pink windblown sand and caliche rocks - - - -	1	6
Sandy reddish-brown loam -	8	14
Fine-grained silty pink sand	8	22
Clean coarse-grained sand-	5	27
Clean coarse-grained sand and gravel - - - - -	1	28
Struck water at 27 feet. October 20, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 351</u>		
In valley, P. A. Nelson tract, NE $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 39, blk. M-2, H. & G. N. sur., 2 $\frac{1}{2}$ miles northeast of Miami.		
Sandy brown loam - - -	1	1
Sandy gray clay - - -	1	2
Sandy brownish-gray clay -	5	7
Sandy light-brown clay- -	1	8
Soft brown sand - - - -	1	9
Sand and gray clay - - -	5	14
Soft brown sand - - - -	6	20
Sand and small gravel - -	3	23
Coarse-grained sand and gravel - - - - -	2	25
Medium brown sand - - -	4	29
February 8, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 352</u>		
Gentle slope, P. A. Nelson tract, NE $\frac{1}{2}$ SW $\frac{1}{2}$ sec. 39, blk. M-2, H. & G. N. sur., 2 miles northeast of Miami.		
Sandy gray top soil - -	1	1
Sand, clay, and caliche -	4	5
Fine-grained brown sand -	10	15
Fine-grained brown sand and caliche - - - - -	7	22
Sand, clay and caliche- -	7	29
Medium sand, some clay -	6	35
Sandy gray clay - - - -	2	37
Quicksand - - - - -	1	38
February 8, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 353</u>		
Flat, P. A. Nelson tract, NE $\frac{1}{2}$ SE $\frac{1}{2}$ sec. 39, blk. M-2, H. & G. N. sur., 2 $\frac{1}{2}$ miles		

	Thickness (feet)	Depth (feet)
<u>Well 353--Continued</u>		
northeast of Miami.		
Sandy top soil and gray clay	3	3
Sandy brownish-gray clay -	2	5
Sandy gray clay - - - -	5	10
Fine-grained brown sand -	5	15
Medium sand and limestone	3	18
Medium sand and small gravel	8	26
February 9, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 354</u>		
Gentle slope, P. A. Nelson tract, NW $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 39, blk. M-2, H. & G. N. sur., 800 feet west of well 353.		
Sandy brownish-gray top soil	1	1
Sandy brown loam and caliche	3	4
Fine-grained buff-colored sand, some gray clay -	2	6
Sandy gray clay - - - -	1	7
Sandy brown clay - - - -	3	10
Sandy reddish-brown clay -	3	13
Fine-grained buff-colored sand - - - - -	7	20
Medium sand, small gravel	6	26
Medium to coarse sand - -	4	30
Sand and small gravel - -	1	31
Struck water at 29 feet. February 9, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 355</u>		
Gentle slope, P. A. Nelson tract, SW $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 39, blk. M-2, H. & G. N. sur., 800 feet west of well 354.		
Sandy gray top loam - -	2	2
Fine-grained sand and clay	1	3
Fine-grained brown sand -	1	4
Sandy reddish-brown clay -	2	6
Sand, mixed fine clay - -	4	10
Sandy brown clay - - - -	1	11
Sand, some clay - - - -	1	12
Fine-grained brown sand -	5	17
Sand, mixed red clay - -	3	20
Medium brown sand - - -	7	27
Sand and small gravel - -	2	29
Small gravel - - - - -	1	30
Sand and gravel - - - -	2	32
Fine-grained brown sand -	2	34
Struck water at 30 feet. February 9, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 356</u>		
Gentle slope, P. A. Nelson tract, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 40, blk. M-2, H. & G. N. sur., 1 $\frac{1}{2}$		
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
<u>Well 356--Continued</u>		
Miles northeast of Miami.		
Sandy gray top soil - - -	3	3
Sandy gray clay - - - -	2	5
Fine-grained brown sand and caliche - - - - -	3	8
Fine-grained reddish-brown sand - - - - -	6	14
Coarse-grained sand and small gravel - - - - -	3	17
Sandy gray clay - - - -	6	23
Sand and heavy gravel - -	2	25
Struck water at 17 feet. February 6, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 357</u>		
Flat, P. A. Nelson tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 40, blk. M-2, H. & G. N. sur., 2 $\frac{1}{4}$ miles northeast of Miami.		
Sandy gray top soil - - -	2	2
Sandy brown clay - - - -	3	5
Sandy brownish-gray clay -	1	6
Sand and clay - - - - -	8	14
Sandy brown and gray clay	3	17
Sandy brown clay - - - -	2	19
Loose sand and clay - - -	3	22
Sandy brownish-gray clay -	6	30
Brown sand and white lime	1	31
Sand and gray clay - - - -	2	33
Sand and white lime - - -	1	34
Medium sand - - - - -	2	36
Sand and gray clay - - - -	4	40
Medium sand - - - - -	1	41
Sand and gray clay - - - -	1	42
Sand, gray clay, and white lime - - - - -	3	45
Sand and brown clay - - -	3	48
Sand and small gravel - - -	5	53
Sandy gray clay - - - - -	10	63
Struck water at 48 feet. Water level, 49 feet below ground level, 33 hours after hole completed. February 6, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 361</u>		
Creek bottoms, Texas Highway Department tract, side of Highway 60, 3 $\frac{1}{8}$ miles northeast of Miami.		
Sandy gray top soil - - -	2	2
Sandy gray clay - - - - -	2	4
Sand and gray clay - - - -	2	6
Sandy gray clay - - - - -	3	9
Sand and caliche - - - - -	2	11
Dark-brown sand - - - - -	2	13
Fine-grained brown sand -	2	15

	Thickness (feet)	Depth (feet)
<u>Well 361--Continued</u>		
Medium brown sand - - -	8	23
Coarse-grained water sand	3	26
Struck water at 24 feet. Water level, 24 feet below ground level, 14 hours after hole completed. January 11, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 366</u>		
In valley, B. F. A. Byrum tract, SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, blk. M-2, H. & G. N. sur., 5 $\frac{1}{2}$ miles northeast of Miami.		
Sandy gray top soil - - -	1	1
Sandy brown loam - - - -	2	3
Brown sand and clay - - -	4	7
Sandy brown clay - - - -	2	9
Sandy reddish-brown clay -	7	16
Fine-grained brown sand -	3	19
Sandy reddish-brown clay -	11	30
Sand and reddish-brown clay	4	34
Sandy brown clay - - - -	6	40
Sandy brown and bluish-gray clay - - - - -	7	47
Struck water at 23 feet. January 20, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 367</u>		
Gentle slope, B. F. A. Byrum tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, blk. M-2, H. & G. N. sur., 5 $\frac{1}{2}$ miles northeast of Miami.		
Sandy gray top soil - - -	3	3
Brown sand and clay - - -	3	6
Sandy red clay - - - - -	3	9
Sandy red and gray clay -	5	14
Sandy red clay - - - - -	6	20
Sandy gray clay - - - - -	5	25
Sandy red and gray clay -	6	31
Sandy brown clay - - - -	7	38
Sand and brown clay - - -	3	41
Struck water at 13 feet. Water level, 11 feet below ground level, 21 hours after hole completed. January 23, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 368</u>		
In valley, B. F. A. Byrum tract, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, blk. M-2, H. & G. N. sur., 5 $\frac{1}{2}$ miles northeast of Miami.		
Sandy gray top soil - - -	3	3
Sandy brown clay - - - -	1	4
Fine-grained sand and clay	6	10
Sandy red clay - - - - -	1	11
Fine-grained red sand and clay - - - - -	2	13
Sandy reddish-brown clay -	4	17

(Continued on next page)

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

	Thickness (feet)	Depth (feet)
<u>Well 368--Continued</u>		
Red clay - - - - -	2	19
Sandy brown clay - - -	5	24
Sand and brown clay - -	7	31
Sandy brown clay - - -	1	32
Sand and brown clay - -	4	36
Sandy reddish-brown clay -	3	40
Sandy brownish-gray clay -	5	45
Bluish-gray clay - - -	4	50
Sticky black clay - - -	1	51
Sandy green clay - - -	1	52
Sandy gray clay - - -	5	57
Struck water at 23 feet. Water level, 23 feet below ground level, 27 hours after hole completed. January 25, 1940.		

<u>Well 370</u>		
In valley, Texas Highway Department tract, south side of Highway 56, 5 miles northeast of Miami.		
Sandy gray top soil - - -	1	1
Fine-grained brown sand, white lime streaks - - -	5	6
Sandy gray clay - - - -	12	18
Coarse-grained red sand and gray clay - - - - -	10	28
Struck water at 13 feet. Water level, 10 feet below ground level, 86 hours after hole completed. January 12, 1940.		

<u>Well 371</u>		
In valley, B. F. A. Byrum tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 4 $\frac{1}{2}$ miles northeast of Miami.		
Sandy gray top soil - - -	2	2
Sandy gray clay - - - -	2	4
Sandy brown clay - - - -	6	10
Sand and gravel - - - -	1	11
Sandy brown clay - - - -	39	50
Sandy grayish-black gumbo	2	52
Struck water at 23 feet. Water level, 24 feet below ground level, 14 hours after hole completed. January 16, 1940.		

<u>Well 372</u>		
Flat, B. F. A. Byrum tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 700 feet east of well 371.		
Sandy gray top soil - - -	4	4
Fine-grained brown sand -	8	12
Sandy brown clay - - - -	2	14
Medium-grained sand - - -	1	15
Sandy light-brown clay - -	3	18
Fine-grained light-brown sand - - - - -	8	26

	Thickness (feet)	Depth (feet)
<u>Well 372--Continued</u>		
Sand, some clay - - - -	4	30
Medium sand and clay - -	4	34
Struck water at 23 feet. January 16, 1940.		

<u>Well 373</u>		
Flat, B. F. A. Byrum tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 700 feet east of well 372.		
Sandy black top soil - - -	2	2
Sandy dark-brown soil - -	2	4
Sandy fine clay - - - -	5	9
Sand - - - - -	1	10
Sandy brown clay - - - -	13	23
Fine-grained brown sand -	8	31
Fine sandy clay - - - -	10	41
Sandy reddish-brown clay -	9	50
Sandy blue clay - - - -	2	52
Struck water at 24 feet. January 16, 1940.		

<u>Well 374</u>		
Gentle slope, Bob McCoy tract, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 4 $\frac{1}{2}$ miles northeast of Miami.		
Sandy gray top soil - - -	2	2
Sand, clay, and small caliche	7	9
Fine-grained sand - - - -	4	13
Red sand, soft lime, and red clay - - - - -	6	19
Soft brown sand - - - -	8	27
Soft sandy lime - - - -	1	28
Medium reddish-brown sand	11	39
Reddish-brown sand, large gravel, and red clay - -	1	40
Coarse-grained reddish-brown sand - - - - -	8	48
Struck water at 40 feet. January 30, 1940.		

<u>Well 375</u>		
Gentle slope, Bob McCoy tract, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 650 feet east and 400 feet north of well 374.		
Sandy top soil - - - -	4	4
Fine-grained brown sand -	6	10
Sandy red clay - - - -	6	16
Sand and red clay - - - -	2	18
Sandy red clay - - - -	24	42
Sandy reddish-gray clay -	5	47
Struck water at 24 feet. Water level, 24 feet below ground level, 32 hours after hole completed. January 30, 1940.		

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

	Thickness (feet)	Depth (feet)
<u>Well 376</u>		
Flat, Bob McCoy tract, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 4 $\frac{3}{4}$ miles northeast of Miami.		
Sandy gray top soil - - -	2	2
Sand and clay - - - - -	3	5
Sandy brown clay and caliche	2	7
Fine-grained brown sand and caliche - - - - -	8	15
Sandy brown clay - - - - -	2	17
Fine-grained brown sand - - -	6	23
Sandy reddish-brown clay - - -	7	30
Sand and brown clay - - - - -	1	31
Struck water at 23 feet. January 31, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 377</u>		
Flat, Bob McCoy tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 4 $\frac{3}{4}$ miles northeast of Miami.		
Sandy gray top soil - - - - -	3	3
Fine, sandy gray clay - - - - -	3	6
Fine-grained brown sand - - - - -	8	14
Sandy brown clay - - - - -	16	30
Sand, small gravel, and clay	8	38
Fine-grained sand - - - - -	2	40
Struck water at 24 feet. Water level, 2 feet below ground level -- hours after hole completed. February 1, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 378</u>		
Flat, Bob McCoy tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, blk. M-2, H. & G. N. sur., 500 feet west of well 377.		
Sandy gray top soil - - - - -	2	2
Fine-grained sand and clay	4	6
Reddish-brown sand and clay	6	12
Fine-grained brown sand - - -	3	15
Sand, clay, and white lime	1	16
Sandy brown clay and sand	8	24
Sandy brown clay - - - - -	9	33
Struck water at 24 feet. January 31, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 379</u>		
Gentle slope, Bob McCoy tract, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, blk. M-2, H. & G. N. sur., 800 feet east of well 375.		
Fine-grained, sandy gray top soil - - - - -	1	1
Fine-grained sand, some clay	2	3
Fine-grained brown sand - - -	4	7
Sandy brown clay - - - - -	16	23
Sand and brown clay - - - - -	4	27
Sandy gray clay - - - - -	3	30

	Thickness (feet)	Depth (feet)
<u>Well 379--Continued</u>		
Sand and gravel - - - - -	2	32
Loose sand, caving - - - - -	1	33
Struck water at 14 feet. January 31, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 380</u>		
Ridgetop, Bob McCoy tract, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 10, blk. M-2, H. & G. N. sur., 5 $\frac{1}{4}$ miles northeast of Miami.		
Sandy gray top soil - - - - -	2	2
Fine-grained brown sand - - -	5	7
Sandy brown clay - - - - -	5	12
Fine-grained brown sand, some clay - - - - -	2	14
Sand and clay - - - - -	6	20
Medium sand, some clay - - -	5	25
Sandy, dark brown clay - - -	22	47
Sand and clay - - - - -	2	49
Struck water at 30 feet. February 1, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 381</u>		
Gentle slope, W. I. Whitsell tract, east side W $\frac{1}{2}$ sec. 10, blk. M-2, H. & G. N. sur., 50 feet north of road, 5 $\frac{1}{4}$ miles northeast of Miami.		
Sandy brown top soil - - - - -	1	1
Soft red sand, some clay	1	2
Sand and gray silt - - - - -	2	4
Fine-grained brown sand and line spots - - - - -	2	6
Reddish-brown sand - - - - -	2	8
Sandy red clay - - - - -	10	18
Medium red sand, (water)	1	19
Sandy red clay and sand - - -	6	25
Sandy red clay - - - - -	6	31
Sand, some red clay - - - - -	2	33
Coarse-grained sand, caving	2	35
Struck water at 10 feet. March 25, 1940.		

	Thickness (feet)	Depth (feet)
<u>Well 383</u>		
Flat, National Bank of Commerce tract, NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, blk. B-1, H. & G. N. sur., 7 miles northeast of Miami.		
Fine-grained sandy soil - - -	1	1
Fine-grained sand - - - - -	1	2
Sandy dark-brown clay - - - -	2	4
Fine-grained brown sand - - -	2	6
Sandy, soft brown loam - - - -	2	8
Soft brown sand - - - - -	4	12
Sandy, hard brown clay - - -	3	15
Fine-grained brown sand - - -	2	17
Medium brown sand - - - - -	1	18

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

	Thickness (feet)	Depth (feet)
<u>Well 383--Continued</u>		
Coarse-grained sand and gravel - - - - -	2	20
Struck water at 19 feet. December 15, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 384</u>		
Flat, National Bank of Commerce tract, $1\frac{1}{2}$ S $7\frac{1}{4}$ sec. 1, blk. E-1, H. & G. N. sur., 7 miles northeast of Miami.		
Fine-grained sand and clay	1	1
Fine-grained brown sand -	5	6
Soft, fine-grained brown sand - - - - -	2	8
Sandy dark-brown clay - -	1	9
Sandy, brown silty clay -	6	15
Soft brown sand - - - -	1	16
Brown sand, limestone pebbles	2	18
Fine-grained brown sand -	2	20
Medium to coarse sand, lime rocks - - - - -	3	23
December 5, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 412</u>		
North edge of sink, Chisum Bros. tract, $SE\frac{1}{4}NE\frac{1}{4}$ sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{4}$ miles south of Miami.		
Fine-grained, sandy brown top soil - - - - -	4	4
Fine-grained, silty gray sand	3	7
Sandy gray clay and igneous pebbles - - - - -	9	16
Fine-grained, silty gray sand	1	17
Sandy brownish-red clay -	12	29
Gummy red clay, caliche, and caliche rocks - - - -	5	34
October 3, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 413</u>		
In sink, Chisum Bros. tract, $SE\frac{1}{4}NE\frac{1}{4}$ sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{4}$ miles south of Miami.		
Fine-grained, sandy brown top soil - - - - -	2	2
Sandy reddish-gray clay -	5	7
Fine, silty pink sand - -	6	13
Sandy gray clay - - - -	8	21
Fine-grained white sand -	3	24
Sandy red clay - - - -	22	46
Fine-grained, silty pinkish-gray sand - - - - -	11	57
Fine-grained, silty pink sand, caliche, and caliche rocks - - - - -	3	60
October 4, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 414</u>		
In sink, Chisum Bros. tract, $SE\frac{1}{4}NE\frac{1}{4}$ sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{4}$ miles south of Miami.		
Sandy brown top soil - -	4	4
Sandy reddish-brown clay -	7	11
Fine-grained, silty pink sand	3	14
Gray clay with rusty spots	6	20
Fine-grained, silty sand -	1	21
Sandy pinkish-gray clay with rusty spots - - - - -	3	24
Red clay, some sand and rusty spots - - - - -	19	43
Fine-grained, silty pink sand - - - - -	6	49
Sandy gray clay and chalk	3	52
Sandy red clay, caliche, and caliche rocks - - - -	3	55
October 4, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 415</u>		
South edge of sink, Chisum Bros. tract, $SE\frac{1}{4}NE\frac{1}{4}$ sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{4}$ miles south of Miami.		
Sandy brown top soil - -	3	3
Fine-grained, silty pink sand	7	10
Light-brown clay - - -	8	18
Fine-grained, silty brownish-pink sand - - - - -	4	22
Sandy brownish-red clay -	3	25
Fine-grained, silty gray sand	1	26
Sandy grayish-brown clay with rusty spots - - - - -	9	35
Sandy red clay with rusty spots - - - - -	13	48
Rusty sand - - - - -	1	49
Sandy red and gray clay -	6	55
Silty red sand - - - -	10	65
Sandy red clay and chalk -	6	71
October 6, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 416</u>		
South edge of sink, Chisum Bros. tract, $SE\frac{1}{4}NE\frac{1}{4}$ sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{4}$ miles south of Miami.		
Sandy brown top soil - -	2	2
Clean pink sand - - - -	3	5
Sandy reddish-brown clay -	5	10
Gummy brown clay - - -	10	20
Fine-grained, silty pink sand gray sand - - - - -	4	24
Gummy gray clay with rusty spots - - - - -	5	29
Sandy gray clay with rusty spots - - - - -	3	32

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

	Thickness (feet)	Depth (feet)
<u>Well 416--Continued</u>		
Sandy red clay, rusty spots, and gray spots - - -	9	41
Silty pink sand, some clay	16	57
Sandy pink clay and caliche	2	59
Fine-grained, silty pink sand - - - - -	6	65
Silty pink sand and fine caliche - - - - -	2	67
October 13, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 417</u>		
South side of sink, Chisum Bros. tract, sec. 58, blk. M-2, H. & G. N. sur., $4\frac{1}{2}$ miles south of Miami.		
Sandy brown top soil - -	2	2
Fine-grained, silty pink sand - - - - -	10	12
Sandy reddish-brown clay -	6	18
Sandy grayish-brown clay -	11	29
Fine-grained, silty pink, yellow, and gray sand, some clay - - - - -	5	34
Sandy gray clay, rusty spots	3	37
Sandy pinkish-gray clay, rusty spots - - - -	4	41
Dark-red clay, rusty and gray sand spots - - - - -	7	48
October 13, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 418</u>		
In sink, Chisum Bros. tract, sec. 58, blk. M-2, H. & G. N. sur., 400 feet west of well 414.		
Black top soil - - - -	4	4
Sandy grayish-brown clay soil - - - - -	4	8
Brownish-pink sand, some clay - - - - -	4	12
Silty pink sand - - - -	7	19
Fine-grained gray sand, some clay - - - - -	5	24
Sandy grayish-red clay with rusty spots - - - -	10	34
Sandy red clay - - - -	2	36
Sandy pink clay - - - -	2	38
Sandy gray clay - - - -	2	40
Sandy gray clay, rusty spots	2	42
Pink and gray sand, some clay - - - - -	6	48
Sandy gray clay - - - -	4	52
Sandy pink clay and caliche	1	53
Caliche rock - - - - -		53
October 14, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 419</u>		
In sink, Chisum Bros. tract, Sec. 58, blk. M-2, H. & G. N. sur., 400 feet west of well 418.		
Black top soil - - - -	7	7
Grayish-brown soil - - -	14	21
Sandy gray clay, rusty spots	8	29
Sandy pink clay, rusty spots	3	32
Sandy red clay, rusty spots	5	37
Sandy pink clay - - - -	3	40
Grayish-pink sand, some clay	8	48
Grayish-pink sand, some clay and caliche - - - -	2	50
Fine-grained, silty pink sand	2	52
Fine-grained, silty pink sand and caliche - - - -	1	53
Rock - - - - -		53
October 16, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 420</u>		
In sink, Chisum Bros. tract, sec. 58, blk. M-2, H. & G. N. sur., 400 feet west of well 419.		
Brown top soil - - - -	9	9
Sandy reddish-brown loam -	12	21
Sandy reddish-brown clay -	6	27
Silty gray sand - - - -	2	29
Sandy gray clay, rusty spots	1	30
Sandy gray and pink clay -	13	43
Silty pink sand, some clay	2	45
Fine-grained, silty gray sand	8	53
Fine-grained, silty pink sand, some clay and caliche	3	56
White chalk (?), some pink and yellow clay - - -	2	58
Fine-grained pink sand, clay and caliche - - - -	7	65
Rock - - - - -		65
October 17, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 421</u>		
In sink, Chisum Bros. tract, sec. 58, blk. M-2, H. & G. N. sur., 400 feet west of well 420, $4\frac{1}{2}$ miles south of Miami.		
Brown heavy top soil - -	8	8
Sandy light-brown loam -	11	19
Sandy reddish-brown loam -	5	24
Silty gray sand - - - -	1	25
Sandy red and gray clay -	2	27
Silty gray sand - - - -	1	28
Pinkish-gray sand, some clay	4	32
Sandy gray and yellow clay	2	34
Sandy pink, gray, and yellow clay - - - - -	3	37

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

	Thickness (feet)	Depth (feet)
<u>Well 421--Continued</u>		
Silty pink sand - - - -	3	40
Silty gray and pink sand, some clay - - - -	6	46
Silty gray sand - - - -	5	51
October 17, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 501</u>		
In draw, J. M. Daugherty tract, SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 36, blk. 2, I. & G. N. sur., 1 1/2 miles west of Miami.		
Sandy gray clay - - - -	1	1
Sandy brown clay, some lime	4	5
Sandy brown clay, some hard caliche - - - -	2	7
Sandy light-red clay and caliche - - - -	1	8
Sandy red clay and caliche	8	16
Sandy red clay - - - -	4	20
Sandy red clay and small gravel - - - -	1	21
December 14, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 502</u>		
In draw, J. M. Daugherty tract, SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 36, blk. 2, I. & G. N. sur., 300 feet west of well 501.		
Sandy gray top soil - - -	2	2
Sandy brown clay - - - -	4	6
Sandy brown clay, lime spots	6	12
Sandy brown clay and white lime - - - -	3	15
Sandy red clay and soft lime	1	16
Sandy reddish-brown clay and white lime - - - -	8	24
December 14, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 514</u>		
In sink, Foreman Est., SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 1 1/2 miles west of Miami.		
Gummy black soil - - - -	6	6
Reddish-brown clay - - - -	14	20
Gray clay, rusty spots - -	3	23
Gray clay and caliche - -	3	26
Yellowish-gray clay - - -	7	33
Linkish-gray clay, rusty spots (water at 34 feet)	14	47
Red, gray, and rusty clay	2	49
Gray and rusty clay - - -	3	52
Sandy pink and gray clay -	8	60
Struck water at 34 feet. Water level, 31 feet below ground level, 13 hours after hole completed. November 22, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 515</u>		
Test side of sink, Foreman Est., SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 1 1/2 miles west of Miami.		
Sandy brown top soil - - -	17	17
Red clay - - - - - - -	6	23
Sandy gray clay, wet - - -	2	25
Granular gray clay - - - -	5	30
Pink clay - - - - - - -	4	34
Sandy brown clay, caliche spots - - - - - - -	4	38
Sandy reddish-brown shale	3	41
Gray clay - - - - - - -	6	47
Sandy reddish-brown clay -	5	52
Red clay - - - - - - -	4	56
Sandy red clay, caliche spots	3	59
November 22, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 516</u>		
In sink, Foreman Est., SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 1 1/2 miles west of Miami.		
Sandy brown top soil - - -	4	4
Brownish-gray clay - - - -	6	10
Sandy light-brown clay - - -	5	15
Reddish-brown clay - - - -	6	21
Dark-gray clay - - - - -	3	24
Brownish-gray clay - - - -	2	26
Sandy light-gray clay with spots of caliche - - - -	2	28
Brownish-gray clay - - - -	2	30
Sandy brown clay - - - - -	9	39
November 26, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 518</u>		
In sink, Foreman Est., SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 1 1/2 miles west of Miami.		
Tight brown top soil - - -	5	5
Light-brown clay, some caliche - - - - - - -	9	14
Reddish-brown clay, rusty spots - - - - - - -	3	17
Gray clay - - - - - - -	4	21
Reddish-brown clay - - - -	17	38
Light-red clay and caliche	9	47
November 13, 1939.		

	Thickness (feet)	Depth (feet)
<u>Well 519</u>		
In sink, Foreman Est., SE $\frac{1}{4}$ -SE $\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet north of well 518.		
Tight brown top soil - - -	5	5
(Continued on next page)		

Logs of T. P. A. test wells in Roberts County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 519--Continued</u>		
Light-brown clayey soil -	7	12
Reddish-brown clayey soil	4	16
Pinkish-gray clay, rusty spots - - - - -	4	20
Gray clay - - - - -	1	21
Light-red clay, gray streaks	6	27
Light-red clay - - - - -	17	44
Red clay - - - - -	3	47
Red clay and caliche - -	9½	56½
November 13, 1939.		

<u>Well 520</u>		
In sink, Foreman Est., $1E\frac{1}{2}SE\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet north of well 519.		
Tight brown top soil - -	5	5
Light-brown clay - - -	7	12
Light-brownish-pink clay, gray streaks - - - -	6	18
Light-red clay - - - -	25	43
Red clay - - - - -	2	45
Medium red clay - - - -	5	50
Red silty sand - - - -	4	54
Caliche, and sandy red clay	3	57
November 15, 1939.		

<u>Well 521</u>		
In sink, Foreman Est., $NE\frac{1}{4}SE\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet north of well 520.		
Brown top soil - - - -	3	3
Light-brown clayey soil -	3	6
Grayish-brown clay - - -	4	10
Gray clay, rusty spots -	2	12
Gray and red clay - - -	5	17
Light-red clay - - - -	31	48
Red clay - - - - -	5	53
Red clay and caliche - -	4	57
Very sandy dark-red clay -	6	63
Sandy red clay, some caliche	4	67
Caliche, some red clay -	12	79
Red sand, some clay - -	13	92
Caliche and caliche rock -	1	93
November 15, 1939.		

<u>Well 522</u>		
In sink, Foreman Est., $SE\frac{1}{4}SE\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet west of well 519.		
Tight brown top soil - -	5	5
Light-brown clayey soil -	6	11
Reddish-brown clay - - -	10	21
Gray clay - - - - -	1	22

	Thickness (feet)	Depth (feet)
<u>Well 522--Continued</u>		
Light-red clay, rusty spots	11	33
November 16, 1939.		

<u>Well 523</u>		
In sink, Foreman Est., $SE\frac{1}{4}SE\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet west of well 522.		
Tight brown top soil - -	5	5
Light-brown clayey soil -	5	10
Reddish-brown clay - - -	5	15
Reddish-brown clay, gray streaks - - - - -	5	20
Sandy gray clay - - - -	2	22
Light-red clay - - - - -	22	44
Red clay and caliche - -	47	51
November 17, 1939.		

<u>Well 524</u>		
In sink, Foreman Est., $SW\frac{1}{4}SD\frac{1}{4}$ sec. 40, blk. 2, I. & G. N. sur., 400 feet west of well 523.		
Tight brown top soil - -	6	6
Light-brown clayey soil -	11	17
Light-red clay - - - -	5	22
Gray clay - - - - -	5	27
Light-red clay with rusty spots - - - - -	4	31
Light-red clay - - - - -	15	46
Red clay, gray streaks -	9	55
November 20, 1939.		

<u>Well 540</u>		
In sink, B. Foreman Est., $SW\frac{1}{4}SW\frac{1}{4}$ sec. 93, blk. 2, I. & G. N. sur., 17 miles west of Miami.		
Hard dark-brown clay - -	4	4
Sandy reddish-brown clay -	16	20
Sandy light-reddish-brown clay, some caliche - -	11	31
December 2, 1939.		

<u>Well 541</u>		
In sink, B. Foreman Est., $NE\frac{1}{4}SW\frac{1}{4}$ sec. 93, blk. 2, I. & G. N. sur., 17 miles west of Miami.		
Sandy reddish-brown soil -	2	2
Fine-grained, sandy light-brown clay - - - - -	2	4
Sandy red clay - - - - -	6	10
Sandy red clay and caliche	2	12
Sandy red clay - - - - -	10	22
Caliche and sandy red clay	2	24
(Continued on next page)		

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

	Thickness (feet)	Depth (feet)
Well 541--Continued		
Sandy red clay - - - -	13	37
Mixed sandy clay and caliche	3	40
Sandy rusty-red clay - -	10	50
December 2, 1939.		

	Thickness (feet)	Depth (feet)
Well 542		
In sink, Foreman Est., SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 93, blk. 2, I. & G. N. sur., 17 miles west of Miami.		
Loose sandy gray soil - -	3	3
Sandy brownish-gray clay -	4	7
Sandy brown clay - - -	6	13
Sandy hard gray clay - -	3	16
Sandy reddish-brown clay and caliche - - - - -	3	19
Sandy brown clay and caliche	4	23
Light-brown sand, some clay	3	26
Red sand, some clay - -	2	28
Light-brown sand - - -	3	31
Fine-grained light-brown sand - - - - -	1	32
Sandy brownish-red clay -	2	34
Sandy red clay - - - -	37	71
Red shale and caliche - -	1	72
Sandy red clay - - - -	4	76
November 28, 1939.		

	Thickness (feet)	Depth (feet)
Well 543		
In sink, Foreman Est., SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 93, blk. 2, I. & G. N. sur., 400 feet east of well 542.		
Fine gray top soil and loose clayey loam - - - -	4	4
Brownish-gray sand, some clay - - - - -	7	11
Brown sand and clay - -	4	15
Fine brownish-gray clay -	4	19
Reddish-brown clay - - -	1	20
Sandy red clay - - - -	29	49
Sandy red clay and caliche	13	62
November 28, 1939.		

	Thickness (feet)	Depth (feet)
Well 544		
In sink, Foreman Est., NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 93, blk. 2, I. & G. N. sur., 700 feet north of well 543.		
Sandy gray top soil - - -	2	2
Sandy brown clay - - -	5	7
Sandy red clay, some caliche	8	15
Sandy red clay - - - -	12	27
Sandy red clay and caliche	13	40
December 1, 1939.		

Partial analyses of water from wells and springs in Roberts County, Texas

(Analyzed at The University of Texas under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry, and E. W. Lohr, Chemist, U. S. Department of the Interior, Geological Survey; by D. F. Riddell, and H. T. Davidson, Chemists; and Martin Wieland, Jack Ramsey and J. H. Raby, Assistant Chemists. Nitrate and fluoride determined by E. W. Lohr. Results are in parts per million. Well numbers correspond to numbers in table of well records.)

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
2	M. W. O'Loughlin	86	Oct. 15, 1939	269	76	15	7	287	11	4	-	-	249
5	W. I. Whitsell	82	Apr. 25, 1940	318	49	22	39	232	30	53	b/	1.4	214
6	W. P. A. Test	30	Apr. 13, 1940	-	-	-	-	-	65	60	b/	-	-
7	do.	31	do.	238	18	13	58	183	26	32	b/	0.7	98
10	C. S. Lipps	61	Apr. 25, 1940	220	-	-	-	232	11	9	b/	-	-
11	do.	31	do.	213	44	13	22	220	16	10	b/	-	163
14	Woods King	65	do.	289	-	-	-	220	39	34	b/	-	-
19	W. P. A. Test	37	Mar. 29, 1940	347	-	-	-	256	32	59	b/	-	-
24	W. I. Whitsell	96	do.	268	35	25	33	201	26	47	b/	1.5	190
c/ 28	Bell Ranch	82	Mar. 3, 1940	353	46	35	38	281	34	40	22	-	256
29	C. S. Lipps	85	do.	575	41	36	124	207	90	180	b/	1.6	252
30	do.	41	do.	336	40	30	45	214	45	71	b/	-	224
31	W. P. A. Test	25	Mar. 22, 1940	-	-	-	-	-	84	138	b/	-	-
34	do.	25	Mar. 21, 1940	477	-	-	-	329	51	86	b/	-	-
35	do.	35	do.	393	72	37	24	299	53	60	b/	-	333
38	Mrs. P. A. Worley	28	Oct. 23, 1939	208	-	-	-	207	a/	17	b/	-	-
41	J. D. Lard	48	do.	242	61	14	15	250	11	18	b/	-	209
45	do.	Spring	do.	498	62	23	100	262	24	160	b/	-	249
46	do.	Spring	do.	260	-	-	-	244	20	20	120	-	-
48	J. L. Wells	77	do.	221	68	10	3	226	11	12	b/	-	211
49	J. F. Rasor	93	Oct. 13, 1939	196	56	10	7	214	12	6	b/	-	181
c/ 51	Ledrick Brothers	200	do.	209	56	16	3	226	a/	6	b/	0.6	205
53	Texas-Mexico Land & Cattle Co.	238	Oct. 9, 1939	183	45	12	10	201	10	7	b/	-	163
59	Ledrick Brothers	-	Nov. 16, 1939	216	-	-	-	220	12	12	b/	-	-
61	Mrs. P. A. Worley	230	Oct. 9, 1939	196	49	11	13	207	11	9	b/	-	167
62	do.	300	do.	179	44	17	2	195	a/	12	b/	-	181

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
63	Mrs. P. A. Worley	172	Nov. 16, 1939	131	36	9	2	140	a/	5	b/	-	126
64	do.	-	do.	219	50	8	25	207	24	10	b/	-	155
65	do.	Spring	do.	263	41	14	43	232	23	28	b/	-	159
66	do.	28	do.	190	-	-	-	195	11	9	b/	-	-
68	do.	175 /	do.	218	47	12	22	214	12	20	b/	-	168
c/ 69	do.	180	Oct. 9, 1939	244	44	15	32	226	16	26	b/	0.5	169
71	do.	120 /	do.	201	67	5	6	232	a/	4	b/	-	188
72	do.	239	do.	197	52	6	17	201	14	9	b/	-	154
73	Texas-Mexico Land & Cattle Co.	225 /	Nov. 20, 1939	209	43	14	18	201	28	7	b/	-	164
c/ 74	do.	280 /	do.	238	62	11	12	214	20	15	b/	0.6	202
75	do.	-	do.	174	-	-	-	177	16	4	b/	-	-
76	J. W. Morrison	-	Oct. 25, 1939	180	-	-	-	189	10	7	b/	-	-
77	Texas-Mexico Land & Cattle Co.	-	Nov. 20, 1939	294	44	11	53	201	40	47	b/	-	157
78	do.	-	do.	204	-	-	-	207	12	11	b/	-	-
79	do.	Spring	do.	-	-	-	-	-	30	30	b/	0.2	-
80	J. W. Morrison	36	Oct. 25, 1939	205	48	10	18	195	19	14	b/	-	161
82	do.	25 /	do.	205	-	-	-	220	10	7	b/	-	-
83	do.	50 /	do.	199	-	-	-	220	a/	6	b/	-	-
c/ 84	do.	80	do.	121	33	7	5	128	a/	5	b/	0.7	109
101	A. A. Parsell	23	Oct. 10, 1939	508	71	29	84	256	22	176	b/	-	298
103	W. R. Hill	60	Nov. 25, 1939	181	49	15	1	207	a/	4	b/	1.2	184
104	do.	83	do.	148	32	13	8	153	10	10	b/	-	133
106	do.	118	do.	610	53	25	150	262	36	215	b/	2.3	236
107	A. A. Parsell	50	Feb. 29, 1940	511	45	22	120	244	61	143	b/	-	204
108	do.	27	do.	229	36	20	27	232	12	20	b/	-	172
109	Mrs. -- Morrison	58	do.	209	-	-	-	207	14	12	b/	-	-
110	Tandy Sisters	55	Mar. 14, 1940	202	-	-	-	159	18	30	b/	-	-
c/111	R. B. Killebrew	54	Feb. 29, 1940	386	67	22	51	275	36	74	b/	1.4	259

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
112	R. B. Killebrew	44	Feb. 29, 1940	282	-	-	-	189	39	46	b/	-	-
113	Tandy Sisters	19	Oct. 10, 1939	339	54	24	45	293	26	44	b/	1.7	235
114	W. P. A. Test	24	Mar. 7, 1940	562	48	122	5	732	17	10	b/	-	620
117	R. B. Killebrew	36	Mar. 6, 1940	169	40	10	12	165	14	12	b/	-	141
118	do.	33	Mar. 8, 1940	243	33	22	28	189	39	28	b/	-	174
c/120	W. P. A. Test	29	Mar. 14, 1940	775	62	26	200	317	94	235	b/	2.2	261
122	R. B. Killebrew	43	Feb. 29, 1940	265	51	14	32	220	30	30	b/	-	184
123	Tandy Sisters	23	Mar. 7, 1940	544	40	20	141	262	69	144	b/	-	182
124	W. I. Whitsell	76	Mar. 6, 1940	331	-	-	-	238	41	50	b/	-	-
127	do.	-	Oct. 10, 1939	337	48	24	48	250	36	58	b/	-	220
128	F. McMordie	-	Oct. 28, 1939	451	52	27	81	232	60	117	b/	-	242
129	D. D. Payne	35	Oct. 17, 1939	254	-	-	-	238	14	25	b/	-	-
c/131	W. T. Hammond	Spring	do.	281	80	15	10	305	11	14	b/	1.4	264
132	do.	-	do.	170	-	-	-	159	13	14	b/	-	-
133	do.	19	do.	243	64	12	16	256	12	13	b/	-	207
136	A. G. Hammond	-	Oct. 25, 1939	156	26	11	20	153	10	14	b/	-	112
137	do.	44	Nov. 24, 1939	235	48	13	24	207	36	10	b/	1.5	173
138	do.	152	do.	265	44	19	30	232	52	6	b/	-	187
139	do.	199	Oct. 17, 1939	246	54	21	12	244	16	22	b/	1.0	223
143	J. H. Jones	37	do.	243	59	18	10	238	22	17	b/	-	221
c/144	F. McMordie	47	Oct. 30, 1939	260	61	22	8	268	a/	11	b/	1.4	244
145	N. H. Read	33 ¹ / ₂	do.	373	61	24	49	281	42	59	b/	-	250
146	F. McMordie	131	do.	212	52	21	-	232	12	7	b/	1.7	218
147	do.	153	do.	251	46	26	15	226	18	33	b/	1.5	221
148	do.	111	do.	225	61	15	6	238	11	15	b/	-	214
149	do.	Spring	do.	267	-	-	-	256	15	23	b/	-	-
150	do.	34	Oct. 17, 1939	222	-	-	-	244	a/	9	b/	-	-
152	do.	18	Oct. 31, 1939	231	72	9	5	244	a/	6	b/	-	216
155	D. D. Payne	31 ¹ / ₂	Oct. 27, 1939	241	-	-	-	232	16	18	b/	-	-
156	F. McMordie	30	do.	243	76	13	-	250	13	8	b/	1.1	243
157	W. P. A. Test	23	do.	330	-	-	-	293	24	36	b/	-	-

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
158	W. P. A. Test	26	Oct. 27, 1939	267	54	14	29	214	26	39	b/	-	194
160	do.	25	Oct. 28, 1939	337	60	15	51	293	29	38	b/	-	214
c/161	do.	25	Oct. 31, 1939	420	89	24	28	262	135	13	b/	2.3	320
163	F. McMordie	56	Oct. 27, 1939	154	-	-	-	159	a/	7	b/	-	-
166	F. M. Chambers	Spring	Nov. 1, 1939	181	58	3	10	207	a/	3	b/	-	157
167	do.	33	do.	390	44	26	71	214	22	122	b/	-	216
168	F. McMordie	20	Oct. 28, 1939	283	59	22	20	268	20	30	b/	-	239
169	do.	24	do.	288	53	24	26	238	14	54	b/	-	230
171	Mrs. M. Waterfield	42	Oct. 15, 1939	313	61	28	20	238	26	60	b/	1.1	267
172	do.	Spring	do.	426	60	39	46	262	52	100	-	-	309
173	G. A. Mohler	Spring	Sept. 30, 1939	441	70	32	49	281	88	64	b/	-	205
175	A. C. Taylor	80	Sept. 29, 1939	251	-	-	-	268	12	9	b/	-	-
c/176	do.	80	do.	247	58	23	6	256	a/	10	b/	3.2	239
177	do.	Spring	do.	300	53	36	14	329	17	18	b/	-	283
178	do.	269	do.	244	43	29	13	256	13	16	b/	3.6	228
200	J. H. Whitson	147	Oct. 19, 1939	201	41	24	4	220	13	11	b/	-	200
201	do.	Spring	do.	243	50	31	2	293	10	6	b/	-	254
202	Citizens Nat'l Bank	189	do.	203	43	22	6	232	a/	9	b/	1.1	199
203	do.	103	do.	218	-	-	-	226	11	11	b/	-	-
204	B. F. A. Byrum	-	Oct. 20, 1939	202	-	-	-	220	a/	7	b/	-	-
206	do.	-	do.	200	-	-	-	207	a/	12	b/	-	-
c/209	Amarillo Live Stock Co.	400	Sept. 28, 1939	226	43	27	10	262	a/	8	b/	1.3	217
211	N. H. Read	-	do.	258	-	-	-	275	11	11	b/	-	-
212	do.	Tank	Oct. 15, 1939	188	53	5	14	195	15	5	b/	-	153
213	do.	Tank	do.	326	73	11	41	305	17	34	b/	0.4	227
214	Mrs. J. O. Burnett	Tank	Nov. 9, 1939	263	72	4	26	281	18	5	b/	-	198
215	H. J. McCuiston	509	Dec. 18, 1939	220	40	24	12	244	12	9	b/	-	200
216	Mrs. J. O. Burnett	432	do.	219	45	24	7	226	11	21	b/	-	210
c/217	R. L. Simmons	377	do.	244	53	25	7	244	11	26	b/	1.4	236

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
218	C. R. Cowan	350	Dec. 18, 1939	-	-	-	-	-	a/	8	b/	-	-
219	B. P. Seitz	440	do.	-	-	-	-	-	12	16	b/	-	-
220	M. K. Heare	326	do.	241	41	25	20	275	12	8	b/	-	206
221	J. B. Talley	415	do.	235	50	23	11	262	14	7	b/	1.3	219
224	N. H. Martin	395	Feb. 14, 1940	199	29	25	14	201	14	17	b/	1.0	175
225	W. R. Ewing	397	do.	246	28	27	32	262	14	16	b/	-	182
227	J. F. Rasor	143	Oct. 13, 1939	236	46	22	17	250	12	16	b/	-	204
229	Miami Land & Cattle Co.	382	Sept. 20, 1939	211	42	24	8	238	a/	19	b/	-	205
231	Alfred Cowan	370 4	do.	240	44	33	3	275	11	6	-	1.1	245
c/232	C. R. Cowan	256	Dec. 18, 1939	233	68	16	-	244	a/	9	b/	0.8	235
234	John Haggard	400 4	Sept. 20, 1939	263	50	23	21	262	20	19	b/	0.6	219
235	Mrs. G. M. McCuiston	400 4	do.	247	-	-	-	256	16	9	b/	-	-
236	Ellis Locke	434	Dec. 7, 1939	-	-	-	-	-	13	14	b/	-	-
237	W. H. Gay	394	Dec. 2, 1939	-	-	-	-	-	15	15	b/	-	-
240	J. P. Osborne	420	Dec. 7, 1939	227	45	27	8	256	a/	14	b/	-	221
241	do.	380	do.	239	52	24	8	262	12	14	b/	-	230
244	J. E. Welton	Spring	Sept. 18, 1939	334	53	20	41	250	15	23	59	-	212
245	do.	Spring	Sept. 19, 1939	577	93	20	105	348	30	157	b/	0.8	312
246	do.	265	Sept. 18, 1939	213	68	8	4	244	a/	1	-	0.5	205
249	M. W. O'Loughlin	Spring	Sept. 19, 1939	153	31	12	-	165	14	2	b/	0.9	128
c/250	do.	167	do.	238	24	10	46	146	a/	17	60	0.1	101
253	Mrs. Beulah Edge	-	Sept. 16, 1939	320	86	10	4	195	a/	6	113	-	256
255	N. M. Maddox	Tank	Sept. 19, 1939	175	46	10	9	195	12	2	b/	0.3	156
260	E. C. Meador	398	Nov. 29, 1939	218	-	-	-	244	a/	6	b/	-	-
268	Mrs. Beulah Edge	392	do.	229	30	36	11	275	a/	9	b/	-	222
269	L. A. Maddox	395	Dec. 2, 1939	242	48	20	20	262	12	12	b/	0.8	203
270	W. L. Brown	209	do.	223	29	41	-	244	10	22	b/	-	240
275	M. W. O'Loughlin	350	Sept. 21, 1939	155	48	10	-	171	a/	4	b/	0.4	161
279	F. A. Talley	-	do.	111	35	4	4	128	a/	2	b/	-	102

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 33.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
c/284	F. A. Talley	150	Sept. 21, 1939	214	49	12	12	171	10	15	31	0.8	173
290	M. W. O'Loughlin	-	Oct. 5, 1939	215	56	8	10	171	11	15	30	-	175
295	-- Noblett	62	Sept. 22, 1939	168	-	-	-	183	a/	4	b/	-	-
297	H. A. Gill	196	Feb. 15, 1940	174	22	30	5	207	a/	8	b/	0.5	178
298	do.	93	do.	143	-	-	-	146	a/	8	b/	-	-
302	W. P. A. Test	39	Sept. 28, 1939	291	73	12	20	281	10	7	31	-	233
c/304	do.	38	Sept. 29, 1939	386	109	11	20	287	30	53	21	1.2	317
305	do.	42	Sept. 30, 1939	268	85	4	11	256	12	7	23	-	227
310	J. P. Osborne	138	Sept. 29, 1939	175	37	20	3	189	17	5	b/	-	172
311	do.	160	Sept. 25, 1939	210	-	-	-	232	10	4	b/	-	-
315	J. O. Duniven	55	do.	283	-	-	-	220	10	18	46	-	-
317	A. J. Nickel	58	do.	186	60	6	5	207	a/	3	b/	0.6	174
318	Mrs. Billie Laughlin	-	do.	196	-	-	-	201	10	11	b/	-	-
324	Roberts County	97	Nov. 9, 1939	378	98	13	18	220	29	58	54	-	296
c/326	Mrs. -- Wade	69	Jan. 17, 1940	353	97	11	13	244	42	28	38	0.5	287
327	R. L. Howard	66	do.	247	33	11	51	226	a/	16	28	-	127
333	W. P. A. Test	50	Feb. 10, 1940	389	78	33	11	116	75	119	b/	0.6	330
334	do.	49	Feb. 12, 1940	261	56	18	19	238	13	28	b/	-	215
338	do.	46	Feb. 13, 1940	367	105	14	20	378	20	21	b/	0.5	319
342	C. Burnett	40	Oct. 20, 1939	212	70	9	1	244	a/	4	b/	-	211
c/343	do.	90	do.	329	75	24	23	366	12	12	b/	2.5	285
344	F. W. Osborne	-	do.	231	-	-	-	244	10	11	b/	-	-
345	do.	67	Sept. 25, 1939	232	50	22	11	256	13	10	b/	-	214
346	do.	120	Oct. 20, 1939	246	59	24	4	268	10	17	b/	-	245
347	W. P. A. Test	57	Oct. 19, 1939	223	67	9	9	250	a/	7	b/	1.2	206
348	do.	42	do.	238	70	12	9	281	a/	8	b/	-	222
357	do.	63	Feb. 6, 1940	156	29	15	11	153	16	9	b/	1.4	134
358	C. F. Christopher	-	Jan. 31, 1940	191	59	9	3	220	a/	6	b/	-	186
359	P. A. Nelson	96	Feb. 6, 1940	-	-	-	-	-	12	14	b/	-	-
360	Bob McCoy	90	Dec. 5, 1939	200	57	8	11	220	a/	6	b/	0.5	175
362	F. W. Osborne	-	Oct. 18, 1939	206	52	16	7	232	a/	9	b/	-	195
363	do.	-	do.	241	-	-	-	256	10	11	b/	-	-

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
364	B. F. A. Byrum	29	Jan. 16, 1940	237	66	16	6	281	a/	5	b/	0.6	230
c/366	W. P. A. Test	47	Jan. 20, 1940	512	68	24	81	232	172	50	b/	2.8	270
367	do.	41	Jan. 23, 1940	299	58	14	37	244	36	34	b/	-	204
368	do.	60	Jan. 25, 1940	331	66	20	36	323	24	26	b/	-	248
369	Bob McCoy	64	Jan. 11, 1940	197	52	16	3	207	12	11	b/	1.4	195
370	W. P. A. Test	28	Jan. 12, 1940	332	40	62	70	275	44	21	b/	6.4	165
371	do.	52	Jan. 16, 1940	-	-	-	-	-	20	15	b/	-	-
373	do.	52	do.	401	38	13	96	250	95	33	b/	2.7	148
375	do.	47	Jan. 30, 1940	298	56	13	42	244	28	39	b/	-	193
380	do.	49	Feb. 1, 1940	260	59	18	18	268	20	13	b/	-	221
382	Nat'l Bank of Commerce	23	Dec. 4, 1939	-	-	-	-	-	11	11	b/	-	-
385	Mrs. C. Coffee	106	Dec. 5, 1939	-	-	-	-	-	10	19	b/	-	-
386	Bob McCoy	96	do.	-	-	-	-	-	16	18	b/	-	-
388	J. M. Gill	20 ⁰	Oct. 29, 1939	329	57	20	45	329	18	15	b/	-	222
395	do.	300 ⁰	Oct. 6, 1939	241	51	27	4	256	10	12	b/	-	237
396	A. W. Gill	245 ⁰	do.	251	56	18	17	256	15	18	b/	0.7	216
397	do.	268	do.	231	-	-	-	238	12	12	b/	-	-
398	R. B. Mathers	260	Oct. 5, 1939	229	44	23	14	244	12	16	b/	-	204
402	do.	405	do.	238	59	21	5	256	12	15	b/	-	233
c/403	J.G. Bodenschatz	Spring	Oct. 12, 1939	134	40	8	1	159	a/	2	b/	0.5	135
408	First State Bank	409	Oct. 3, 1939	232	44	23	17	268	a/	8	b/	0.8	204
409	do.	400 ⁰	do.	217	46	26	4	262	a/	4	b/	-	221
411	Chisum Brothers	106	Oct. 6, 1939	254	66	15	16	305	a/	3	b/	0.5	224
422	Mart Cunningham	375 ⁰	Oct. 3, 1939	290	62	23	18	244	18	49	b/	-	249
503	J. Lewis	401	Dec. 7, 1939	233	49	26	6	268	10	10	b/	-	231
504	J. L. Seibers	415	Dec. 6, 1939	253	41	25	24	268	14	17	b/	-	206
505	Talley & Pulaski	408	do.	325	47	27	42	268	30	46	b/	0.8	227
506	P. Pennington	427	Dec. 12, 1939	200	28	23	18	195	16	19	b/	-	164
c/508	C. L. Broadus	509	do.	247	46	24	18	268	13	13	b/	0.8	215
509	W. D. Allen	432	do.	217	36	23	18	232	12	14	b/	-	184

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
510	G. W. Hodges	475	Dec. 12, 1939	247	35	25	25	232	28	20	b/	-	191
511	Beulah Edge	478	Nov. 29, 1939	383	50	23	63	238	63	67	b/	-	219
513	N. M. Maddox	400/	Nov. 14, 1939	260	43	25	23	250	26	19	b/	0.7	210
514	W. P. A. Test	60	Nov. 22, 1939	205	-	-	-	207	17	7	b/	-	-
517	-- Foreman	366	Nov. 27, 1939	231	37	27	18	256	10	12	b/	0.8	201
525	W. M. Craven	480	Dec. 13, 1939	-	-	-	-	-	a/	48	b/	-	-
526	B. C. Rogers	407	do.	215	39	28	7	256	a/	6	b/	-	212
c/527	G. M. Cooper	390	Dec. 1, 1939	224	58	14	11	250	a/	8	b/	0.8	204
528	R. J. Sailor	400?	Sept. 18, 1939	240	46	23	16	256	17	12	b/	-	209
529	W. G. Lyons	500	Dec. 13, 1939	533	42	36	101	171	133	136	b/	0.7	252
530	T. M. Osborne	385	Dec. 1, 1939	259	37	24	29	226	36	22	b/	-	190
531	G. T. Montgomery	447	Dec. 13, 1939	195	28	30	6	214	16	10	b/	-	193
532	C. W. Osborne	400/	Sept. 18, 1939	250	33	2	68	262	10	7	b/	0.9	92
534	E. W. Hogan	488	Dec. 13, 1939	272	44	24	29	281	23	14	b/	-	210
535	Worley Estate	400	do.	237	45	19	21	238	16	19	b/	-	192
536	J. E. Seitz	420	Dec. 19, 1939	230	44	22	15	226	24	14	b/	-	198
c/537	C. L. Thomas	473	do.	206	40	23	9	226	12	10	b/	0.7	194
538	H. A. Talley	495	do.	198	26	20	24	201	15	13	b/	0.6	148
539	G. McConnell	406	do.	187	28	24	12	207	12	9	b/	-	170
c/545	--	280	Nov. 21, 1939	216	47	24	5	244	10	10	b/	0.5	215
547	O. Theis	200/	do.	223	34	26	18	238	12	16	b/	-	191
550	Orphans Home	Tank	Nov. 17, 1939	93	22	4	9	98	a/	5	b/	-	73
551	B. F. Price	180	Nov. 14, 1939	227	42	26	11	244	14	14	b/	-	211
552	do.	148	do.	198	60	10	3	207	a/	12	b/	-	191
553	T. J. Price	133	do.	295	48	40	8	287	13	26	19	0.6	285
554	do.	-	do.	178	30	21	10	195	12	9	b/	-	163
555	W. D. Price	200/	Nov. 17, 1939	217	59	14	6	226	14	12	b/	0.6	204
556	O. Theis	336	do.	233	43	22	18	250	12	14	b/	0.6	199
557	do.	152	Nov. 21, 1939	142	25	14	10	128	15	15	b/	-	119
559	do.	200/	Nov. 17, 1939	286	33	16	56	244	40	21	b/	-	150
560	do.	414	Nov. 20, 1939	218	54	18	7	232	15	10	b/	0.5	206

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 53.

Partial analyses of water from wells and springs in Roberts County--Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Fluoride (F)	Total hardness as CaCO ₃ (calc.)
c/561	O. Theis	300 /	Nov. 21, 1939	186	22	25	15	177	28	8	b/	0.7	155
562	A. Combs	180	Oct. 13, 1939	207	64	8	4	214	10	10	b/	-	195
564	Miami Land & Cattle Co.	300 /	Oct. 4, 1939	244	41	27	18	262	14	14	b/	0.6	212
566	do.	500 /	Nov. 15, 1939	275	48	26	21	250	40	16	b/	0.7 Q	226
c/567	Mrs. G. N. McChristian	400 /	Sept. 20, 1939	198	40	26	180	226	10	8	b/	1.1	206
568	Miami Land & Cattle Co.	174	Oct. 4, 1939	241	53	13	15	183	15	20	35	-	188
569	G. G. Frashier	400 /	do.	240	52	23	10	256	14	15	b/	-	224
571	Miami Land & Cattle Co.	Spring	Nov. 15, 1939	267	43	24	29	262	23	17	b/	1.7	205
574	G. G. Frashier	47	Oct. 4, 1939	253	62	22	6	256	14	23	b/	-	244
579	Texas-Mexico Land & Cattle Co.	102	Nov. 15, 1939	184	50	9	11	207	a/	7	b/	-	161
580	do.	-	Oct. 13, 1939	212	-	-	-	220	13	9	b/	-	-
581	do.	-	do.	198	29	20	22	201	11	16	b/	-	152
c/582	O. Theis	122	Nov. 20, 1939	88	26	4	2	98	a/	1	b/	0.3	83
584	do.	154	Nov. 21, 1939	206	38	20	14	201	17	18	b/	-	177
586	--	-	do.	186	-	-	-	189	12	9	b/	-	-

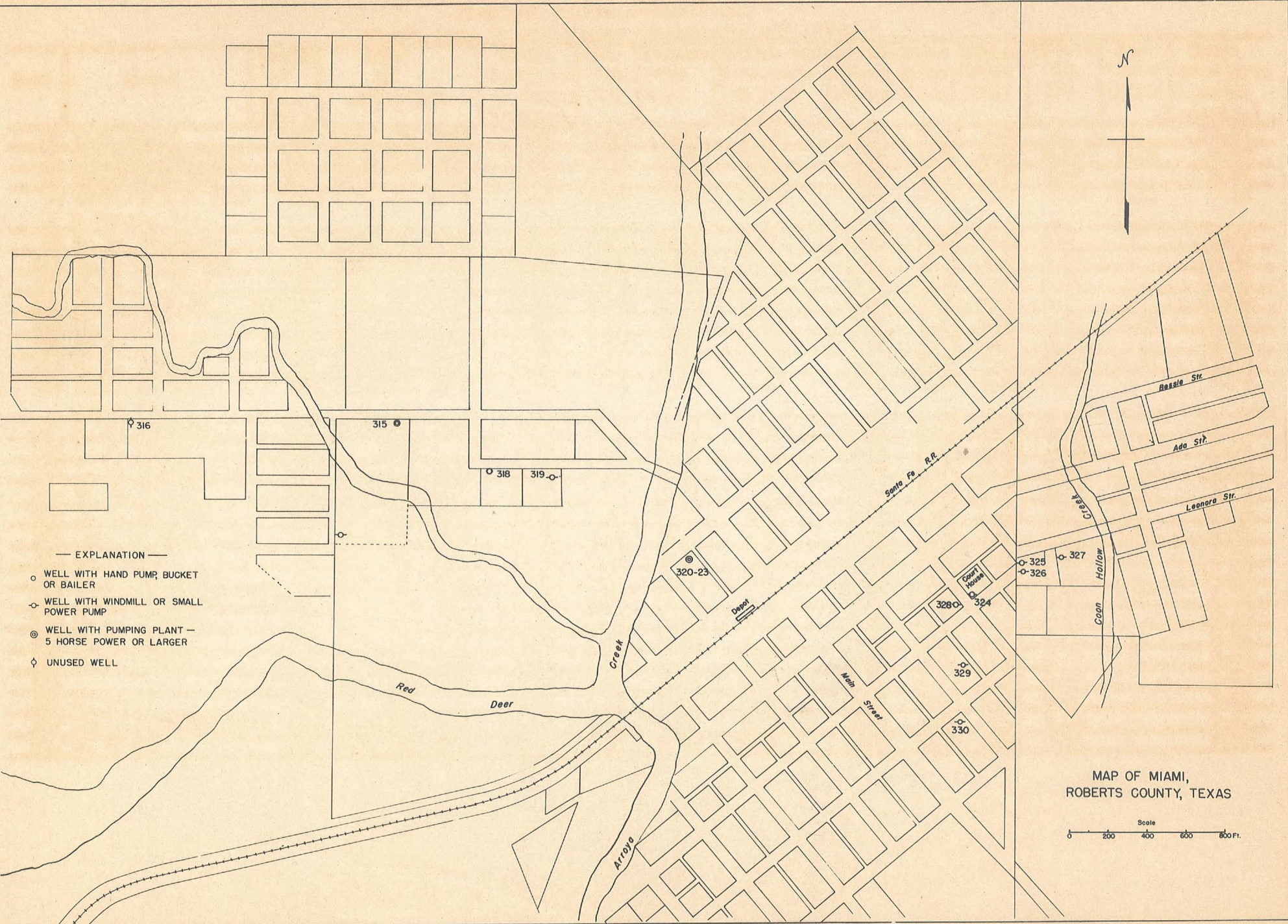
a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

c/ Analyses of selected wells are given in milligrams equivalents per liter on page 63.

Chemical analyses--Continued
Results are in milligrams equivalents per liter

Well	Owner	Depth of well (ft.)	Date of collection	Total hardness as CaCO ₃ (calc.)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicar-bonate (HCO ₃)	Sul-phate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Mi-trate (NO ₃)	Total dissolved solids (calc.)
28	Bell Ranch	82	Mar. 6, 1940	5.12	2.28	2.84	1.66	4.60	0.69	1.13	-	-	13.56
51	Ledrick Brothers	200	Oct. 13, 1939	4.10	2.80	1.30	0.12	3.70	0.19	0.17	0.03	0.13	8.44
69	Mrs.P.A.Worley	180	Oct. 9, 1939	3.38	2.18	1.20	1.41	3.70	0.33	0.73	0.03	-	9.58
74	Texas-Mexico Land & Cattle Co.	280	Nov. 20, 1939	4.04	3.10	0.94	0.52	3.50	0.42	0.42	0.03	0.19	9.12
84	J. W. Morrison	80	Oct. 25, 1939	2.18	1.64	0.54	0.23	2.10	0.15	0.16	0.01	-	4.82
111	R. B. Killebrew	54	Feb. 29, 1940	5.18	3.34	1.84	2.22	4.50	0.73	2.09	0.07	-	14.80
120	W. P. A. Test	29	Mar. 14, 1940	5.22	3.08	2.14	8.69	5.20	1.96	6.63	0.12	-	27.82
131	W. T. Hammond	Spring	Oct. 17, 1939	5.28	4.02	1.26	0.42	5.00	0.23	0.40	0.07	-	11.40
144	F. McMordie	47	Oct. 30, 1939	4.88	3.04	1.84	0.34	4.40	0.17	0.31	0.07	0.27	10.44
161	W. P. A. Test	25	Oct. 31, 1939	6.40	4.44	1.96	1.20	4.30	2.81	0.37	0.12	-	15.20
176	A. C. Taylor	80	Sept. 29, 1939	4.78	2.88	1.90	0.25	4.20	0.17	0.28	0.17	0.21	10.06
209	Amarillo Live Stock Co.	400	Sept. 28, 1939	4.34	2.14	2.20	0.43	4.30	0.17	0.23	0.07	-	9.54
217	R. L. Simmons	377	Dec. 18, 1939	4.72	3.64	2.08	0.31	4.00	0.23	0.73	0.07	-	10.06
232	C. R. Cowan	256	do.	4.70	3.42	1.28	-	4.00	0.15	0.25	0.04	0.19	9.33
250	M. W. O'Loughlin	167	Sept. 19, 1939	2.02	1.22	0.80	2.02	2.40	0.19	0.48	0.005	0.91	8.08
284	F. A. Talley	150	Sept. 21, 1939	3.46	2.46	1.00	0.51	2.80	0.21	0.42	0.04	0.50	7.94
304	W. P. A. Test	38	Sept. 29, 1939	6.34	5.44	0.90	0.88	4.70	0.62	1.50	0.06	0.34	14.44
326	Mrs. -- Wade	69	Jan. 17, 1940	5.74	4.86	0.88	0.56	4.00	0.86	0.79	0.03	0.61	12.60
343	C. Burnett	90	Oct. 20, 1939	5.70	3.76	1.94	1.02	6.00	0.25	0.34	0.13	-	13.44
366	W. P. A. Test	47	Jan. 20, 1940	5.40	3.42	1.98	3.54	3.80	3.58	1.41	0.15	-	18.88
403	J.G.Bodenschatz	Spring	Oct. 12, 1939	2.70	2.00	0.70	0.05	2.60	0.02	0.06	0.03	0.04	5.50
508	C. L. Broadus	509	Dec. 12, 1939	4.30	2.32	1.98	0.78	4.40	0.27	0.37	0.04	-	10.16
527	G. M. Cooper	390	Dec. 1, 1939	4.08	2.90	1.18	0.48	4.10	0.19	0.23	0.04	-	9.12
537	C. L. Thomas	473	Dec. 19, 1939	3.88	2.00	1.88	0.39	3.70	0.25	0.28	0.04	-	8.54
545	--	280	Nov. 21, 1939	4.30	2.36	1.94	0.22	4.00	0.21	0.28	0.03	-	9.04
561	O. Theis	300	do.	3.10	1.08	2.02	0.65	2.90	0.58	0.23	0.04	-	7.50
567	Mrs.G.N.McChristian	400	Sept. 20, 1939	4.12	2.02	2.10	0.08	3.70	0.21	0.23	0.06	-	8.40
582	O. Theis	122	Nov. 20, 1939	1.66	1.32	0.34	0.11	1.60	0.12	0.03	0.01	-	3.54



— EXPLANATION —

- WELL WITH HAND PUMP, BUCKET OR BAILER
- ⊕ WELL WITH WINDMILL OR SMALL POWER PUMP
- ⊙ WELL WITH PUMPING PLANT — 5 HORSE POWER OR LARGER
- ◇ UNUSED WELL



MAP OF MIAMI,
ROBERTS COUNTY, TEXAS

Scale
0 200 400 600 800 ft.

MAP OF ROBERTS COUNTY, TEXAS SHOWING WATER WELLS AND SPRINGS

FIELD WORK BY
C.R. FOLLETT & C.V. FOSTER
PROJECT SUPERINTENDENTS
W.P.A. PROJECT 13673

BASE COMPILED FROM
LAND OWNERSHIP MAP
HIGHWAY PLANNING SURVEY MAP
AND FIELD NOTES

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

- EXPLANATION —
- WELL WITH HAND PUMP, BUCKET OR BAILER
 - ◊ WELL WITH WINDMILL OR SMALL POWER PUMP
 - ⊗ WELL WITH PUMPING PLANT — 5 HORSE POWER OR LARGER
 - ◇ WELL DRILLED TO TEST FOR OIL OR GAS
 - ◊ UNUSED WELL
 - SPRING
 - TEST WELL DRILLED BY W.P.A. LABOR
 - ✕ WHERE STREAM WAS SAMPLED
 - ☒ EARTHEN TANK OR RESERVOIR

