

HIDALGO COUNTY, TEXAS

Records of wells, driller's logs,
water analyses, and map
showing location of wells.

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by

John T. Lonsdale and S. S. Nye

Mimeographed by
WORKS PROGRESS ADMINISTRATION
PROJECT 9864

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Prepared in cooperation with the United States
Department of the Interior, Geological Survey,
and the Engineering Experiment Station of the
Agricultural and Mechanical College of Texas.

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Austin, Texas
Sept. 20, 1933

HIDALGO COUNTY, TEXAS

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Introduction

by

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Geological Survey

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

The records were obtained in the course of an investigation which was undertaken as part of a statewide study of the underground water resources of Texas. The investigation was made by the State Board of Water Engineers, in cooperation with the Geological Survey of the United States Department of the Interior and the Engineering Experiment Station of the Agricultural and Mechanical College of Texas. The field work was carried out by J. T. Lonsdale, of the Department of Geology of the A. & M. College, and S. S. Nye, Assistant Geologist in the Geological Survey. The analyses were made in the laboratory of the Geological Survey at Washington by E. W. Lohr, Assistant Chemist.

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

These records were typed, assembled, and mimeographed by employees of Works Progress Administration Project 9864, which is sponsored by the Texas Board of Water Engineers in cooperation with the Geological Survey.

Records of wells in Hidalgo County, Texas

(All wells are drilled or bored unless otherwise noted in "Remarks" column.)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
1	8.5 miles northeast of La Reforma	A. C. Jones, Quatro Milpas well	--	--	150	4 $\frac{1}{2}$	--	--
2	8.8 miles northeast of La Reforma, 1.0 mile northwest of well 1	A. C. Jones, Salado (deep) well	--	--	350	4	--	--
3	7.7 miles northeast of La Reforma	A. C. Jones, Salado (shallow) well	--	--	150	6- 5/8	--	--
4	10.0 miles northeast of La Reforma, 3.0 miles northeast of Cristalinos Ranch	L. J. Lions, Encalmada well	--	--	80	5- 3/16	--	--
5	6.6 miles north, slightly west of Guerra's store, 1.5 miles west of Highway 12	Mrs. H. M. King Est., Sauzes Marana Pasture	--	--	--	--	--	--
6	9.6 miles northeast of Guerra's store, 4.5 miles east of Highway 12	Mrs. H. M. King Est., Hacha well	C. M. Hatcher	1924	771	4 $\frac{1}{2}$	--	--
7	2.4 miles east, slightly south of La Reforma	H. O. Casas	M. Pena	1910	90	4	--	--
8	0.6 mile southeast of La Reforma at Alta Bonita Ranch	C. G. Barrera	F. Vela	1912	123	6	--	--
9	1.4 miles east of La Reforma	J. Barrera	--	--	115	6	--	--
10	100 yards east of well 9	do.	--	--	107	6	--	--
11	2.1 miles southeast of La Reforma	S. Casas	--	--	97	4 $\frac{3}{4}$	--	--
12	2.2 miles east of La Reforma, 0.4 mile southwest of Santa Monica School	Placedo Casas	Paulo Casas	1921	40	4 $\frac{3}{4}$	23	17
13	2.1 miles east, slightly north of La Reforma at Santa Rita Ranch	R. Casas	P. Garcia	1902	80	84	--	--
14	2.0 miles east, slightly north of La Reforma	do.	R. Casas	1921	91	4 $\frac{3}{4}$	60?	31?
15	1.9 miles northeast of La Reforma	do.	R. Panajua	1921	57	84	--	--
16	1.3 miles northeast of La Reforma, 0.5 mile north of Santa Rita Ranch	do.	Pancho Vela	1908	110	6	--	--
17	2.4 miles northeast of La Reforma, 0.4 mile northeast of Santa Rita Ranch	Felipe Garza	Felipe Garza	1927	74	4 $\frac{3}{4}$	--	--

a/w, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

By John T. Lonsdale

(All wells are on flat ground unless otherwise indicated in "Remarks" column.)

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
1	--	-41.1	May 18, 1933	W	S	Bad	Hard, slightly salty.
2	--	-19.8	do.	W	S	Good	Temperature, 85° F.
3	--	-100?	Reported	W	S	Bad	
4	--	--	--	W	S	do.	
5	--	+2	Apr. 21, 1933	--	S	Good	Flowing 15 gallons a minute, April, 1933. Temperature 81½° F. On slope.
6	771	+1	do.	--	S	do.	Flowing 6 gallons a minute, April, 1933. Temperature 85½° F. Cost of well, \$468.24. On hilltop.
7	--	-28	June 21, 1933	W	D, S	do.	Irrigates garden. On rolling ground.
8	4	-30	do.	W	D, S	do.	Irrigates garden. Yield, 15 gallons a minute.
9	--	-30	do.	W	D, S	do.	Do.
10	--	-40	do.	W	D, S, I	do.	With well 9 irrigates 10 acres citrus by tank wagon. Yield, 15
11	--	-29	do.	W	D, S	do.	Irrigates garden. Yield, 8 gallons a minute. gallons a minute.
12	8	-22	July 8, 1933	H	S	do.	Well draws water from sandy caliche in Lissie-Reynosa beds.
13	--	-30	do.	W	D, S	Bad	Dug well. Slightly salty. Well draws water from Lissie-Reynosa beds.
14	10	-30	do.	W	D, S	do.	Do.
15	--	-51	July 9, 1933	H	S	do.	Dug well. Salty. Well draws water from Lissie-Reynosa beds.
16	125	-47	do.	W	D, S	do.	Salty. Sanded to 15 feet.
17	8½	-35	do.	W	D, S	do.	Salty.

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/ See table of analyses in back of this report.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
18	3.3 miles northeast of La Reforma, 1.6 miles northwest of Bella Vista Ranch	H. B. Hargrove	H. B. Hargrove	--	78	4 $\frac{1}{2}$	--	--
19	2.8 miles northeast of La Reforma, on Starr County line	do.	do.	--	84	4 $\frac{1}{2}$	--	--
20	La Reforma, at corrals	A. Guerra	Francisco Garza	1902	65	48	--	--
21	La Reforma, at gin	do.	C. Aguirre	1914	62	96	--	--
22	La Reforma	Crisanto G. Barrere	Sabina Gonzales	1888	56	84	--	--
23	2.9 miles east, slightly south of La Reforma, 0.3 mile south of Santa Monica Ranch	A. G. Munoz	Francisco Vela	1918	125	4	--	--
24	3.0 miles east of La Reforma	M. Hinojosa	--	--	120	4	--	--
25	2.6 miles east of La Reforma	Santa Monica School	--	--	155	4 $\frac{1}{2}$	--	--
26	3.3 miles east, slightly north of La Reforma, at Hinojosa Ranch	F. G. Hinojosa	L. Calderon	1928	100	6	35	65
27	Javelina Ranch, 4.7 miles northeast of La Reforma	Petro Valdez	Petro Valdez	1919	103	6	50	53
28	do.	do.	do.	1926	66	6	50	16
29	Bella Vista Ranch, 3.7 miles northeast of La Reforma	H. B. Hargrove, south well	H. B. Hargrove	1926	85	4 $\frac{1}{2}$	62	16
30	do.	H. B. Hargrove, north well	do.	1928	85	3	--	--
31	4.6 miles northeast of La Reforma, 1.3 miles east of Bella Vista Ranch	H. B. Hargrove	do.	1930	96	4 $\frac{1}{2}$	70	14
32	5.7 miles northeast of Cipres	A. C. Jones, Cristalinos well	--	--	150	5- 3/16	--	--
33	5.7 miles northeast of Cipres, 0.6 mile north, slightly west of well 32	A. C. Jones, well 10	--	--	150	5- 3/16	--	--
34	5.5 miles east of Cipres, 7.7 miles west of Highway 12,	Mrs. M. M. Fairbanks, Charco large well	--	--	400+	5	--	--
35	5.2 miles north of Cipres	L. J. Lipps, Numero Dos well	--	--	80	4 $\frac{1}{2}$	--	--
36	7.3 miles northwest of Guerra's store, 6.4 miles west of Highway 12	L. J. Lipps, Tres Lagunas well	--	--	450	4 $\frac{1}{2}$	--	--
37	8.8 miles northwest of Guerra's store, 7.7 miles west of Highway 12	L. J. Lipps, Agua Dulce well	--	--	648	4 $\frac{1}{4}$	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
18	78	-71	July 12, 1933	W	S	Bad	Salty. Yield, 10 gallons a minute. Located in Starr County.
19	--	-70	do.	W	S	Good	Yield, 8 gallons a minute.
20	--	-32	July 9, 1933	C,G	D,S	do.	Dug well. Located in Starr County.
21	--	-32	do.	C,S	D,S, Ind, I	do.	Dug well. Irrigates citrus orchard and supplies boiler water for gin.
22	--	-30	do.	W	D,S	do.	Dug well. Reported flat taste. Located in Starr County.
23	60	-42.5	June 22, 1933	W	D,S,I	do.	
24	--	-26	July 21, 1933	W	D,S	do.	Yield, 15 gallons a minute.
25	--	-28	do.	W	D	Fair	
26	80	-37	July 8, 1933	W	D,S	Bad	Slightly salty. Well draws water from sand. Yield, 15+ gallons a minute.
27	14	-58	July 9, 1933	W	S	do.	Very salty. Well draws water from sandy caliche. Yield, 15+ gallons a minute.
28	14	-56	do.	H	D,S	do.	Salty.
29	85	-68	do.	W	S	do.	Slightly salty. Yield, 4 gallons a minute.
30	85	-75	do.	W	D,S	do.	Weak supply; slightly salty.
31	96	-71	do.	W	S	do.	Salty. Water sand, 59 to 63 feet.
32	--	-58.1	May 18, 1933	W	S	Good	
33	--	-67.2	do.	W	S	do.	
34	--	-22	July 6, 1933	C,W,G	S	Bad	Salty.
35	--	--	--	W	S	do.	
36	--	--	--	W	S	Good	Temperature, 83° F.
37	--	--	--	W	S	do.	Temperature, 85° F.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
38	6.7 miles northwest of Guerra's store, 5.3 miles west of Highway 12	L. J. Livos, Muertos well	--	--	535	8	--	--
39	5.3 miles north slightly west of Guerra's store, 1.6 miles west of Highway 12	Mrs. H. M. King Est., Santa Fe Pancho well	--	--	--	4	--	--
40	3.8 miles north, slightly west of Guerra's store, 1.5 miles west of Highway 12	Mrs. H. M. King Est., South Copita well	H. L. Curry	1927	740	3 $\frac{1}{2}$	--	--
41	6.0 miles north, slightly east of Guerra's store, 0.3 mile east of Highway 12	Mrs. H. M. King Est., East Conita well	--	1917	552	3 $\frac{1}{2}$	--	--
42	2.7 miles north, slightly east of Guerra's store, 0.7 mile east of Highway 12	Mrs. H. M. King Est., Todos Santos well	--	1919	516	3 $\frac{1}{2}$	--	--
43	1.0 mile northwest of Guerra's store, west side of Highway 12	D. Guerra & Sons	H. L. Curry	1923	643	4 $\frac{1}{2}$	--	--
44	2.2 miles north, slightly west of Guerra's store, west side of Highway 12	Raphael Garcia	Raphael Garcia	1931	55	4 $\frac{1}{4}$	--	--
45	2.6 miles north, slightly west of Guerra's store, west side of Highway 12	D. G. Guerra	Otto Custer	1927	792	4 $\frac{1}{2}$	700	92
46	4.6 miles east, slightly north of Guerra's store	Mrs. H. M. King Est., Mesquiting well	H. L. Curry	1931	903	5- 3/16	--	--
47	7.4 miles northeast of Guerra's store	Mrs. H. M. King Est., La Mula well	Chester Davis	1921	718	4 $\frac{1}{2}$	--	--
48	6.3 miles northeast of Guerra's store	Mrs. H. M. King Est., Tampico well	J. C. Curry	--	787	8	--	--
49	8.0 miles northeast of Guerra's store	Mrs. H. M. King Est., Cantinas well	--	--	--	5- 3/16	--	--
50	5.8 miles northeast of Guerra's store	Mrs. H. M. King Est., Golfo Nuevo well	--	--	646	5- 3/16	--	--
51	do.	Mrs. H. M. King Est., Golfo Viejo well	--	--	--	9	--	--
52	Puerto Rico, at store	F. R. Barrera	N. Pena	1922	75	6	--	--
53	La Primavera Ranch, 1.0 mile northwest of Puerto Rico	do.	F. R. Barrera	1915	75	6	39	36
54	0.2 mile northwest of store at Puerto Rico	do.	Lino Trevino	1931	72	5- 3/16	32	40

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
38	--	-20.5	--	W	S	Good	
39	--	-14	--	W	D,S	do.	Temperature, 80° F. On hilltop.
40	740	+ 5	Apr. 21, 1933	None	S	Bad	Temperature, 87° F. Yield, flowing 4 gallons a minute. On slope.
41	552	+10+	do.	None	S	Good	Temperature, 87½° F. Yield, flowing 25 gallons a minute. Cost of well, \$441.60. In sink.
42	516	- 3.6	do.	W	S	do.	Temperature, 83° F. Cost of well, \$516.00.
43	643	+ 2	July 14, 1933	W	D,S	do.	Yield, flowing 5 gallons a minute.
44	50	-40	do.	C,G	S	Bad	Salty.
45	792	+ 3+	do.	W	D,S	Good	Another sand at 480 to 498 feet: good water, no flow. Well draws water from yellowish sand. Yield, flowing 10 gallons a minute.
46	903	--	Apr. 24, 1933	None	S	Bad	Bitter. Temperature, 88° F. Yield, flowing 13 gallons a minute.
47	718	+10+	--	None	S	do.	Temperature, 85½° F. Salty and bitter. Yield, flowing 18 gallons a minute; Apr. 24, 1933. Near edge of lake.
48	787	- 7.7	Apr. 24, 1933	W	D,S	Good	Temperature, 86° F. On hilltop.
49	--	+10+	--	None	S	do.	Temperature, 89° F. Yield, flowing 18 gallons a minute, April, 1933. On hilltop.
50	646	+10+	--	None	S	do.	Temperature, 87½° F. Yield, flowing 8 gallons a minute. Near edge of lake.
51	--	+10+	--	None	S	Bad	Temperature, 84° F. Yield, flowing 5 gallons a minute. Near edge of lake.
52	--	-29.5	Aug. 12, 1933	W	D,S,I	Good	Yield measured Aug. 12, 1933.
53	4	-38	do.	W	D,S	do.	Well draws water from Lissie-Reynosa beds. Yield, 10 gallons a minute, Aug., 1933.
54	--	-29	do.	W	D,S	Bad	Bitter. Well draws water from Lissie-Reynosa beds. Yield, 10 gallons a minute, Aug., 1933.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
55	0.8 mile west, slightly north of Puerto Rico at San Jose Ranch	A. Guerra	--	--	84	4 $\frac{1}{2}$	--	--
56	0.9 mile west, slightly north of Puerto Rico	G. Perez	--	--	85	6	--	--
57	0.8 mile west, slightly north of Puerto Rico, south side of Highway	Antonio Perez	Antonio Perez	1932	69	6	34	35
58	1.2 miles southwest of San Jose Ranch, 1.7 miles southwest of Puerto Rico	do.	N. Pena	1920	115	4 $\frac{1}{2}$	--	--
59	1.3 miles southwest of San Jose Ranch, 1.8 miles southwest of Puerto Rico	Bonifacio Perez	do.	1920	130	4 $\frac{1}{2}$	--	--
60	3.3 miles southwest of San Jose Ranch, 3.5 miles southwest of Puerto Rico	Dario Perez	do.	1924	130	4 $\frac{1}{4}$	85	--
61	4.0 miles south, slightly west of Puerto Rico	Roman Chabana	do.	1923	120	4 $\frac{1}{2}$	80	--
62	1.7 miles south, slightly west of San Jose Ranch, 1.9 miles southwest of Puerto Rico	Martias Pena	--	--	125	4 $\frac{1}{2}$	--	--
63	1.8 miles south, slightly west of San Jose Ranch, 2.0 miles southwest of Puerto Rico	Liberato Calderon	Liberato Calderon	1919	130	6	65	--
64	1.5 miles south, slightly west of San Jose Ranch, 1.6 miles southwest of Puerto Rico	Onesimo Rodriguez	do.	1923	115	6	65	--
65	1.0 mile southwest of Puerto Rico at La Piedra Ranch	Anastacio Casos	Marcos Pena	1915	97	8	--	--
66	1.0 mile south of Puerto Rico	do.	N. Pena	1924	79	5- 3/16	--	--
67	0.5 mile south of Puerto Rico	Jesusa G. Trevino	do.	1927	61	6	--	--
68	Puerto Rico, south side of road	do.	do.	1927	74	8	40	34
69	0.8 mile east, slightly south of Puerto Rico, 0.5 mile northeast of Guadalupe Church	Pedro Longoria	Aciano Sanchez	1910	67	96	--	--
70	0.9 mile southeast of Puerto Rico, at San Luis Ranch	Juan N. Cabasos	N. Pena	1924	76	5- 3/16	--	--
71	1.3 miles southeast of Puerto Rico, 0.3 mile east, slightly south of Guadalupe Church	Jesus Bazan	do.	1925	105	4 $\frac{1}{2}$	38	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
55	--	-25	Aug. 12, 1933	W	D, S	Good	Well draws water from Lissie-Reynosa beds. On slope.
56	--	-62	do.	W	D, S	do.	Do.
57	None	-35	do.	H	D, S	Fair	Well draws water from red and white sand in Lissie-Reynosa beds.
58	8	-60	do.	W	D, S	Good	Weak supply.
59	10	-60±	do.	H	D, S	do.	Yield, 10 gallons a minute.
60	10	-97	do.	W	S	Bad	Very salty.
61	5	-84	do.	W	S	do.	Salty, sanded to 102 feet. Well draws water from caliche and red
62	--	-61	July 12, 1933	W	D, S	Good	Sanded to 114 feet. Yield, sand. 5 gallons a minute.
63	3	-65	do.	W	D, S, I	do.	Well draws water from red and white sand.
64	None	-63	do.	W	D, S	do.	Sanded to 96 feet.
65	5	-45	do.	W	D, S, I	do.	
66	10	-43	July 11, 1933	H	D, S	Bad	Slightly salty.
67	4	-34	do.	H	D, S	Good	
68	4	-24.5	do.	W	D, S, I	do.	
69	--	-41	do.	W	D, S	do.	Dug well.
70	--	-31	do.	W	D, S, I	do.	Irrigates citrus.
71	3	-25	do.	W	D, S	do.	Irrigates garden. Well draws water from red sand and clay.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
72	1.4 miles southeast of Puerto Rico, west side of highway	Alfredo Rodriguez	Alfredo Rodriguez	1928	72	5	--	--
73	2.4 miles southwest of Puerto Rico at La Union Ranch	A. Guerra	--	--	84	96	--	--
74	1.2 miles northeast of Sam Lane School, 1.7 miles northeast of Puerto Rico	A. O. Luck	--	--	120	60	--	--
75	2.0 miles east slightly north of Puerto Rico, 1.3 miles north of Sam Lane School	Crisoforo Longoria	L. Calderon	1923	90	4½	--	--
76	1.1 miles east, slightly south of Puerto Rico, 1.4 miles north, slightly east of Sam Lane School	Ricardo Gonzalez	Ricardo Gonzalez	1929	64	4	36	0.2
77	1.3 miles southeast of Puerto Rico, 0.6 mile east of Guadalupe Church	Manuel C. Vela	N. Pena	1919	125	4½	100	25
78	1.4 miles southeast of Puerto Rico, 0.7 mile east of Guadalupe Church	Enemencio Bazan	do.	1929	100	6	--	--
79	Esperanza Ranch, 1.8 miles southeast of Puerto Rico	Bernardino Bazan Est.	do.	1919	82	4½	--	--
80	Santa Juanita Ranch, 3.4 miles southeast of Puerto Rico	Mrs. M. M. Fairbanks	Wm. Collins	1912	150	6	--	--
81	do.	do.	Curry Bros.	--	450	8	--	--
82	4.2 miles northeast of Puerto Rico, 3.2 miles north, slightly east of Santa Juanita Ranch	do.	--	--	129	5	--	--
83	6.2 miles northwest of Santa Anita Ranch	Mrs. M. M. Fairbanks, Palomas well	--	--	200+	4½	--	--
84	3.7 miles west, slightly north of Santa Anita Ranch, south side of highway	Mrs. M. M. Fairbanks	Curry Bros.	--	300	4	--	--
85	1.0 mile west of Santa Anita Ranch, south side of highway	Henry Guerra	Otto Custer	1925	672	5	--	--
86	Santa Anita Ranch, at Corral	Baker Est.	--	--	85	96	--	--
87	Santa Anita Ranch, at house	do.	--	--	500+	6	--	--
88	0.7 mile west of Guerra's store	D. Guerra & Sons	--	1908	500+	4½	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
72	5	-57	July 11, 1933	W	D,S	Good	Well draws water from sandy red caliche.
73	--	-83	do.	W	D,S	do.	Dug well.
74	--	-36	June 21, 1933	W	D,S	do.	Dug well. Yield, 20+ gallons a minute.
75	3	-25	June 11, 1933	H	D,S	do.	
76	None	-30	do.	H	D,S	do.	Water from crevice in caliche. Yield, 10+ gallons a minute.
77	3	-29	do.	W	D,S,I	do.	Well draws water from caliche.
78	10	-31.5	do.	W	D,S	do.	Caved to 83 $\frac{1}{2}$ feet.
79	20	--	do.	H	D,S	do.	
80	150	-35	Aug. 12, 1933	W	D,S	do.	West well.
81	--	-30+	do.	C,W,G	D,S	do.	Yield, 50+ gallons a minute. East well. Base of hill.
82	--	-48	do.	C,W,G	S	Bad	Slightly salty. Yield, 10 gallons a minute.
83	--	-37	do.	W	S	do.	Salty, originally flowed. Yield, 8 gallons a minute. Drawdown, 53 feet in 5 minutes.
84	--	-35.5	do.	W	S	Fair	Originally flowed. Yield, 20 gallons a minute.
85	672	-22.5	June 30, 1933	C,W,G	D,S	Good	
86	--	-28	do.	W	S	do.	Dug well. Yield, 8 gallons a minute. In draw.
87	--	-11	do.	C,W,G	D,S	Fair	Yield, 12 gallons a minute. On hilltop.
88	--	- 5+	--	W	D,S	Good	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
89 c/	Guerra store, 6.2 miles north, slightly east of San Manuel	D. Guerra & Sons	H. L. Curry	1925	625	4½	--	--
90	4.6 miles north, slightly west of San Manuel, 1.2 miles west of Highway 12	--	--	--	--	--	--	--
91	4.2 miles north, slightly west of San Manuel, 1.1 miles west of Highway 12	-- Doughty	W. T. Sprague	1907	440	4½	--	--
92	2.0 miles southeast of Guerra's store, 1.8 miles east of Highway 12	D. Guerra & Sons, San Carlos well	H. L. Curry	1917	525	4½	--	--
93	2.0 miles southeast of Guerra's store, 0.8 mile east of Highway 12 at San Esteban Ranch	D. Guerra & Sons	--	1905	525+	4½	--	--
94 c/	3.4 miles north, slightly east of San Manuel, east side of Highway 12	D. Guerra & Sons, San Felipe well	H. L. Curry	1920	575	4½	--	--
95	3.2 miles northeast of San Manuel, 1.0 mile east of Highway 12	D. Guerra & Sons, Charita well	do.	1905	525+	4½	--	--
96	1.6 miles east of Guerra's store	D. Guerra & Sons	Curry Bros.	1893	600+	4½	--	--
97	5.2 miles east of Guerra's store	Mrs. H. M. King Est., Los Machos well	H. L. Curry	1917	1,070	5- 3/16	--	--
98	3.3 miles southeast of Guerra's store at El Golfo Ranch	D. Guerra & Sons, Golfo well	do.	1915	575	5- 3/16	--	--
99	3.7 miles southeast of Guerra's store, 1.8 miles east of Highway 12	D. Guerra & Sons, Toro well	do.	1912	560	4½	--	--
100	3.0 miles northeast of San Manuel, 2.3 miles east of Highway 12	P. Y. Perez	do.	1912	630	4½	--	--
101	4.2 miles west, slightly south of Judd City	Provin & Davenport	--	1933	1,030	4½	750	60
102	4.5 miles northwest of McCook	Boston Texas Land Co., Pinto	--	1906	310	5- 3/16	290	20
103	Judd City	G. E. Stevens	-- Newbro	1928	337	4½	285	52
104	0.6 mile north, slightly east of Judd City	P. J. Stevens	do.	1930	335	4½	--	--
105	0.7 mile east, slightly south of Judd City	Andrew Reule	J. Spears	1929	338	4½	--	--

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
89	625	+ 1	July 20, 1933	W	D,S	Good	Yield, flowing 1 gallon a minute.
90	--	--	--	--	--	--	Abandoned oil test.
91	440	--	Aug. 15, 1933	C,W,G	S	Good	Originally flowed.
92	525	+ 1	do.	None	D,S	do.	Yield, flowing 3 gallons a minute. On slope.
93	525	+ 0.5	do.	W	S	do.	Yield, flowing $\frac{1}{2}$ gallon a minute. On slope.
94	575	+ 5+	do.	None	D,S	do.	Yield, flowing 7 gallons a minute.
95	--	+ 3	do.	None	D,S	do.	Yield, flowing 1 gallon a minute. On slope.
96	--	+ 8	do.	None	D,S	do.	Yield, flowing 15 gallons a minute.
97	960	+ 8+	Apr. 24, 1933	None	S	Bad	Yield, flowing $9\frac{1}{2}$ gallons a minute. Temperature, 87° F. Cost of well, \$595.20 for 744 feet. Near edge of
98	575	+ 1	Aug. 15, 1933	None	D,S	Good	Yield, flowing 8 gallons a minute. Near edge of lake.
99	560	+ 2	do.	None	D,S	do.	Bad water at 40 feet. Yield, flowing 3 gallons a minute. Near edge of lake.
100	630	-32	Aug. 17, 1933	W	D,S,I	do.	Irrigates $\frac{1}{4}$ acre citrus. Originally flowed. On hilltop.
101	1,030	-185	July 10, 1933	W	D,S	Fair	Other sands at 370+ and 500+ feet. Located in Starr County.
102	310	-189	do.	W	S	do.	Yield, 1 gallon a minute.
103	337	-186	do.	W	D,S	Bad	Salty. On slope.
104	335	-148	do.	W	D	do.	Do.
105	338	-160	do.	W	D,S	do.	Salty.

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/ See table of analyses in back of this report.

Records of well in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
106	1.6 miles north, slightly east of McCook	R. A. Kremel	R. A. Kremel	1933	350	5	345	5
107 c/	4.8 miles east, slightly north of Judd City, 1.5 miles west of Monte Christo-Puerto Rico Road	J. C. Thompson	--	--	300	4 $\frac{1}{2}$	--	--
108 c/	4.6 miles east, slightly north of Judd City, 1.6 miles west of Monte Christo-Puerto Rico road	--	--	--	--	--	--	--
109 c/	6.0 miles south, slightly west of Santa Juanita Ranch, 1.0 mile east of Monte Christo-Puerto Rico road	Mrs. M. M. Fairbanks	--	1926	170	4 $\frac{1}{4}$	--	--
110	2.5 miles south of Rucia Ranch	do.	--	1926	156	4 $\frac{1}{2}$	--	--
111	Rucia Ranch, east well	do.	H. L. Curry	1910	350	6	--	--
112	2.0 miles north slightly east of Rucia Ranch, 4.0 miles southeast of San Juanita Ranch	Mrs. M. M. Fairbanks Dominguez well	--	1910	150	5	--	--
113	5.0 miles west of Linn, Santa Ana Ranch	D. Guerra & Sons	--	1908	440	5- 3/16	--	--
114	6.4 miles southwest of Linn, Colimitas Ranch, west well	J. J. Young	Juan Mercado	1919	125	6	--	--
115	6.2 miles southwest of Linn, Colimitas Ranch, east well	do.	--	1925	125	6	--	--
116	2.0 miles northwest of Delfina School, 6.3 miles southwest of Linn	do.	Juan Mercado	1921	120	4 $\frac{1}{2}$	--	--
117	1.8 miles south of Colimitas Ranch, 7.0 miles southwest of Linn	do.	do.	1932	140	4 $\frac{1}{2}$	--	--
118	0.2 mile southeast of Delfina School, 5.6 miles southwest of Linn	Frank Rabb Est.	--	--	80+	5- 3/16	--	--
119	1.0 mile northeast of Delfina School, 4.7 miles southwest of Linn	do.	--	--	84	5- 3/16	--	--
120	2.0 miles north of Delfina School, 4.0 miles southwest of Linn	J. J. Young	--	--	71	5- 3/16	--	--
121 c/	3.6 miles southwest of Linn, 3.2 miles west of Highway 12	J. A. White	Ned Wells	1929	80	8	50	30
122	2.2 miles southwest of San Manuel, 3.2 miles west of Highway 12	O. J. Blane	--	1931	60	4 $\frac{1}{2}$	--	--

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No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
106	60	-175	July 10, 1933	C,G	D,S	Fair	Other sands at 260 and 305 feet. Well draws water from sandy clay. Yield, 7 gallons a minute. Drawdown,
107	--	- 79	--	C,W,G	S	Bad	Salty. 75 feet in 40 minutes.
108	--	--	--	--	--	--	Abandoned oil test.
109	60	-100	Aug. 20, 1933	C,W,G	D,S	Good	Well draws water from caliche.
110	20	-101	do.	C,W,G	S	do.	Do.
111	--	- 29	July 5, 1933	C,G	S	Fair	Near edge of lake.
112	--	- 58	do.	W	S	do.	Yield, 10 gallons a minute.
113	44	- 45	July 6, 1933	W	D,S	Good	
114	-80	- 49	do.	W	D,S	do.	On slope.
115	60	- 66	do.	W	D,S	do.	
116	20	- 72	do.	W	D,S	do.	
117	40	-102	do.	C,G	S	Fair	
118	--	- 80	Aug. 10, 1933	C,G	D,S	do.	On slope.
119	--	- 48	do.	W	S	do.	
120	--	- 41	do.	W	S	do.	
121	80	- 50	Aug. 7, 1933	C,G	D,S,I	do.	Irrigates 1 acre berries and 10 acre citrus. Has pumped 10 hours at 35 gallons a minute. Well draws water from gray sand in Lissie-Reynosa bed.
122	10	- 38	do.	W	D,S,I	do.	Yield, 35 gallons a minute. Irrigates $\frac{1}{2}$ acre nursery. slope.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
123	1.8 miles southwest of San Manuel, 2.9 miles west of Highway 12	R. R. Jackson	--	--	48	4 $\frac{1}{2}$	--	--
124	1.6 miles west, slightly north of Linn	W. J. Wylie	--	1926	65	4 $\frac{1}{2}$	--	--
125	0.7 mile north, slightly west of Linn, El Tule Ranch	A. Guerra	--	--	--	4	--	--
126	0.5 mile north, slightly west of Linn, El Tule Ranch house	do.	--	--	90	4	--	--
127	0.6 mile north of Linn, east of S. P. R. R.	do.	--	--	115	4	--	--
128	Linn, at Guerra Gin	do.	--	1925	173	5	--	--
129	Linn, east of S. P. R. R.	Walter Doughty	Juan N. Cavazos	1931	67	4	--	--
130	Linn, at S. P. R. R. shop	S. P. R. R. Co.	J. Jackson	1927	765	6	402	101
131	Linn, at Valley Gin Co. Gin	Valley Gin Co.	--	1927	120+	4	--	--
132	1.0 mile north slightly west of San Manuel, west of Highway 12	Juan N. Guerra	Juan N. Guerra	1926	68	4 $\frac{1}{2}$	--	--
133	1.0 mile slightly west of San Manuel, east of Highway 12	Juan Chapa	Juan N. Cavazos	1929	66	4 $\frac{1}{2}$	--	--
134	1.7 miles northeast of San Manuel, El Relita Ranch	A. B. Garza	H. L. Curry	1923	650	4 $\frac{1}{2}$	--	--
135	0.7 mile north, slightly east of San Manuel, west of Highway 12	A. M. Chapa	Juan N. Cavazos	1920	75	4 $\frac{1}{2}$	--	--
136	San Manuel, at store	M. Chapa	do.	1920	210	5- 3/16	--	--
137	San Manuel, 0.2 mile east of Highway 12	do.	do.	1910	64	4 $\frac{1}{2}$	--	--
138	0.6 mile south slightly west of San Manuel, west of Highway 12	A. Guerra	--	--	213	5	--	--
139	2.6 miles southwest of San Manuel, 2.1 miles west of Highway 12	J. J. Mullinax	--	1895	60	4 $\frac{1}{2}$	--	--
140	3.3 miles southwest of San Manuel, 2.5 miles west of Highway 12	J. A. Torres	J. A. Torres	1932	42	3 $\frac{1}{2}$	38 $\frac{1}{2}$	3 $\frac{1}{2}$
141	2.7 miles southwest of San Manuel, 1.2 miles west of Highway 12	G. Carrisal	Francisco Calvio	1928	50	4 $\frac{1}{2}$	--	--
142	3.9 miles southwest of San Manuel, 1.8 miles west of Highway 12	Manuel Bravo	Manuel Bravo	1931	37	4 $\frac{3}{4}$	--	--

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No.	Depth to which well is cased (ft.)	Water level		Method of lift b/	Use of water a/	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
123	--	- 40	Aug. 7, 1933	W	D, S	Good	
124	10	- 34	June 25, 1933	W	D, I	do.	Irrigates yard.
125	--	- 19	do.	W	D	do.	
126	--	- 30	do.	W	D, S	do.	
127	--	- 30	do.	W	D, S	do.	
128	--	- 30	do.	W	D, S	do.	
129	--	- 28	do.	W	D, S	do.	
130	765	+ 10 ₊	do.	--	--	Bad	Slightly salty. Another sand at 730 to 744 feet. Well draws water from sand. Yield, flowing 10 gallons a minute, pumps 250 gallons a minute.
131	--	--	Aug. 8, 1933	W	D	Good	
132	60	- 40	do.	W	S	Bad	Salty.
133	--	- 41	do.	W	S	do.	Salty. Gas reported.
134	650	- 5	July 28, 1933	W	D, S	Good	
135	75	- 46	Aug. 2, 1933	W	D, S	Bad	Slightly salty. Drawdown, 4 feet in 4 hours.
136	216	- 41	do.	W	S	do.	Salty.
137	60	- 44	do.	W	D, S	do.	On slope, Salty.
138	--	- 38	June 25, 1933	W	D, S	Fair	
139	--	- 33	July 12, 1933	W	D, S	Good	
140	20	- 33.5	do.	H	D, S	do.	Well draws water from sand from Lissie-Reynosa beds.
141	20	- 39	Aug. 2, 1933	W	D, S	do.	Well draws water from caliche. On slope.
142	--	- 36	Aug. 1, 1933	W	D, S	do.	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
143	2.2 miles northwest of Salino at Cardenena Ranch	M. Cantu	--	--	38	96	--	--
144	1.3 miles northwest of Salino, 1.7 miles west of Highway 12	Carlos Hinojosa	Carlos Hinojosa	1923	52	4 $\frac{1}{2}$	--	--
145	1.4 miles north of Salino, west of S. P. R. R.	Mrs. Agnes Puckett	Francisco Mares	1930	37	5- 3/16	--	--
146	On west side Highway 12, 4.2 miles southwest of San Manuel	Juan B. Gonzalez	Carlos Hinojosa	1930	75	6	--	--
147	3.7 miles east slightly north of San Manuel, Villareal Ranch	A. V. Garza	--	--	750+	4 $\frac{1}{2}$	--	--
148	4.4 miles northeast of San Manuel, 4.2 miles east of Highway 12	P. Garza	--	--	750+	4 $\frac{1}{2}$	--	--
149	5.0 miles east, slightly north of San Manuel, 1.3 miles east of Villareal Ranch	Jose G. Trevino	J. Curry	1918	776	6	--	--
150	5.8 miles east of San Manuel, 2.1 miles east, slightly south of Villareal Ranch	Roma Garza	--	--	750+	4 $\frac{1}{2}$	--	--
151	0.4 miles west of Jesus Maria School, 0.6 mile west of Willacy County line	--	--	--	750+	5- 3/16	--	--
152	2.5 miles south slightly west of Jesus Maria School, near Willacy County line	Ritchie Bros.	--	1927	900+	5- 3/16	--	--
153	4.2 miles southwest of Jesus Maria School, 2.8 miles southeast of Sal del Ray	Mrs. M. M. Fairbanks	--	--	900+	6	--	--
154	3.8 miles west, slightly north of McCook, in Starr County	Boston Texas Land Co., Javelina well	H. C. Stoops	1906	240	6 $\frac{1}{2}$	220	20
155	4.0 miles west, slightly north of McCook	Boston Texas Land Co., Quatro Esquinas well	do.	1905	178	4 $\frac{1}{2}$	158	20
156	4.5 miles west, slightly south of McCook	Boston Texas Land Co., Rifle well	do.	1905	255	6 $\frac{1}{2}$	235	20
157	1.6 miles west, slightly north of McCook	Boston Texas Land Co., Sunshine well	do.	1905	265	5- 3/16	235	30
158	0.9 mile north slightly east of McCook	John Walker	E. Newbro	1926	280	5	--	--
159	0.3 mile north, slightly east of McCook	John T. Judd	do.	1927	290	6	--	--
160	McCook store	M. Nusbaum	do.	1927	285	4 $\frac{1}{2}$	--	--

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No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
143	--	- 36	Aug. 1, 1933	W	D, S	Good	Dug well.
144	--	- 45	do.	W	D, S	Fair	
145	7	- 36.5	do.	C, W, G	D, S	Good	On slope.
146	5	- 42	Aug. 2, 1933	W	D, S	do.	
147	--	- 11 $\frac{1}{2}$	Aug. 5, 1933	W	D, S	do.	
148	--	- 9	do.	W	D, S, I	do.	Irrigates 0.1 acre citrus. Slight hydrogen sulphide taste.
149	--	+ 5 $\frac{1}{2}$	do.	None	D, S	do.	Slight hydrogen sulphide taste and odor. Yield, flowing 10 gallons a minute.
150	--	+ 1 $\frac{1}{2}$	do.	None	D, S	do.	Yield, flowing 5 gallons a minute.
151	--	+ 2 $\frac{1}{2}$	Aug. 20, 1933	None	D, S	do.	Slight hydrogen sulphide odor and taste. Yield, flowing 5 gallons a minute. Near edge of lake.
152	--	-30	do.	W	D, S	do.	On hilltop.
153	--	+ 5 $\frac{1}{2}$	do.	None	S	Bad	Slightly salty. Yield, flowing 10 gallons a minute. Near edge of lake.
154	240	-173	July 18, 1933	C, W, G	D, S	Fair	Well draws water from sand and gravel. Yield, 50 gallons a minute, on original test.
155	178	-160	do.	C, W, G	D, S	do.	Well draws water from sand and gravel. Yield, 30 gallons a minute, on original test.
156	255	-174	do.	W	S	do.	Do. original test.
157	265	-188	do.	W	S	Bad	Salty. Well draws water from sand and gravel. Yield, 50 gallons a
158	--	-167	do.	W	D, S	do.	minute, on original test.
159	--	-185	do.	W	D, S	do.	Salty.
160	220	-183	do.	W	D, S	do.	Salty. Well draws water from fine-grained red sand.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
161	2.3 miles south, slightly west of McCook	P. Christenson	James Speer	1930	265	4 $\frac{1}{2}$	251	14
162	3.0 miles southeast of McCook, 5.0 miles northwest of Monte Cristo	J. W. Burrsey	E. Newbro	1927	338	4 $\frac{1}{2}$	338	--
163	5.4 miles northwest of Monte Cristo	N. Kotzur	do.	1926	380	4 $\frac{1}{2}$	370	10
164	4.4 miles northwest of Monte Cristo	O. M. Johnson	--	1926	163	4 $\frac{1}{2}$	--	--
165	3.1 miles southwest of LaComa	E. Vela	E. Vela	1928	72	4 $\frac{1}{2}$	--	--
166	Laguna Seca Ranch, headquarters	Frank Rabb Est.	--	--	77	4 $\frac{1}{2}$	--	--
167	3.3 miles north slightly east of Paysville, east of side of Highway 12	-- Norwood	A. L. Willingham	1927	255	4 $\frac{1}{2}$	240	15
168	0.4 mile northwest of La Coma, west side of Highway 12	Mrs. G. C. Cavazos	Juan Z. Cavazos	1921	65	5- 3/16	60	--
169	California Ranch, 0.5 mile northwest of La Coma, west side of Highway 12	Jack Lane	C. Hinojosa	1924	67	4	--	--
170	La Coma Ranch, headquarters	-- Doughty	Curry Bros.	1908	950+	6	--	--
171	0.6 mile west of Salino	Crisanto Vela	M. Soto	1930	56	5- 3/16	--	--
172	0.6 mile west, slightly north of Salino	E. H. Carlsbath	--	1926	76	4 $\frac{1}{2}$	--	--
173	1.1 miles west, slightly north of Salino	Joaquin Cavazos	Juan Cavazos	1920	75	4 $\frac{1}{2}$	70	--
174	LaComa, at gin	Cotton Belt Gin Co.	do.	1923	95	4 $\frac{1}{2}$	--	--
175	0.9 mile south, slightly west of La Coma	F. B. Vela	--	--	63	4 $\frac{1}{2}$	--	--
176	1.0 mile southwest of Salino	Mrs. A. R. Calzado	Juan Mercado	1932	60	4 $\frac{1}{2}$	--	--
177	1.1 miles southwest of Salino	Ohlenbusch Lumber Co.	Juan Cavazos	1932	60	4 $\frac{1}{2}$	--	--
178	1.2 miles southwest of Salino	J. A. Deaton	J. A. Deaton	--	57	4 $\frac{1}{2}$	43	14
179	1.7 miles southwest of Salino	Frank Rabb Est.	R. Serde	1926	60	5- 3/16	--	--
180	Lot 3, blk. 11, Las Mestenas tract, 3.5 miles northwest of Hargil	Delta Orchards	--	--	1,100+	5- 3/16	--	--

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No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
161	265	-211	July 18, 1933	W	D,S	Bad	Salty. Well draws water from fine-grained red sand.
162	338	-160	July 15, 1933	W	D,S,I	Fair	Irrigates $1\frac{1}{4}$ acres citrus. Yield, 10 gallons a minute.
163	375	-139	do.	W	D,S,I	Bad	Slightly salty. Other sands at 190 and 300 feet. Irrigates 1 acre citrus. Well draws water from fine white sand. Yield, 10 gallons a
164	--	- 72	do.	W	S	do.	Salty. minute.
165	4	- 64	Aug. 7, 1933	W	D,S	Good	On slope.
166	--	- 50	do.	W	D,S	Bad	Slightly salty. On slope.
167	242	--	--	W	D,S	do.	Salty; bitter. Another sand at 90 to 110 feet.
168	20	- 48	Aug. 7, 1933	W	D,S	Fair	Very slightly salty. Well draws water from sandstone.
169	20	- 45.5	do.	W	D,S	Good	Well draws water from soft sand.
170	950 ₊	- 20	--	W	D,S	Fair	Originally flowed.
171	6	- 43	July 26, 1933	W	D,S	Good	
172	10	- 40 ₊	do.	W	D,S	do.	
173	6	- 43	do.	W	D,S	Fair	Well draws water from sand rock. On slope.
174	80	- 50	do.	C,G	D, Ind	do.	Slightly salty. Well draws water from gravel and sand. Yield, 10
175	--	- 56	do.	W	D,S	Good	gallons a minute.
176	7	- 40	do.	W	D,S	do.	
177	6	- 43	do.	W	D,S	Fair	
178	14	- 40	do.	W	D,S	Good	Well draws water from sand.
179	60	- 54	do.	W	S	do.	
180	--	+ 3 ₊	Aug. 2, 1933	W	D,S	Fair	Yield, flowing 5 gallons a minute. Near edge of lake.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
181	Northeast part of blk. 2, Las Mestenas tract, 2.0 miles northwest of Hargil, at Steuver Ranch	Steuver Est.	--	--	1,000+	6	--	--
182	Lot 7, blk. 4, Las Mestenas tract, 2.0 miles northwest of Hargil	--	--	--	886	--	--	--
183	Lot 11, northwest blk. 14, Las Mestenas tract, 2.0 miles northwest of Hargil	C. L. Pollock	H. Curry	1915	870	4 $\frac{1}{2}$	--	--
184	Lot 13, blk. 13, Las Mestenas tract, 2.0 miles north of Hargil	Community	--	1926	940+	4 $\frac{1}{2}$	--	--
185	McMillian Ranch, 12.0 miles north of Sam Fordyce	W. D. Jeffress	--	--	280	4 $\frac{1}{2}$	--	--
186	6.8 miles west, slightly north of Monte Cristo	A. L. Landry	J. Speer	1931	260	4 $\frac{1}{2}$	--	--
187	0.8 mile north, slightly east of Monte Cristo	Hammond Bros.	--	1900	900+	8	--	--
188	5.3 miles northeast of Monte Cristo	J. F. Shary	O. C. Withers	1913	372	6	357	15
189	4.8 miles east, slightly north of Monte Cristo	do.	do.	1913	136	6	133	3
190	Medanita Ranch 6.8 miles northeast of Monte Cristo	W. M. Brewster	--	1908	180	4 $\frac{1}{2}$	--	--
191	Brazil Ranch 7.0 miles east of Monte Cristo	Jose Guerra	--	--	131	8	--	--
192	Alfonso Ranch, 3.6 miles northwest of Faysville	Alfonso Alamedo	--	1915	250	10	--	--
193	Michigan Service Station, 2.3 miles north of Faysville	H. H. Linder	A. L. Willingham	1923	256	4 $\frac{1}{2}$	243	13
194	1.4 miles north, slightly east of Faysville, side of Highway 12	L. E. Tinkler	do.	1924	248	5- 3/16	228	20
195	3.0 miles northeast of Faysville, San Rafael Ranch	A. Guerra	--	--	147	4 $\frac{1}{2}$	--	--
196	Lot 14, blk. 4, Las Mestenas tract, 1.8 miles west, slightly north of Hargil	Delta Orchards Co.	--	--	1,100	--	--	--
197	Lot 5, blk. 6, Las Mestenas tract, 0.8 mile southwest of Hargil	Community	--	--	900	--	--	--

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
181	--	- 10 ₊	June 28, 1933	W	D,S	Fair	Slightly salty.
182	--	--	Reported	--	--	--	Information reported.
183	--	- 6	June 28, 1933	W	D,S	Fair	Located in Willacy County.
184	--	- 10 ₊	do.	W	D,S	Bad	Bitter.
185	--	-147	Aug. 22, 1933	W	S	Good	
186	200+	-200	do.	W	D,S	Bad	Salty.
187	--	- 27	June 16, 1933	W	D,S	Good	Originally flowed.
188	372	- 68	--	W	S	Bad	Salty. Other sands at 70, 120, 130, 220, and 270 feet. Yield, 8 gallons
189	--	--	--	None	N	--	Slightly salty. Well <u>a minute.</u> draws water from red clay and sand.
190	180	- 35	Aug. 25, 1933	W	D,S	Good	On slope.
191	--	- 54	do.	W	D,S	Fair	
192	--	- 48	do.	W	D,S	do.	Slightly salty.
193	245	- 65.5	July 29, 1933	W	D,S	do.	Slightly salty. Well draws water from sand.
194	236	--	do.	C,G	D,S	do.	Do.
195	--	- 52	do.	W	S	Bad	Salty.
196	--	--	--	W	--	--	
197	--	--	--	W	D,S	--	

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/ See table of analyses in back of this report.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
198	Hargil, town well	Edinburg Independent School District	A. L. Willingham	1932	870	6	840	30
199	Lot 13, blk. 42 Las Mestenas tract, 1.0 miles south of Hargil	Delta Orchards Co.	McNeil & Custer	--	456	4 $\frac{1}{2}$	--	--
200	Lot 4, blk. 39, Las Mestenas tract, 2.6 miles east, slightly south of Hargil	do.	--	--	930	--	--	--
200a	Lot 31, blk. 15, Las Mestenas tract, 2 $\frac{1}{2}$ miles east of Hargil	D. F. Stevenson	Hargil Oil Co.	1928	968	--	962	6
201	Block 34, Las Mestenas tract, 5.5 miles east slightly south of Hargil	W. H. Keenly	--	--	310	--	--	--
202	6.5 miles east slightly south of Hargil	C. O. Sundling	Ed Kieke	--	350	5	--	--
203	7.6 miles east, slightly south of Hargil	First Nat'l Bank of Raymondville	--	--	350	--	--	--
204	8.2 miles east, slightly south of Hargil	--	--	--	450	--	--	--
205	7.8 miles north, slightly east of La Joya School, west side of County Highway	C. Reyna	Juan Cavazos	--	125	4 $\frac{1}{2}$	100	25
206	9.1 miles north slightly east of La Joya School, east side of County Highway	Martin Cavazos	do.	1926	190	4 $\frac{1}{2}$	180	10
207	9.6 miles north, slightly east of La Joya School, east side of County highway	Mrs. R. L. Cavazos	do.	1928	170	5- 3/16	--	--
208	Jarachinos Ranch headquarters	E. Salinas	-- Colbath	1927	205	4 $\frac{1}{2}$	195	10
209	Velena Ranch headquarters	T. C. Gill	--	1913	145	4 $\frac{1}{2}$	--	--
210	Tanquecillas Ranch, south well	Brock & Showers	--	--	197	4 $\frac{1}{2}$	--	--
211	LaGloria Ranch headquarters	do.	--	--	396	3	200	200
212	1.1 miles west of Monte Cristo	Hammond Bros.	--	1910	310	10	--	--
213	1.5 miles south, slightly west of Monte Cristo, at Sterling Ranch	do.	O. C. Woods	1911	750	6	--	--
214	do.	do.	do.	1910	1,447	4	--	--

John T. Lonsdale.

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
198	840	- 10	--	--	D, S	Good	Other sands at 40 to 60, 320 to 335, 620 to 650 and 760 to 775 feet; all salt water. Well draws water from
199	456	- 20 ₊	--	W	D, S	--	gray sand. Yield, 40 gallons a minute.
200	--	--	--	--	--	--	
200a	--	--	--	--	--	--	Oil test. See log.
201	--	--	--	--	--	--	Well draws water from gravel.
202	350	- 17.2	--	W	D, S	Fair	Sulphur taste. Well draws water from gravel and sand.
203	--	- 17.8	--	--	D, S	do.	Salty.
204	--	- 22.5	--	H	D, S	do.	
205	--	-101	--	W	D, S	Good	Well draws water from gravel.
206	--	-100	--	W	D, S	do.	Well draws water from sand. On slope.
207	170	-138	--	W	D, S	do.	Well draws water from sand and gravel. On slope.
208	125	-136.5	--	W	D, S	do.	
209	--	-116	--	W	D, S	do.	
210	197	-101	--	W	D, S	do.	
211	396	-106	--	W	D, S	Fair	Yield, 15 gallons a minute. Draw-down, 94 feet.
212	--	-144	--	W	S	Bad	Salty
213	--	- 49.5	--	W	D, S	Good	North well.
214	1,447	- 31.5	--	W	D, S	do.	Sands at 511 to 522, 772 to 785, 1,035 to 1,040, 1,125 to 1,165, 1,170 to 1,187, 1,257 to 1,273, 1,362 to 1,376 and 1,406 to 1,417 feet. Yield, tested 200 gallons a minute. South well.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
215	5.0 miles south, slightly west of Monte Cristo	H. G. Trospen	-- Colbath	1931	180	5-3/16	180	--
216	5.4 miles east, slightly south of Monte Cristo	J. F. Shary, Huisache well	O. C. Withers	1913	300	6	290	10
217	6.8 miles southeast of Monte Cristo	J. F. Shary	do.	1913	550	10	525	25
218	3.0 miles northwest of Court House, Edinburg	Baptist Seminary	A. L. Willingham	1929	425	4 1/4	415	10
219	S. P. R. R. Icing Plant, 3.0 miles north of Court House, Edinburg	S. P. R. R. Co.	J. W. Jackson	1927	1,040	6	972	68
220	0.6 mile south, slightly west of Faysville, west side of Highway 12	Geo. Zimmer	--	1913	240	4	225	15
221	Gin, at Faysville	Alamo Cotton Oil Co.	A. L. Willingham	1929	258	4	240	18
222	Cibolo Ranch, 2.0 miles east of Faysville	Salvador Cardenas	--	1918	74	4 1/4	--	--
223	Porvenir Ranch, 4.2 miles east slightly south of Faysville	Juan de la Vina	--	--	130	4 1/2	--	--
223a	Lot 3, blk. 70, Las Mestenas tract, 5 miles east of Faysville	Engleman Gardens, Inc.	J. & C. Drilling Co.	1934	7,502	10 3/4	--	--
224	Carmen Ranch, 4.3 miles east of Faysville	Carmel Cardenas	--	--	84	4 1/2	--	--
225	Lot 2, blk. 93, Las Mestenas tract, 7.0 miles northeast of Edinburg	Community	E. Kieke	--	462	5	--	--
226	Lot 6, blk. 74, Las Mestenas tract, 6.0 miles south, slightly west of Hargil	do.	--	--	480	5	--	--
227	Lot 7, blk. 68, Las Mestenas tract, 5.0 miles south, slightly west of Hargil	Delta Orchards Co.	--	--	460	5	--	--
228	Lot 7, blk. 67, Las Mestenas tract, 4.6 miles south of Hargil	do.	E. Kieke	--	465	--	--	--
229	Lot 9, blk. 66, Las Mestenas tract, 5.0 miles southeast of Hargil	Community	--	--	450	--	--	--
230	Lot 15, blk. 58, Las Mestenas tract, 5.0 miles southeast of Hargil	Delta Orchards Co.	E. Kieke	--	127	--	--	--
231	Lot 5, blk. 79, Las Mestenas tract, 2.5 miles north of Carlson School	Engleman Gardens Co.	--	--	120	--	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
215	180	- 98	--	W	D,S	Bad	Salty. Another sand at 80 feet; also salty. Well draws water from sand.
216	200	--	--	None	N	do.	Salty water to 200 feet.
217	550	- 22	--	W	S	do.	Salty. Another sand at 450 feet. Probably defective casing.
218	420	- 21	--	W	D,S	Good	Slight taste. Well draws water from gray sand. Yield, tested 50 gallons a
219	1,040	+ 10+	--	T	N	Bad	Sands at 126 to 134 minute. On hill. 586 to 669, and 800 to 818 feet. Well draws water from hard sand. Yield,
220	160	- 56.5	--	W	D,S	do.	Salty. flowing 42 gallons a minute; Yield, tested pumps 225 gallons a 20 gallons a minute. minute.
221	258	--	--	W	D,S	do.	Salty.
222	--	- 50	--	W	S	do.	Very salty. On slope.
223	--	- 47	--	W	D,S	Fair	Yield measured, Aug. 25, 1933.
223a	--	--	--	--	--	--	Oil test. See log.
224	--	- 54.5	--	W	D,S	Bad	Salty. Yield measured, Aug. 25, 1933.
225	--	- 32.5	--	W	N	Fair	Yield measured, Aug. 25, 1933
226	--	--	--	W	N	--	Do.
227	--	- 25½	--	N	N	--	Yield measured, Aug. 2, 1933.
228	--	--	--	W	D,S	Bad	Salty. Yield measured, Aug. 23, 1933.
229	--	--	--	W	D,S	--	Yield measured, Aug. 2, 1933.
230	--	--	--	--	--	--	
231	--	- 40+	Aug. 23, 1933	None	N	Good	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
232	Lot 1, blk. 58, Las Mestenas tract, 4.8 miles southeast of Hargil	Delta Orchards Co.	--	--	123	--	--	--
233	Lot 2, blk. 59, Las Mestenas tract, 5.3 miles southeast of Hargil	do.	--	--	125	--	--	--
234	Lot 4, blk. 50, Las Mestenas tract, at Hughes Ranch, south well	Barton Hughes	A. L. Curry	--	80	6	70	--
235 c/	Lot 13, blk. 49, Las Mestenas tract, Hughes Ranch, north well	do.	E. Kieke	--	98	5	90	--
236	Lot 9, blk. 48, Las Mestenas tract, 5.8 miles southeast of Hargil	Fred Henson	--	--	61	--	--	--
237	Lot 1, blk. 48, Las Mestenas tract, 5.7 miles east, slightly south of Hargil	Mary L. Barnan	H. L. Curry	1915	920	--	--	--
238	Lot 16, blk. 51, Las Mestenas tract, 6.4 miles southeast of Hargil	O. K. Dickinson & T. D. Harris	do.	--	710	--	--	--
239	Lot -, blk. 64, Las Mestenas tract, 6.8 miles southeast of Hargil	Delta Orchards Co.	--	--	160	--	--	--
240	Lot 13, blk. 62, Las Mestenas tract, 5.5 miles east of Hargil	Merchants National Bank, Brownsville	E. Kieke	--	270	5	--	--
241	1.0 mile east and 4.2 miles north of Panchita	W. Erickson	--	--	235	--	--	--
242	1.5 miles east and 4.5 miles north of Panchita	C. O. Sundling	--	--	150	4 $\frac{1}{2}$	140	10
243	2.3 miles east and 4.5 miles north of Panchita	A. Swenson Est.	H. L. Curry	1912	1,115+	5	1,100+	--
244	0.2 mile east of Turner's Store	J. Reynolds	E. Kieke	--	240+	--	230	10
245	0.3 mile east of Turner's Store	C. I. H. Baker	--	--	35	--	25	10
246	1.0 mile east and 2.3 miles north of Panchita	Mrs. Amanda Lund	--	--	239	--	--	--
247	Los Burros Ranch, 0.7 mile southeast of Panchita	C. O. Pearson	--	--	27	--	--	--
248	Panchita, at old school house	J. R. Barr	--	1915	665	--	--	--
249	Panchita, 0.25 mile east of old school, south of road	F. R. Johnston	--	--	30	84	20	10

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift <u>a/</u>	Use of water <u>b/</u>	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
232	--	--	Aug. 23, 1933	W	N	Fair	
233	--	- 20	do.	W	D,S	do.	
234	--	- 40 ₊	Aug. 2, 1933	W	S	Bad	Salty. Well draws water from sand.
235	--	- 25	do.	W	D,S	Fair	Well draws water from sand.
236	--	- 40 ₊	do.	W	D,S	do.	
237	--	- 15 ₊	Aug. 23, 1933	H	N	do.	
238	--	- 20 ₊	Aug. 2, 1933	W	S	Bad	Salty.
239	--	- 16.5	Aug. 23, 1933	W	D,S	Fair	Slightly salty.
240	--	- 30.5	do.	W	D,S	do.	Salty.
241	--	- 25 ₊	Aug. 24, 1933	W	S	Bad	Do.
242	130	- 17.2	do.	W	N	Fair	Well draws water from sand.
243	1,115	* 1 ₊	do.	W	D,S	do.	Slightly salty. Yield, flowing 1 gallon a minute.
244	--	- 20 ₊	do.	--	S	do.	Well draws water from sand.
245	--	- 25	do.	W	D,S	Good	Dug well. Hard water. Well draws water from sand.
246	--	--	do.	H	S	Bad	Salty.
247	--	- 27	do.	W	D,S	Good	Dug well.
248	--	- 6 ₊	do.	W	S	Bad	Salty.
249	--	- 17	do.	W	D,S	Good	Dug well. Well draws water from sand.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
250	Los Olmos Ranch, 2.0 miles east, slightly south of Panchita	S. Ross	--	--	35	--	--	--
251	5.0 miles north, slightly west of Samfordyce	W. R. Jackson	--	--	170	4 $\frac{1}{2}$	--	--
252	4.7 miles northwest of Samfordyce	M. Pena	C. Smith	1927	120	4 $\frac{1}{2}$	--	--
253	4.2 miles northwest of Samfordyce	Maximo Diaz	Maximo Diaz	1929	--	--	--	--
254	4.0 miles northwest of Samfordyce, Alta Medd Ranch	Tomas Flores	Tomas Flores	1883	140	4 $\frac{1}{2}$	--	--
255	3.8 miles northwest of Samfordyce	-- Hart	--	--	99	8	--	--
256	3.5 miles northwest of Samfordyce	P. S. Rivas	--	1926	87	5- 3/16	--	--
257	3.2 miles northwest of Samfordyce	Lopez Guerra	Juan Vela	1930	90	5- 3/16	--	--
258	3.0 miles northwest of Samfordyce	Victorina Garza Chapa	--	--	144	4 $\frac{1}{2}$	--	--
259	2.7 miles north, slightly west of Samfordyce	Luis L. Longoria	W. Reyes	1922	73	4 $\frac{1}{2}$	--	--
260	2.2 miles northwest of Samfordyce	Juan Ramirez	Juan Vela	1929	82	4 $\frac{1}{2}$	--	--
261	Mission-Rio Grande City Highway, at Starr County line	Mrs. A. F. Flores	--	1925	110	4 $\frac{1}{2}$	--	--
262	Mission-Rio Grande City Highway, 0.4 mile east of Starr County line	do.	E. Newbro	1929	230	4 $\frac{1}{2}$	--	--
263	Sullivan's store, 2.5 miles northwest of Samfordyce	E. W. Sullivan	E. W. Johnson	1924	80	4 $\frac{1}{2}$	41	20
264	Oja de Agua de Arriba Ranch	G. Garcia	--	1883	19	48	--	--
265	Havana	John Lawrence	--	1916	90	6	--	--
266	1.0 mile west of Samfordyce, near Military Road	--	--	--	--	--	--	--
267	3.5 miles northeast of Samfordyce	--	--	--	--	--	--	--
268	5.7 miles north, slightly east of La Joya school	--	-- Colbath	1928	110	4 $\frac{1}{2}$	105	--
269	4.6 miles northwest of La Joya school	L. Garza	--	--	134	4 $\frac{1}{2}$	--	--
270	3.0 miles northwest of La Joya school	--	--	--	--	--	--	--
271	3.9 miles northeast of La Joya school	F. Kurz	John Hartzell	--	242	10	230	12

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
250	--	--	Aug. 24, 1933	W	D,S	Good	
251	--	-111	July 26, 1933	W	D,S	do.	
252	--	- 94	do.	W	D,S	Fair	Slightly salty.
253	--	--	do.	W	D,S	Good	
254	120	-78	do.	W	D,S	do.	
255	--	- 70	July 16, 1933	W	D,S	do.	On slope.
256	80	- 61	do.	W	D,S	do.	
257	--	- 62	do.	W	D,S	do.	
258	--	- 95	do.	H	S	Bad	Salty.
259	72	- 59	July 17, 1933	W	D,S	Good	
260	82	- 51	do.	W	D,S	do.	On slope.
261	--	- 85	July 16, 1933	W	S	Bad	Salty.
262	210	--	do.	W	S	do.	Very salty.
263	80	- 10	do.	W	D,S	Fair	Brackish. Well draws water from sand and gravel.
264	--	- 16	July 17, 1933	W	D,S	Good	Dug well. On slope.
265	90	- 32	do.	W	D,S	Bad	Slightly salty. Well draws water from sand and gravel. On slope.
266	--	--	--	--	--	--	Oil test.
267	--	--	--	--	--	--	Do.
268	110	- 95	July 26, 1933	C,G	N	Good	Well draws water from sand and gravel. On hill.
269	--	-100	July 17, 1933	W	D,S	do.	On slope.
270	--	--	--	--	--	--	Gas well.
271	242	- 95	Aug. 20, 1933	C,G	--	--	Irrigated 3 acres, 1932. Another sand at 104 feet. Well draws water from coarse sand. Capacity of pump, 175 gallons a minute. Yield, 50 gallons a minute.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
272	3.8 miles northeast of La Joya school	Mary Fleoden	Killinger	1928	106	6	78	28
273	do.	Henry Bunges	---	1927	129	6	109	20
274	3.1 miles north, slightly east of Penitas	Augustine Zamora	Colbath	1926	120	4 $\frac{1}{2}$	82	38
275	LaCruz Ranch, 5.0 miles north, slightly east of Chihuahua	Brock & Showers	---	---	161	4 $\frac{1}{2}$	---	---
275a	Daskam tract, Porcion 45, 5 miles north of Chihuahua	-- Daskam	Dayle L. Smith Oil Co.	---	2,336	---	---	---
276	Seven Mile Road, 6.2 miles west of M. P. R.R.	Mrs. H. M. King Est.	---	---	175	4 $\frac{1}{2}$	---	---
277	Seven Mile Road, 5.4 miles west of M. P. R.R.	Brock & Showers	Colbath	---	227	5- 3/16	180	10
278	do.	do.	---	---	---	---	---	---
279	Doffing Club House, 6.0 miles northeast of Chihuahua	Nick Doffing	Colbath	1933	330	5- 3/16	278	15
280	Seven Mile Road, 0.7 mile west of M. P. R.R.	G. W. B. Garrett	E. Newbro	1928	241	4 $\frac{1}{2}$	241	7
281	0.3 mile north of Seven Mile Road, 0.5 mile west of M. P. R.R.	W. H. Wycoff	---	1930	248	4 $\frac{1}{2}$	---	---
282	1.7 miles north, slightly east of Alton, east side of Lomita Blvd.	Mrs. W. J. Wicks	---	1925	123	4 $\frac{1}{2}$	120	---
283	0.3 mile north of Seven Mile Road, 0.5 mile west of Shary Blvd.	F. W. Borman	---	1915	175	4 $\frac{1}{2}$	---	---
284	0.3 mile north of Six Mile Road, 0.5 mile east of Shary Blvd.	W. B. Beard	Killinger	1929	50	4 $\frac{1}{2}$	---	---
285	Six Mile Road, 0.6 mile west of Shary Blvd.	J. F. Shary	---	---	150	4 $\frac{1}{2}$	---	---
286	Alton, east side of Lomita Blvd.	do.	---	---	257	4 $\frac{1}{2}$	---	---
287	0.5 mile north of Five Mile Road, 0.5 mile west of Shary Blvd.	Carrie Stroman	---	1918	87	4 $\frac{1}{2}$	---	---
288	Five Mile Road, 0.4 mile west of Shary Blvd.	J. M. Kandle	---	1918	102	6	---	---
289	Intersection of Shary Blvd. and Four Mile Road, east side of road	H. T. Klatt	Colbath	1918	101	4 $\frac{1}{2}$	100+	---
290	Shary Club house, 4.5 miles northeast of Mission	J. F. Shary	---	---	104	4 $\frac{1}{2}$	---	---

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
272	95	- 90	July 17, 1933	W	D, S	Fair	West side of road.
273	129	- 60	do.	W	D, S	Good	East side of road.
274	120	- 92	Aug. 20, 1933	W	D, S	do.	On hill.
275	--	- 88	do.	W	D, S	do.	On slope.
275a	--	--	--	--	--	--	Oil test. See log.
276	--	--	Aug. 20, 1933	W	D, S	Good	
277	210	- 96.5	Aug. 11, 1933	C, G	D, S	do.	Yield, 15 gallons a minute. On slope.
278	--	--	--	--	--	--	Oil test.
279	278	--	Aug. 11, 1933	C, E	D, S	Good	Yield, 35 gallons a minute. On slope.
280	248	-114	Aug. 16, 1933	W	D, S	do.	Another sand at 90+ feet. Salty.
281	--	- 96	do.	W	D, S	Fair	Slightly salty. On slope.
282	123	- 60	do.	W	S	Bad	Salty.
283	--	- 58	do.	W	D, S	do.	Do.
284	50	- 36	do.	W	D, S	Good	Well draws water from fine gravel.
285	--	- 49	do.	W	D, S	Bad	Salty.
286	--	- 60	do.	W	D, S	Fair	
287	--	- 45	do.	W	S	Bad	Very salty.
288	--	- 55+	do.	W	D, S	do.	Do.
289	101	- 49	do.	W	D, S	Good	Other sands at 18, 44 and 80 feet; all salty.
290	--	- 60+	do.	C, E	D, S	do.	

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/ See table of analyses in back of this report.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
291	Four Mile Road, 1.0 mile west of Shary Blvd.	Mrs. J. S. Lyons	John Moore	1930	55	5- $\frac{3}{16}$	--	--
292	Four Mile Road, 1.5 miles west of Shary Blvd.	Mrs. Louise Hunt	-- Colbath	1933	35	5- $\frac{3}{16}$	--	--
293	Three Mile Road, 1.0 mile west of Shary Blvd.	Thomas Hatch	John Moore	1931	78	6	65	13
294	Seven Mile Road, 0.5 mile west of Edinburg	Mrs. M. Ross	A. L. Willingham	1924	118	4	93	25
295	3.6 miles southwest of Edinburg, 3.7 miles north, slightly east of McAllen	R. L. Cowden Co.	--	1926	65	4 $\frac{1}{2}$	--	--
296	3.0 miles north slightly east of McAllen	H. M. Molet	--	1930	67	4 $\frac{1}{4}$	--	--
297	6.3 miles north slightly east of McAllen	A. B. McAfee	--	1929	194	4 $\frac{1}{4}$	--	--
298	1.6 miles north slightly east of McAllen	Mrs. J. H. Stoner	--	--	--	4 $\frac{1}{4}$	--	--
299	1.7 miles southwest of Edinburg	F. H. Biggs	--	--	70	3 $\frac{1}{2}$	--	--
300	1.5 miles west of Edinburg	G. Calloway	--	1913	70	4 $\frac{1}{4}$	--	--
301	do.	J. M. Boyd	--	1924	68	4 $\frac{1}{4}$	--	--
302	Highway 12, 1.8 miles <u>s/</u> south of Edinburg	E. Short	A. L. Willingham	1926	128	4 $\frac{1}{2}$	--	--
303	Central Power and Light Co., Filter plant, Edinburg	Central Power & Light Co.	do.	1922	156	8	118	40
304	0.7 mile south of Edinburg <u>s/</u>	Mrs. C. Gormantz	--	1918	110	4 $\frac{1}{2}$	--	--
305	2.5 miles southeast of Edinburg <u>s/</u>	F. H. Hull	Wm. Edwards	1920	120	4 $\frac{1}{2}$	--	--
306	2.0 miles southeast of Edinburg	Mrs. R. P. Bouse	--	1919	96	6	--	--
307	1.0 mile east, slightly south of Edinburg	Hugo Conlee	--	1923	120	4 $\frac{1}{2}$	110	10
308	1.0 mile northeast of Edinburg <u>s/</u>	C. R. Fitzpatrick	--	1924	87	4 $\frac{1}{2}$	--	--
309	2.0 miles northeast of Edinburg <u>s/</u>	C. B. Starr	--	1926	200	3 $\frac{1}{2}$	--	--
310	3.5 miles northeast of Edinburg	V. Z. Young	A. L. Willingham	1928	136	4 $\frac{1}{2}$	126	10
311	4.0 miles northeast of Edinburg	E. Bader	do.	1927	136	3 $\frac{1}{2}$	120	16
312	3.2 miles northeast of Edinburg	Gulfcoast Orchards Co.	--	1925	119	4 $\frac{1}{2}$	--	--
313	Edinburg-Edcouch road, 3.0 miles east of Edinburg	W. L. Matthews	--	1924	65	3 $\frac{1}{8}$	--	--
314	Edinburg-Edcouch road, 3.5 miles east of Edinburg	C. L. Heinemann	--	1924	69	4 $\frac{1}{4}$	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
291	55	- 43	Aug. 16, 1933	C,G	D,S	Good	
292	35	- 6	do.	W	D,S	do.	Well draws water from caliche.
293	78	- 30+	do.	W	D,S	do.	Well draws water from white sand. Yield, tested 50 gallons a minute.
294	118	--	June 27, 1933	W	D,S	do.	Well draws water from gravel.
295	--	--	do.	W	D,S	do.	
296	--	- 25	June 30, 1933	C,E	S	Bad	
297	--	- 7	Aug. 10, 1933	W	D,S	Fair	
298	--	- 8	do.	W	S	Bad	Salty.
299	70	- 5	do.	W	S	do.	Do.
300	70	- 8	July 17, 1933	W	S	do.	Very salty.
301	68	- 30	do.	W	D,S	do.	Salty.
302	128	- 25	Aug. 15, 1933	W	D,S	Good	Well draws water from sand.
303	156	- 6.5	June. 8, 1933	None	N	--	Well draws water from gravel. Yield, tested 350 gallons a minute.
304	110	- 30	Aug. 15, 1933	W	D,S	Good	
305	--	- 8.5	Aug. 16, 1933	W	D,S	do.	
306	96	- 10	do.	W	D,S	Fair	
307	120	- 12	do.	W	D,S	do.	
308	87	- 8	do.	W	D,S	Bad	Salty.
309	200+	--	--	W	D,S	Fair	
310	136	- 7	Aug. 1, 1933	H	S	do.	Well draws water from sand.
311	136	- 9	do.	H	D,S	do.	Another sand at 60 feet. Salty. Static level originally 30 feet. Well
312	119	- 10	do.	C,E	D,S	do.	draws water from gravel.
313	10	- 8.5	do.	W	D,S	Bad	Slightly salty.
314	69	- 11	do.	W	D,S	Fair	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
315	4.0 miles southeast of Edinburg	John Stutt	--	1921	100	4 $\frac{1}{2}$	--	--
316	Southeast edge of Edinburg	O. W. Curry	-- Withers	1927	122	4 $\frac{1}{2}$	115	5
317	0.8 mile southeast of Edinburg	E. Mooney	--	1917	126	4 $\frac{1}{2}$	--	--
318	2.5 miles southeast of Edinburg	Mrs. H. Hansen	Wm. Brewster	1917	123	3 $\frac{1}{2}$	--	--
319	2.0 miles north, slightly east of Val Verde School	J. H. Merrill	A. L. Willingham	--	155	4	145	10
320	San Carlos, south side of highway	E. S. Doughtie	-- Withers	--	167	4 $\frac{1}{2}$	163	4
321	1.0 mile north of San Carlos	M. C. Carr	--	--	170	--	--	--
322	1.5 miles north of San Carlos	J. C. Tipps, et al	A. L. Willingham	1926	147	--	--	--
323	1.9 miles northwest of San Carlos	R. L. Teal	--	--	155	4	--	--
324	do.	H. C. Aderhold	--	--	125	--	--	--
325	Lot 3, blk. 96, Las Mestenas tract, 1.0 mile northeast of Cadillosos Ranch	J. C. Engleman	--	--	200+	6	--	--
325a	Lot 215, La Blanca sur., 1 mile north of La Blanca	C. H. Swallow	Dee Davenport	1937	7,959	16	--	--
326	200 feet east of Mile 6 West Road, 120 feet south of Mile 16 $\frac{1}{2}$ road, west of Elsa	J. A. Lijiestrand	A. C. Brewster	--	151	5	150	1
327	Intersection of Mile 14 North Road and Mile 6 West Road, Southwest of Elsa	H. A. Yohey	--	--	13	48	--	--
328	Intersection of Mile 4 West and Mile 15 North roads, southwest of Edcouch	E. R. Moore	--	--	14	--	--	--
329	Carlson School, northeast of Elsa	Adolph Carlson	Smith Bros.	--	133	5	--	--
330	1.2 miles northeast of Elsa	J. S. Downey	Ed. Kieke	1925	135	--	--	--
331	1.4 miles northeast of Edcouch	Gill Bros.	--	--	160	5	--	--
332	Lot 11, blk. 83, Las Mestenas tract, northeast of Edcouch	Delta Orchards Co.	--	--	130	4 $\frac{1}{2}$	--	--
333	0.5 mile south of Edcouch	R. R. Hill	Ed. Kieke	--	143	8	139	4
334	1.0 mile south of Edcouch, east side of road	Mrs. C. L. Rice	do.	1921	130	10	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
315	100	- 5	Aug. 1, 1933	W	D,S	Fair	
316	122	- 6	do.	W	D,S	Good	
317	126	- 9	do.	W	D,S	do.	
318	123	- 6	do.	W	S	Bad	Originally potable.
319	155	- 12	Aug. 25, 1933	W	D,S	Fair	Well draws water from sand.
320	167	- 24	Aug. 26, 1933	W	S	do.	Do.
321	--	--	Aug. 25, 1933	H	D,S	do.	
322	--	- 18.7	Aug. 26, 1933	H	D,S	do.	
323	155	- 8	do.	W	D,S	do.	Salty. Located on south side of road.
324	--	- 20	do.	W	D,S	do.	Slightly salty. Located on north side of road.
325	--	- 24.6	Aug. 23, 1933	W	D,S	Bad	Salty.
325a	--	--	--	--	--	--	Oil test. See log.
326	151	- 8	Aug. 17, 1933	W	D,S	Fair	Well draws water from red gravel. Cost of well, \$502.00.
327	--	- 5	do.	--	N	Good	Dug well.
328	--	- 6.5	do.	None	N	Bad	Salty.
329	--	- 16	do.	W	D,S	Fair	
330	--	- 15	do.	W	D,S	do.	Well draws water from sand.
331	160	- 22	do.	W	S	Bad	Salty.
332	--	- 35	Aug. 2, 1933	H	N	Fair	
333	143	- 20+	Aug. 1, 1933	H	N	Bad	Salty. Well draws water from fine sand.
334	--	- 60+?	do.	W	D,S	Fair	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter or well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
335	1.0 mile southeast of Edcouch	E. Roser	Ed. Kieke	--	140	5	--	--
336	2.3 miles southeast of c/ Edcouch	C. A. Pearson	--	--	178	4 $\frac{1}{2}$	158	20
337	1.2 miles north of La c/ Villa	J. F. Byrnes	E. Juncke	--	495	6	--	--
338	0.6 mile south of La Villa	--	--	--	75	5	--	--
339	1.0 mile southwest of La Villa	John Wade	Ed. Kieke	--	135	5	115	20
340	Mile 13 $\frac{1}{2}$ North road, 2.9 miles east of Los Indios School	F. W. Johnson	--	1933	41	6	--	--
340a	Tract 2297, Llano Grande grant, 7 $\frac{1}{2}$ miles north of Mercedes	American Rio Grande Land & Irr. Co.	Union Sulphur Co.	1934	6,431	12 $\frac{1}{2}$	--	--
341	1.0 mile southeast of San Jose Ranch	A. B. Baker	--	--	120	5	--	--
342	Los Burros Ranch, 3.0 miles northeast of La Villa	Blasa H. de Lorias	--	--	33	6	20	10
343	Los Ebanos	Town of Los Ebanos	Maximo Diaz	1915	60	4 $\frac{1}{2}$	--	--
344	do.	M. Carrizales	--	1918	42	4 $\frac{1}{2}$	--	--
345	do.	Jose Pena	M. Flores	1932	35	30	--	--
346	do.	Luis Pena	--	1926	80	5	--	--
347	Samfordyce, near railroad station	Yturria Town & Improvement Co.	-- Colbath	1932	65	4 $\frac{1}{4}$	--	--
348	0.4 mile southeast of Samfordyce, on railroad	Fordyce Gin Co.	--	1926	100+	8	--	--
349	Mission-Laredo Highway, 1.0 mile east of Samfordyce	Oscar Daskam	E. Daskam	1933	108	5- 3/16	103	5
350	0.3 mile west of Havana, at Card gravel pit	T. Card	--	--	108	5- 3/16	52	10
351	0.1 mile east of La Joya School	La Joya Est.	A. L. Willingham	1926	180	8	90	90
352	0.3 mile east of La Joya c/ School	N. G. Cavazos	Juan Cavazos	1927	126	5- 3/16	72	54
353	0.6 mile east of La Joya School	Salomon Chapa	Servilo de Luna	1929	87	3 $\frac{1}{2}$	--	--
354	1.1 miles northwest of Penitas, on Rio Grande City-Mission highway	David Chapa	Juan Cavazos	1924	90	5- 3/16	75	15
355	1.1 miles northeast of c/ Penitas	Mrs. D. Lowry	--	--	138	6	--	--
356	Penitas	N. G. Cavazos	N. G. Cavazos	1914	120	4 $\frac{1}{2}$	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift	Use of water	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
335	140	- 8	Aug. 18, 1933	W	D,S	Fair	
336	178	--	Aug. 17, 1933	W	D,S	do.	Well draws water from gravel.
337	495	- 20+	Aug. 18, 1933	W	D,S	Good	Temperature, 79° F.
338	--	- 6	do.	W	N	Bad	Salty.
339	135	- 9.5	do.	W	D,S	Fair	Temperature, 80° F.
340	--	- 16	do.	H	N	Bad	Salty. Temperature, 77° F.
340a	--	--	--	--	--	--	Oil test. See log.
341	--	- 12.5	Aug. 18, 1933	W	N	Bad	Salty.
342	33	- 17.5	Aug. 24, 1933	H	D,S	Good	Well draws water from sand.
343	60	- 25	July 24, 1933	W	D,S	do.	
344	40	- 25	do.	W	D,S	do.	Irrigates 2 acres citrus. Well draws water from sand.
345	--	- 28	do.	W	S	do.	Dug well. Flooded by river water at flood stage.
346	80	- 29	do.	W	D,S,I	do.	Irrigates citrus garden.
347	65	- 42	do.	W	S	Bad	Salty. On slope.
348	100+	- 31	do.	C,G	Ind	Good	Taste. On slope.
349	108	- 67	do.	C,G	D,S,I	do.	Irrigates 3 acres citrus and vegetables. Yield, 10 gallons a minute. Well draws water from sandstone.
350	108	- 46	do.	C,E	Ind	do.	Another sand at 72 to 108 feet. Yield, 25 gallons a minute. On slope.
351	180	- 35+	June 7, 1933	C,E	N	do.	Two additional wells with reservoir designed for irrigation system. Well draws water from sand. Yield, tested
352	120	- 60	Aug. 20, 1933	C,G	D,S,I	do.	Irrigates 20 acres citrus by tank wagon. Well
353	87	- 48	do.	W	D,S,I	do.	Irrigates garden. Well draws water from sandstone. Yield, 35 gallons a
354	90	- 40+	do.	W	D,S,I	do.	Irrigates garden. Well draws water from sandstone. minute.
355	--	- 37	do.	W	D,S	do.	
356	120	- 7	do.	W	D,S	Bad	Salty. Well draws water from sandy clay.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
357	0.8 mile north, slightly east of Chihuahua	Brock & Showers	--	--	153	5- 3/16	--	--
358	Chihuahua, north side of highway	Vela Bros.	Ned Wells	1920	120	4 $\frac{1}{2}$	70	--
359	Abram School	--	Servilo de Luna	1912	90	4 $\frac{1}{2}$	--	--
360	2.0 miles west of Mission, south side of highway	R. M. Hanson	-- Killinger	1931	40	4 $\frac{1}{2}$	30	10
361	1.4 miles southwest of Mission	J. J. Smith	J. J. Smith	1924	32	4 $\frac{1}{2}$	26	6
362	1.7 miles southwest of Mission	Mrs. H. K. Wood	O. C. Wood	1918	44	5- 3/16	21	23
363	do.	do.	do.	1931	60	60	30	30
364	0.9 mile northwest of Malero	T. McBride	E. J. Basye	1932	90	12	--	--
365	1.5 miles west of Sharyland Blvd., 0.5 mile north of Mile 2 road, near Mission	Mrs. G. F. Gray	--	1925	265	4 $\frac{1}{2}$	260	5
366	Intersection of Sharyland Blvd. and Mile 2 road	W. K. Boatwright	--	1924	130	5- 3/16	--	--
367	Intersection of Sharyland Blvd. and Mile 1 road	Marion Macdonald	--	1913	99	5- 3/16	--	--
368	Southwest edge of Mission	City of Mission	-- Colbath	1933	90	12	40	30
369	Southeast edge of Mission	T. L. Langham	Chas. Colbath	1925	265	4 $\frac{1}{2}$	--	--
370	Swimming Pool, 0.5 mile south of Mission	Dr. W. Woods	W. Woods	1926	68 $\frac{1}{2}$	24	48	20
371	0.4 mile east of Mission Swimming Pool	H. P. Peterson	F. Burrhus	1932	86	8	71	15
372	0.5 mile east, 0.5 mile south of Mission Swimming Pool	L. L. Kessler	W. Newhouse	1932	92	6	70	22
373	do.	do.	-- Killinger	1931	52	5- 3/16	48	4
374	0.5 mile east, 0.5 mile south of Mission Swimming Pool, east side of road	Boyd & Bois	E. H. Ray	1933	98	10	82	16
375	0.7 mile east of Mission Swimming Pool	J. B. Close	F. Burrhus	1932	71	10	59	12

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
357	--	- 14	Aug. 20, 1933	W	S	Fair	
358	--	- 36	do.	W	D,S	do.	Well draws water from gravel. On slope.
359	--	- 25	do.	W	D	Good	Do.
360	--	- 22	do.	W	D,S	do.	Do.
361	--	- 26	Aug. 1, 1933	H	D,S	do.	Salt water at 14 feet.
362	44	- 24	July 7, 1933	W	D,S	do.	Well draws water from gravel. North well.
363	60	- 20	do.	C,E,G	I	do.	Irrigates 40 acres citrus and vegetables. Well draws water from gravel. Yield, tested 450 gallons a minute.
364	90	--	do.	T,O	I	do.	Irrigates 100 acres citrus and vegetables. Cost of well, \$500.00. South well.
365	265	- 49	Aug. 1, 1933	W	S	Fair	Capacity of pump, 1,750 gallons a minute. Yield, tested 800 gallons a minute.
366	130	- 21.5	do.	W	S	Bad	Salty.
367	--	- 26	do.	W	S	do.	Do.
368	90	- 17	June 5, 1933	--	D,S, Ind	Fair	Well draws water from gravel and sand. Yield, tested 850 gallons a minute.
369	--	- 40+	Aug. 8, 1933	W	D,S	do.	Slightly salty. Drawdown, 20 feet in 3 days.
370	68½	- 22	June 6, 1933	T,E	D,S, Ind	Good	Well draws water from sand and gravel. Yield, 700 gallons a minute.
371	86	- 12	Aug. 24, 1933	C,E,G	I	do.	Irrigates 36 acres citrus and field crops. Cistern 4 feet diameter for upper 23 feet. Well draws water from gravel. Yield, 1,000+ gallons a minute.
372	92	- 16	do.	C,E,G	I	do.	Irrigates 135 acres citrus and field crops. Cistern 3 feet diameter for upper 18 feet. Well draws water from gravel. Yield, 400 gallons a minute. On slope.
373	52	- 19	do.	W	D,S	do.	Well draws water from gravel. South well.
374	98	- 19	do.	C,E,G	I	do.	Irrigates 80 acres citrus and field crops. Cistern 4 feet diameter for upper 21 feet. Well draws water from gravel. Yield, 700 gallons a minute.
375	71	- 17	Aug. 23, 1933	C,E,G	I	do.	Irrigates 33 acres citrus. Cistern 3 feet diameter for upper 36 feet. Well draws water from gravel. Yield, 700 gallons a minute.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
376	1.0 mile east of Mission Swimming Pool	R. E. Doyle	--	--	40	--	--	--
377	1.5 miles west of Sharyland Blvd., 1.0 mile southeast of Mission, west side of road	Evan Rees	New-house	1932	75	14	55	20
378	1.4 miles south of Mission Swimming Pool, east side of road	Layne-Texas Co.	Layne-Texas Co.	1927	110	18	55	55
379	0.8 mile east of Madero, south side of road	L. Marsell	E. J. Bayse	1931	90	16	--	--
380	0.5 mile west of Sharyland Blvd., 0.8 mile southwest of Sharyland, west side of road	Bentsen's Nursery	--	--	42	5- 3/16	--	--
381	0.5 mile west of Sharyland Blvd., 1.1 miles southwest of Sharyland, west side of road	H. L. Rapp	Killinger	1933	62	10	37	25
382	Sharyland Blvd., 0.8 mile south of Sharyland, east side of road	A. E. Henninger	E. H. Ray	1930	55	12	38	17
383	0.5 mile east of Sharyland Blvd., 1.1 miles southeast of Sharyland, east side of road	-- Swantz	do.	1931	50	8	35	14
384	0.5 mile east of Sharyland Blvd., 1.4 miles southeast of Sharyland, east side of road	H. Powell	do.	1931	75	10	55	20
385	0.6 mile east of Sharyland Blvd., 1.3 miles southeast of Sharyland, south side of road	W. C. Whyte	do.	1931	50	8	35	14
386	0.5 mile east of Sharyland Blvd., 1.4 miles southeast of Sharyland, west side of road	C. H. Ray	C. H. Ray	1931	77	6	55	22
387	Sharyland Blvd., 1.2 miles south of Sharyland, east side of road	H. F. Krusemark	E. H. Ray	1930	68	6	56	12
388	do.	do.	--	1919	56	4 $\frac{1}{4}$	56	--
389	0.5 mile west of Sharyland Blvd., 1.8 miles south of Sharyland, east side of road	H. W. Grover	E. H. Ray	1932	72	10	39	33
390	Sharyland Blvd., 2.9 miles south of Sharyland, east side of road	S. West	do.	1933	88	8	72	16

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
376	--	--	Aug. 23, 1933	C, G	S	Bad	Salty, bitter.
377	75	- 14	Aug. 17, 1933	C, E, G	I	Good	Irrigates 80 acres citrus. Cistern 4 feet diameter at top. Yield, 800 gallons a minute.
378	110	- 18	do.	T, G	I	do.	Irrigates 40 acres field crops. Yield, 1,100 gallons a minute. Well draws sand and gravel.
379	90	- 17.5	do.	T, G	I	do.	Irrigates 80 acres citrus and vegetables. Yield, 700 gallons a minute.
380	--	- 14	do.	W	D, S	do.	
381	62	- 10.5	do.	T, G	D, S, I	Fair	Irrigates 20 acres citrus. Well draws water from gravel. Yield, 800 gallons a minute. Cost of well \$700.00.
382	55	--	do.	T, G	I	Good	Irrigates 65 acres citrus. Well draws water from gravel. Yield, 1,000 gallons a minute.
383	50	- 10	do.	C, E, G	I	do.	Irrigates 38 acres citrus. Cistern 4 feet diameter for upper 12 feet. Yield, 800 gallons a minute.
384	75	--	do.	T, G	I	do.	Irrigates 30 acres citrus. Cistern 5 feet diameter for upper 20 feet. Well draws water from gravel. Yield, 800 gallons a minute.
385	50	- 10	Aug. 16, 1933	C, E, G	I	do.	Irrigates 13 acres citrus. Cistern 5 feet diameter for upper 12 feet. Well draws water from gravel. Yield, 500 gallons a minute.
386	77	- 11	do.	C, E, G	I	do.	Irrigates 15 acres citrus. Cistern 6 feet diameter for upper 30 feet. Well draws water from gravel. Yield, 500 gallons a minute.
387	68	- 18	do.	C, E, G	I	do.	Irrigates 20 acres citrus. Cistern 5 feet diameter for upper 12 feet. Yield, 450 gallons a minute. Cost of well \$325.00.
388	56	- 18	do.	W	D, S	do.	
389	72	- 11	do.	T, G	I	do.	Irrigates 55 acres citrus. Well draws water from gravel. Yield, 500 gallons a minute. Drawdown, 20 feet. Cost of well \$725.00.
390	88	- 9.5	do.	C, E, G	I	do.	Irrigates 20 acres citrus and vegetables. Cistern 3.5 feet diameter for upper 10 feet. Well draws water from gravel. Yield, 700 gallons a minute.

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used. minute.

c/ See table of analyses in back of this report.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
391	1.5 miles east of Sharyland Blvd., 3.2 miles southeast of Sharyland	J. J. Carr	J. J. Carr	1930	100	8	85	15
392	2.3 miles east of Sharyland Blvd., 2.8 miles southeast of Sharyland	W. H. Jordan	Juan Vela	1933	50	4 $\frac{1}{2}$	45	5
393	2.5 miles north, slightly east of McAllen	W. H. Smith	--	--	77	4 $\frac{1}{2}$	--	--
394	2.7 miles northeast of McAllen	G. A. Eby	U. G. Jarris	1912	156	4 $\frac{1}{2}$	156	--
395	2.3 miles northeast of McAllen	do.	Frank Reed	1911	98	4 $\frac{3}{4}$	92	6
396	2.3 miles north, slightly east of McAllen	W. D. Gray	--	1929	80	4 $\frac{1}{2}$	80	--
397	2.0 miles north, slightly east of McAllen	Purcell & Brandon	-- Killinger	1930	80	6 $\frac{1}{8}$	72	8
398	1.0 mile north, slightly east of McAllen	O. T. Yates	--	1927	194	4 $\frac{1}{2}$	--	--
399	1.9 miles northeast of <u>g/</u> McAllen	Ada R. Sigrist	--	1915	80	4 $\frac{1}{2}$	--	--
400	1.7 miles northeast of McAllen	Marv King	J. P. Moore	--	53	4 $\frac{1}{2}$	--	--
401	do.	C. W. Rogers	Juan Cavazos	1912	86	4 $\frac{3}{4}$	--	--
402	0.7 mile southwest of McAllen	Dr. A. B. Cockrell	--	--	65	4 $\frac{1}{2}$	--	--
403	McAllen Swimming Pool, 1.5 miles south of McAllen	M. R. Nelson	--	--	--	--	--	--
404	0.8 mile north of McAllen Swimming Pool	C. L. Fulwider	--	--	83	10	--	--
405	1.4 miles northeast of McAllen Swimming Pool	J. H. Smith	Ned Wells	1916	86	4 $\frac{1}{2}$	84	2
406	1.0 mile northeast of McAllen Swimming Pool	Mrs. Zoe Roger	do.	--	58	4 $\frac{1}{2}$	--	--
407	1.5 miles east, slightly north of McAllen Swimming Pool	M. D. Page	--	1913	125	4 $\frac{1}{2}$	--	--
408	1.0 mile west, slightly south of Pharr	H. F. Richards	--	1924	86	5- 3/16	--	--
409	Highway 12, 2.1 miles north of Pharr	H. R. Giles	--	1925	76	4 $\frac{1}{2}$	--	--
410	Highway 12, 2.8 miles north of Pharr	Central Power & Light Co.	A. L. Willingham	1931	100	4 $\frac{1}{2}$	96	4
411	0.4 mile north of San Juan	H. M. Hess	--	1923	105	7	--	--
412	1.5 miles northwest of <u>g/</u> San Juan	G. E. Alcott	Ned Wells	1929	96	4 $\frac{1}{2}$	85	--
413	2.4 miles north, slightly east of San Juan	-- Aldrich	--	1920	120	4 $\frac{1}{2}$	--	--
414	3.0 miles northeast of San Juan	Peter Iverson	--	1918	79	4 $\frac{1}{2}$	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift	Use of water	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
391	100	- 13	Aug. 16, 1933	C, E, G	I	Good	Irrigates 5 acres citrus. Cistern 5 feet diameter for upper 18 feet. Yield, 250 gallons a minute.
392	50	- 12	Aug. 8, 1933	W	D, S	Fair	Well draws water from gravel. On slope.
393	--	- 21	June 14, 1933	W	D, S	do.	
394	156	--	do.	H	D, S	Bad	Slightly salty. Other sands at 30 and 92 feet. Well draws water from
395	98	- 30 ₊	do.	W	D, S	Fair	Salt water at 30 feet. <u>gravel.</u> Well draws water from gravel.
396	80	- 30 ₊	do.	W	D, S	do.	Salt water at 12 feet. Well draws water from sand.
397	80	--	do.	W	D, S	Bad	Bitter. Well draws water from sand.
398	194	- 19	do.	W	D, S	Good	
399	80	- 17.5	do.	W	D, S	do.	
400	53	- 28	do.	W	S	Bad	Salty.
401	86	- 18	do.	W	D, S	Good	Well draws water from gravel.
402	--	- 8	Aug. 11, 1933	W	D, S	do.	
403	--	--	--	--	--	Bad	Salty.
404	--	- 14	Aug. 11, 1933	W	S	do.	Do.
405	86	- 26	do.	W	D, S	Fair	Well draws water from gravel.
406	58	--	do.	W	D, S	Good	Do.
407	125	- 35 ₊	do.	W	D, S	do.	Salt water at 30 and 60 feet.
408	86	- 23 ₊	do.	W	D, S	do.	
409	76	- 14	do.	W	D, S	do.	
410	100	- 12.5	do.	C, E	D, S	do.	Salt water at 60 feet. Well draws water from gravel and sand.
411	105	- 11	Aug. 19, 1933	W	D, S	Fair	
412	96	- 12 ₊	do.	W	D, S	Good	Well draws water from gravel and sand.
413	120	- 12 ₊	do.	W	D, S	do.	
414	79	- 8	do.	W	D, S	Fair	

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
415	1.7 miles northeast of San Juan	L. L. Stone	--	--	106	4 $\frac{1}{2}$	--	--
416	5.0 miles northeast of San Juan	B. L. Parham	--	--	100	4 $\frac{1}{2}$	--	--
417	3.2 miles north, slightly east of Alamo	P. L. Gross	P. L. Gross	--	15	42	--	--
418	2.0 miles north, slightly east of Alamo	W. Jacob	--	--	108	4 $\frac{1}{2}$	--	--
419	Valley Highway, 0.9 mile east of Alamo	T. T. Keffer	--	--	35	5- 3/16	--	--
420	2.4 miles northeast of Alamo	A. V. Schuhart	Wm. Brewster	--	114	4 $\frac{1}{2}$	--	--
421	2.0 miles northwest of Donna	A. Herzog	D. Smith	1921	136	4 $\frac{1}{2}$	--	--
422	1.0 mile northeast of Donna	J. B. Millican	--	--	18	--	12	6
423	1.0 mile north of Donna	K. W. Townsend	--	--	14	24	--	--
424	3.1 miles north, slightly east of Donna	F. Giese	--	--	8	10	--	--
425	5.0 miles north, slightly east of Donna	Isaac Brown	--	--	11 $\frac{1}{2}$	60	--	--
426	1.5 miles northwest of Ebony Heights School	Anton Henza	Anton Henza	--	18	48	--	--
427	Intersection Mile 6 $\frac{1}{2}$ west road and Mile 11 north road, north of Weslaco	Mrs. S. St Clair	--	--	15	--	--	--
428	Mile 6 $\frac{1}{2}$ west road, 0.47 mile north of Mile 10 north road, north of Weslaco	M. W. Smith	M. W. Smith	--	18	30	--	--
429	Mile 6 west road, 0.65 mile north of Mile 8 north road, north of Weslaco	C. C. Marshall	--	--	10	--	--	--
430	Intersection Mile 5 west road and Mile 9 north road, north of Weslaco	I. H. Fields	--	--	20	8	--	--
431	Mile 5 west road, 0.2 mile south of Mile 10 north road, north of Weslaco	W. T. Lacy	T. D. Blackwell	--	26	8	--	--
432	Mile 5 west road, 100 yards south of Mile 11 north road, north of Weslaco	C. Spears	C. Spears	--	15	--	--	--
433	Mile 5 west road, 0.2 mile south of Mile 12 north road, north of Weslaco	R. Helder	--	--	13	5	12	--
434	Mile 13 north road, 100 feet west of Mile 4 west road, north of Weslaco	-- Schwadie	--	--	8	6	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
415	106	- 12	Aug. 21, 1933	W	D,S	Bad	Bitter, salty.
416	100	- 15	do.	W	D,S	Fair	
417	--	- 9	do.	C,E	D,S	Good	Dug well.
418	108	- 6	do.	W	D,S	Fair	
419	35	- 5 ₊	do.	W	D,S	Good	
420	114	- 3	do.	W	D,S	Bad	
421	136	- 7.5	Aug. 25, 1933	None	N	do.	Salty.
422	--	- 6	Aug. 22, 1935	--	D	do.	Dug well. Salty. Well draws water from sand.
423	--	- 7	do.	W	D,S	Fair	Dug well. Well draws water from silt.
424	--	- 2.5	Aug. 25, 1933	H	D,S	do.	
425	--	- 7.5	do.	W	D,S	do.	Dug well.
426	--	- 9	Aug. 17, 1933	H	D,S	Good	Dug well. Well draws water from sand.
427	--	- 6	Aug. 15, 1933	H	D,S	Fair	Well draws water from fine sand.
428	--	- 14.5	do.	W	D,S	Good	Dug well. Well draws water from sand.
429	--	- 3.5	do.	H	D	do.	
430	--	- 15 ₊	Aug. 27, 1933	H	D,S	Fair	
431	--	- 18 ₊	do.	None	N	Bad	Salty.
432	--	- 7.5	do.	H	D,S	Good	Temperature, 80° F.
433	--	- 4.5	do.	H	D,S	Bad	Salty. Well draws water from yellow sand.
434	--	- 6	Aug. 17, 1933	H	D,S	do.	Salty.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
435	Mile 4 west road, 0.4 mile south of Mile 12 north road, north of Weslaco	--	--	--	11	6	--	--
436	Mile 4½ west road, 0.3 mile south of Mile 11 north road, north of Weslaco	Adam Wood	--	--	19	--	--	--
437	Mile 4½ west road, 0.1 mile north of Mile 10 north road, north of Weslaco	American Rio Grande Land & Irr. Co.	--	--	15	--	--	--
438	Mile 4½ west road, 0.5 mile north of Mile 8 north road, north of Weslaco	J. B. Funk	J. B. Funk	--	6	48	--	--
439	Mile 3½ west road, 0.5 mile north of Mile 8 north road, northeast of Weslaco	O. T. Dunlap	--	--	5½	8	--	--
440	Mile 3½ west road, 0.5 mile south of Mile 11 north road, northeast of Weslaco	C. Hamel	--	--	10	36	--	--
441	Mile 3½ west road, 0.5 mile south of Mile 12 north road, northeast of Weslaco	Southland Life Ins. Co.	--	--	14	60	--	--
442	Mile 3½ west road, 0.1 mile south of Mile 12 north road, northeast of Weslaco	M. G. Carter	--	--	20	120	18	--
443	Intersection Mile 3 west road and Mile 12 north road, northeast of Weslaco	F. Bennett	--	--	14	4	--	--
444	Mile 13½ north road, at Los Indios School	Mrs. E. J. Hutchison	--	--	12	36	--	--
445	Mile 2 west road, 0.4 mile south of Mile 11 north road, northwest of Mercedes	A. J. Wright	--	--	20	4	--	--
446	Mile 1½ west road, 0.5 mile south of Mile 11 north road, northwest of Mercedes	A. H. Downing	--	--	24	6	22	--
447	Intersection Mile 1 west road and Mile 10 north road, north of Mercedes	K. A. Pleasant	--	--	14	42	--	--
448	Mile 1½ west road, 0.4 mile south of Mile 10 north road, northwest of Mercedes	American Rio Grande Land & Irr. Co.	--	--	9	48	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
435	--	- 10	July 28, 1933	H	N	Bad	
436	--	- 11.5	July 27, 1933	--	D,S	do.	Salty. Well draws water from sand.
437	--	- 10	do.	--	D,S	Fair	
438	--	- 4.5	July 28, 1933	None	D,S	Bad	Dug well. Well draws water from sandy clay.
439	--	- 4	do.	None	N	do.	Salty. Well draws water from silt and clay.
440	--	- 8.7	do.	H	D,S	Fair	Dug well.
441	--	- 11	do.	W	D,S	do.	Do.
442	--	- 9	do.	H	D,S	Good	Dug well. Well draws water from sand and gravel.
443	--	- 6.5	July 29, 1933	None	N	Bad	
444	--	- 6	Aug. 18, 1933	H	D,S	Good	Dug well.
445	--	- 6.5	Aug. 3, 1933	None	N	Bad	Salty.
446	--	- 6	do.	W	D,S	Fair	Well draws water from fine gravel and sand.
447	--	- 7+	do.	W	D,S	Good	Dug well.
448	--	- 6	do.	W	D,S	do.	Do.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
449	Mile $\frac{1}{2}$ west road, 1.0 mile north of Mile 7 north road, north of Merced	E. C. Ramsey	C. Newman	--	54	4	50?	--
450	Mile $\frac{3}{4}$ west road, 0.15 mile south of mile 9 north road, north of Merced	J. G. T. Colley	--	--	13	48	--	--
451	West bank Campacus Lake, near Mile 9 north road, north of Merced	Mrs. F. M. Carter	--	--	30+	--	--	--
452	Los Indios School, Mile $13\frac{1}{2}$ north road northwest of Merced	Mrs. E. J. Hutchison	--	--	150	5	--	--
453	Mile 2 east road, 0.2 mile north of Mile 11 north road, northeast of Merced	C. W. Schwarz	--	--	18	--	--	--
454	Intersection Mile 1 east and Mile 11 north, northeast of Merced	Albert Schwarz	--	--	80+	--	--	--
455	Mile $1\frac{1}{2}$ east, 0.3 mile north of Mile 10 north, northeast of Merced	J. M. Waller	--	--	11	30	--	--
456	Mile 2 east road, 0.25 mile north of Mile 10 north road, northeast of Merced	-- Marcus	--	--	14	4	--	--
457	Base line road, 0.3 mile south of Mile 9 road, north of Merced	L. T. Galbroath	--	--	14	36	--	--
458	Intersection Base Line road and Mile 9 north road, north of Merced	F. O. Underhill	--	--	40	$1\frac{1}{4}$	--	--
459	Base Line road, 0.4 mile north of Mile 8 north road, north of Merced	I. Seinheimer	--	--	5	30	--	--
460	Base Line road, 0.1 mile south of Mile 8 north road, north of Merced	H. J. Riesterer	--	--	19	4	--	--
461	Mile $\frac{1}{2}$ east road, 0.2 mile south of Mile 8 north road, northeast of Merced	J. H. McKinney	--	--	32	3	15	17
462	Mile 1 east road, 0.25 mile south of Mile 8 north road, northeast of Merced	J. Ziebarth	--	1931	90	--	--	--
463	Mile 1 east road, 0.35 mile north of Mile 8 north road, northeast of Merced	H. H. Wetegrove	C. Newman	--	35+	2	18	17

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
449	--	- 7 ⁺	Aug. 4, 1933	C, E	D, S	Fair	
450	--	- 10	Aug. 9, 1933	C, E	D, S	do.	Dug well.
451	--	- 5 ⁺	do.	W	D, S	Good	
452	--	- 8	Aug. 19, 1933	W	D	Fair	Old well.
453	--	- 10 ⁺	Aug. 14, 1933	W	D, S	do.	Dug well.
454	--	--	Aug. 10, 1933	W	D, S	do.	Very hard.
455	--	- 6	do.	H	S	do.	Dug well.
456	--	- 6.5	Aug. 14, 1933	None	D, S	Good	
457	--	- 10.5	Aug. 9, 1933	W	D, S	do.	Dug well.
458	--	- 20 ⁺	do.	C, E	D, S	do.	
459	--	- 5	do.	None	S	Fair	Dug well.
460	--	- 12	do.	W	D, S	Good	
461	--	- 5.75	Aug. 10, 1933	W	S	Bad	Well draws water from fine sand.
462	--	--	do.	H	D, S	Good	
463	--	--	do.	W	D, S	do.	Well draws water from sand.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
464	Mile 1½ east road, 0.1 mile south of Mile 9 north road, northeast of Mercedes	M. L. Kleener	--	--	11	--	--	--
465	Mile 2 east road, 0.1 mile south of Mile 9 north road, northeast of Mercedes	J. I. Mills	--	--	18	--	--	--
466	Mile 3 east road, 0.5 mile south of Mile 9 north road, northeast of Mercedes	V. V. Brown	--	--	35	3	--	--
467	Mission of the Oblate Fathers, 1.0 mile southeast of Madero	Oblate Fathers	--	1913	150	4¼	--	--
468	0.5 mile northeast of Oblate Mission	H. P. Porter	F. Burrhus	1933	120	8	90	30
469	0.5 mile northeast of Oblate Mission	R. C. Bruttche	do.	--	--	8	--	--
470	1.3 miles southeast of Oblate Mission	O. A. Smith	do.	1933	116	8	92	24
471	1.6 miles southeast of Oblate Mission	F. Burrhus	do.	1933	115	8	91	20
472	2.0 miles northeast of Oblate Mission	M. Madsen	--	1913	80	4¼	80	--
473	2.2 miles northeast of Oblate Mission	do.	F. Burrhus	1932	113	10	79	34
474	2.5 miles east, slightly south of Oblate Mission	J. H. Shary	--	1921	120	4¼	--	--
475	3.2 miles east of Oblate Mission	J. W. Herrington	--	--	--	--	--	--
476	3.6 miles northeast of Oblate Mission	J. J. Carr	J. J. Carr	1922	85	4¼	85	--
477	4.2 miles north of Hidalgo, 0.7 mile west of Hidalgo-McAllen Highway	J. H. Curtis	Ned Wells	1929	104	10	78	26
478	West Hidalgo-McAllen Highway, 3.6 miles north of Hidalgo	R. W. Rowe	--	1923	93	4¼	--	--
479	4.0 miles east, slightly north of Oblate Mission	G. T. Meister	C. H. Ray	1932	104	12	80	22
480	3.8 miles east, slightly south of Oblate Mission, near Hackney Lake	J. J. Hackney	J. J. Hackney	1931	108	8	92	16
481	West Hidalgo-McAllen c/ Highway, 3.8 miles north of Hidalgo	O. A. Bakhaus	-- Bayse	--	--	--	--	--

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
464	--	- 7.5	Aug. 14, 1933	None	D,S	Good	Dug well. Well draws water from white sand.
465	--	- 8+	do.	H	N	Bad	Salty, hard.
466	--	- 16	July 25, 1933	H	D,S	Good	Well draws water from sand.
467	150	- 47	Aug. 7, 1933	C,E	D,S	do.	Yield, 16 gallons a minute. On hilltop.
468	120	--	do.	None	N	--	Well draws water from sand and gravel.
469	--	--	do.	T,G	I	--	Irrigates 15 acres citrus.
470	116	- 14	do.	C,E,G	I	--	Irrigates 75 acres field crops. Cistern 6 feet diameter for upper 19 feet. Bitter taste. Well draws water from sand and gravel. Yield,
471	115	- 11	do.	C,E,G	I	Good	Irrigates 1,000+ gallons a minute. 60 acres field crops. Cistern for
472	80	- 11	do.	W	D,S	do.	Well upper 16 feet. Yield, 800+ draws water from gravel. gallons a
473	113	- 13.5	do.	C,E,G	I	do.	Irrigates 70 acres citrus and field crops. Cistern 4½ feet
474	120	- 14	do.	W	D,S	do.	diameter for upper 22 feet. Well draws water from gravel. Yield,
475	--	--	--	--	I	--	1,000 gallons a minute. Drawdown, 15+ feet in one hour.
476	85	--	Aug. 7, 1933	W	D,S	Good	Well draws water from gravel.
477	104	- 10	do.	T,O	I	do.	Irrigates 100 acres. Yield, 1,000+ gallons a minute. Drawdown, 30 feet in five minutes.
478	93	- 13	do.	W	D,S	do.	Well draws water from gravel.
479	104	- 20+	do.	C,E,G	I	do.	Irrigates 80 acres citrus. Cistern 4 feet diameter for upper 22 feet.
480	108	- 20+	Aug. 8, 1933	T,G	I	do.	Irri- Yield, 1,000+ gallons a minut gates 38 acres citrus. Yield, 500 gallons a minute.
481	--	--	--	T,G	I	--	Irrigates 100 acres vegetables.

b/ S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/ See table of analyses in back of this report.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
482	West Hidalgo-McAllen Highway, 2.4 miles north of Hidalgo.	-- Fletcher	C. H. Ray	1932	110	10	85	25
483	West Hidalgo-McAllen Highway 1.9 miles north of Hidalgo	W. J. Zackman	-- Bayse	1931	120	12	100	20
484	Hidalgo, at Ice Plant c/	Central Power & Light Co.	--	--	--	--	--	--
484a	$\frac{3}{4}$ mile east of Hidalgo	Mrs. M. M. Fairbanks	King-Woods Oil Co.	1934	--	--	--	--
485	1.0 mile northeast of Hidalgo	Anton Thesar	Juan Vela	1913	99	4 $\frac{1}{2}$	--	--
486	East Hidalgo-McAllen Highway, 2.9 miles north of M. P. R. R.	Robert Gregory	--	--	--	4 $\frac{1}{2}$	--	--
487	2.7 miles northeast of Hidalgo	-- Evans	--	--	82	4 $\frac{1}{2}$	--	--
488	1.2 miles north of Valley View School, northeast of Hidalgo	G. M. Shoup	--	1918	125	4 $\frac{1}{2}$	--	--
489	Valley View School, northeast of Hidalgo	Valley View School	Juan Perez	1927	105	4 $\frac{1}{2}$	100	--
490	Schulz Crossing, east of Hidalgo, at Gin	Valley Gin Co.	--	1925	110	4 $\frac{1}{2}$	--	--
491	0.6 mile south of Valley View School, east of Hidalgo	W. W. Stevens	Wm. Schulz	1913	90	4 $\frac{1}{2}$	--	--
492	1.7 miles east of Hidalgo, south of M. P. R. R.	E. C. Chastain	E. C. Chastain	1925	60	6	--	--
493	2.0 miles east of Hidalgo, on Military road	M. M. Damron	Juan Perez	1925	100	4 $\frac{1}{2}$	98	--
494	3.3 miles east of Hidalgo, on Military road	Amado Lozano	Amado Lozano	1928	75	4 $\frac{1}{2}$	--	--
495	3.7 miles southeast of Hidalgo, 0.3 mile north of Military road	J. G. Moutier	--	1917	110	4 $\frac{1}{2}$	100	10
496	4.1 miles southeast of Hidalgo, 0.7 mile north of Military road	R. J. Sorensen	--	1917	110	4 $\frac{1}{2}$	105	--
497	Military Road, 4.5 miles southeast of Hidalgo	John Klumb	Juan Vela	1928	83	4 $\frac{1}{2}$	--	--
498	4.0 miles northeast of Hidalgo	E. T. Swanberg	--	--	70	4 $\frac{1}{2}$	--	--
499	4.5 miles northeast of Hidalgo	J. S. Ward	--	1920	90	5- 3/16	--	--
500	2.0 miles south of Pharr	John C. Kelly	--	1912	78	4 $\frac{1}{2}$	--	--
501	1.5 miles southwest of San Juan	C. W. Dawley	--	1924	49	4 $\frac{1}{2}$	--	--
502	1.7 miles southeast of San Juan	F. R. Lenser	Wm. Brewster	1922	103	4 $\frac{1}{2}$	90	13

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
482	110	- 21+	Aug. 8, 1933	T,G	I	--	Irrigates 30 acres vegetables and field crops. Well draws water from gravel. Yield, 800 gallons a minute.
483	120	- 18	June 10, 1933	T,E	I	Good	Well draws water from gravel and sand. Yield, 700 gallons a minute. Drawdown, 20 feet in one hour.
484	--	--	--	C,E	D,S, Ind	do.	Yield, 150 gallons a minute.
484a	--	--	--	--	--	--	Oil test. See log.
485	--	- 11	Aug. 9, 1933	W	D,S	Good	
486	--	- 9	do.	H	D,S	Bad	Slightly salty.
487	82	- 7	do.	H	D,S	Good	
488	125	- 10 ₊	do.	W	D,S	do.	
489	105	- 12	do.	W	D	do.	Well draws water from gravel. On slope.
490	110	- 12	do.	W	D,S	do.	
491	90	- 9	do.	W	D,S	do.	
492	60	- 36	do.	W	D,S	do.	Well draws water from sand.
493	100	- 12	do.	W	D,S	do.	Salt water at 14 feet; water sand at 60 feet.
494	75	- 11	do.	W	D,S	do.	Well draws water from gravel.
495	110	- 17	do.	W	D,S	do.	Well draws water from gravel and sand.
496	110	- 8.5	do.	W	D,S	do.	Well draws water from gravel.
497	83	- 10	Aug. 10, 1933	W	D,S	do.	
498	70	- 4	do.	H	D,S	do.	
499	90	- 5	do.	H	D,S	do.	
500	78	- 7	do.	W	D,S	Bad	Salty.
501	--	- 15	do.	W	S	do.	Do.
502	103	- 17	Aug. 14, 1933	W	S	do.	Salty. Well draws water from gravel.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
503	2.1 miles south of Alamo	G. Belke Est.	Wm. Brewster	1925	95	4 $\frac{1}{2}$	95	--
504	3.4 miles southeast of San Juan	Mutual Life Ins. Co.	--	1913	104	4 $\frac{1}{2}$	--	--
505	3.4 miles south of San Juan	Southwestern Life Ins. Co.	--	1923	75	4 $\frac{1}{2}$	--	--
506	3.5 miles south of Alamo	W. J. Wittenberg	Wm. Brewster	1927	80	4 $\frac{1}{2}$	80	--
507	3.6 miles south of Alamo	C. Wichman	--	1920	108	4 $\frac{1}{2}$	--	--
508	2.7 miles northeast of San Juan plantation	--	--	--	--	--	--	--
509	1.0 mile north, slightly east of San Juan plantation	C. R. Boase	--	1926	105	4 $\frac{1}{2}$	--	--
510	0.8 mile north, slightly east of San Juan plantation	Santa Clara Community	--	1925	85+	4 $\frac{1}{2}$	--	--
511	6.0 miles south of Alamo	J. A. Unland	J. A. Unland	1926	86	4 $\frac{1}{2}$	86	--
512	1.3 miles southeast of Alamo	J. A. Elmer	Wm. Brewster	1921	104	4 $\frac{1}{2}$	--	--
513	2.5 miles southeast of c/ Alamo	E. L. Gililand	--	1923	50	4 $\frac{1}{2}$	40	10
514	1.9 miles north slightly east of Run School	O. Dean	--	--	70+	5	--	--
515	2.0 miles southwest of Weslaco	--	--	--	12	6	--	--
516	Mile 6 north road, 0.2 mile west of Mile 5 $\frac{1}{2}$ west road	C. J. Bair	--	--	11	24	--	--
517	Intersection of Mile 6 $\frac{1}{2}$ west road and Mile 6 $\frac{1}{2}$ north road:	D. A. Cleveland	--	--	23	--	19	4
518	Mile 4 $\frac{1}{2}$ west road, 0.6 mile south of Mile 8 north road	G. H. Molby	--	--	13	30	--	--
519	Mile 6 north road, 0.2 mile west of Mile 4 west road	C. H. Cotton	--	--	36	--	--	--
520	Intersection of Mile 5 north road and Mile 4 $\frac{1}{2}$ west road	J. H. Couch	--	--	36	6	30	5
521	Mile 5 north road, 0.25 mile east of Mile 4 west road	W. M. Welch	--	--	100+	--	--	--
522	Mile 3 west road, 0.25 mile north of Mile 6 $\frac{1}{2}$ north road	L. R. Crockett	A. L. Willingham	1920	135	4 $\frac{1}{2}$	125	10
523	South Palm Garden School, south of Llano Grande	South Palm Garden School	A. E. Darlington	1924	20	4 $\frac{1}{2}$	15	5

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above(+) or below(-) surface or bench mark (ft.)	Date of measurement				
503	90	- 20 ₊	Aug. 14, 1933	W	D,S	Good	Salt water at 35 feet. Well draws water from sand.
504	104	- 3	do.	W	D,S	Fair	
505	75	- 5	do.	H	S	Good	
506	80	- 13	do.	W	D,S	do.	Well draws water from gravel.
507	108	- 15	do.	W	D,S	do.	Well draws water from sand.
508	--	--	--	--	--	--	Abandoned oil test.
509	--	- 9	Aug. 14, 1933	W	D,S	Good	
510	85 ₊	--	do.	C,G	D,S	do.	
511	86	- 25 ₊	do.	W	D,S	do.	Well draws water from fine sand.
512	104	- 12	do.	W	S	Bad	Salty. Well draws water from gravel.
513	50	- 15	do.	W	D,S	Good	Well draws water from gravel.
514	--	--	Aug. 22, 1933	W	D,S	do.	
515	--	- 7.5	Aug. 19, 1933	H	D,S	Bad	Salty.
516	--	- 7.5	do.	W	D,S	do.	Dug well. Salty. Well draws water from sand.
517	--	- 11	do.	W	D,S	Good	Dug well. Well draws water from gravel.
518	--	- 5.5	July 28, 1933	W	D,S	Fair	Dug well. Well draws water from sandy clay.
519	--	- 11.5	Aug. 19, 1933	W	D,S	Good	Dug well.
520	--	- 16.5	do.	W	D,S	do.	Well draws water from sand and gravel.
521	--	--	do.	C,E	D,S	do.	
522	--	- 13.5	do.	W	D,S	Fair	Well draws water from sand.
523	--	- 6	do.	W	D,S	Good	Do.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
524	Mile 5 north road, 0.1 mile east of Mile 2 $\frac{1}{2}$ west road	C. H. Mann	--	--	30	--	--	--
525	Intersection of Mile 2 west road and Mile 5 north road	E. E. Drew	--	--	20	5	--	--
526	Mile $\frac{1}{2}$ west road, 0.6 mile north of Mile 7 north road	F. H. Karle	--	--	25	1 $\frac{1}{2}$	20	5
527	Mile $\frac{1}{2}$ east road, 1.1 miles north of M. P. R.R.	-- Killman	--	--	15	2	--	--
528	Mile $\frac{1}{2}$ east road, 0.95 mile north of M. P. R.R.	Henry Williamson	--	--	45	4	--	--
529	Mile 1 east road, 0.8 mile north of M. P. R.R.	W. A. Critchfield	W. A. Critchfield	--	40	3 $\frac{1}{2}$	15	25
530	Mile 1 $\frac{1}{2}$ east road, 0.92 mile north of M. P. R.R.	P. R. Lucky & M. B. Ermich	--	--	11	60	--	--
531	Mile 2 east road, 0.3 mile north of M. P. R.R.	W. K. Swift	--	--	40	4 $\frac{1}{2}$	--	--
532	Mile 1 $\frac{1}{2}$ east road, 0.2 mile north of M. P. R.R.	S. J. P. Bohannon	A. E. Darlington	--	32	6	16	16
533	Mile $\frac{1}{2}$ east road, 0.25 mile south of Mile 4 north road	W. H. Drawe	--	--	13	36	--	--
534	0.2 mile west of Cameron County line, on Military road	C. F. Barter	C. F. Barter	--	50	2	33	17
535	2.0 miles southeast of Santa Clara	D. A. Knapo	--	1929	126	4 $\frac{1}{2}$	104	22
536	4.0 miles southeast of Santa Clara	H. Landa	--	1913	68	4 $\frac{1}{2}$	--	--
537	Raypaul, M. P. R.R., 5.5 miles south of Donna	J. O. Bain	--	--	110	5	--	--
538	Run School No. 4, 6 miles south of Donna	Run School No. 4	R. H. Harvey	--	110	5	--	--
539	0.6 mile south of Run School	F. Campbell	--	--	26	48	--	--
540	1.6 miles southeast of Run School	E. A. Boyce	--	--	22	48	16	--
541	Military Road, 1.0 mile east of Run School	Temple Orchards Co.	--	1932	120	4 $\frac{1}{4}$	--	--
542	Military Road, 2.0 miles northeast of Run School	-- Shepperd	--	--	187	4 $\frac{1}{4}$	--	--
543	3.7 miles east of Run School, 0.3 mile south of Military Road	A. L. Steele	C. Newman	--	80	3 $\frac{1}{2}$	--	--
544	Military Road, at Relampago	Ray Brown	--	--	18	60	--	--

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift a/	Use of water b/	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
524	--	- 17	Aug. 19, 1933	W	D, S	Bad	Salty.
525	--	- 7.5	Aug. 3, 1933	H	D, S	Good	
526	--	- 9	Aug. 4, 1933	W	D, S	Fair	Well draws water from sand.
527	--	- 10	Aug. 10, 1933	W	D, S	do.	
528	--	- 13.5	do.	W	D, S	Good	
529	40	- 11.5	do.	W	D, S	do.	Well draws water from sand.
530	--	- 9	Aug. 14, 1933	None	N	Bad	Dug well.
531	--	- 11	July 25, 1933	W	D, S	Good	
532	--	- 10	Aug. 14, 1933	H	D, S	do.	Well draws water from sand.
533	--	- 12	Aug. 21, 1933	H	D	do.	Dug well.
534	--	- 20 ₊	do.	W	D, S	do.	Well draws water from sand.
535	--	- 15	do.	C, G	D, S	do.	Well draws water from gravel. Near edge of lake.
536	--	- 14	do.	W	D, S	do.	
537	--	- 12	Aug. 27, 1933	W	D, S	do.	
538	--	- 16	Aug. 22, 1933	W	D, S	do.	Well draws water from sand.
539	--	- 14.5	do.	None	--	Fair	Dug well. Well draws water from sand.
540	--	- 16	do.	C, E	D, S	Good	Do.
541	--	- 15 ₊	do.	W	D, S	do.	Well draws water from gravel.
542	--	- 30 ₊	do.	H	D, S	do.	Do.
543	--	- 22	do.	W	D, S	do.	
544	--	- 8	do.	None	S	Bad	Dug well. Salty.

Records of wells in Hidalgo County--(Continued)

No.	Location	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Principal Water-bearing bed	
							Depth to top of bed (ft.)	Thickness (ft.)
545	Military Road, 1.0 mile east of Relampago	Wm. McKinney	--	--	100+	--	--	--
546	Mile 2 north road, 0.1 mile east of Mile 1½ east road	W. D. Chadick	C. Newman	--	145	6	135	10
547	Lot 9, blk. 30, American Rio Grande Land & Irrigation Co., 4 miles southeast of Mercedes	Wm. Lingenbrink	Ike Bettison	1916	2,566	--	--	--

a/ W, windmill; H, hand; C, cylinder; G, gasoline; S, steam; E, electric; T, turbine; O, oil.

John T. Lonsdale

No.	Depth to which well is cased (ft.)	Water level		Method of lift <u>a/</u>	Use of water <u>b/</u>	Quality reported	Remarks
		Above (+) or below (-) surface or bench mark (ft.)	Date of measurement				
545	--	--	Aug. 21, 1933	H	D,S	Good	
546	100	- 40+	do.	W	D,S	do.	Well draws water from gravel.
547	--	--	--	--	--	--	Oil test. See log.

b/S, stock; D, domestic; I, irrigation; Ind, industrial; N, not used.

c/See table of analyses in back of this report.

Table of Drillers' Logs, Hidalgo County, Texas

		Thickness	Depth			Thickness	Depth
		(feet)	(feet)			(feet)	(feet)
<u>Driller's log of well 200a</u>				<u>Partial driller's log of well 223a--</u>			
Hargil Oil Co., D. F. Stevenson well 1, 2 1/2 miles east of Hargil.				Continued			
Surface materials - - -	20	20	Sand - - - - -	11	774		
Hard limestone - - -	10	30	Gravel and clay - - -	34	808		
Sand - - - - -	10	40	Clay and sand - - -	52	860		
Hard-packed yellow clay - - -	50	90	Sandy clay and fine gravel	459	1319		
Water sand - - - - -	20	110	Shale - - - - -	31	1350		
Chalk - - - - -	11	121	Sand - - - - -	10	1360		
Sandy clay - - - - -	89	210	Shale - - - - -	41	1401		
Chalk rock - - - - -	2	212	Gravel and shale - - -	14	1415		
Hard-packed clay - - -	21	233	Shale - - - - -	38	1453		
Sand - - - - -	5	238	Shale with streaks of				
Clay, lime and gravel - - -	30	268	gravel - - - - -	17	1470		
Sandy clay - - - - -	17	285	Sandy shale - - - - -	62	1532		
Drv gumbo - - - - -	26	311	Shale and lime - - -	16	1548		
Gumbo - - - - -	53	364	Sandy shale and lime - -	122	1670		
Shale - - - - -	13	377	Sandy shale with lime				
Gumbo - - - - -	29	406	breaks - - - - -	117	1787		
Sandy shale - - - - -	36	442	Hard sandy lime - - -	9	1796		
Gumbo - - - - -	82	524	Hard shale - - - - -	14	1810		
Shale and sand - - - -	21	545	Shale with streaks of				
Gumbo - - - - -	19	564	lime - - - - -	51	1861		
Hard-packed shale - - -	51	615	Sticky shale - - - - -	11	1872		
Gumbo - - - - -	20	635	Hard shale - - - - -	18	1890		
Shale and gumbo - - -	30	665	Sticky shale - - - - -	13	1903		
Gumbo - - - - -	50	715	Shale - - - - -	112	2015		
Gumbo, shale and chalk-	30	745	Broken lime - - - - -	6	2021		
Sandy shale - - - - -	39	784	Shale - - - - -	66	2087		
Gumbo - - - - -	25	809	Sand and shale - - -	20	2107		
Limy chalk - - - - -	8	817	Sand with streaks of lime-	50	2157		
Sticky red shale - - -	48	865	Shale - - - - -	102	2259		
Hard gumbo - - - - -	11	876	Pink shale - - - - -	4	2263		
Gumbo - - - - -	12	888	Shale - - - - -	34	2297		
Shale - - - - -	17	905	Shale and gypsum - - -	23	2320		
Rock - - - - -	2	907	Shale - - - - -	68	2388		
Gumbo - - - - -	41	948	Hard-packed shale - - -	146	2534		
Shale - - - - -	8	956	Sand - - - - -	9	2543		
Gumbo - - - - -	6	962	Hard-packed sandy lime-	7	2550		
Water sand - - - - -	6	968	Broken shale and lime - -	25	2575		
TOTAL DEPTH - - - - -		968	Hard-packed shale, streaked				
			with gypsum - - - - -	162	2737		
			Sandy shale - - - - -	10	2747		
			Shale and lime - - - - -	75	2822		
			Shale - - - - -	48	2870		
			Shale streaked with				
			gypsum - - - - -	127	2997		
			Hard, broken lime - - -	15	3012		
			Shale and shells - - -	28	3040		
			Brown shale - - - - -	69	3109		
			Shale with streaks of lime-	11	3120		
			TOTAL DEPTH - - - - -		7502		
			CASING RECORD 535 feet of 10 3/4-inch casing				
			at top.				
<u>Partial driller's log of well 223a</u>							
J. & C. Drilling Co., Engleman Gardens well 1, 5 miles east of PAYSVILLE.							
Not given - - - - -	585	585					
Sticky shale - - - - -	17	602					
Sand - - - - -	35	637					
Clay with sand breaks - - -	41	678					
Clay - - - - -	7	685					
Sand - - - - -	10	695					
Sticky clay - - - - -	15	710					
Gravel and clay - - - - -	35	745					
Clay - - - - -	18	763					

Table of Drillers' logs, Hidalgo County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 275a</u>		
Dayle L. Smith Oil Co., Daskam well 1, Porcion 45, 5 miles north of Chihuahua.		
Conglomeratic limestone -	30	30
Gravel, sand rock and red soil - - - - -	15	45
Hard, dry gravel - - -	47	92
Cap rock over water sand-	16	108
Soapstone - - - - -	4	112
Rock - - - - -	2	114
Water sand - - - - -	6	120
Clay and gravel - - -	9	129
Limerock - - - - -	4	133
Packed sand - - - - -	16	149
Light-yellow clay and gravel - - - - -	51	200
Rock - - - - -	12	212
Clay, sand and unbedded gray gravel - - - - -	32	244
Rock, gravel and hard- packed clay - - - - -	53	297
Clay, gravel, and gray lime rock - - - - -	99	396
Gray joint clay and gravel-	80	476
Hard sandstone - - -	2	478
Hard-packed gravel - - -	6 $\frac{1}{2}$	484 $\frac{1}{2}$
Tough gray joint clay - -	19 $\frac{1}{2}$	504
Tough gray joint clay and gravel - - - - -	66 $\frac{1}{2}$	570 $\frac{1}{2}$
Hard-packed gray clay and gravel - - - - -	42 $\frac{1}{2}$	613
Light-colored soft-packed shale - - - - -	40	653
Soft-packed reddish-brown shale - - - - -	12 $\frac{1}{2}$	665 $\frac{1}{2}$
Reddish-brown and light- blue shale with sand -	32 $\frac{1}{2}$	698
Yellow and blue shale -	37	735
Water sand - - - - -	20	755
Hard lime rock - - - -	6	761
Hard-packed reddish- brown shale and bould- ers - - - - -	68	829
Quicksand - - - - -	40	869
Hard-packed shale - - -	11	880
Hard lime rock - - - -	18	898

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 275a--Continued</u>		
Shale and boulders - -	33	931
Rock, gravel and light- blue and brown shale - -	29	960
Light-blue and gray shale - - - - -	152 $\frac{1}{2}$	1112 $\frac{1}{2}$
Rock and hard-packed shale - - - - -	1 $\frac{1}{2}$	1114
Hard-packed dark-colored shale and sandstone -	61 $\frac{1}{2}$	1175 $\frac{1}{2}$
Tough reddish-colored clay marl - - - - -	44 $\frac{1}{2}$	1220
Light-colored clay - -	5	1225
Anhydrite, mica, sand- stone and dolomite - -	35	1260
Shale, clay, lime, mica and anhydrite - - -	138	1398
Hard rock and shale - -	15	1413
Gumbo - - - - -	7	1420
Hard rock - - - - -	2	1422
Shale and sand - - -	11	1433
Shale and brown sand -	7	1440
Soft-packed reddish- colored clay - - - -	5	1445
Rock - - - - -	2	1447
Hard-packed shale - -	11	1458
Shale, boulders, clay and marl - - - - -	165	1623
Lime rock, gumbo, shale and boulders - - - -	61 $\frac{1}{2}$	1684 $\frac{1}{2}$
Water sand - - - - -	2	1686 $\frac{1}{2}$
Quartz, lime, pebbles and flint - - - - -	28 $\frac{1}{2}$	1715
Rock shale and marl - -	8	1723
Shale, marl and sand - -	32	1755
Hard-packed shale, marl and sand - - - - -	8	1763
Blue gumbo, light-red marl, sandstone, calcite and quartz - - - - -	89	1852
Gumbo, shale and lime rock - - - - -	58 $\frac{1}{2}$	1910 $\frac{1}{2}$
Sand and lime rock - -	33	1943 $\frac{1}{2}$
Packed sand, shale, gumbo and lime - - - - -	3 $\frac{1}{2}$	1947
Sand rock - - - - -	53	2000

(Continued on next page)

Table of Drillers' logs, Hidalgo County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 275a--Continued</u>		
Shale, lime rock, calcite and sand - - - - -	66	2066
Sandstone, limestone and gumbo - - - - -	76	2142 $\frac{1}{2}$
Sandstone and sand - - - -	45 $\frac{1}{2}$	2188
Sandstone, blue shale and marl - - - - -	7	2195
Lime and sandstone - - - -	15	2210
Gumbo, shale, lime rock and sand - - - - -	35	2245
Soft-packed shale and lime rock - - - - -	48	2293
Shale and anhydrite - - - -	7	2300
Sand rock and quartz - - - -	36	2336
TOTAL DEPTH - - - - -		2336

<u>Driller's log of well 325a</u>		
Dee Davenport, C. H. Swallow well 1-A, 1 mile north of La Blanca.		
Surface sand and clay - - -	100	100
Shale and gravel - - - - -	101	201
Sand and gravel - - - - -	99	300
Shale - - - - -	180	480
Shale and lime - - - - -	72	552
Hard-packed, sticky shale -	38	590
Hard-packed sand and gravel - - - - -	95	685
Hard-packed shale and lime-	81	766
Shale - - - - -	214	980
Shale, hard lime and shells - - - - -	20	1000
Shale and lime with streaks of shell - - - - -	151	1151
Hard-packed shale and boulders - - - - -	111	1262
Sand and shale - - - - -	38	1300
Hard-packed, sticky shale and lime - - - - -	17	1317
Shale - - - - -	144	1461
Shale and lime - - - - -	26	1487
Shale - - - - -	167	1654
Sand and lime boulders- -	36	1690
Hard-packed shale and lime-	95	1785
Hard-packed shale, lime and shells - - - - -	15	1800

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 325a--Continued</u>		
Hard-packed sticky shale -	17	1817
Shale and lime - - - - -	286	2103
Shale, lime and boulders -	165	2268
Hard-packed shale and shells - - - - -	32	2300
Shale and lime with shells	200	2500
Shale and lime - - - - -	50	2550
Shale, boulders and lime -	80	2630
Shale - - - - -	49	2679
Hard-packed shale, lime and shells - - - - -	39	2718
Hard-packed shale and lime - - - - -	120	2838
Shale and lime - - - - -	153	2991
Hard-packed shale and lime - - - - -	89	3080
Shale - - - - -	29	3109
Shale and lime - - - - -	191	3300
Hard-packed shale with streaks of sand - - - - -	65	3365
Shale and lime - - - - -	35	3400
Sandy shale and lime - - -	40	3440
Shale, lime and shells- - -	85	3525
Shale and lime - - - - -	21	3546
Shale - - - - -	137	3683
Shale with streaks of sand - - - - -	156	3839
Shale and lime with streaks of sand - - - - -	151	3990
Hard-packed shale and lime - - - - -	135	4125
Hard-packed shale and crystallized lime - - - -	26	4151
Hard-packed shale and lime-	142	4293
Shale - - - - -	42	4335
Shale and lime - - - - -	47	4382
Shale - - - - -	108	4490
Hard-packed, streaked shale - - - - -	48	4538
Solid lime - - - - -	3	4541
TOTAL DEPTH - - - - -		7959
CASING RECORD: 250 feet of 16-inch casing; 1262 feet of 10 $\frac{3}{4}$ -inch; 7960 feet of 7-inch.		

Table of Drillers' logs Hidalgo County--Continued

		Thickness	Depth			Thickness	Depth
		(feet)	(feet)			(feet)	(feet)
Driller's log of well 340a							
Union Sulphur Co., American Rio Grande							
Land & Irrigation Company well 1, 7½							
miles north of Mercedes.							
Surface sand - - - -	35	35					
Sand and gravel - - -	13	48					
Sand - - - - -	54	102					
Sandy clay - - - - -	7	109					
Sticky shale - - - -	61	170					
Shale - - - - -	6	176					
Sand and gravel - - -	161	337					
Shale - - - - -	97	434					
Shale and gravel - - -	56	490					
Sand with streaks of shale-	26	516					
Sandy shale and boulders -	50	566					
Hard-packed shale and							
boulders - - - - -	33	599					
Gumbo - - - - -	12	611					
Hard-packed shale and							
boulders - - - - -	22	633					
Broken sand, shale and							
boulders - - - - -	8	641					
Boulders and sand - - -	25	666					
Sticky shale - - - - -	11	677					
Sticky shale and boulders-	12	689					
Shale and boulders - - -	35	724					
Sand - - - - -	34	758					
Hard gravel and sand - - -	20	778					
Shale - - - - -	16	794					
Shale with streaks of							
sand - - - - -	12	806					
Gumbo - - - - -	15	821					
Sandy shale - - - - -	11	832					
Shale and boulders - - -	16	848					
Gurbo - - - - -	12	860					
Shale and boulders - - -	6	866					
Sandy shale - - - - -	54	920					
Shale and boulders - - -	24	944					
Shale - - - - -	14	958					
Shale and boulders - - -	46	1004					
Hard-packed sand and							
boulders - - - - -	14	1018					
Hard-packed sand - - - -	12	1030					
Shale and boulders - - -	8	1038					
Shale - - - - -	3	1041					
Shale and boulders - - -	23	1064					
Hard-packed sand and							
boulders - - - - -	23	1087					
Hard-packed shale - - - -	7	1094					
Hard-packed sand with broken							
rock - - - - -	3	1097					
Hard-packed sand - - - -	2	1099					
Sand shale with streaks							
of sticky shale - - - -	25	1124					
Sticky shale - - - - -	31	1155					
Driller's log of well 340a--Continued							
Sandy shale - - - - -	28	1183					
Sticky shale - - - - -	74	1257					
Sandy shale - - - - -	13	1270					
Sandy shale and boulders-	26	1296					
Packed sand - - - - -	18	1314					
Sandy shale - - - - -	16	1330					
Sticky shale - - - - -	23	1353					
Hard-packed sandy shale -	26	1379					
Sandy shale - - - - -	6	1385					
Water sand - - - - -	16	1401					
Sand - - - - -	17	1418					
Hard-packed sandy shale							
and boulders - - - -	18	1436					
Hard-packed sandy lime -	9	1445					
Hard-packed sandy shale							
and boulders - - - -	59	1504					
Sand and boulders - - -	28	1532					
Sandy shale - - - - -	31	1563					
Hard-packed shale and							
boulders - - - - -	21	1584					
Sticky shale - - - - -	11	1595					
Hard-packed sandy shale							
and boulders - - - -	64	1659					
Hard lime - - - - -	2	1661					
Sticky shale - - - - -	22	1683					
Sandy shale with hard							
streaks - - - - -	9	1692					
Sticky shale - - - - -	6	1698					
Sandy brown shale, water-	11	1709					
Sticky shale - - - - -	14	1723					
Packed water sand - - -	2	1725					
Packed sand and boulders-	29	1754					
Hard-packed sand - - - -	17	1771					
Shale and lime - - - -	1	1772					
Sticky shale and lime - -	21	1793					
Sticky, sandy brown shale							
and lime, water - - -	13	1806					
Sandy shale with hard							
streaks - - - - -	40	1846					
Sticky shale and boulders-	20	1866					
Sandy shale - - - - -	4	1870					
Hard-packed sand and							
shale - - - - -	24	1894					
Sticky shale - - - - -	17	1911					
Hard-packed sandy dry							
shale and boulders - -	13	1924					
Hard-packed shale and							
boulders - - - - -	2	1926					
Sticky shale - - - - -	8	1934					
Sand - - - - -	27	1961					
Sticky shale - - - - -	7	1968					
Hard-packed shale with							
streaks of hard-packed							
sand - - - - -	44	2012					
Shale and lime - - - -	25	2037					

(Continued on next page)

Table of Drillers' logs, Hidalgo County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 34(a--Continued</u>		
Sandy shale - - - -	30	2067
Hard-packed sandy shale -	58	2125
Sticky shale - - - -	7	2132
Hard-packed sand - - - -	40	2172
Sticky shale - - - -	8	2180
Hard-packed sand - - - -	86	2266
Hard-packed sandy shale, water - - - -	28	2294
Hard-packed sandy shale -	9	2303
Hard-packed sand - - - -	17	2320
Hard-packed sandy shale and lime - - - -	14	2334
Sticky red shale - - - -	38	2372
Sticky shale - - - -	19	2391
Sticky red shale - - - -	15	2406
Hard-packed brown shale -	10	2416
Sandy shale, water - - - -	5	2421
Sandy shale - - - -	19	2440
Sticky shale - - - -	26	2466
Sticky shale with streaks of sand - - - -	9	2475
Sticky shale - - - -	7	2482
Sandy shale and lime - - -	37	2519
TOTAL DEPTH - - - -		6431
CASING RECORD: 1132 feet of 12 $\frac{1}{2}$ -inch casing.		

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 484a</u>		
Mrs. M. M. Fairbanks tract, $\frac{3}{4}$ mile east of Hidalgo.		
Sandy clay - - - -	31	31
Hard-packed sand and gravel - - - -	3	34
Clay with streaks of gravel - - - -	18	52
Sand and gravel - - - -	34	86
Shale - - - -	4	90
Water sand - - - -	30	120
Sand and gravel - - - -	50	170
Shale - - - -	41	211
Shale and gravel - - - -	5	216
Sandy clay - - - -	5	221
Conglomerate - - - -	3	224
Sand - - - -	196	420
Sandy clay - - - -	113	533
Sand and gravel - - - -	17	550
Sand and gravel with streaks of shale - - - -	114	664
Sand with streaks of shale - - - -	280	944
Sticky shale - - - -	33	977
Shale with streaks of sand - - - -	72	1049
Sticky shale - - - -	7	1056

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 484a--Continued</u>		
Shale with streaks of hard-packed sand - - -	50	1106
Sticky shale - - - -	22	1128
Sandy shale - - - -	4	1132
Sticky shale - - - -	29	1161
Sandy shale - - - -	6	1167
Tough shale - - - -	65	1232
Shale - - - -	52	1284
Hard-packed shale - - -	3	1287
Soft-packed sand - - -	3	1290
Shale - - - -	45	1335
Sticky shale - - - -	91	1426
Sandy shale - - - -	12	1438
Tough shale - - - -	48	1486
Hard-packed sticky shale-	109	1595
Water sand - - - -	15	1610
Sticky shale - - - -	89	1699
Sand - - - -	5	1704
Sticky shale - - - -	150	1854
Sandy shale - - - -	26	1880
Hard-packed tough shale-	47	1927
Sandy shale - - - -	21	1948
Tough sticky shale - - -	261	2209
Rock - - - -	3	2212
Sticky shale - - - -	5	2217
Sandy shale - - - -	13	2230
Tough shale - - - -	5	2235
Sandy shale - - - -	60	2295
Sticky shale - - - -	3	2303
Sandy shale - - - -	20	2323
Sticky shale - - - -	5	2328
Sand - - - -	22	2350
Shale - - - -	20	2370
Lime and tough shale - -	166	2536
TOTAL DEPTH - - - -		2536
CASING RECORD: 200 feet of 10-inch casing at top.		

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 547</u>		
Wm. Lingenbrink tract, 4 miles southeast of Mercedes.		
Clay - - - -	30	30
Sand - - - -	72	102
Gumbo - - - -	28	130
Gravel - - - -	72	202
Sand - - - -	23	225
Rock - - - -	12	237
Gumbo - - - -	64	301
Boulders - - - -	28	329
Packed sand - - - -	23	352
Gumbo - - - -	31	383
Gray rock - - - -	16	399
Gumbo - - - -	3	402
Sand - - - -	32	434

(Continued on next page)

Table of Drillers' logs, Hidalgo County--Continued

		Thickness	Depth
		(feet)	(feet)
<u>Driller's log of well 547--Continued</u>			
Gumbo - - - - -	156	590	
Packed sand - - - - -	12	602	
Boulders - - - - -	106	708	
Gumbo - - - - -	21	729	
Boulders - - - - -	24	753	
Gumbo - - - - -	56	809	
Boulders and sand - - - - -	11	820	
Gumbo - - - - -	80	900	
Rock - - - - -	9	909	
Gumbo - - - - -	96	1005	
Rock - - - - -	55	1060	
Gumbo - - - - -	72	1132	
Boulders - - - - -	48	1180	
Sand rock - - - - -	25	1205	
Gumbo - - - - -	28	1233	
Rock - - - - -	27	1260	
Sand - - - - -	12	1272	
Rock - - - - -	42	1314	
Gumbo - - - - -	41	1355	
Rock - - - - -	110	1465	
Gumbo - - - - -	7	1472	
Rock - - - - -	17	1489	
Gumbo - - - - -	31	1520	
Sand - - - - -	11	1531	
Gumbo - - - - -	39	1570	
Rock - - - - -	25	1595	
Gumbo - - - - -	11	1606	
Blue shale - - - - -	82	1688	
Rock - - - - -	26	1714	
Blue shale - - - - -	17	1731	
Gumbo - - - - -	74	1805	
Sand rock - - - - -	27	1832	
Blue shale - - - - -	33	1865	
Gumbo - - - - -	66	1931	
Blue gumbo - - - - -	24	1955	
Rock - - - - -	66	2021	
Gumbo - - - - -	9	2030	
Lime rock - - - - -	12	2042	
Gumbo - - - - -	11	2053	
Rock - - - - -	8	2061	

		Thickness	Depth
		(feet)	(feet)
<u>Driller's log of well 547--Continued</u>			
Blue gumbo - - - - -	18	2079	
Rock - - - - -	22	2101	
Gumbo - - - - -	10	2111	
Sand rock - - - - -	29	2140	
Gumbo - - - - -	15	2155	
Sand rock with gray pyrite - - - - -	12	2167	
Gumbo - - - - -	13	2180	
Rock - - - - -	45	2225	
Blue gumbo - - - - -	83	2308	
Sand rock - - - - -	12	2320	
Gray-blue gumbo - - - - -	50	2370	
Sand rock - - - - -	20	2390	
Gray-blue gumbo - - - - -	39	2429	
Shale and black sand - - - - -	20	2449	
Hard-packed blue gumbo - - - - -	41	2490	
Hard rock - - - - -	14	2504	
Gumbo - - - - -	19	2523	
Rock - - - - -	3	2526	
Gumbo - - - - -	15	2541	
Rock - - - - -	5	2546	
Gumbo - - - - -	10	2556	
Rock - - - - -	3	2559	
Gumbo - - - - -	7	2566	
TOTAL DEPTH - - - - -		2566	

Analyses of ground waters in Hidalgo County, Texas

A. W. Lohr. Parts per million. For records of wells see corresponding numbers in well tables.)

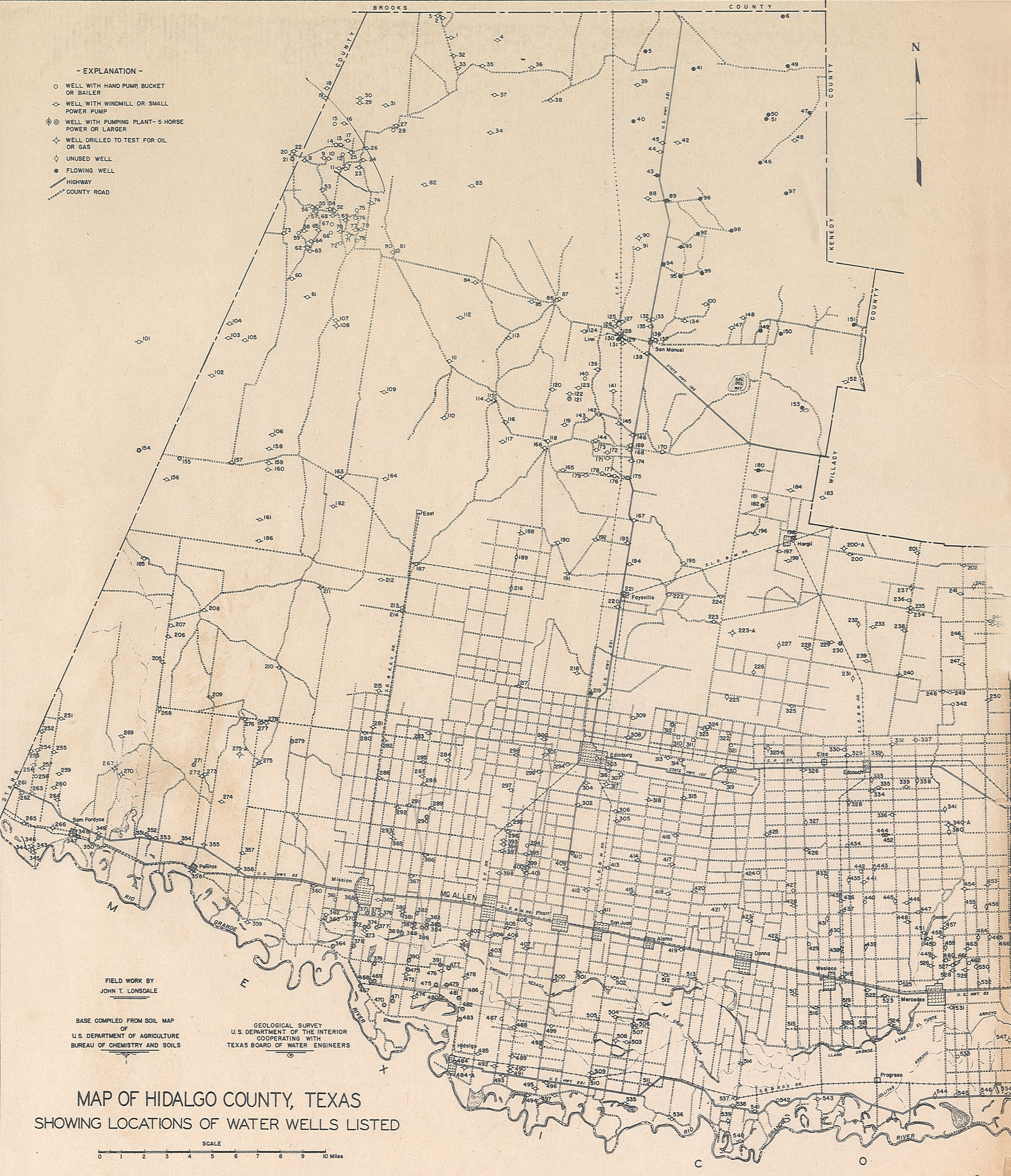
Owner	Depth (feet)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium (Na)	Potassium (K)	Carbonate (CO ₃)	Bicarbonate (HCO ₃)	Sulfate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calculated)
M. Fairbanks	150	Aug. 25, 1933	563a/	30b/	-	167a/	0	363	40b/	122	6.6	153	
do.	450	do.	-	90b/	-	-	0	312	460b/	1,100	-	-	
Guerra & Sons	625	do.	1,207	24b/	-	442a/	4.9	195	146	520	0	92	
do.	575	do.	1,504	31	11	495	5.4	0	196	342	490	0	123
C. Thompson	300	Aug. 26, 1933	-	80b/	-	-	0	253	150b/	1,270	-	375	
--	-	do.	1,695a/	5b/	-	665a/	40	128	80b/	880	0.25	50	
Mrs. M. M. Fairbanks	170	do.	-	88	33	122a/	0	254	44b/	252	14	355	
J. A. White	80	do.	1,031	62	32	262	10	0	383	114	295	12	286
A. Guerra	173	do.	-	100b/	-	-	0	426	270b/	620	-	502	
O. M. Nusbaum	285	do.	-	76	39	632a/	0	396	189	842	19	350	
85 W. D. Jeffress	280	do.	-	134	40	281a/	0	402	109	455	32	499	
187 Hammond Bros.	900	Aug. 25, 1933	1,154a/	8b/	-	441a/	18	288	339	255	0.25	20	
192 Alfonso Alamiedo	250	do.	-	65b/	-	-	0	434	360b/	980	-	363	
208 E. Salinas	205	--	-	91	27	323a/	0	332	90b/	455	40	338	
210 Brock & Showers	197	Aug. 25, 1933	1,703a/	160	-	380a/	0	537	75b/	715	4.8	705	
211 do.	396	do.	-	108	53	723a/	0	292	384	1,005	4.7	47	
213 Hammond Bros.	750	do.	-	55	23	521a/	0	310	417	480	0	232	
214 do.	1,447	do.	1,574a/	12b/	-	579a/	12	291	573	318	0.25	45	
235 Barton Hughes	98	Aug. 23, 1933	2,854a/	28b/	-	1,030a/	22	553	631	920	0	204	
274 Augustine Zamora	120	Aug. 25, 1933	-	154	38	428a/	0	250	291	680	4.3	541	
275 Brock & Showers	161	do.	1,179a/	60b/	-	342a/	0	170	100b/	560	1.0	291	
277 do.	227	do.	1,449	84	35	398	12	0	370	183	520	0	354
284 W. B. Beard	50	Aug. 27, 1933	794a/	35b/	-	271a/	-	376	100b/	210	3.6	123	
286 J. F. Shary	257	do.	-	114	49	603a/	0	307	316	860	4.0	486	
289 H. T. Klatt	101	Aug. 24, 1933	-	73	27	443a/	0	364	362	410	4.5	293	
302 E. Short	128	Aug. 27, 1933	-	90b/	-	-	0	449	500b/	825	-	645	
304 Mrs. C. Germantz	110	do.	-	200b/	-	-	0	437	200b/	930	-	690	
305 F. H. Hull	120	do.	-	260b/	-	-	0	488	160b/	1,360	-	1,065	
308 C. R. Fitzpatrick	87	do.	-	110b/	-	-	0	528	420b/	1,410	0	630	
309 C. B. Starr	107	do.	-	120b/	-	-	0	544	480b/	1,095	-	585	
316 O. W. Curr	122	do.	-	97	48	582a/	0	476	396	640	0	439	

a/ Calculated.

b/ By turbidity

- 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
- FLOWING WELL
- HIGHWAY
- - - COUNTY ROAD



FIELD WORK BY
JOHN T. LONSDALE

BASE COMPILED FROM SOIL MAP
OF
U.S. DEPARTMENT OF AGRICULTURE
BUREAU OF CHEMISTRY AND SOILS

GEOLOGICAL SURVEY
U.S. DEPARTMENT OF THE INTERIOR
COOPERATING WITH
TEXAS BOARD OF WATER ENGINEERS

MAP OF HIDALGO COUNTY, TEXAS
SHOWING LOCATIONS OF WATER WELLS LISTED

