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DEAF SMITH COUNTY, TEXAS

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

* * *

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by
Joe W. Lang and C. R. Follett
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Dallas, Texas
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Analyses made and report mimeographed by
WORKS PROGRESS ADMINISTRATION
Project 10443

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Prepared in cooperation with the United States Depart-
ment of the Interior, Geological Survey and the Bureau
of Industrial Chemistry of The University of Texas,

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DEAF SMITH COUNTY, TEXAS

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Introduction

by

Walter N. White

Senior Hydraulic Engineer

United States Department of the Interior

Geological Survey

This publication contains records of wells and pumping plants in Deaf Smith County, Texas, together with tables of well logs and well water analyses, and a map on which all the wells listed are shown, each well being given 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 in the Texas High Plains comprising a part of state-wide studies of the ground-water resources of Texas by the State Board of Water Engineers in cooperation with the Geological Survey of the United States Department of the Interior. The field work was first started in 1934, a reconnaissance being made in that year covering parts of western Kansas and Oklahoma and eastern Colorado as well as the Texas Panhandle. That investigation was under the direction of C. V. Theis, Associate Geologist with the Geological Survey, and was made with an allocation of funds from the Administration of Public Works. In 1936 considerable data on irrigation from wells in different parts of the Texas High Plains including a part of Deaf Smith County were obtained by H. P. Burleigh and W. R. Stanley of the Resettlement Administration. The present investigation was started in the spring of 1937 with funds appropriated by the Texas Legislature and nearly equal amounts contributed by the Federal Government.

Most of the records listed were obtained from October, 1937, to July, 1938, by Joe W. Lang and C. R. Follett, two of the engineers assigned to the present investigation. Some were contributed by the Resettlement Administration and a few were obtained in the reconnaissance investigation of 1934.

The analyses were made by chemists employed on Works Progress Administration Project 6507-5112, under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry of The University of Texas and E. W. Lohr, Chemist of the Quality of Water Division of the Geological Survey. This release was typed by typists employed on that project.

The records serve as a guide to land owners and well drillers who need information regarding wells and pumping plants, the depth to ground water in different parts of the county and the quantity and quality of water yielded by wells. They afford a basis for the more intensive investigation that is now being carried on, the purpose of which is to determine the distribution and extent of the available ground-water supplies and the safe yield of the underground reservoirs.

Thanks are due the owners of wells and pumping plants in Deaf Smith County who have given their cordial cooperation and assistance. Several well drillers and representatives of different pump companies also have contributed freely of their information.

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

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/ 1	44 miles northwest	30, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T.7 N., R.4 E.	Rock Island R. R.	F. A. Luce	1911	344	12
2	40 miles northwest	36, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.7 N., R.1 E.	Landergin Bros. Co.	--	Old	33	6
3	do.	do.	do.	do.	--	Old	31	6
4	do.	do.	do.	do.	--	Old	20	6
d/ 5	41 $\frac{1}{2}$ miles northwest	4, NW $\frac{1}{4}$ NE $\frac{1}{4}$	T.6 N., R.1 E.	do.	--	Old	31	6
6	do.	do.	do.	do.	--	--	--	--
7	do.	do.	do.	do.	--	Old	--	48
8	43 $\frac{1}{2}$ miles northwest	6, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	Old	31	4 $\frac{1}{2}$
d/ 9	do.	do.	do.	do.	--	--	35	4 $\frac{1}{2}$
10	do.	do.	do.	do.	--	--	36	4 $\frac{1}{2}$
d/ 11	43 miles northwest	7, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	--	53	4 $\frac{1}{2}$
12	do.	do.	do.	do.	--	Old	28	4 $\frac{1}{2}$
d/ 13	41 miles northwest	17, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	do.	--	Old	--	4 $\frac{1}{2}$
d/ 14	39 miles northwest	33, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	Old	7	60
d/ 15	37 $\frac{1}{2}$ miles northwest	35, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	Old	20	6
16	35 miles northwest	31, NW $\frac{1}{4}$ SE $\frac{1}{4}$	T.6 N., R.2 E.	do.	--	Old	--	--
d/ 17	33 miles northwest	34, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	L. T. Davis	J. W. Adrian	1938	199	5
18	do.	do.	do.	do.	--	--	--	--
19	31 $\frac{1}{2}$ miles northwest	35, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	J. W. Adrian	1938	273	--
20	33 miles northwest	26, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	Old	400	--
d/ 21	30 $\frac{1}{2}$ miles northwest	30, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.6 N., R.3 E.	J. G. Fortenberry	--	--	264	4 $\frac{1}{2}$
22	33 miles northwest	23, NE $\frac{1}{4}$ SE $\frac{1}{4}$	T.6 N., R.2 E.	J. W. Adrian	"Colonel" Owens	1933	255	--
23	do.	23, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	J. W. Adrian	1938	280	--

a/ Measuring point was usually top of casing, or top of pipe clamp.

b/ C, cylinder; W, windmill; T, turbine; Cf, centrifugal; G, gasoline; S, steam; Ng, natural gas; D, diesel; E, electric; H, hand; number indicates horsepower.

g/ Figures for acreage irrigated are based on information from owners of wells.

Records obtained by Joe W. Lang and C. R. Follett
(Chemical analyses of water from these wells are in the table of analyses.)

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
1	--	--	--	C,S	Ind	Reported yield, 100 gallons a minute. Located at Glenrio. See log.
2	2	21.5	June 7, 1938	None	N	Steel casing. Drilled before 1915.
3	1.5	21.2	do.	None	N	Do.
4	---	---	---	None	N	Steel casing. Filled above water level.
5	3	28.5	June 7, 1938	C,W	D,S	Water level measured while pumping $\frac{1}{2}$ gallon a minute.
6	--	--	--	None	N	Dug well.
7	--	--	--	None	N	Dug well. Galvanized casing.
8	3	17.2	June 7, 1938	None	N	
9	1	16.3	do.	C,W	S	Estimated yield, 3 gallons a minute.
10	1	17	do.	None	N	Steel casing.
11	1.5	27.3	do.	C,W	S	Water level measured while pumping about 2 gallons a minute.
12	1.3	27.8	do.	None	N	Water level measured while well 10 feet to north was pumping.
13	--	--	--	C,W	S	Estimated yield, 5 gallons a minute. Reported obstructed at 9 feet.
14	1	5.4	June 7, 1938	C,W	S	Water level measured while pumping about 4 gallons a minute. Wire-wrapped $4\frac{1}{2}$ -inch screen surrounded with rocks. Known as
15	--	--	--	C,W	S	Estimated yield, "Little Sand Point Well." $\frac{1}{2}$ gallon a minute. Known as "Big Sand Point
16	--	--	--	None	N	Reported filled. Well."
17	--	183	e/	C,W	D,S	Reported yield, 5 gallons a minute. Supplies about 700 head of cattle. Water reported in
18	--	--	--	None	N	Drilled as test well. Dry hole. red sand, 190 to 199 feet.
19	--	--	--	None	N	Weak supply reported in "Red Beds" at 200 feet.
20	--	--	--	None	N	Drilled as test well. Dry hole.
21	1.5	259.7	June 2, 1938	C,W,G	S,I	Water level measured while pumping $2\frac{1}{2}$ gallons a minute. Irrigates garden.
22	--	--	--	None	N	"Red Beds" reported, 140 to 200 feet, and at 235 feet.
23	--	--	--	None	N	Weak supply reported from seeps in "Red Beds" at 218 feet.

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

d/ Water sample collected for analysis.

e/ Water level reported.

f/ Measured by engineers of Resettlement Administration.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
24	33 miles northwest	23, NW $\frac{1}{4}$ SE $\frac{1}{4}$	T.6 N., R.2 E.	J. W. Adrian	-- McNew	1929	418	--
25	33 $\frac{1}{2}$ miles northwest	do.	do.	do.	J. W. Adrian	1938	248	--
26	do.	23, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	do.	"Doc" Reeves	1934	220	--
27	do.	do.	do.	do.	J. W. Adrian	1938	255	--
28	33 miles northwest	24, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. N. Couch	--	Old	256	4 $\frac{1}{2}$
29	32 $\frac{1}{2}$ miles northwest	33, SE $\frac{1}{2}$ SE $\frac{1}{2}$	T.7 N., R.3 E.	Fay McIntire	--	--	207	4 $\frac{1}{2}$
d/ 30	30 miles northwest	16, NE $\frac{1}{4}$ SE $\frac{1}{2}$	J. C. Maulk, blk. A	W. F. Fisher	--	1929	265	4 $\frac{1}{2}$
31	28 $\frac{1}{2}$ miles northwest	9, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Mary V. Palmer	--	Old	170	4 $\frac{1}{2}$
32	28 miles northwest	53, NW $\frac{1}{4}$ SW $\frac{1}{4}$	G.C.& S.F.R.R., blk. K 11	N. O. Phillips	Joe Rydell	--	316	4
33	29 miles northwest	49, SE $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Temple Lumber Co.	--	Old	--	--
34	28 miles northwest	29, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	W. G. Hindman	--	Old	258	4 $\frac{1}{2}$
d/ 35	27 miles northwest	24, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	J. P. Collier	--	Old	310	4 $\frac{1}{2}$
d/ 36	29 miles northwest	5, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	E. Kinsey	--	1918	280	4
37	27 $\frac{1}{2}$ miles northwest	3, NE $\frac{1}{2}$ NE $\frac{1}{2}$	blk. D	N. C. Knox	--	Old	252	4 $\frac{1}{2}$
38	26 $\frac{1}{2}$ miles northwest	74, NE $\frac{1}{4}$ NW $\frac{1}{4}$	G.B.& C.N.G.R.R., blk. K 6	J. Heiselman	--	Old	270	--
d/ 39	24 $\frac{1}{2}$ miles northwest	68, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	M. & G. A. Hare	--	Old	300+	5
40	23 miles northwest	2, SW $\frac{1}{2}$ SW $\frac{1}{4}$	blk. E	R. P. Maxey	--	--	93	4 $\frac{1}{2}$
d/ 41	22 miles northwest	70, SE $\frac{1}{2}$ SE $\frac{1}{2}$	G.B.& C.N.G.R.R., blk. K 6	H. Powell	--	1928	300+	5
d/ 42	24 miles north	33, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	O. H. Loyd	--	Old	209	4
d/ 43	22 $\frac{1}{2}$ miles north	9, NW $\frac{1}{4}$ NE $\frac{1}{2}$	do.	J. Schwartz	--	--	--	4 $\frac{1}{2}$
44	20 miles north	5, SW $\frac{1}{2}$ SE $\frac{1}{2}$	blk. E	H. P. Canode	--	Old	102	5
d/ 45	18 miles north	2, SW $\frac{1}{2}$ SW $\frac{1}{4}$	blk. K 7	R. E. Wagoner	--	Old	152	4
46	17 miles north	18, NE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	W. S. Spears	--	Old	180	4
d/ 47	18 miles north	38, SE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	First State Bank of Vega	--	Old	--	4
d/ 48	19 $\frac{1}{2}$ miles northwest	58, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	B. Calwell	"Colonel" Owens	--	255	4
49	18 miles northwest	56, NE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Cappock & Coleman	--	1930	203	4 $\frac{1}{2}$

Joe W. Lang and C. R. Follett

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
24	--	--	--	None	N	Salty water reported in "Red Beds" at 240 feet. Reported yield, 8 barrels a day.
25	--	--	--	None	N	Drilled as test well. "Red Beds" at 220 feet. Dry hole.
26	--	--	--	None	N	Do.
27	--	--	--	None	N	Weak supply reported in sand, 228 to 243 feet. "Red Beds" at 243 feet.
28	2.1	241.8	June 13, 1938	None	N	Steel casing.
29	1.5	189.4	Apr. 5, 1937	None	N	Iron casing.
30	--	230	e/	C,W,G, --	D,S	Reported yield, 4 gallons a minute. Water level questionable.
31	0.5	169.8	June 2, 1938	None	N	Reported nearly dry when measured.
32	0	285.4	do.	C,W	N	Steel casing. Water in red quicksand, 291 to 361 feet.
33	--	--	--	None	N	Filled with dirt.
34	1.5	258+	June 2, 1938	C,G, 6	S	Steel casing. Obstructed at 258 feet.
35	--	--	--	C,W	D,S,I	Steel casing. Estimated yield, 3 gallons a minute. Irrigates garden.
36	--	--	--	C,W	D,S,I	Do.
37	0.5	231.8	June 15, 1938	None	N	Steel casing. Water level questionable.
38	2	232	do.	C,W	D,S	Do.
39	--	--	--	C,W	D,S	Steel casing. Estimated yield, 5 gallons a minute.
40	0	76.1	Nov. 25, 1937	None	N	Steel casing. No pumping well within several miles.
41	2	237.5	June 14, 1938	C,W	D,S,I	Estimated yield, 3 gallons a minute.
42	0	191.8	June 15, 1938	C,W	D,S	Steel casing, top to bottom. Reported fills with sand readily since earthquake. Esti-
43	--	--	--	C,W	D,S	Estimated yield, $\frac{1}{4}$ gallon a minute. yield, 4 gallons a minute.
44	1.5	182.4	June 14, 1938	C,W	N	Steel casing,
45	--	147	e/	C,W	D,S,I	Estimated yield, 3 gallons a minute.
46	0.8	173.3	July 5, 1938	None	N	Steel casing,
47	--	--	--	C,W	S	Estimated yield, 3 gallons a minute.
48	5	222.4	June 14, 1938	C,W	D,S	Steel casing. Reported yield, $\frac{1}{4}$ gallon a minute. Sands up readily.
49	1.5	193.4	Sept. 15, 1937	C,W	D,S	Steel casing.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
50	17 miles north	24, NW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. K 7	Texas Loan & Mortgage Co.	--	Old	127	5 $\frac{1}{2}$
51	16 $\frac{1}{2}$ miles north	17, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	--	141	4 $\frac{1}{2}$
d/ 52	15 $\frac{1}{2}$ miles north	16, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	Old	--	5
53	15 miles north	15, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	--	Old	156	4 $\frac{1}{2}$
54	15 $\frac{1}{2}$ miles north	25, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	181	4 $\frac{1}{2}$
55	15 $\frac{1}{2}$ miles northwest	35, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Texas Land & Development Co.	--	--	88	4 $\frac{1}{2}$
56	16 miles northwest	35, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	--	192	5
d/ 57	14 $\frac{1}{2}$ miles northwest	34, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. N. Hodges	--	Old	--	--
d/ 58	do.	34, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. N. Hodges	A. B. Hayes	1937	272	15 $\frac{1}{2}$
59	13 $\frac{1}{2}$ miles northwest	28, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. E. Hodges	do.	1937	265	15 $\frac{1}{2}$
60	11 miles north	9, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. H. Hutson	Jim Mock	1925	150	6
61	do.	10, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. G. Lewis	--	Old	133	4 $\frac{1}{2}$
62	10 miles northwest	10, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Federal Farm Loan Mortgage Co.	--	--	147	--
63	11 miles northwest	11, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	R. R. Wills	--	Old	166	--
64	16 miles northwest	89, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Federal Farm Loan Mortgage Co.	--	Old	--	--
65	17 $\frac{1}{2}$ miles northwest	88, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	W. B. Denman	--	Old	--	4
d/ 66	18 miles northwest	94, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	M. E. Ranson, et al	--	Old	--	4 $\frac{1}{2}$
d/ 67	19 miles northwest	NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. G. Witherspoon sur.	S. F. Williams	--	Old	170	--
d/ 68	20 miles northwest	4, NE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. C	do.	"Colonel" Owens	1918	246	5
69	do.	77, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. K 7	R. J. McLafting	--	Old	280	5
d/ 70	21 $\frac{1}{2}$ miles northwest	2, NE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. E	--	"Colonel" Owens	1918	365	4 $\frac{1}{2}$
71	23 $\frac{1}{2}$ miles northwest	1, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. A	J. M. Shelton	--	Old	248	6
72	24 miles northwest	8, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.5 N., R.4 E.	Ed. McCaskey	--	Old	300	4 $\frac{1}{2}$
d/ 73	24 miles northwest	35, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.5 N., R.3 E.	W. J. Williams	--	Old	270	4 $\frac{1}{2}$
74	25 miles northwest	33, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	Old	271	4 $\frac{1}{2}$

Joe W. Lang and C. R. Follett

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
50	1	128+	July 12, 1938	C,W	S	Obstructed at 127 feet.
51	2	128.1	do.	None	N	Steel casing.
52	--	--	--	C,W	D,S	Estimated yield, 5 gallons a minute. Located on "Cap Rock" about 50 feet above stream.
53	0.8	143.6	July 5, 1938	None	N	Steel casing.
54	0.8	162.9	do.	None	N	Do.
55	--	88+	e/	None	N	Obstructed at 88 feet.
56	--	--	--	None	N	
57	--	--	--	C,W	S	Estimated yield, 2 gallons a minute. Equipped with frost box.
58	0	198	Sept. 15, 1937	T,G, 80	I	Reported yield, 700 to 750 gallons a minute. Irrigated 200 acres in 1937. 190 feet of 15½-inch steel casing; 70 feet of 15½-inch perforated casing. Water in sand from 204 to 272 feet. Did not reach "Red Beds."
59	1.5	201.1	Nov. 26, 1937	T,G, 80	I	Estimated yield, 500 gallons a minute. Irrigated 50 acres in 1937. 265 feet of 15½-inch steel casing, perforated at bottom.
60	--	100	e/	C,W	D,S	Reported Water in fine-grained red sand. cost: well, \$112.50; pump and power, \$335.00.
61	1.5	130.6	July 5, 1938	None	N	Steel casing.
62	--	120	e/	C,W	D,S	Water level questionable.
63	1.2	156	July 14, 1938	C,W	N	Do.
64	--	--	--	C,W	D,S	Reported weak supply.
65	--	--	--	None	N	Obstructed at 10 feet.
66	--	--	--	C,W	S	Obstructed at 34 feet. Estimated yield, 4 gallons a minute.
67	--	--	--	C,W	S	Estimated yield, 4 gallons a minute.
68	--	237	e/	C,W	D,S	Do.
69	--	--	--	C,W	D,S	Steel casing.
70	--	--	--	C,W	D,S	Estimated yield, 4 gallons a minute from quicksand. Reported supplies 200 head of
71	--	--	--	C,W	D,S	Obstructed at 213 feet. Depth reported. cattle.
72	1.1	273	July 7, 1938	C,W	S	Water level questionable.
73	--	250	e/	C,W	D,S	Steel casing. Estimated yield, 4 gallons a minute.
74	0.6	246	July 7, 1938	C,W	S	Steel casing. Used in winter. Water level questionable.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/ 75	26 miles northwest	28, SW $\frac{1}{4}$ NE $\frac{1}{4}$	T.5 N., R.3 E.	W. J. Williams	--	Old	270	4 $\frac{1}{2}$
76	28 $\frac{1}{2}$ miles northwest	4, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. P. Hurs	--	Old	272+	5
77	31 miles northwest	12, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.5 N., R.2 E.	E. J. Moore	--	Old	242	4 $\frac{1}{2}$
d/ 78	31 $\frac{1}{2}$ miles northwest	10, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	W. F. Hammons	--	Old	270	5
79	32 miles northwest	16, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Elizabeth Bippus	--	Old	161	4 $\frac{1}{2}$
d/ 80	33 $\frac{1}{2}$ miles northwest	17, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	G. A. Welch	--	Old	300	4 $\frac{1}{2}$
81	29 miles northwest	35, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. L. Fuqua	--	Old	97+	5
82	30 $\frac{1}{2}$ miles northwest	8, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.2 E.	Kansas City Life Ins. Co.	--	Old	220	5
83	31 miles west	8, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	Old	--	--
84	do.	do.	do.	do.	--	Old	43+	5
d/ 85	32 $\frac{1}{2}$ miles west	12, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.1 E.	C. L. Syndicate	J. W. Adrian	1938	240	5
86	37 $\frac{1}{2}$ miles west	32, NE $\frac{1}{4}$ NW $\frac{1}{4}$	T.5 N., R.1 E.	Landergin Bros. Co.	--	--	178	5
87	do.	16, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	--	178	4 $\frac{1}{2}$
d/ 88	37 miles north	15, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	Old	300	4 $\frac{1}{2}$
d/101	24 $\frac{1}{2}$ miles north	76, NW $\frac{1}{4}$ SW $\frac{1}{4}$	G.B.& C.N.G.R.R., blk. K 5	I. Rasco	--	Old	150	--
102	24 miles north	77, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	W. M. Stewart	--	--	129	4 $\frac{1}{2}$
103	21 $\frac{1}{2}$ miles north	79, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. E. Hill	--	--	172	--
d/104	20 miles north	80, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Ford Public School	--	--	165	--
105	do.	61, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. E. Hill	--	Old	158	4 $\frac{1}{2}$
d/106	24 miles north	57, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Kansas City Life Ins. Co.	--	Old	136	5
107	24 $\frac{1}{2}$ miles north	56, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. E. Dyer	--	Old	148	4 $\frac{1}{2}$
108	23 $\frac{1}{2}$ miles north	44, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	O. H. Loyd	--	Old	142	4 $\frac{1}{2}$
109	21 miles north	41, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. W. Wilson	--	--	162	4 $\frac{1}{2}$
110	do.	40, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Great Southern Life Ins. Co.	--	Old	108	--
d/111	24 $\frac{1}{2}$ miles north	4, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. J. Currie	--	Old	128	4 $\frac{1}{2}$
112	do.	22, SE $\frac{1}{4}$ NW $\frac{1}{4}$	blk. 8	Ed. Spruell	--	Old	88+	4 $\frac{1}{2}$

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
75	--	250	e/	C,W	S	Estimated yield, 5 gallons a minute.
76	6	159.2	June 2, 1938	None	N	Pump set at 266 feet. Water level measured in column pipe.
77	--	--	--	C,W	D,S	Obstructed at 242 feet.
78	0.8	264.9	June 2, 1938	C,W	D,S	Estimated yield, 3 gallons a minute.
79	1	259.7	do.	None	N	Steel casing.
80	--	260	e/	C,W	D,S	Estimated yield, $\frac{1}{4}$ gallon a minute.
81	--	--	--	C,W	N	Obstructed at 97 feet.
82	1.2	205.6	July 8, 1938	None	N	Steel casing.
83	--	--	--	C,W	N	Located at old "Cow Camp".
84	--	--	--	None	N	Obstructed at 43 feet. Located 500 feet west of well 83.
85	--	--	--	C,W	D,S	Reported supplies 2,000 head of sheep. Estimated yield, 4 gallons a minute.
86	1.5	169.1	Apr. 1, 1937	None	N	Iron casing.
87	1.3	167.8	June 7, 1937	None	N	Steel casing.
88	--	--	--	C,W	S	Depth reported. Obstructed at 19 feet. Estimated yield, 4 gallons a minute.
101	--	--	--	C,W	D,S,I	Estimated yield, 4 gallons a minute. Irrigates small garden.
102	2	146.6	June 3, 1938	C,W	N	Steel casing.
103	1	169.9	do.	None	N	
104	--	150	e/	C,W	P	Located 900 feet southwest of well 105.
105	0.8	150.5	Dec. 3, 1937	C,W	N	Located 0.2 mile northwest of dry lake.
106	--	--	--	C,W	S	Estimated yield, 3 gallons a minute.
107	3	143.4	June 21, 1938	C,W	N	Steel casing.
108	1.5	129.6	do.	None	N	Do.
109	1.3	152.7	June 3, 1938	C,W	N	Do.
110	0.3	97.2	do.	C,W	N	
111	1	113.5	June 21, 1938	C,W	S	Estimated yield, 2 gallons a minute.
112	--	88+	e/	None	N	Obstructed at 88 feet.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township, or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
113	12½ miles north	58, NW¼NW¼	blk. K 4	A. S. Higgins	-- McDade	1937	162	15
114	27 miles northeast	26, NE¼NW¼	blk. 8	E. T. Allred	--	Old	--	4
d/115	25½ miles northeast	18, NE¼NW¼	do.	H. E. Floyd	--	1915	170	4
116	25 miles northeast	18, SE¼SE¼	do.	do.	--	Old	--	4
d/117	do.	7, SE¼NE¼	do.	C. L. Garrison	--	Old	159	4½
118	do.	8, NE¼SE¼	do.	J. C. Allred	--	Old	--	--
d/119	24 miles northeast	10, NW¼SW¼	B.S.& F. sur., blk. 7	L. C. Moore	--	Old	--	--
d/120	22 miles northeast	29, SE¼SE¼	do.	G. L. Muse	--	Old	--	--
121	do.	8, NE¼SW¼	do.	N. L. Barnes	--	Old	139	4
122	do.	50, NW¼NW¼	blk. 1	W. M. Grabbe	Reid Smith	1937	200	13
123	18½ miles northeast	17, SE¼NE¼	B.S.& F. sur., blk. 7	C. Hodges	--	--	Spring	--
d/124	20½ miles northeast	15, NE¼NE¼	do.	G. L. Muse	--	Old	40	--
d/125	21½ miles northeast	28, NE¼SE¼	do.	R. L. Campbell	--	--	--	--
d/126	do.	23, NW¼NE¼	do.	do.	--	Old	--	--
127	18 miles northeast	36, SE¼SE¼	do.	Federal Life Ins. Co.	--	--	81+	--
128	do.	36, SW¼SE¼	do.	M. H. Byrum	--	--	30+	5
129	20½ miles north	2, SW¼NW¼	blk. 8	C. P. Fine	--	Old	--	--
130	21 miles north	NE¼NE¼	J. M. Burns sur.	Deaf Smith County School	--	--	140	4½
131	17 miles north	28, cen. SE¼	blk. K 4	Elmer Wemble	--	--	--	--
d/132	15½ miles north	26, SE¼NW¼	do.	W. Forwell	--	Old	--	--
d/133	17 miles north	33, SW¼SW¼	do.	First National Bank of Hereford	--	Old	120	5
134	19½ miles north	50, NW¼NE¼	do.	J. E. Hill	--	--	141	6
d/135	do.	51, NW¼NE¼	do.	do.	--	--	--	--
136	do.	51, NW¼NW¼	do.	Kansas City Life Ins. Co.	--	--	151+	4½
137	17 miles north	53, SW¼NE¼	do.	A. E. Benson	--	Old	142	4½

a/ Measuring point was usually top of casing, or top of pipe clamp.

b/ C, cylinder; W, windmill; T, turbine; Cf, centrifugal; G, gasoline; S, steam; Ng, natural gas; D, diesel; E, electric; H, hand; number indicates horsepower.

g/ Figures for acreage irrigated are based on information from owners of wells.

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
113	0.8	99.1	Nov. 9, 1937	None	N	Drilled for irrigation well. Reported yield, 300 gallons a minute from fine-grained red sand.
114	--	--	--	None	N	Obstructed at 30 feet.
115	0.3	143.4	June 21, 1938	C,W	D,S	Steel casing. Estimated yield 3 gallons a minute.
116	--	--	--	None	N	Filled to surface with dirt.
117	1	143.2	June 3, 1938	C,W	D,S	Steel casing. Estimated yield, 3 gallons a minute.
118	--	--	--	None	N	No casing.
119	--	--	--	C,W	D,S	Estimated yield, 3 gallons a minute. Equipped with frost box.
120	--	--	--	C,W	S	Estimated yield, 3 gallons a minute.
121	1.3	116.1	June 3, 1938	C,W	N	Steel casing.
122	1	110.9	Dec. 4, 1937	Cf,G, 85	I	111 feet of 13-inch steel casing; 89 feet of 13-inch perforated. Three-stage pump set at
123	--	Flows	--	None	S	Estimated 140 feet; 8 5/8-inch suction pipe. yield, 20 gallons a minute.
124	--	25	e/	C,W	S	No casing. Depth reported. Obstructed at 23 feet. Estimated yield, 5 gallons a minute.
125	--	--	--	C,W	D,S	Estimated yield, 4 gallons a minute.
126	--	--	--	C,W	D,S,I	Estimated yield, 1 gallon a minute. Irrigates vegetable garden.
127	0.5	74	Nov. 28, 1937	C,W	N	Located 0.2 mile north of Palo Duro Draw.
128	0.8	24.9	do.	C,W	S	Located in Palo Duro Draw.
129	--	--	--	C,W	N	Filled to surface with dirt.
130	0	130	June 3, 1938	C,W	P	Steel casing.
131	--	--	--	--	I	Estimated yield, 750 gallons a minute. Irrigated 140 acres in 1937.
132	--	--	--	C,W	S	Estimated yield, 4 gallons a minute.
133	0.8	101.6	July 6, 1938	C,W	D,S	Steel casing. Estimated yield, 4 gallons a minute.
134	1	135.9	June 3, 1938	None	N	Steel casing.
135	--	--	--	C,W	D,S	Estimated yield, 3 gallons a minute.
136	--	151+	e/	C,W	N	Obstructed at 151 feet.
137	0.1	136.5	July 18, 1938	C,W	N	Steel casing.

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

d/ Water sample collected for analysis.

e/ Water level reported.

f/ Measured by engineers of Resettlement Administration.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/138	15 miles north	75, SE $\frac{1}{2}$ NE $\frac{1}{4}$	blk. K 4	B. C. Aylor	--	--	--	--
d/139	16 $\frac{1}{2}$ miles north	74, NE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. F. Morris	--	Old	130	4 $\frac{1}{2}$
d/140	13 $\frac{1}{2}$ miles north	89, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Byron Gist	W. D. Muncie	1937	270	14
141	13 miles north	89, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	do.	--	1938	--	--
142	16 $\frac{1}{2}$ miles north	94, NE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. S. Orr	--	Old	164	--
d/143	15 $\frac{1}{2}$ miles north	95, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	B. C. Aylor	--	--	137+	5
144	15 miles north	96, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	--	--	169	4 $\frac{1}{2}$
145	11 $\frac{1}{2}$ miles north	99, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. R. Higgins	--	Old	148	5
d/146	10 miles north	100, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Ward Public School	--	Old	145	5
147	14 $\frac{1}{2}$ miles north	85, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	B. C. Aylor	--	--	131	5
148	13 $\frac{1}{2}$ miles north	77, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Dennis C. Barnard	Edd Raef	1937	190	18
149	12 miles north	78, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. R. Crutchfield	Bishop & Whitman	1937	200	15 $\frac{1}{2}$
150	10 $\frac{1}{2}$ miles north	79, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	D. Thompson	--	--	--	--
151	11 miles north	82, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Charley Veigel	-- Witt	1937	181	16
152	12 $\frac{1}{2}$ miles north	64, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Kansas City Life Ins. Co.	--	Old	--	4
153	do.	43, NW $\frac{1}{2}$ NE $\frac{1}{4}$	do.	A. S. Higgins	L. McDade	1937	175	16
154	10 miles north	41, NW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Dr. F. E. Bowe	L. Ellis	1937	144	14
d/155	12 miles north	32, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. L. Woodford	-- McDade	1937	160	14 $\frac{1}{2}$
d/156	12 $\frac{1}{2}$ miles north	23, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	H. G. Conkwright	--	--	--	--
d/157	14 $\frac{1}{2}$ miles north	16, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. F. Hickman	--	Old	--	4 $\frac{1}{2}$

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
138	--	--	--	C,W	S	
139	1.5	117.4	July 6, 1938	C,W	D	Steel casing. Estimated yield, 3 gallons a minute.
140	0.8	162.5	Oct. 31, 1937	T,G, 80	I	Water in fine-grained red sand at 217 feet. Reported pumped sand until casing collapsed.
141	--	--	--	T,G, --	I	Drilled as test for irrigation well.
142	0.5	156.8	July 6, 1938	C,W	N	
143	0.5	161.2	Mar. 22, 1937	C,W	S	Estimated yield, 5 gallons a minute.
144	0.3	158.6	May 27, 1938	None	N	Iron casing. Located 0.35 mile south of Palo Duro Draw.
145	1.5	142.9	July 5, 1938	C,W	N	Steel casing.
146	0.3	117.4	Nov. 26, 1937	C,W	P	
147	1	121.1	July 5, 1938	C,W	N	Steel casing.
148	3.2	127.1	Sept. 15, 1937	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 110 acres in 1937. 125 feet of 18-inch steel casing and 65 feet of 18-inch perforated casing. Located 0.4 mile north of lake.
149	1.2	122.1	Nov. 24, 1937	T,G, 80	I	Estimated yield, 1,200 gallons a minute. Irrigated 320 acres in 1937. 173 feet of 15½-inch steel casing; 70 feet of 13-inch perforated casing. Pump set at 150 feet; 38 feet of suction pipe.
150	0.6	96.7	May 27, 1938	C,W	N	Concrete curb. of suction pipe.
151	1.5	97.1	Dec. 3, 1937	C,G, 85	I	Estimated yield, 800 gallons a minute. Irrigated 280 acres in 1937. 95 feet of 16-inch steel casing and 86 feet of 16-inch perforated casing. Pump set at 120 feet; 20 feet of suction pipe. Water in fine-grained red sand
152	--	--	--	None	N	Filled with mud to from 100 to 120 feet. depth of 87 feet; no water in hole.
153	--	100	e/	T,G, 50	I	Estimated yield, 800 gallons a minute. Irrigated 75 acres in 1937. Three-stage pump set at 130 feet; 25 feet of suction pipe. Water in fine-grained red sand at 105 feet.
154	2	73.4	Nov. 9, 1937	T,G, 90	I	Estimated yield, 800 gallons a minute. Irrigated 270 acres in 1937. 70 feet of 14-inch casing and 74 feet of 14-inch perforated casing. Water in fine-grained red sand.
155	--	--	--	T,G, 40	I	Measured yield, 863 gallons a minute. Irrigated 320 acres in 1937. Three-stage pump set at 120 feet; 25 feet of suction pipe.
156	--	--	--	C,W	S	Estimated yield, 4 gallons a minute.
157	--	--	--	C,W	D,S	Steel casing. Obstructed at 17 feet.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
158	14 miles north	16, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. K 4	J. F. Hickman	--	Old	--	5
159	11 miles northeast	20, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	-- McDade	1937	160	--
160	12 $\frac{1}{2}$ miles northeast	1, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. K 14	do.	--	Old	101	5
161	14 $\frac{1}{2}$ miles northeast	41, NW $\frac{1}{4}$ NE $\frac{1}{4}$	B.S. & F. sur., blk. 7	R. G. Wiseman Est.	D. L. McDonald	1918	150	26
162	14 miles northeast	1, NE $\frac{1}{4}$ SE $\frac{1}{4}$	A.B. & M. Sur., blk. 3	Raymond Harrah	do.	1937	230	16
163	do.	7, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Paul Artho	-- McDade	1935	145	14
164	14 $\frac{1}{2}$ miles northeast	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	E. Harrah	--	Old	14 $\frac{1}{2}$	4
165	15 miles northeast	21, SW $\frac{1}{4}$ SE $\frac{1}{4}$	B.S. & F. sur., blk. 7	Lee Harrah	Bishop & Whitman	1937	180	16
166	16 $\frac{1}{2}$ miles northeast	23, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. M. White	J. Mauk	1937	200	14 $\frac{1}{2}$
d/167	17 $\frac{1}{2}$ miles northeast	18, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Daniels Public School	--	--	110	--
d/168	17 miles northeast	19, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Mrs. J. F. Matthews	-- Ellis	1937	167	14
169	15 $\frac{1}{2}$ miles northeast	20, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. T. Gilbreath, Jr.	Jim Mauk	1937	180	16
170	14 miles northeast	6, NW $\frac{1}{4}$ SW $\frac{1}{4}$	A.B. & M. sur., blk. 3	Herbert Friemel	Bishop & Whitman	1937	150	15
d/201	8 $\frac{1}{2}$ miles north	92, SW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. K 3	Hood & Williams	Jones & Evans	1937	212	16
202	do.	52, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	E. M. Haile	Jim Mauk	1936	120	15
202a	7 $\frac{1}{2}$ miles north	52, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. Jenkins	Fish & Campbell	1938	214	16
203	7 miles north	53, cen. NE $\frac{1}{4}$	do.	--	--	--	49	6
204	do.	48, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	V. E. Dodson	-- McDade	1937	120	--

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
158	--	--	--	None	N	Steel casing. Obstructed at 13 feet.
159	5	87.7	Nov. 28, 1937	T,G, 50	I	Estimated yield, 750 gallons a minute. Irrigated 355 acres in 1937. Water in fine-
160	0.2	75.5	July 6, 1938	C,W	N	Steel casing. <u>grained red sand.</u>
161	2.8	91.5	May 30, 1936	T,G, 70	I	Estimated yield, 750 gallons a minute. Irrigated 260 acres in 1937. 150 feet of 26-
162	1	72.6	Nov. 27, 1937	Gr, --	I	Reported <u>inch perforated steel casing.</u> yield, 1,000 gallons a minute. Irrigated 90 acres wheat in 1937. 70 feet of 16-inch steel casing and 160 feet of 16-inch perforated casing. Gravel-walled well. Water in
163	3.5	85.5 f/	June 18, 1936	T,E, --	I	Estimated yield, <u>fine-grained red sand.</u> 750 gallons a minute. Irrigated 270 acres in 1937. Perforated steel casing. Pump set at 115 feet; 20 feet of suction pipe.
164	--	--	--	C,W	N	Steel casing.
165	--	92	e/	T,G, 60	I	Reported yield, 900 gallons a minute. Irrigated 290 acres in 1937. Steel casing. Pump set at 120 feet. Water in fine-grained red
166	1.5	97.4	Nov. 26, 1937	T,G, 50	I	Estimated yield, 800 gallons a minute. <u>sand.</u> Irrigated 270 acres in 1937. 90 feet of 14 $\frac{1}{2}$ -inch steel casing and 110 feet of 14 $\frac{1}{2}$ -inch perforated casing. Pump set at 140 feet; 40 feet of suction pipe. Water in fine-grained
167	1	88.7	Dec. 4, 1937	C,W	P	<u>red sand.</u>
168	1.5	98.1	Nov. 26, 1937	T,G, 85	I	Estimated yield, 750 gallons a minute. Irrigated 207 acres in 1937. 147 feet of 14-inch steel casing and 77 feet of 12-inch perforated casing. Pump set at 110 feet;
169	--	90	e/	T,G, 50	I	Estimated yield, <u>50 feet of suction pipe.</u> 800 gallons a minute. Irrigated 310 acres in 1937. 90 feet of 16-inch steel casing and 90 feet of 16 $\frac{1}{2}$ -inch perforated casing. Pump set at 126 feet; 45 feet of suction pipe.
170	--	--	--	T,G, 40	I	Estimated yield, 850 gallons a minute. Irrigated 227 acres in 1937. 80 feet of 15-inch perforated steel casing at bottom. Pump set at 120 feet; 25 feet of suction pipe.
201	1.5	103.1	Dec. 11, 1937	T,G, --	I	212 feet steel casing. Pump set at 140 feet. Water reported in fine-grained red sand.
202	5	74.8	Nov. 9, 1937	T,G, 85	I	Irrigated 490 acres in 1937. 120 feet steel casing. Measured 19.5 feet drawdown after pumping 800 gallons a minute for 120 hours.
202a	--	--	--	T,G, 85	I	216 feet steel casing. 121 feet <u>See log.</u> perforated casing. Pump set at 130 feet.
203	0.3	42.5	Apr. 4, 1937	None	N	Iron casing.
204	4.5	59.4	Nov. 9, 1937	T,G, --	I	Irrigated 150 acres in 1937. Water reported in fine-grained red sand.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
205	9½ miles north	50, NW¼NW¼	blk. K 3	Hill & Ricketts	L. Ellis	1937	154	14
206	8 miles northeast	33, NW¼NE¼	do.	J. L. Click	Green Machinery Co.	1937	150	16
207	9 miles northeast	12, NW¼SW¼	do.	R. Schroeter	Jim Mauk	--	108	26
208	do.	29, NW¼NW¼	do.	J. L. Click	-- McDade	1936	140	12½
209	8½ miles northeast	13, NW¼SE¼	do.	L. B. Drake	-- Muncey	1937	194	15
210	9 miles northeast	8, NW¼NW¼	do.	E. V. Holman	D. L. McDonald	1917	125	26
d/211	9½ miles northeast	8, NW¼NE¼	do.	Lester Galley	-- Muncey	1935	174	14
211a	10 miles northeast	NW¼NW¼	D. W. Dillon sur.	Troy Womble	--	1938	--	--
212	12 miles northeast	16, NE¼NW¼	A. B. & M., blk. 3	Alfred May	D. L. McDonald	1914	140	26
213	do.	3, SW¼NE¼	blk. K 14	Ernest May	do.	1917	140	26
214	13 miles northeast	10, NW¼SE¼	A. B. & M., blk. 3	J. M. White	Jim Mauk	1937	148	16
215	12½ miles northeast	14, SW¼SW¼	do.	W. W. Wimberly	--	--	--	--
216	13 miles northeast	14, SW¼SE¼	do.	H. H. Miller	--	1936	160	15
d/217	do.	21, SE¼NW¼	do.	W. E. Neal	D. L. McDonald	Old	120	26
218	13½ miles northeast	14, NE¼NE¼	do.	C. L. Scott	--	1938	--	16
219	14 miles northeast	11, NE¼NW¼	do.	J. E. Manz	--	1937	162	14
d/220	11½ miles northeast	22, SW¼SW¼	do.	C. T. Wimberly	C. A. Wimberly	1937	180	15
d/221	13 miles northeast	21, NE¼NW¼	do.	Dawn School	--	Old	95	--

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
205	1.8	76	Nov. 9, 1937	T,G, 90	I	Estimated yield, 800 gallons a minute. Irrigated 280 acres in 1937. 154 feet steel casing perforated below 70 feet. Water re-
206	--	63	e/	T,G, --	I	Estimated yield, 750 gallons a minute. Irrigated 60 acres in 1937. 105 feet perforated casing reported in fine-grained sand. at bottom.
207	0.4	54.1 f/	June 16, 1936	T,G, --	I	Irrigated 38½ acres in 1937. Steel casing. Pump set at 85 feet. Reported 30 feet drawdown pumping about 800 gallons
208	--	65	e/	T,G, 50	I	Estimated yield, 1,000 gallons a minute. Irrigated 640 acres in 1937. 30 feet 11-inch perforated casing at bottom. Pump set at 100 feet; 27 feet of suction pipe.
209	0.8	52.8	Nov. 12, 1937	T,G, 90	I	Estimated yield, 750 gallons a minute. Irrigated 53 acres in 1937. Steel casing. Water reported in fine-grained red sand.
210	5	72.9 f/	May 30, 1936	T,O, 60	I	Irrigated 487 acres in 1937. 125 feet steel casing. Pump set at 80 feet. Reported 24 feet drawdown pumping 1,000 gallons a minute.
211	1.5	66.8	Nov. 12, 1937	T,G, 35	I	Irrigated 357 acres in 1937. Steel casing. Reported 13 feet drawdown after pumping about 584 gallons a minute for 29 hours. f/Water re-
211a	--	--	--	T,-, --	I	ported in fine-grained red sand.
212	1	72.8 f/	May 30, 1936	T,O, 60	I	Irrigated 224 acres in 1937. 140 feet steel casing. Measured 36 feet drawdown after pumping 1,005 gallons a minute for 35 hours. f/Water reported in fine-grained red sand.
213	1	72.6 f/	do.	T,O, 60	I	Estimated yield, 1,000 gallons a minute. Irrigated 229 acres in 1937. 140 feet steel casing.
214	1.5	68.6 f/	Jan. 15, 1937	T,G, 60	I	Estimated yield, 800 gallons a minute. Irrigated 512 acres in 1937. 148 feet steel casing perforated below 65 feet. Reported main supply, 100 to 148 feet.
215	1.5	75.7	Dec. 4, 1937	T,G, 50	I	Estimated yield, 800 gallons a minute. Irrigated about 200 acres in 1937. Water report-
216	2	71.9 f/	Jan. 15, 1937	T,G, 40	I	Estimated yield, 750 gallons a minute. Irrigated 220 acres in 1937. Pump set at 120 feet. ed in fine-grained red sand.
217	1	94.1	Sept. 17, 1937	T,Ng, --	I	Estimated yield, 600 gallons a minute. Irrigated 230 acres in 1937.
218	1	71.6	July 14, 1938	T,-, --	I	Steel casing.
219	2	79.6	Nov. 12, 1938	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 200 acres in 1937. 160 feet steel casing. Pump set at 110 feet; 30 feet of suction pipe. Water reported in fine-grained red sand
220	1.5	85.4	Aug. 27, 1937	T,Ng, --	I	Estimated yield, 700 gallons a minute. Irrigated 200 acres in 1937. Pump set at 130 feet; 40 feet of suction pipe. Water reported in fine-grained and honey-comb rock.
221	0.4	84	Dec. 4, 1937	C,W	P	Supplies school. Water level measured while pumping. red sand.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/222	13 miles northeast	21, cen. NW $\frac{1}{4}$	A. B. & M., blk. 3	Santa Fe R. R.	--	--	100+	9
223	12 $\frac{1}{2}$ miles northeast	28, SE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	W. J. Stewart	J. L. Mauk	1937	161	14
224	10 miles northeast	25, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	M. H. Burum	Bishop & Whitman	1937	180	15
225	12 miles northeast	27, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	C. A. Wimberly	C. A. Wimberly	1937	180	--
226	9 miles northeast	7, NW $\frac{1}{2}$ NE $\frac{1}{4}$	blk. K 3	J. B. Stoker	D. L. McDonald	Old	--	26
227	11 $\frac{1}{2}$ miles northeast	27, NW $\frac{1}{2}$ NW $\frac{1}{4}$	A. B. & M., blk. 3	C. A. Wimberly	--	1937	186	16
228	11 miles northeast	23, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	W. E. Neal	--	Old	--	--
229	do.	do.	do.	L. Neal	--	1938	--	--
230	7 $\frac{1}{2}$ miles northeast	6, NW $\frac{1}{2}$ SW $\frac{1}{4}$	blk. K 3	E. C. Reineaur	D. L. McDonald	Old	120	26
231	11 miles northeast	23, SE $\frac{1}{2}$ SW $\frac{1}{4}$	A. B. & M., blk. 3	Lavinne Ricketts	--	1938	171	14
232	10 $\frac{1}{2}$ miles east	18, NE $\frac{1}{2}$ SE $\frac{1}{4}$	blk. K 14	J. O. Miller	L. Ellis	1937	142	24
233	10 $\frac{1}{2}$ miles northeast	24, SE $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Carl Luke	do.	1937	153	14
234	8 miles northeast	N $\frac{1}{2}$	W. H. Akers sur.	W. H. Akers	--	--	52	4
235	7 miles northeast	5, SW $\frac{1}{2}$ SE $\frac{1}{4}$	blk. K 3	W. G. Slagle	Jacob Johnson	1917	105	--
236	6 $\frac{1}{2}$ miles northeast	5, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Western Natl. Bank of Hereford	--	Old	51	6
237	7 miles northeast	5, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	do.	D. L. McDonald	1917	105	26
238	8 $\frac{1}{2}$ miles northeast	SW $\frac{1}{2}$	W. A. Hunt sur.	Ashbrook Est.	do.	Old	--	--
239	do.	do.	do.	do.	do.	Old	--	--
240	8 miles northeast	NW $\frac{1}{2}$ NW $\frac{1}{4}$	M. H. Cahill sur.	D. F. Ashbrook	do.	Old	--	--
241	5 $\frac{1}{2}$ miles northeast	17, NW $\frac{1}{2}$ NW $\frac{1}{4}$	blk. K 3	J. K. Estes	--	Old	100+	26

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
222	2	79.7	Mar. 12, 1937	C,W	D, Ind	
223	4.4	104.7	Sept. 17, 1937	T,G, 28	I	Irrigated 15 acres in 1937. 161 feet steel casing and 65 feet perforated casing. Pump set at 140 feet; 10 feet of suction pipe. "Red Beds" reported at 155 feet.
224	3.2	58.3	Aug. 27, 1937	T,G, 90	I	Estimated yield, 750 gallons a minute. Irrigated 205 acres in 1937. 180 feet steel casing.
225	--	87	e/	T,G, --	I	Pump set at 130 feet.
226	0.5	51.9	May 30, 1936	T,O, 60	I	Irrigated 344 acres in 1937. Measured 23 feet drawdown after pumping 1,032 gallons a minute for 21 hours. f/
227	2	95.8	Jan. 18, 1938	T,G, 60	I	Irrigated 353 acres in 1937. 120 feet of 16-inch; 66 feet of 14-inch steel casing; perforated below 80 feet.
228	0.3	83	Dec. 4, 1937	None	N	Reported weak supply. Filled to 85 feet. See log.
229	--	--	--	--	--	Drilling when visited July 15, 1938.
230	2.8	43.3	June 11, 1936	T,G, --	I	Partially irrigated 293 acres in 1937. 120 feet steel casing. Reported weak supply.
231	--	--	--	T,G, --	I	171 feet steel casing. Unused before 1937. Pump set at 110 feet; 45 feet of suction pipe.
232	0.3	64.7	Nov. 10, 1937	T,G, --	I	Irrigated 15 acres in 1937. 105 feet of 24-inch and 35 feet of 14-inch steel casing. Pump set at 95 feet. Reported breaks suction
233	--	70	e/	T,G, 36	I	Irrigated 143 acres in 1937. 153 feet steel casing, perforated below water level. Measured 12 feet drawdown after pumping about 700 gallons a minute for 14 hours.
234	1	50.2	June 24, 1937	C,W	N	Unused when visited, June 24, 1937.
235	2	54.6	May 30, 1936	T,Ng, 40	I	Dug well, 0 to 55 feet; drilled well 55 to 105 feet. Estimated yield, 550 gallons a minute. Irrigated 72 acres in 1937. Water reported in sandy caliche-like rock.
236	0.3	46.7	June 24, 1937	C,W	N	Steel casing.
237	2	42.7	Nov. 15, 1934	T,G, 90	I	Irrigated 490 acres in 1937. 105 feet steel casing. Measured 52 feet drawdown after pumping 820 gallons a minute for $\frac{3}{4}$ hour. f/ Pump set at 114 feet; 20 feet of suction pipe. Reported deepened to "Red Beds" in 1938. Water in sand and gravel 40 to 105 feet.
238	--	--	--	None	N	Reported too weak for irrigation use. Filled with dirt.
239	--	--	--	None	N	Do.
240	0.2	42.4	Nov. 12, 1937	None	N	Reported too weak for irrigation use.
241	0	47.3	Nov. 10, 1937	None	N	Do.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
242	4½ miles northeast	24, NW¼SW¼	blk. K 3	Travis Dameron	L. Ellis	1938	130	15
243	8 miles northeast	6, NE¼NW¼	do.	E. C. Raineaur	J. Mauk	1937	--	--
244	7½ miles northeast	6, NW¼NW¼	do.	do.	do.	1937	200	14
245	5½ miles northeast	25, NW¼NW¼	do.	A. D. Smith	D. L. McDonald	1917	100	24
246	do.	36, NW¼NE¼	do.	Henry Brorman	Bob Brazel	1936	140	15
247	7 miles northeast	34, NE¼NE¼	do.	S. E. Zook	--	Old	38	5
248	do.	34, NE¼NW¼	do.	Mrs. A. C. Thompson	--	--	--	6
249	8 miles northeast	14, NW¼NE¼	do.	E. R. Biggs	D. L. McDonald	1917	112	26
250	6 miles northeast	16, SW¼NW¼	do.	J. K. Estes	do.	Old	120	--
251	6½ miles north	47, SW¼NW¼	do.	Thompson & Blakemore	Jim Mauk	--	--	--
252	do.	do.	do.	do.	do.	1910	103	14
253	do.	do.	do.	do.	do.	1917	137	--
254	6 miles northeast	17, NW¼NW¼	do.	J. K. Estes	--	Old	--	--
255	do.	do.	do.	do.	--	Old	--	--
256	5 miles northeast	24, NW¼NW¼	do.	V. Urbanczyk	D. L. McDonald	1920	110	--
257	4½ miles northeast	36, NW¼SW¼	do.	Joe Brorman	--	1936	140	14
257a	4½ miles northeast	45, NW¼SE¼	do.	W. A. Scales	L. Ellis	1938	150	14
258	3 miles north	77, SW¼NE¼	do.	Dr. G. W. Heard	D. L. McDonald	1917	125	22
259	3½ miles northeast	44, NW¼NW¼	do.	E. B. Childre	Reid Smith	1937	150	16
260	3½ miles north	77, NW¼NW¼	do.	J. L. Johnson	J. L. Johnson	1918	107	26
261	4 miles north	65, NW¼SW¼	do.	D. L. McDonald	D. L. McDonald	1911	179	26

a/ Measuring point was usually top of casing, or top of pipe clamp.

b/ C, cylinder; W, windmill; T, turbine; Cf, centrifugal; G, gasoline; S, steam; Ng, natural gas; D, diesel; E, electric; H, hand; number indicates horsepower.

g/ Figures for acreage irrigated are based on information from owners of wells.

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
242	4	50.6	Nov. 1, 1937	T,G, ---	I	Irrigated 14 acres in 1937. Reported originally drilled to 113 feet and later deepened into "Red Beds". See log.
243	--	--	--	None	N	Reported too weak for irrigation use.
244	--	--	--	T,G, ---	I	Irrigated 50 acres in 1937. Estimated yield, 650 gallons a minute. Steel casing.
245	0.5	43.4	Nov. 15, 1934	T,-, ---	N	100 feet steel casing. Water reported in sand and gravel. Unused when visited in
246	1	55.2	Nov. 10, 1937	T,G, ---	I	Irrigated 260 acres in 1937. 140 feet steel casing. Measured 27 feet drawdown after pumping 610 gallons a minute for 29 hours. f/Originally drilled to 110 feet.
247	0.4	20.8	Aug. 27, 1937	C,W	N	Unused when visited, See log.
248	4.1	49	June 24, 1937	None	N	Water level questionable.
249	--	49.1 f/	Apr. 22, 1936	T,O, 110	I	Irrigated 480 acres in 1937. Measured 36 feet drawdown after pumping 1,005 gallons a minute for 30 hours. Pump set at 90 feet.
250	0.8	42.6 f/	Jan. 16, 1937	T,O, 40	I	Estimated yield, 800 gallons a minute. Irrigated 280 acres in 1937. Pump set at 120
251	0	50 f/	May 29, 1936	None	N	Unused when visited, May 29, 1936. feet.
252	--	--	--	T,G, 90	N	103 feet steel casing; 60 feet perforated casing at bottom. Water reported in fine-
253	--	54	e/	T,E, ---	I	Irrigated 371 acres in <u>grained red sand</u> . 1937. Measured 15 feet drawdown after pumping 935 gallons a minute for 34 hours. f/Original depth, 103 feet; deepened in 1917 to
254	0.1	47.7	Nov. 10, 1937	None	N	Reported too weak for irrigation use. Filled with sand to near water level. 137 feet.
255	--	--	--	None	N	Reported too weak for irrigation use. Filled above water level.
256	--	47	e/	--	I	Estimated yield, 500 gallons a minute. Irrigated 150 acres in 1937.
257	1.5	50.4	Nov. 10, 1937	T,G, ---	I	Estimated yield, 800 gallons a minute. Irrigated 190 acres in 1937. 140 feet steel casing. Water reported in fine-grained red sand.
257a	--	50	e/	T,G, ---	I	150 feet steel casing. 90 feet of 9-inch column pipe; 45 feet of suction.
258	1.5	55.5 f/	Apr. 24, 1936	T,G, ---	I	Irrigated 80 acres in 1937. Steel casing. Reported 35 feet drawdown after pumping 800
259	1.3	43.3	Nov. 29, 1937	T,E, 30	I	Irrigated gallons a minute for 24 hours. 50 acres in 1937. 150 feet steel casing, perforated below water level. Water reported in fine-grained red sand from 120 to 150 feet.
260	1.5	54.3 f/	Apr. 8, 1936	T,G, ---	I	Reported yield, 1,000 gallons a minute. Irrigated 52 acres in 1937. 107 feet steel
261	0.5	52.1	Oct. 29, 1937	T,E, 20	I	Reported yield, 600 gallons a minute. casing. Irrigated 74 acres in 1937. 179 feet steel cas-

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

d/ Water sample collected for analysis.

e/ Water level reported.

f/ Measured by engineers of Resettlement Administration.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/262	6 $\frac{1}{2}$ miles north	54, NE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. K 3	Progressive School	--	--	65	--
d/263	do.	54, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	D. Wallace	--	1937	110	--
264	5 $\frac{1}{2}$ miles north	67, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	L. Ellis	--	1934	55	24
265	6 miles north	74, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Reineaur Bros.	J. Mauk	1937	230	16
266	do.	67, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	L. Ellis	L. Ellis	1938	--	--
267	2 $\frac{1}{2}$ miles north	57, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	O. E. Sherman	Jim Mauk	1937	150	14
269	do.	64, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	N. E. Gass	L. Ellis	1937	170	16
270	2 $\frac{3}{4}$ miles north	64, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	R. R. Jackson	--	Old	135	24
271	3 miles north	64, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. P. Shaw	D. L. McDonald	1917	130	22
272	5 miles northwest	86, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Empire Mortg. Co.	do.	1916	120	22
273	4 $\frac{1}{4}$ miles north	65, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	D. L. McDonald	do.	1923	120	24
274	do.	do.	do.	do.	do.	Old	120	26
275	5 $\frac{1}{2}$ miles northwest	95, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. Shinn	--	Old	--	26
276	7 $\frac{1}{2}$ miles north	69, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. L. Fuqua	--	--	72	6
277	do.	72, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	H. H. Myers	--	--	26	12
278	8 $\frac{1}{2}$ miles north	69, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	First Natl. Bank	--	Old	90	6
279	7 miles northwest	94, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. Ellis	L. Ellis	1938	149	14
280	6 $\frac{1}{2}$ miles northwest	95, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Clara Shinn	Jim Mauk	1938	--	--
281	5 $\frac{1}{2}$ miles northwest	96, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	P. H. Filbin	--	1937	120	14
282	do.	96, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. S. Gunter	Jim Mauk	1937	155	16

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
262	--	50	e/	--	P	
263	0.7	57.1	Aug. 27, 1937	T, -, --	I	Estimated yield, 750 gallons a minute. Irrigated 260 acres in 1937. Water reported
264	0.2	49.1	do.	None	N	Reported drilled in fine-grained red sand. for irrigation use. Unused when visited, Aug. 27, 1937. Located 0.6 miles north of
265	0.8	69.3	Sept. 15, 1937	T, E, --	I	Estimated yield, 800 gallons a minute. Irrigated 160 acres in 1937. lake. See
266	--	--	--	--	I	log.
267	2	56.8	Oct. 30, 1937	T, E, 30	I	Irrigated 255 acres in 1937. 150 feet steel casing, perforated below 48 feet. Reported 28 feet drawdown after pumping about 800 gallons a minute for several days.
269	2	58.3	Oct. 29, 1937	T, E, 30	I	Irrigated 100 acres in 1937. 170 feet steel casing. Reported 20 feet drawdown after pumping 850 gallons a minute for 4 hours. Pump set at 120 feet. Water reported in fine-
270	1.5	64.2	do.	T, E, 30	I	Reported yield, 650 gal- grained red sand. lons a minute. Irrigated 86 acres in 1937. Steel casing. Pump set at 100 feet; 30 feet
271	1	58.8 f/	May 29, 1936	T, O, 50	I	Estimated yield, 800 gal- of suction pipe. lons a minute. Irrigated 118 acres in 1937. 130 feet steel casing, perforated below water
272	0.9	66.6 f/	do.	T, O, 50	N	120 feet steel casing. level.
273	1.5	53.6	Nov. 8, 1937	T, E, 30	I	Irrigated 325 acres in 1937. Steel casing. Reported 38 feet drawdown after pumping about
274	1.5	54.2	Oct. 29, 1937	T, E, 30	I	Estimated 750 gallons a minute for 3 weeks. yield, 1,000 gallons a minute. 120 feet steel casing. Water reported in fine-grained
275	3.2	67.3 f/	Dec. 29, 1936	T, -, --	N	red sand.
276	0.5	36.5	Sept. 15, 1937	None	N	
277	1.6	17.9	do.	C, W	S	Galvanized casing. Estimated yield, 2 to 5 gallons a minute.
278	0.6	72.1	do.	None	N	
279	1.9	62.4	July 18, 1938	T, G, 40	I	Reported yield, 950 gallons a minute. 149 feet steel casing and 70 feet perforated casing. Pump set at 90 feet; 10 feet of suction
280	--	--	--	T, -, --	I	pipe.
281	1	64.8	Oct. 30, 1937	T, E, 30	I	Irrigated 140 acres in 1937. 120 feet steel casing, perforated below 60 feet. Measured 31 feet drawdown after pumping 1,200 gallons a minute for 3 hours. Pump set at 100 feet;
282	1.5	63.2	do.	T, E, 40	I	Estimated yield, 10 feet of suction pipe. 800 gallons a minute. 155 feet steel casing, perforated below 60 feet. Pump set at 110 feet; 15 feet of suction pipe.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
283	3 miles west	133, NW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. M 7	J. T. Gilbreath	-- Muncey	1936	166	14
284	4 $\frac{1}{2}$ miles northwest	85, NW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. K 3	Charles H. Keffer	D. L. McDonald	1936	142	--
285	5 miles north	75, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Mrs. J. M. Lewis	Reid Smith	1937	130	16
286	do.	do.	do.	do.	--	--	100	--
287	4 $\frac{1}{2}$ miles north	75, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Clinton Jackson	Green Machinery Co.	1937	--	--
288	2 $\frac{1}{4}$ miles north	63, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	John W. Kropff	D. L. McDonald	1913	160	24
289	4 miles north	76, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. W. Hill	Jim Mauk	1937	300	20
290	do.	76, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	do.	1937	235	18
291	1 $\frac{1}{4}$ miles northeast	59, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	S. L. Harman	D. L. McDonald	1917	117	26
292	3 $\frac{1}{2}$ miles north	76, SE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	W. W. Hill	--	--	80	2 $\frac{1}{2}$
293	2 $\frac{1}{2}$ miles north	77, SW $\frac{1}{2}$ SE $\frac{1}{2}$	do.	W. R. Matthews	D. L. McDonald	Old	130	22
295	3 $\frac{1}{2}$ miles northwest	98, SE $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Earl Dehart	Reid Smith	1937	175	16
296	3 miles northwest	98, SE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	J. V. Robinson	Bishop & Whitman	1937	175	16
297	2 miles northwest	78, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Harry Kibbe	W. D. Muncey	1936	135	15
298	1 $\frac{1}{2}$ miles north	63, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. W. Witherspoon	J. Mauk	1937	140	14
299	2 miles northeast	58, SE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	B. C. Bynum	--	--	49	6

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
283	1.3	65.1	Nov. 24, 1937	T, G, 40	I	Steel casing 60 to 130 feet. Measured 22 feet drawdown after pumping about 800 gallons a minute for several days. Pump set at 85 feet; 30 feet of suction pipe. See log.
284	3	68.7	Oct. 30, 1937	T, G, --	I	Estimated yield, 800 gallons a minute. Irrigated 240 acres in 1937. See log.
285	1.3	57.8	Dec. 11, 1937	C, G, 85	I	Estimated yield, 850 gallons a minute. Irrigated 90 acres in 1937. 122 feet steel casing, 72 feet perforated casing. Pump set at
286	--	--	--	None	N	Dug well, 120 feet. See log. 0 to 45 feet; drilled well, 45 to 100 feet.
287	3.8	49.1	Nov. 29, 1937	T, -, --	N	Reported just completed when visited, Nov. 29, 1937. Filled above water level.
288	2	67.8	Oct. 29, 1937	T, E, 30	I	Irrigated 316½ acres in 1937. 133 feet steel casing. Measured 30 feet drawdown after pumping 692 gallons a minute for 22 hours. f/Pump set at 100 feet; 26 feet of suction pipe.
289	2	72.2	do.	T, G, 80	I	Reported yield, 1,400 gallons a minute. Irrigated 550 acres in 1937. 300 feet steel casing, perforated below 50 feet. Water reported in fine-grained red sand from 60 to 220 feet; gray sand from 220 to 300 feet.
290	0.7	55.1	do.	None	N	Irrigated 260 acres in 1937. 196 feet of 18-inch; 40 feet of 14-inch casing. No pump installed when visited, Oct. 29, 1937. Water reported in gray sand, 220 to 235 feet.
291	0.5	55.1 f/	May 29, 1936	T, O, 50	I	Irrigated 66 acres in 1937. 117 feet steel casing. Measured 22 feet drawdown after pumping 692 gallons a minute for 30 hours. f/Pump set at 90 feet; 20 feet of suction pipe.
292	--	50	e/	C, W	D, S	
293	--	67.8 f/	May 29, 1936	T, E, 20	I	Irrigated 104 acres in 1937. Measured 39 feet drawdown after pumping 610 gallons a minute for 32 hours. f/Pump set at 107 feet; 23 feet of suction pipe. Measuring point
295	5	85.7	Nov. 29, 1937	C, E, 40	I	175 feet steel casing; 75 feet perforated casing at bottom. Pump set at 120 feet, 45 feet of suction pipe. Water reported in fine-grained red sand. Main water supply reported at 150 feet. was bed plate of pump.
296	2	94.2	Sept. 17, 1937	T, G, --	I	Estimated yield, 750 gallons a minute. 175 feet steel casing, perforated below 85 feet. Well completed few days before visited, Sept. 17, 1937. Water reported in fine-grained red
297	3.5	64.4 f/	May 29, 1936	T, G, --	I	Reported yield, 800 gallons a minute. Irrigated 215 acres in 1937. 75 feet perforated casing at bottom. Water reported in sand.
298	3.5	57.8	Oct. 28, 1937	T, G, 75	I	Estimated yield, 800 gallons a minute. Irrigated 84 acres in 1937. 136 feet steel casing, perforated below 50 feet. Pump set at 90 feet; 40 feet of suction pipe. See log. fine-grained red sand.
299	0	42.3	June 24, 1937	None	N	

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
300	2 miles northeast	43, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. K 3	Ayres Est.	--	--	50	4 $\frac{1}{2}$
301	2 $\frac{3}{4}$ miles northeast	43, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	M. E. Joss	--	--	56	5
302	4 miles northeast	38, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. L. Fuqua	-- Brazil	1936	120	14 $\frac{1}{2}$
303	1 $\frac{1}{4}$ miles north	63, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Lee Hopson	L. Ellis	1937	122	14
304	3 miles west	99, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. A. Callahan	J. Mauk	1936	170	--
305	3 $\frac{1}{2}$ miles west	100, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. M. Benefield	Bishop & Whitman	1937	180	18
306	do.	100, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	L. Z. Oldham	--	1938	--	--
307	2 $\frac{3}{4}$ miles west	100, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Troy Womble	Jones & Evans	1938	126	14
308	1 $\frac{1}{4}$ miles east	60, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Hereford State Park	--	Old	--	--
309	2 $\frac{1}{2}$ miles west	81, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	S. H. Slagle	Bishop & Whitman	1937	163	14
310	2 $\frac{1}{4}$ miles west	81, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	--	69	6
311	2 miles east	41, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	H. H. Boardman	D. L. McDonald	1917	100	26
312	2 miles northwest	82, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	T. L. Ferguson	--	1936	200	--
313	1 $\frac{1}{2}$ miles northwest	79, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	--	--	1937	100	8
314	do.	79, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	D. Y. Edwards	--	1915	--	18
315	3 $\frac{1}{4}$ miles east	67, SW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. M 7	C. P. Hussey	--	--	--	15
316	2 miles southeast	89, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Carl Gilliland	D. L. McDonald	1918	130	22
317	1 $\frac{1}{2}$ miles south	110, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	M. L. Johnson	do.	1917	80	30
318	1 mile northwest	79, NW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. K 3	Carl Mounts	--	Old	150	--

Joe W. Lang and C. R. Follett

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
300	0.5	47	June 24, 1937	None	N	
301	1.5	46.6	do.	C,W	N	
302	4	53.8	Nov. 1, 1937	T,G, --	I	Irrigated 120 acres in 1937. Steel casing. Measured 19 feet drawdown after pumping 870 gallons a minute for 30 hours. f/ Pump set at
303	1.5	57.7	Oct. 28, 1937	T,G, --	I	Estimated 80 feet. See log. yield, 500 to 600 gallons a minute. Irrigated 65 acres in 1937. 80 feet perforated steel casing at bottom. Pump set at 80 feet;
304	4	91.8 f/	May 29, 1936	T,G, 40	I	Irrigated 410 acres 25 feet of suction pipe. in 1937. Measured 31 feet drawdown after pumping 845 gallons a minute for 2½ hours. f/ Pump set at 140 feet; 20 feet of suction pipe. Reported deepened from 150 feet to 170 feet.
305	0.7	79.9	Aug. 27, 1937	T,G, 28	I	Irrigated 312 acres in 1937. 180 feet steel casing perforated below 70 feet. Measured 24.5 feet drawdown after pumping 782 gallons a minute for about 6 hours. See log.
306	1	72	July 16, 1938	T,G, --	I	
307	--	--	--	T,E, 30	I	126 feet steel casing. Pump set at 100 feet; 20 feet of suction pipe.
308	1.4	47.8 f/	May 29, 1936	None	N	Located 0.3 mile north of Tierra Blanca Creek.
309	1.8	69.5	Nov. 23, 1937	T,E, 30	I	Estimated yield, 800 gallons a minute. Irrigated 160 acres in 1937. 163 feet steel casing, perforated below 65 feet. Pump set at 110 feet; 59 feet of suction pipe. Water reported in fine-grained red sand.
310	0.2	55.3	Aug. 26, 1937	C,W	N	Located 0.7 mile north of Tierra Blanca Creek.
311	1	54.8	Nov. 15, 1934	T,Ng, 50	I	Irrigated 380 acres in 1937. 100 feet steel casing. Measured 24 feet drawdown after pumping 1,130 gallons a minute for 12 hours. f/ Water reported in sand and gravel, 55 to 100 feet.
312	4.8	87.6	Nov. 29, 1937	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 340 acres in 1937.
313	0	65.1	Aug. 26, 1937	None	N	Completed shortly before visited, Aug. 26, 1937. Drilled for irrigation use.
314	0	64.9	do.	C,G, --	I	Irrigated 5 acres in 1937. 6½-inch column pipe.
315	1	60.8 f/	May 15, 1936	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 95 acres in 1937.
316	0	57 f/	May 29, 1936	T,O, 40	I	Estimated yield, 900 gallons a minute. Irrigated 259 acres in 1937. 130 feet steel casing.
317	2.9	62.3	Nov. 15, 1934	T,G, 60	I	Irrigated 100 acres in 1937. 80 feet steel casing. Water reported in sand, 60 to 80 feet.
318	3.5	64	Aug. 26, 1937	T,G, 30	I	Estimated yield, 700 gallons a minute. Irrigated 40 acres in 1937.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
319	1 mile northwest	79, SE $\frac{1}{4}$ NE $\frac{1}{4}$	blk. K 3	Hooker Est.	--	Old	150	--
320	1 $\frac{1}{2}$ miles southwest	80, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. E. Williams	Jones & Evans	1937	120	10
321	1 $\frac{1}{4}$ miles southwest	do.	do.	H. V. Hennon	do.	1937	105	10
322	2 $\frac{3}{4}$ miles south	112, SW $\frac{1}{4}$ SE $\frac{1}{4}$	blk. M 7	Lloyd Edwards	D. L. McDonald	1915	140	26
323	$\frac{1}{2}$ mile northeast	62, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. K 3	Mrs. G. S. Parker	--	--	--	--
324	In Hereford	61, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	City of Hereford	--	Old	--	--
d/325	do.	do.	do.	do.	--	Old	200	24
326	5 miles south	119, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. M 7	E. Schwartz	--	Old	100	26
327	1 $\frac{1}{2}$ miles south	110, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Woods & Sowell	D. L. McDonald	1914	100	26
328	1 $\frac{3}{4}$ miles south	do.	do.	Homer Brumley	-- Bishop	1938	120	14
329	4 $\frac{1}{2}$ miles southwest	134, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. E. Upton	Bob Bizel	1926	80	4 $\frac{1}{2}$
330	do.	do.	do.	do.	Jones & Evans	1937	150	15
331	4 $\frac{1}{4}$ miles south	107, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	M. C. Doss	-- Muncey	1937	136	12
332	3 $\frac{1}{2}$ miles southwest	134, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	E. Morgan	--	1936	78	7 $\frac{1}{2}$
333	5 miles southwest	135, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	G. Miller	L. Ellis	1937	150	--
334	5 $\frac{1}{2}$ miles southwest	129, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Reineaur Bros.	Jim Mauk	1936	200	14
335	4 $\frac{1}{2}$ miles south	114, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	N. E. Cass	Haney & Ware	1937	173	13
336	3 $\frac{3}{4}$ miles southeast	86, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	E. J. Boeskin	Jim Mauk	1936	140	15
d/337	4 miles south	113, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Reineaur Bros.	W. D. Muncey	1937	175	--
338	do.	107, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	R. H. Sewell	Jim Mauk	1936	160	16

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
319	1.5	61	Aug. 26, 1937	T, -, --	N	
320	1.5	47.4	Nov. 23, 1937	T, E, 5	I	120 feet steel casing, perforated below 45 feet. Pump set at 70 feet; 14 feet of suction pipe; 4-inch column pipe. Water reported in fine-grained red sand.
321	1.2	45.8	Dec. 11, 1937	None	N	105 feet steel casing, perforated below water level. Pump not installed when visited, Dec. 11, 1937.
322	1	70.2 f/	May 28, 1936	T, O, --	I	Irrigated about 20 acres in 1937. 146 feet steel casing. Reported unused in 1936.
323	--	--	--	C, E, 5	I	Reported yield, 60 gallons a minute. Irrigated about 2 acres garden and truck in 1937.
324	--	--	--	T, G, 25	P, Ind	Dug well to 50 feet; drilled well, 50 feet to bottom. Measured yield, 600 gallons a minute. Water reported in fine-grained red sand. Reported used slightly.
325	--	60 e/		T, E, 50	P, Ind	Dug well, 0 to 53 feet; drilled well, 53 to 200 feet. Measured yield, 1,000 gallons a minute. Water reported in fine-grained red sand.
326	2.5	89.6	Oct. 27, 1937	None	N	Steel casing. Supplies City of Hereford.
327	0.9	60.1 f/	May 16, 1936	T, E, 25	I	Estimated yield, 800 gallons a minute. Irrigated 258 acres in 1937. 100 feet steel casing. Pump set at 90 feet.
328	--	--	--	--	I	120 feet steel casing. Pump set at 90 feet; 40 feet of suction pipe.
329	1.8	65.6	Mar. 26, 1937	C, W	D, S	80 feet wrought iron casing.
330	1.5	68.8	Nov. 23, 1937	None	N	Steel casing.
331	5	80	Aug. 26, 1937	T, G, --	I	Reported yield, 800 gallons a minute. Irrigated 147 acres in 1937. 115 feet steel casing, perforated below 72 feet. Pump set at 110 feet; 18 feet of suction pipe. Water reported in fine-grained red sand and coarse gravel.
332	1.8	63.8	Mar. 26, 1937	C, W	S	Located near small lake.
333	5	82.3	Oct. 28, 1937	T, G, --	I	Estimated yield, 800 gallons a minute. Irrigated 200 acres in 1937. Water reported in red sand.
334	4	97.4 f/	Jan. 15, 1937	T, G, --	I	Irrigated 260 acres in 1937. Steel casing. Reported 37 feet drawdown
335	--	--	--	--	I	170 feet pumping about 800 gallons a minute. steel casing and 100 feet perforated casing. Pump set at 100 feet; 20 feet of suction pipe. Well was being developed when visited Dec. 1, 1937. Reported water sand, 98 to 174 feet.
336	1	88.3 f/	Apr. 27, 1936	T, G, 36	I	Irrigated 63 acres in 1937. 136 feet steel casing. Measured 25 feet drawdown after pumping 600 gallons a minute for 8 hours. f/See
337	5	84.5	Oct. 27, 1937	T, G, --	I	Estimated yield, 800 gallons a minute. Irrigated 561 acres in 1937. Water reported log.
338	--	--	--	T, E, 25	I	Irrigated 360 acres in fine-grained red sand. in 1937. 155 feet steel casing. Reported 21 feet drawdown after pumping about 750 gallons a minute for 12 days.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/339	4 $\frac{1}{2}$ miles southeast	88, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. M 7	George Robertson	A. B. Hayes	1935	150	16
340	3 $\frac{1}{4}$ miles south	108, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Felix Urbanczyk	D. L. McDonald	1920	120	26
341	3 miles south	108, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	do.	1917	130	26
342	3 $\frac{1}{2}$ miles south	108, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	C. Tucker	1937	126	16
343	2 $\frac{1}{2}$ miles south	109, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. C. Morrison	Jim Mauk	1936	150	14
344	1 $\frac{1}{2}$ miles northeast	59, SW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. K 3	C. W. Woodruff	--	1910	130	--
345	1 $\frac{1}{4}$ miles east	60, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Dr. J. W. Hendrix	--	--	--	--
346	do.	60, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	L. H. Aikman	--	Old	--	--
347	1 mile southeast	60, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Dr. J. W. Hendrix	--	1937	--	--
348	2 miles south	90, SW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. M 7	S. O. Wilson	D. L. McDonald	1914	120	26
d/349	2 $\frac{1}{2}$ miles south	90, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. W. Alexander	do.	Old	120	26
350	5 miles south	93, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	H. C. Doak	--	1937	170	14
351	3 $\frac{1}{2}$ miles southeast	96, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. E. Rea	--	Old	--	20
354	1 $\frac{1}{2}$ miles east	42, SW $\frac{1}{4}$ SW $\frac{1}{4}$	blk. K 3	G. S. Parker	--	Old	--	--
355	1 $\frac{1}{2}$ miles northeast	42, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	Joe Lytle	1936	120	24
356	do.	do.	do.	B. E. Brunley	D. L. McDonald	1914	--	--
357	do.	42, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. L. Benefield	Joe Lytle	1937	120	--
358	2 $\frac{1}{2}$ miles northeast	39, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Gallagher Bros.	do.	1935	140	24
359	3 miles east	40, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Underwood & Albracht	D. L. McDonald	1916	146	26
360	4 $\frac{1}{2}$ miles southeast	69, SW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. M 7	R. A. Gilliam	Joe Lytle	1937	150	14

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No.	Height of measuring point above ground (ft.) <u>a/</u>	Water level		Pump and power <u>b/</u>	Use of water <u>c/</u>	Remarks <u>g/</u>
		Depth below measuring point (ft.)	Date of measurement			
339	0.8	81.7 <u>f/</u>	May 28, 1936	T,G, --	I	Irrigated 200 acres in 1937. 78 feet steel casing, perforated at bottom. Measured drawdown 22 feet after pumping 584 gallons a minute for 20 hours. <u>f/</u> Pump set at 120 feet; 23 feet of suction pipe. Reported breaks suction
340	0.8	73.6 <u>f/</u>	Apr. 17, 1936	None	N	Irrigated 180 acres in 1937. 120 feet steel casing. after pumping about 8 hours.
341	0.9	76.7 <u>f/</u>	do.	T,O, 50	I	Irrigated 218 acres in 1937. 130 feet steel casing. Measured 34.6 feet drawdown after pumping 664 gallons a minute for 35 $\frac{3}{4}$ hours. <u>f/</u>
342	1.3	86.2	Dec. 1, 1937	T,E, 40	I	Reported yield, 800 gallons a minute. Irrigated 160 acres in 1937. 121 feet steel casing, perforated below 80 feet. Pump set at 100 feet; 15 feet of suction pipe.
343	--	--	--	--	I	Irrigated 206 acres in 1937. 150 feet steel casing, perforated below water level. Pump set at 110 feet; 20 feet of suction pipe.
344	3.5	58.7	Oct. 28, 1937	T,G, --	I	Irrigated 160 acres in 1937. Pump set at 70 feet; 30 feet of suction pipe.
345	1.4	54.1	Nov. 2, 1937	T,-, --	I	
346	--	--	--	C,G, 5	N	
347	1.5	55.2	Nov. 2, 1937	T,G, --	N	
348	--	64.1 <u>f/</u>	May 28, 1936	T,E, 25	I	Irrigated 321 acres in 1937. 120 feet steel casing. Measured 13 feet drawdown after pumping 830 gallons a minute for 51 hours. <u>f/</u>
349	1	71.3 <u>f/</u>	May 22, 1936	T,E, --	I	Irrigated 300 acres in 1937. Measured 12.5 feet drawdown after pumping 637 gallons a
350	1.5	86	Nov. 13, 1937	T,G, 90	I	Estimated yield, 800 gallons a minute for 10 $\frac{1}{2}$ hours. <u>f/</u> gallons a minute. Irrigated 335 acres in 1937. 150 feet of 14-inch; 20 feet of 11-inch steel casing at bottom. Pump set at 130 feet; 35
351	4.2	26.4	Nov. 2, 1937	None	N	Located about 600 feet northwest of Frio Draw. feet of suction pipe.
354	--	--	--	None	N	Reported caved in.
355	2.5	58.2	Oct. 28, 1937	T,G, --	I	Irrigated 80 acres in 1937. 12 feet steel casing. Water reported in fine-grained red
356	--	--	--	T,Ng, 50	I	Irrigated 287 acres in 1937. sand.
357	--	60	<u>e/</u>	T,G, 90	I	Estimated yield, 750 to 800 gallons a minute. Irrigated 95 acres in 1937. No casing.
358	0	49.9	Nov. 1, 1937	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 130 acres in 1937. Water reported in
359	0.5	60.2 <u>f/</u>	May 29, 1936	T,G, 75	S,I	Irrigated 564 acres in 1937. 146 feet steel casing. Measured 30 feet drawdown after pumping 1,005 gallons a minute for 34 hours. <u>f/</u> Reported originally drilled to 120 feet. Supplies
360	5	91	Nov. 2, 1937	T,-, --	I	Estimated water for 1,700 head of sheep. yield, 800 gallons a minute. Irrigated 25 acres in 1937. 150 feet steel casing, perforated below 85 feet.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
361	4½ miles southeast	69, SE¼SW¼	blk. M 7	J. J. Paetzold	D. L. McDonald	1917	180	26
362	6 miles southeast	62, NW¼NW¼	do.	Wm. J. Battles	Jones & Evans	1938	150	14
363	5½ miles southeast	63, NW¼SW¼	do.	W. A. Fisk	L. Ellis	1937	150	15
364	do.	63, NW¼NE¼	do.	do.	-- McDade	1937	160	15
365	5 miles southeast	65, SW¼SE¼	do.	M. J. Arnold	Bishop & Whitman	1937	160	15
366	4 miles east	21, SW¼NE¼	blk. K 3	T. N. Bradley	Jim Mauk	1935	120	16
367	3½ miles east	21, NW¼NW¼	do.	Mrs. A. B. Schulz	--	--	53	--
d/373	6 miles east	46, NE¼NE¼	blk. M 7	Wyche School	--	Old	85	--
374	5½ miles southeast	46, SW¼SW¼	do.	D. R. Carmichael	Green Machinery Co.	1937	--	--
375	6 miles southeast	48, NE¼NW¼	do.	G. Hazelwood	Bishop & Whitman	1937	180	15
376	6½ miles southeast	48, NW¼SE¼	do.	C. W. Hays	--	1937	180	15
377	do.	43, SW¼SW¼	do.	R. Elliston	Joe Lytle	1937	--	15
378	6 miles east	3, NW¼NW¼	blk. K 3	Mrs. M. D. Bradley	--	1938	--	16
379	7½ miles east	SE¼SE¼	W. M. Howard sur.	W. M. Howard	--	Old	--	--
380	8 miles southeast	25, SE¼NW¼	blk. M 7	J. H. Reinart	Jones & Evans	1937	163	15
381	9 miles southeast	19, SE¼NW¼	do.	D. B. McGregor	--	1937	--	--
382	9½ miles southeast	19, NE¼NE¼	do.	do.	Jones & Evans	1937	200	--
383	8½ miles east	SW¼SE¼	J. S. Wyche sur.	J. S. Wyche Est.	--	Old	57	--
d/384	9 miles east	do.	A. S. Gracy sur.	E. F. Smith	--	Old	--	--

a/ Measuring point was usually top of casing, or top of pipe clamp.

b/ C, cylinder; W, windmill; T, turbine; Cf, centrifugal; G, gasoline; S, steam; Ng, natural gas; D, diesel; E, electric; H, hand; number indicates horsepower.

c/ Figures for acreage irrigated are based on information from owners of wells.

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
361	1	93.3 f/	May 28, 1936	T, D, 50	I	Irrigated 317 acres in 1937. Measured 17 feet drawdown after pumping 637 gallons a minute for 32 hours. f/ Pump set at 125 feet;
362	--	--	--	T, G, --	I	72 feet of 14-inch steel casing and 78 feet of 14-inch perforated.
363	2	90.8	Nov. 3, 1937	T, G, --	I	Irrigated 530 acres in 1937. 150 feet steel casing, perforated below 85 feet. Measured 31 feet drawdown after pumping 800 gallons a minute for 3 hours. Pump set at
364	2	91.5	do.	T, G, --	I	Estimated yield, 750 gallons a minute. Irrigated 360 acres in 1937. 160 feet steel casing. Pump set at 130 feet. 20 feet of suction pipe. Water reported in fine-grained
365	4.2	84.4	Nov. 2, 1937	T, G, 85	I	Irrigated 317 acres in 1937. 160 feet steel casing, perforated below 75 feet. Measured 20 feet drawdown pumping about 750 gallons a minute. Pump set at 120
366	0.4	16.4 f/	May 15, 1936	T, G, --	I	Reported yield, 750 gallons a minute. Irrigated 47 acres in 1937. 80 feet steel casing. Pump set at 60 feet; 20 feet of suction pipe. Reported originally drilled
367	--	--	--	C, W	D, S, I	Irrigates $\frac{1}{4}$ acre garden. No casing.
373	--	70	e/	C, W	P	Estimated yield, 2 to 4 gallons a minute.
374	0	78.2	Dec. 10, 1937	None	N	52 feet steel casing at bottom. New well, pump not installed when visited Dec. 10, 1937. Water reported in fine-grained red
375	--	85	e/	T, G, 85	I	Irrigated 277 acres in 1937. 180 feet steel casing. Water reported in fine-
376	5	77.4	Nov. 3, 1937	T, G, --	I	Irrigated 180 acres in 1937. 180 feet steel casing. Water reported-
377	0.6	76.8	Nov. 2, 1937	None	N	New well, no pump installed when visited, Nov. 2, 1937. Water reported in fine-grained red sand.
378	0	55	Mar. 29, 1938	None	N	New well, no pump installed when visited, March 29, 1938.
379	0.3	54.7	July 15, 1938	C, W	D, S	
380	--	--	--	T, G, --	N	Estimated yield, 650 gallons a minute. Irrigated 110 acres in 1937. 163 feet steel casing. Pump set at 130 feet. Reported
381	0.5	81.8	Nov. 15, 1937	T, G, 50	I	Reported weak supply. drilled to "Red Beds".
382	0	89.4	Aug. 24, 1937	None	N	Reported drilled into "Red Beds". Insufficient supply for irrigation use. No casing.
383	4	47.2	July 15, 1938	C, W	N	No casing.
384	--	--	--	C, W	D, S	Estimated yield, 4 gallons a minute.

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

d/ Water sample collected for analysis.

e/ Water level reported.

f/ Measured by engineers of Resettlement Administration.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
385	9 miles east	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. M 7	T. E. Shirley	--	Old	98	--
386	10 miles east	25, SW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. K 14	Wilson Syn. Trust Co.	--	-- Spring		--
387	11 miles east	26, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	R. A. Frye	--	Old	163	4
d/388	11 $\frac{1}{2}$ miles east	324, NW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. M 6	H. A. Halbert	--	--	193	4
401	36 miles west	16, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.4 N., R.1 E.	Landergin Bros. Co.	--	--	59	5
d/402	54 miles west	22, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	O. V. Ellison	--	--	165	48
403	36 $\frac{1}{2}$ miles west	20, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	V. Ridley	-- Mott	1930	60	4 $\frac{1}{2}$
404	do.	30, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. Glasscock	--	1908	177	6
405	36 miles west	7, SE $\frac{1}{4}$ NE $\frac{1}{4}$	T.3 N., R.1 E.	Commerce Tr. Co.	--	--	175	4 $\frac{1}{2}$
d/406	33 miles west	10, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Fred Colliet	--	--	128	4 $\frac{1}{2}$
407	32 miles west	13, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	E. W. Wilson	--	--	11	48
408	31 $\frac{1}{2}$ miles west	do.	do.	do.	--	-- Spring		--
409	do.	do.	do.	do.	--	-- Spring		--
410	8 miles northwest	36, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. K 8	Federal Land Bank	--	Old	74	6
411	31 $\frac{1}{2}$ miles west	13, NE $\frac{1}{4}$ NW $\frac{1}{4}$	T.3 N., R.1 E.	E. W. Wilson	--	-- Spring		--
d/412	do.	13, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	--	22	--
d/413	35 miles west	32, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. C. Garrett	--	1938	100	5
415	37 miles west	6, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.2 N., R.1 E.	J. H. Moody	--	--	224	4 $\frac{1}{2}$
416	do.	--	--	--	--	Old	211	--
417	36 miles west	19, SE $\frac{1}{4}$ NE $\frac{1}{4}$	T.2 N., R.1 E.	S. B. Walker Est.	--	Old	113	--
418	30 $\frac{1}{2}$ miles west	19, cen.	T.2 N., R.2 E.	do.	--	Old	17	72
419	29 $\frac{1}{2}$ miles west	17, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	F. F. Ferry	--	--	128	4 $\frac{1}{2}$
420	do.	8, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. N. Brown	--	1938	45	18
421	do.	do.	do.	do.	--	1938	60	--
d/422	do.	do.	do.	do.	--	1928	56	4 $\frac{1}{2}$
423	28 miles west	9, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	G. & R. Terry	--	Old	124	4 $\frac{1}{2}$
424	27 $\frac{1}{2}$ miles west	27, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T.3 N., R.2 E.	D. Walker	--	Old	71	--

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
385	0.1	74.7	July 15, 1938	C,W	S,I	Irrigates small garden.
386	--	Flows	Nov. 12, 1937	None	S	Estimated yield, 15 gallons a minute from seeps in sand.
387	1	41.2	July 15, 1938	C,W	S	Steel casing.
388	2	116.1	do.	C,W	D,S	Reported seldom used. Estimated yield, 3 gallons a minute.
401	1	53.8	July 8, 1938	None	N	Reported weak supply.
402	--	16.5	e/	C,W	D,S	Dug well. Estimated yield, $\frac{1}{4}$ gallon a minute.
403	3.7	42.5	Apr. 1, 1937	C,W	D,S	Iron casing. Reported strong supply.
404	1.5	175.9	July 13, 1938	C,W	D,S	Iron casing.
405	--	--	--	C,W	N	Steel casing. Reported weak supply.
406	0.5	121.1	July 8, 1938	C,W	D,S,I	Steel casing. Estimated yield, $1\frac{1}{2}$ gallons a minute.
407	1	7.6	July 9, 1938	C,W	N	Dug well. Wood curb. Dug to base of "Red Beds".
408	--	Flows	do.	None	S	Reported three springs in vicinity supply 400 head of cattle. Dry when visited, July
409	--	Flows	do.	None	S	Nearly dry when visited, July 1938. 1938. Site of Indian camp.
410	0.3	61.1	Sept. 17, 1937	None	N	Located 0.15 mile southeast and about 10 feet above water level of lake.
411	--	Flows	July 9, 1938	None	S	Water seeps from base of "Red Beds" about 50 feet below cap rock.
412	0	19.9	do.	C,H	D	Estimated yield, 3 gallons a minute.
413	--	--	--	C,W	D,S,I	Reported weak supply. Irrigates small garden.
415	1.2	221.2	July 13, 1938	C,W	N	Steel casing.
416	0.9	209.1	do.	C,W	N	Located in State of New Mexico, 40 feet west of SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T.2 N., R.1 E.
417	0	103.1	do.	C,W	D,S	Steel casing. Originally Capitol Lands Syndicate well.
418	0	12.9	do.	C,W	S	Dug well. Estimated yield, 7 gallons a minute.
419	--	--	--	None	N	Iron casing. Dry when visited, April 1937.
420	0	42.9	July 9, 1938	None	N	Reported weak supply.
421	--	--	--	None	N	Caved in. Reported several wells drilled on section; all had weak supply.
422	2.5	51.4	July 9, 1938	C,W	D,S	Steel casing. Estimated yield, $\frac{1}{2}$ gallon a minute.
423	1	117.9	do.	None	N	Steel casing.
424	3.5	60.6	July 13, 1938	C,W	N	Do.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
425	29 miles west	21, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.3 N., R.2 E.	--	--	Old	115	4 $\frac{1}{2}$
426	31 miles west	18, cen. NW $\frac{1}{4}$	do.	C. L. Syndicate	Uscan Oil Co.	1938	3,735	20
427	26 miles west	25, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.2 E.	A. B. Edwards, Jr.	--	--	--	4 $\frac{1}{2}$
d/428	25 miles west	19, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.3 E.	Kansas City Life Ins. Co.	--	--	300+	4 $\frac{1}{2}$
d/429	21 $\frac{1}{2}$ miles west	13, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Stockmen's Cattle Loan Co.	--	Old	300+	--
430	4 $\frac{1}{2}$ miles southwest	153, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. M 7	--	--	--	65	5
431	do.	152, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Mrs. Lucille Schulz	--	--	77	4
432	3 $\frac{1}{2}$ miles southwest	152, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	L. J. Kuper	--	--	85	5
433	6 $\frac{1}{2}$ miles southwest	158, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	W. J. McMinn	--	Old	119	4 $\frac{1}{2}$
434	21 miles west	26, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.3 E.	B. R. Jennings	--	--	236+	--
435	22 miles west	35, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	T. E. Seigler	--	Old	--	--
436	do.	34, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	--	--	155	4 $\frac{1}{2}$
d/437	23 $\frac{1}{2}$ miles west	5, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.3 N., R.3 E.	C. R. Smith	--	Old	272	4 $\frac{1}{2}$
438	do.	9, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. C. Davis	--	Old	--	4 $\frac{1}{2}$
d/439	20 miles west	13, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. W. Medley	--	Old	--	4 $\frac{1}{2}$
440	23 miles west	28, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	C. L. Syndicate	--	--	141	5
441	24 miles west	32, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	R. J. Coleman	--	--	159+	6
442	23 miles west	33, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	--	--	--	67	6
d/444	20 $\frac{1}{2}$ miles west	2, NE $\frac{1}{4}$ NW $\frac{1}{4}$	T.2 N., R.3 E.	F. A. Robbins	--	--	108	4 $\frac{1}{2}$
445	23 $\frac{1}{2}$ miles west	5, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. L. Smith	--	1932	175	--
446	24 miles west	5, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	1932	165	--
d/447	do.	8, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	--	1932	260	4 $\frac{1}{2}$
448	do.	do.	do.	do.	--	1932	175	--
449	do.	17, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	R. Smith	--	--	175	4 $\frac{1}{2}$
450	23 miles west	17, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. L. Pearson	--	--	164	4 $\frac{1}{2}$
451	24 miles west	19, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. L. Syndicate	--	--	--	4 $\frac{1}{2}$
452	do.	20, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. N. Messenger	R. H. Kinsley	1925	160	4 $\frac{1}{2}$

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
425	--	--	--	None	N	Reported weak supply.
426	--	--	--	None	N	Oil test. See log.
427	--	--	--	None	N	Steel casing. Obstructed at 23 feet.
428	1	289.8	July 8, 1938	C,W	D	Estimated yield, 2 gallons a minute.
429	--	300+	e/	C,W	S	Estimated yield, 5 gallons a minute.
430	0.9	52.5	Sept. 16, 1937	C,W	S	Steel casing. Located 750 feet south of lake.
431	2.9	69.9	Mar. 26, 1937	None	N	Located 0.45 mile south of lake and 0.6 mile northeast of lake.
432	1.5	74.1	June 23, 1938	C,W	D,S	Steel casing. Located 0.25 mile northeast of lake.
433	1	110.9	Aug. 19, 1937	None	N	Located at burned house.
434	--	236	e/	None	N	Reported abandoned because of casing trouble.
435	--	--	--	C,W	N	
436	--	--	--	None	N	Dry when visited, April 1937.
437	2.5	255.5	July 8, 1938	C,W	D,S	Estimated yield, 4 gallons a minute.
438	--	--	--	C,W	N	Obstructed at 11 feet.
439	--	--	--	C,W	D,S	Estimated yield, 5 gallons a minute.
440	0.6	129.4	Sept. 16, 1937	C,W	N	Steel casing.
441	0	149.4	Apr. 2, 1937	C,W	D,S	No casing.
442	0	61.7	Mar. 31, 1937	None	N	Galvanized casing.
444	0.2	97.4	July 9, 1938	C,W	D,S	Estimated yield, 4 gallons a minute.
445	--	--	--	None	N	Drilled as test well. Dry hole
446	--	--	--	None	N	Do.
447	1.8	153.3	July 9, 1938	C,W	S	Reported yield, 15 barrels a day.
448	--	--	--	None	N	Drilled as test well. Dry hole.
449	--	--	--	C,W	D,S	Reported yield, 2 barrels a day.
450	1.3	143.5	July 9, 1937	C,W	N	Steel casing.
451	--	--	--	None	N	Obstructed at 10 feet.
452	1.2	146.1	Apr. 2, 1937	C,W	D,S,I	Iron casing. Irrigates small garden.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
453	13 miles west	15, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. B	J. H. Jernigan	--	Old	139	4
454	11 $\frac{1}{2}$ miles southwest	13, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	L. E. McMinn	--	Old	138	4
455	9 $\frac{1}{2}$ miles west	15, SE $\frac{1}{4}$ SE $\frac{1}{4}$	Gray sur.	R. M. Gunn	--	--	100	4 $\frac{1}{2}$
456	15 miles west	10, NW $\frac{1}{4}$ NE $\frac{1}{4}$	T.2 N., R.4 E.	R. R. Jackson	--	--	162	5
457	do.	SE $\frac{1}{4}$ SW $\frac{1}{4}$	Hicks sur.	Mrs. A. B. Best	--	Old	67	5
458	13 miles west	SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. F. Ponder	--	Old	55	4
459	12 $\frac{1}{2}$ miles west	cen. N $\frac{1}{2}$	do.	do.	--	1937	200	16
d/460	19 miles west	18, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.3 N., R.4 E.	T. E. Seigler	--	Old	--	--
461	19 $\frac{1}{2}$ miles west	30, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 N., R.4 E	B. R. Jennings	--	Old	275	4 $\frac{1}{2}$
d/462	14 miles northwest	SE $\frac{1}{4}$ SE $\frac{1}{4}$	Donald sur.	Walcott Public School	--	--	--	5 $\frac{1}{2}$
463	16 $\frac{1}{2}$ miles northwest	NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. A. Fox	--	Old	102	5
464	12 miles northwest	41, NW $\frac{1}{4}$ NE $\frac{1}{4}$	blk. K 8	Federal Life Ins. Co.	--	--	--	4 $\frac{1}{2}$
465	10 miles northwest	39, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	E. V. & J. K. Williams	--	Old	--	4 $\frac{1}{2}$
466	12 miles northwest	42, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Nussbaum Bros.	--	1938	250	--
467	11 $\frac{1}{2}$ miles northwest	59, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. L. Nunn	--	Old	179	4 $\frac{1}{2}$
468	12 $\frac{1}{2}$ miles northwest	62, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	M. L. Oliver	--	Old	198	4 $\frac{1}{2}$
469	do.	SE $\frac{1}{4}$ SE $\frac{1}{4}$	Donald sur.	G. T. Oliver	--	Old	--	4 $\frac{1}{2}$
470	11 $\frac{1}{2}$ miles northwest	63, SE $\frac{1}{4}$ SE $\frac{1}{4}$	blk. K 8	do.	--	--	115	4 $\frac{1}{2}$
d/471	10 $\frac{1}{2}$ miles northwest	38, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. V. Williams	--	Old	--	--
472	8 $\frac{1}{2}$ miles northwest	23, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. H. Patton	--	Old	109	--
d/473	8 miles northwest	25, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. F. Johnson	-- Muncy	1938	190	14
474	do.	36, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Federal Land Bank	--	Old	88	--
475	7 $\frac{1}{2}$ miles northwest	25, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	G. F. Johnson	-- Muncy	1938	195	14
476	5 $\frac{1}{2}$ miles northwest	6, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	G. F. Legrand	Jim Mauk	1934	175	12 $\frac{1}{2}$
477	6 $\frac{1}{2}$ miles northwest	15, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. W. Hill	do.	1937	345	20

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
453	1.8	129.5	July 16, 1937	C,W	N	Steel casing.
454	1.5	122.3	do.	C,W	N	Do.
455	0.8	74.8	Aug. 26, 1937	None	N	Do.
456	1	134.8	Sept. 16, 1937	None	N	Do.
457	0	61.2	do.	None	N	Located in A. B. Best tract.
458	--	--	--	None	N	Obstructed at 55 feet. Located in S. C. Estes tract.
459	1	107.2	July 16, 1938	T,G, 55	I	Reported yield, 1,200 gallons a minute. 200 feet of 16-inch perforated casing. Three-stage pump set at 150 feet; 35 feet of suction pipe.
460	--	--	--	C,W	S	Estimated yield, 4 gallons a minute.
461	--	250	e/	None	N	Obstructed at 77 feet.
462	--	--	--	C,W	D,S,P	Steel casing. Located in W. P. Borton tract.
463	3	69.5	July 7, 1938	None	N	Steel casing. Located in J. A. Fox tract. Water level measured in column pipe.
464	--	--	--	C,W	D,S	Obstructed at 27 feet.
465	--	--	--	None	N	Obstructed at 38 feet.
466	--	160	e/	T,G, 50	I	Reported yield, 750 to 800 gallons a minute. Pump set at 200 feet; 40 feet of suction pipe.
467	1	178	July 5, 1938	C,W	S	Steel casing. Water at 166 to 250 feet. Reported weak supply. Fills with sand.
468	0.1	195	do.	None	N	Steel casing.
469	--	--	--	None	N	Filled to surface with sand. Located in W. C. Slagle tract.
470	1.4	112.7	July 7, 1938	None	N	Steel casing.
471	--	--	--	C,W	S	Estimated yield, 2 gallons a minute.
472	0.2	98.4	July 5, 1938	C,W	S	No casing. Estimated yield, 5 gallons a minute.
473	--	90	e/	T,G, 45	I	Estimated yield, 900 gallons a minute. 155 feet of 14-inch perforated and 40 feet of 12-inch perforated casing. Pump set at 120 feet;
474	0.1	60.6	July 13, 1938	None	N	Located near lake. 30 feet of suction pipe.
475	--	90	e/	T,G, 45	I	Reported yield, 900 gallons a minute. Water at 90 feet.
476	2	78.4	Oct. 30, 1937	T,G, --	I	Irrigated 1,311 acres in 1937. 175 feet of 12½-inch perforated casing. Reported 26 feet drawdown after pumping 790 gallons a minute for 5 hours. Pump set at 120 feet.
477	--	83	e/	T,G, 110	I	Steel casing. Reported fine-grained red sand, 0 to 345 feet; "Red Beds" at 345 feet.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
d/478	8 miles northwest	35, SW $\frac{1}{4}$ NW $\frac{1}{4}$	blk. K 8	Price & David	Fish & Campbell	1938	255	16
479	11 miles west	66, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	--	--	Old	74	--
480	do.	74, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	O. C. Gibson	--	1926	88	5
481	10 miles west	54, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. L. Fuqua	--	1938	42	--
d/482	8 miles northwest	34, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Price & David	Fish & Campbell	1938	265	16
483	7 miles northwest	27, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	do.	1938	313	16
484	4 $\frac{3}{4}$ miles west	8, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Fred Inman	Jim Mauk	1936	140	16
486	7 miles west	28, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	M. L. Parker	D. L. McDonald	--	--	--
487	7 $\frac{1}{2}$ miles west	33, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	E. L. Pool	--	--	--	--
488	8 miles west	48, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	P. S. Mathews	--	--	--	--
d/489	8 $\frac{1}{2}$ miles north	48, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	--	1938	176	13
d/490	do.	53, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	A. C. Pierce	--	--	110	5
d/491	10 $\frac{1}{2}$ miles west	72, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	M. W. Stephens	--	1905	73	--
d/492	8 $\frac{1}{2}$ miles west	52, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	R. M. Gunn	Jones & Evans	1937	200	16
493	7 $\frac{1}{2}$ miles west	49, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. P. Slaton	--	1923	86	6
494	do.	32, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	O. G. Hill	--	--	--	--
495	8 $\frac{1}{2}$ miles west	12, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	D. B. Tyler	--	1938	--	--
496	4 $\frac{1}{2}$ miles west	12, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. B. Joiner	Bishop & Whitman	1937	175	16
497	3 $\frac{3}{4}$ miles west	10, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	M. C. Hoffman	--	1938	--	--
498	4 miles west	10, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Mrs. M. C. Hoffman	--	--	85	6
499	5 miles west	11, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	L. Veozy	--	--	--	--
500	7 $\frac{1}{2}$ miles west	31, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	A. J. Earp	Bishop & Whitman	1937	150	14
501	8 miles west	50, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	D. H. Allmon	--	1937	196	16
502	8 $\frac{1}{2}$ miles west	50, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	M. S. Tannahill	Jones & Evans	1937	210	14
d/503	do.	51, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	West Way School	--	Old	--	--

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No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
478	--	90	e/	T,G, --	I	Estimated yield, 800 gallons a minute. 255 feet of 16-inch perforated casing.
479	1	63.3	July 7, 1938	None	N	No casing.
480	--	--	--	None	N	Obstructed at 88 feet.
481	--	--	--	C,W	N	Caved at 42 feet.
482	--	80	e/	T,G, --	I	Estimated yield, 800 gallons a minute. 265 feet of 16-inch perforated casing. Pump set
483	--	74	e/	T,G, --	I	Estimated yield, 1,000 gal- at 130 feet. lons a minute. 89 feet 16-inch and 225 feet of 16-inch perforated casing. Pump set at
484	4	68.8	Nov. 24, 1937	T,G, --	I	Irrigated 130 acres in 1937. 130 feet. Measured 27 feet drawdown after pumping 665 gallons a minute for 30 hours. f/Pump set at
486	--	80	e/	T,O, --	I	Reported yield, 1,000 90 feet. See log. gallons a minute.
487	--	--	--	T,G, 85	I	
488	0	72.3	July 14, 1938	None	N	Casing and pump removed.
489	--	--	--	T,G, 85	I	Estimated yield, 800 gallons a minute. 93 feet of 13-inch and 87 feet of 13-inch per-
490	--	90	e/	C,W	D,S	Measured yield, 3½ gal- forated casing. lons a minute.
491	0.6	59.1	July 7, 1938	C,W	D,S	Estimated yield, 2 gallons a minute.
492	2	93.2	Nov. 13, 1937	T,G, --	I	Estimated yield, 750 gallons a minute. Irrigated 150 acres in 1937.
493	--	--	--	C,W	D,S	Iron casing.
494	--	--	--	T,G, --	I	
495	--	--	--	T,G, --	I	
496	1.5	64.4	Nov. 1, 1937	T,G, 90	I	Irrigated 44 acres in 1937. 175 feet of steel casing, perforated below water level.
497	--	--	--	T,G, --	I	
498	--	72	e/	C,W	D,S	Measured yield, 2½ gallons a minute.
499	--	--	--	T,G, --	I	
500	1.5	71.2	Nov. 13, 1937	T,G, --	I	Well in fine-grained red sand.
501	1.3	83.2	do.	T,G, --	I	196 feet of perforated steel casing. Estimated 18 feet drawdown after pumping 750 to
502	1	94.3	do.	T,E, 40	I	126 800 gallons a minute for 24 hours. feet of 14-inch perforated casing at bottom. Pump set at 140 feet. Water in fine-grain-
503	--	94	e/	C,W	P	Water level estimated. ed red sand.

Records of wells and springs in Deaf Smith County--Continued

No.	Distance from Hereford	Section	Range, township or block	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)
504	10½ miles west	70, SW¼NW¼	blk. K 8	D. H. Buchanan	--	--	--	--
505	11½ miles west	71, SW¼NW¼	do.	P. Harrison	--	1938	--	--
506	9 miles west	5, NW¼NW¼	Gregg C. S. L.	Alton Fraser	--	--	94	4½
507	8 miles west	8, NE¼NW¼	do.	do.	--	Old	48	5
508	7½ miles west	9, NE¼NE¼	do.	G. T. Fraser	--	1937	170	--
509	5 miles southwest	153, SW¼NW¼	blk. M 7	Wylie Robertson	Reid Smith	1938	160	--
510	do.	152, SW¼NE¼	do.	Mrs. M. Woolridge	L. Ellis	1937	150	14
511	7 miles southwest	158, SE¼SW¼	do.	J. N. Thompson	--	Old	172	--
512	6 miles southwest	157, SW¼NW¼	do.	Ky. Lawrence	Jones & Evans	1937	185	15
513	7½ miles southwest	174, SW¼SW¼	do.	W. L. Parrott	--	Old	85	4½
514	8 miles southwest	173, SW¼SW¼	do.	B. A. Achley	Bishop & Whitaker	1937	178	15
515	9 miles southwest	7, SE¼SE¼	blk. B	C. L. Walser	Jones & Evans	1937	155	--
516	8 miles southwest	22, SW¼SW¼	Gregg C. S. L.	J. G. Evans	do.	1937	164	13½
517	8½ miles west	23, SW¼SW¼	do.	do.	do.	1937	194	15½
518	9 miles west	24, SW¼SE¼	do.	do.	do.	1937	182	13½
519	10 miles west	25, SW¼SW¼	do.	do.	do.	1937	148	15½

a/ Measuring point was usually top of casing, or top of pipe clamp.

b/ C, cylinder; W, windmill; T, turbine; Cf, centrifugal; G, gasoline; S, steam; Ng, natural gas; D, diesel; E, electric; H, hand; number indicates horsepower.

g/ Figures for acreage irrigated are based on information from owners of wells.

Joe W. Lang and C. R. Follett

No.	Height of measuring point above ground (ft.) a/	Water level		Pump and power b/	Use of water c/	Remarks g/
		Depth below measuring point (ft.)	Date of measurement			
504	--	--	--	T,G, 85	I	
505	---	---	---	T,G, 50	I	
506	0.4	74.5	Aug. 26, 1937	None	N	Located 0.55 mile east and 0.8 mile north of two large draws. Labor 5.
507	2	11.8	Sept. 16, 1937	None	N	Steel casing. Located in horse-shoe bend of creek. Labor 8.
508	0.5	75.7	do.	T,G, --	I	Irrigated 105 acres in 1937. Located 0.4 mile north of Tierra Blanca Creek. Labor 9.
509	--	--	--	T,E, 30	I	160 feet of perforated steel casing. Pump set at 120 feet.
510	1.2	78.3	Oct. 28, 1937	T,G, --	I	Irrigated 100 acres in 1937. Reported 11 feet drawdown after pumping 1,000 gallons a minute for 24 hours.
511	0.6	116.8	Sept. 16, 1937	T,E, 50	I	Pump set at 150 feet; 30 feet of suction pipe.
512	1.3	87.7	Nov. 23, 1937	--	I	105 feet of 15-inch plain and 80 feet of 15-inch perforated casing.
513	4.7	79.2	Nov. 1, 1937	None	N	Steel casing. Located 0.6 mile southwest of lake.
514	1.8	106.4	Sept. 16, 1937	T,G, --	I	Estimated yield, 800 gallons a minute. Irrigated 280 acres in 1937. 178 feet of perforated steel casing. Pump set at 140 feet. Struck water at 105 feet. Coarse-grained sand, 164 to 178 feet.
515	2.2	104.1	Oct. 29, 1937	None	N	No casing.
516	5.5	90.1	do.	T,G, 85	I	Irrigated 100 acres in 1937. 80 feet of 13½-inch plain and 84 feet of 13½-inch perforated steel casing. Reported 14 feet drawdown after pumping 900 gallons a minute for 20 hours.
517	5	91.2	do.	T,G, 85	I	Estimated yield, 800 gallons a minute. Irrigated about 60 acres in 1937. 80 feet of 15½-inch plain and 114 feet of 15½-inch perforated casing.
518	5	91.2	do.	T,G, 85	I	Estimated yield, 800 gallons a minute. Irrigated 125 acres in 1937. 82 feet of 13½-inch plain and 100 feet of 13½-inch perforated casing. Water in fine-grained red sand.
519	1.5	86.4	Aug. 26, 1937	--	I	Not developed when visited, Aug. 26, 1937.

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

d/ Water sample collected for analysis.

e/ Water level reported.

f/ Measured by engineers of Resettlement Administration.

Table of Drillers' Logs, Deaf Smith County, Texas

	Thickness (feet)	Depth (feet)
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Driller's log of well 1

Rock Island R. R., at Glenrio, 44 miles northwest of Hereford.

Red sand- - - -	15	15
Red sand and clay - - -	20	35
Hard red clay - - -	25	60
Hard red and gray rock -	5	65
Hard red clay- - -	40	105
Hard gray sand rock - -	32	137
Hard gray rock - - -	5	142
Hard red shale - - -	15	157
Gravel- - - -	21	178
Soft red shale - - -	15	193
Red and gray packed sand-	15	208
Red and gray shale - -	18	226
Gray sand, water- - -	38	264
Hard gray sand - - -	24	288
Shale and packed sand -	22	310
Hard packed sand- - -	32	342
TOTAL DEPTH- - - -		344

CASING RECORD: 286 feet of 12-inch casing; 274 feet of 6-inch wrought iron drop line; 34 feet of 12-inch strainer.

Driller's log of well 202

E. M. Haile tract, 8½ miles north of Hereford.

Surface soil - - -	4	4
Caliche- - - -	6	10
Yellow clay- - -	30	40
Light-yellow clay and gravel, water - - -	22	62
Honey-comb rock - - -	23	85
Soft sand- - - -	15	100
Packed sand - - -	15	115
Coarse-grained gray sand-	5	120
TOTAL DEPTH - - -		120

Driller's log of well 227

C. A. Wimberly tract, 11½ miles northeast of Hereford.

Surface soil- - -	4	4
Caliche- - - -	4	8
Packed sand - - -	79	87
Water sand - - -	30	117
Fine-grained red sand, water- - - -	3	120
Sandstone and honey-comb rock, water - - -	66	186
TOTAL DEPTH- - -		186

	Thickness (feet)	Depth (feet)
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Driller's log of well 242

Travis Dameron tract, 4½ miles north-east of Hereford.

Surface soil- - -	2	2
Pink clay - - -	13	15
White rock and caliche -	25	40
Light-red sand - - -	6	46
Reddish-colored sand and honey-combed rock - -	44	90
Clay and sandy materials-	5	95
Clay- - - -	10	105
Sandy clay and gravel, water - - - -	8	113
TOTAL DEPTH - - -		130

Driller's log of well 246

Henry Bromman tract, 5½ miles northeast of Hereford.

Sandy surface soil - -	3	3
Red sandy clay- - -	27	30
White rock and clay- -	15	45
Honey-combed rock - -	22	67
Water sand- - - -	14	81
Water sand and clay- -	22	103
Gravel and clay- - -	7	110
TOTAL DEPTH- - - -		140

Driller's log of well 265

Reineaur Bros. tract, 6 miles north of Hereford.

Surface soil - - -	6	6
Caliche- - - -	9	15
Light-colored yellow clay -	35	50
Light-colored clay and gravel- - - -	13	63
Chocolate-colored honey-combed rock - - -	17	80
Sand- - - -	20	100
Red packed sand - - -	50	150
Sand, clay and gravel -	50	200
Sand rock- - - -	5	205
Coarse-grained white sand	25	230
TOTAL DEPTH - - -		230

Driller's log of well 283

J. T. Gilbreath tract, 3 miles west of Hereford.

Surface soil - - -	6	6
Yellow and red clay- -	34	40
Reddish fine-grained packed sand- - - -	20	60

Table of Drillers' Logs, Deaf Smith County--Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 283--Continued</u>		
Red coarse-grained honey-comb sandstone, water-	20	80
Hardpan, sandy clay and yellow packed sand -	12	92
Honey-combed sandstone, water- - - -	9	101
Red sand and white rock-	19	120
Light-red honey combed sandstone- - -	5	125
Yellow hardpan and packed sand- - - -	10	135
Reddish-colored honey-combed sandstone, little water- - -	5	140
Soft reddish-colored sandstone- - -	10	150
Red sand and gravel- -	15	165
Reddish-colored clay and fine-grained sand- -	1	166
TOTAL DEPTH- - -		166

<u>Driller's log of well 284</u>		
Charles H. Keffer tract, 4 1/2 miles northwest of Hereford.		
Surface soil- - - -	8	8
Sandy clay - - - -	10	18
Rock- - - - -	16	34
Boulders and sandy clay-	23	57
Sand and clay - - -	4	61
Sand and gravel, water -	14	75
Sand and boulders- - -	19	94
Clay and rock- - - -	5	99
Sand and honey-combed sandstone- - - -	43	142
TOTAL DEPTH- - - -		142

<u>Driller's log of well 285</u>		
Mrs. J. M. Lewis farm, 5 miles north of Hereford.		
Clay- - - - -	43	43
Red sand- - - - -	42	85
White caliche - - -	20	105
Red quicksand - - -	25	130
TOTAL DEPTH- - - -		130

<u>Driller's log of well 298</u>		
J. W. Witherspoon tract, 1 1/2 miles north of Hereford.		
Surface soil- - - -	5	5
Caliche- - - - -	5	10
Yellow clay - - - -	25	35
Yellow clay and light-colored gravel- - -	25	60

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 298--Continued</u>		
Caliche - - - - -	5	65
Honey-combed sandstone-	75	140
TOTAL DEPTH - - - -		140

<u>Driller's log of well 302</u>		
J. L. Fuqua tract, 4 miles northeast of Hereford.		
Surface soil - - - -	2	2
Red sandy clay - - -	26	28
White rock- - - - -	2	30
Clay and rock- - - -	12	42
Honey-combed rock- - -	3	45
White honey-combed rock, water- - - - -	15	60
Sandy clay - - - - -	22	82
Red sand, water- - - -	15	97
Sandy clay- - - - -	12	109
Clay and gravel- - - -	11	120
TOTAL DEPTH- - - - -		120

<u>Driller's log of well 304</u>		
J. S. Callahan tract, 3 miles west of Hereford.		
Surface soil- - - - -	4	4
Cream-colored clay - -	14	18
White rock- - - - -	7	25
Soft reddish-colored sandy clay- - - - -	65	90
White caliche, water- -	10	100
Reddish-colored honey-combed sandstone - - -	20	120
Reddish-colored loose-packed sand- - - - -	30	150
TOTAL DEPTH - - - - -		170

<u>Driller's log of well 336</u>		
E. J. Boeskin tract, 3 3/4 miles southeast of Hereford.		
Surface soil - - - -	4	4
Sandy clay- - - - -	76	80
Coarse-grained sand - -	5	85
Honey-combed sandstone-	25	110
Quicksand- - - - -	20	130
Sand rock- - - - -	3	133
Loose-packed sand- - -	7	140
TOTAL DEPTH - - - - -		140

<u>Driller's log of well 426</u>		
C. L. Syndicate tract, 3 1/2 miles west of Hereford.		
Sandy shale, seep water-	30	30

Table of Drillers' Logs, Deaf Smith County--Continued

	Thickness (feet)	Depth (feet)
Driller's log of well 426--Continued		
Gumbo - - - -	55	85
Red beds - - - -	149	234
Green shale - - - -	2	236
Light-brown shale - - - -	62	298
Red beds - - - -	92	390
Green shale, water - - - -	10	400
Red beds - - - -	85	485
Brown shale - - - -	45	530
Lime shells - - - -	5	535
Red beds - - - -	5	540
Light-brown shale - - - -	35	575
Sand, salt water - - - -	33	608
Red beds - - - -	7	615
White slate - - - -	15	630
Lime shells - - - -	3	633
Brown shale - - - -	47	680
Red beds - - - -	5	685
Red and blue caving materials - - - -	30	715
Shells - - - -	4	719
Red beds- - - -	56	775
Dark-brown shale - - - -	30	805
Light-brown shale- - - -	73	878
Sand, hole full salt water - - - -	22	900
Light-colored shale - - - -	18	918
Brown shale - - - -	8	926
Sand, soft water - - - -	14	940
Coarse-grained sand - - - -	5	945
Sand - - - -	5	950
Soft-packed sand- - - -	54	1004
Green shale- - - -	9	1013

	Thickness (feet)	Depth (feet)
Driller's log of well 426--Continued		
Hard sand - - - -	5	1018
Red shale - - - -	6	1024
Hard sand - - - -	7	1031
Red shale - - - -	3	1034
Brown sand- - - -	19	1053
Soft sand - - - -	7	1060
Hard sand - - - -	3	1063
Red beds, caving - - - -	37	1100
Red shale and shells - - - -	55	1155
Blue sandy shale - - - -	10	1165
Hard lime- - - -	10	1175
Sandy shale - - - -	25	1200
Hard-packed sand - - - -	24	1224
Brown sand, shale and shells - - - -	47	1271
Hard lime - - - -	6	1277
Blue sticky shale - - - -	3	1280
Pink shale- - - -	15	1295
Red gumbo and bentonite Gypsum, bentonite and red rock- - - -	25	1320
Red shale and bentonite	35	1355
Hard-packed sand - - - -	23	1378
Soft-packed sand - - - -	14	1392
Sand- - - -	10	1402
Red sticky gumbo and bentonite - - - -	58	1460
Blue shale- - - -	10	1470
Hard sandy lime - - - -	2	1472
Dolomite- - - -	28	1500
Salt and gypsum- - - -	5	1505
TOTAL DEPTH- - - -	60	1565
		3735

Logs of test wells drilled by W. P. A. labor in Deaf Smith County, Texas
 Samples examined and classified by W. C. Christian,
 Project Superintendent

	Thickness (feet)	Depth (feet)
<u>Well 268</u>		
Upland flat, D. R. Gass farm, SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 64, blk. K3, 2 $\frac{1}{4}$ miles north of Hereford.		
Dark-colored surface soil-	3	3
Sandy caliche- - - -	4	7
Dark-brown sandy clay-	8	15
Light-brown sandy clay -	2	17
Fine-grained sand- - -	5	22
Dark-brown sandy clay and caliche- - - -	10	32
Sandy caliche- - - -	8	40
Mar. 16, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 294</u>		
Upland flat, W. C. Gunter farm, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 98, blk. K3, 3-3/4 miles west of Hereford.		
Surface soil - - - -	3	3
Sandy caliche- - - -	4	7
Brown sandy clay - - -	21	28
Sandy caliche and clay -	9	37
Mar. 17, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 352</u>		
Valley flat, H. H. Boardman tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 41, blk. K3, 2 miles east of Hereford.		
Surface soil - - - -	5	5
Light-colored sandy caliche- - - -	6	11
Brown sand- - - -	1	12

	Thickness (feet)	Depth (feet)
<u>Well 352--continued</u>		
Sand- - - - -	12	24
Struck water at 14 feet. Water level, 13.8 feet below top of ground, $\frac{1}{4}$ hour after hole completed. April 7, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 353</u>		
Valley flat, H. H. Boardman tract, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 41, blk. K3, 2 $\frac{1}{4}$ miles east of Hereford.		
Surface soil and caliche-	3	3
Caliche - - - - -	2	5
Gumbo- - - - -	1	6
Light-colored sand - -	8	14
Struck water at 6 feet. Water level, 5.8 feet below top of ground, $\frac{1}{4}$ hour after hole completed. April 7, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 485</u>		
Bed of dry lake, M. B. McLean tract, SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, blk. K8, 5 miles west of Hereford.		
Dark-colored surface soil-	2	2
Light-brown clay and caliche - - - - -	3	5
Dark-brown clay and caliche - - - - -	15	20
Light-colored stratified fine-grained sand - -	27	47
Struck water at 21 feet. Water level, 19.4 feet below top of ground, 340 hours after hole completed. Mar. 22, 1937.		

Partial analyses of water from wells in Deaf Smith County, Texas

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)	Fluoride (F)
1	Rock Island R.R.	344	Mar. 31, 1938	879	61	48	199	476	208	128	b/	349	0.8
5	Landergin Bros. Co.	31	June 7, 1938	739	20	17	252	586	89	52	b/	120	3.3
9	do.	35	do.	975	32	14	327	634	193	83	b/	139	-
11	do.	53	do.	-	-	-	-	-	456	130	32	-	-
13	do.	-	do.	558	30	14	173	482	64	26	b/	134	-
14	do.	7	do.	-	-	-	-	-	20	2	b/	-	-
15	do.	20	do.	404	88	14	35	275	32	26	74	279	0.7
17	L. T. Davis	199	June 13, 1938	183	42	20	5	220	a/	3	b/	178	0.2
21	J. G. Fortenberry	264	June 2, 1938	371	22	16	102	317	53	18	b/	120	1.4
30	W. F. Fisher	265	June 15, 1938	232	36	27	17	256	20	4	b/	202	0.7
35	J. P. Collier	310	June 2, 1938	316	23	26	64	281	44	14	b/	166	2.4
36	E. Kinsey	280	July 12, 1938	323	39	17	59	207	66	30	b/	165	1.9
39	M. & G. A. Hare	300	June 14, 1938	305	35	28	39	232	61	20	b/	202	-
41	H. Powell	300	do.	257	20	17	59	256	24	7	b/	120	-
42	O. H. Loyd	209	June 15, 1938	290	32	14	61	232	40	19	b/	139	2.3
43	J. Schwartz	-	July 12, 1938	291	-	-	-	293	21	14	b/	-	-
45	R. E. Wagoner	152	July 5, 1938	273	60	19	18	250	29	15	b/	227	1.6
47	First State Bank of Vega	-	July 12, 1938	294	42	32	24	256	37	21	b/	235	-
48	B. Calwell	255	June 14, 1938	332	49	27	34	232	73	20	b/	231	-
52	Texas Loan & Mortgage Co.	-	July 12, 1938	236	-	-	-	220	12	9	b/	-	-
57	J. N. Hodges	-	do.	259	-	-	-	268	14	12	b/	-	-
58	W. N. Hodges	272	Sept. 15, 1937	317	46	24	42	293	29	17	b/	215	-
66	M. E. Ranson, et al	-	July 12, 1938	302	-	-	-	281	16	18	b/	-	-
67	S. F. Williams	170	do.	258	-	-	-	256	12	10	b/	-	-
68	do.	246	do.	256	48	29	14	281	a/	16	b/	238	2.4
70	-	365	do.	266	31	24	41	256	25	16	b/	175	2.6

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)	Fluoride (F)
73	W. J. Williams	270	July 7, 1938	256	34	19	42	244	22	17	b/	162	2.0
75	do.	270	do.	266	-	-	-	238	30	18	b/	-	-
78	W. F. Hammons	270	June 2, 1938	281	32	19	5	262	32	14	b/	157	-
80	G. A. Welch	300	June 7, 1938	255	30	12	55	244	28	8	b/	122	0.8
85	C. L. Syndicate	240	July 8, 1938	268	26	14	61	256	22	13	b/	124	-
88	Landergin Bros. Co.	300	June 7, 1938	260	34	24	31	226	28	21	b/	185	-
101	I. Rasco	150	June 3, 1938	306	36	38	26	293	32	14	b/	249	1.5
104	Ford Public School	165	Dec. 3, 1937	301	42	41	13	281	39	18	b/	276	-
106	Kansas City Life Ins. Co.	136	June 21, 1938	325	54	37	19	329	32	13	b/	288	-
111	J. J. Currie	128	do.	290	45	34	19	293	32	10	b/	251	-
115	H. E. Floyd	170	do.	284	49	27	23	281	36	8	b/	231	-
117	C. L. Garrison	159	June 3, 1938	247	26	37	18	262	28	9	b/	218	-
119	L. C. Moore	-	do.	307	-	-	-	268	28	21	b/	-	-
120	G. L. Muse	-	do.	316	-	-	-	305	32	10	b/	-	-
124	do.	40	July 6, 1938	267	62	27	2	256	12	18	b/	267	3.8
125	R. L. Campbell	-	June 3, 1938	277	70	22	5	293	10	4	22	263	0.8
126	do.	-	do.	297	-	-	-	281	32	14	b/	-	-
132	W. Forwell	-	July 6, 1938	365	-	-	-	317	40	18	b/	-	-
133	First National Bank of Hereford	120	do.	302	52	27	25	238	28	40	b/	242	2.4
135	J. T. Hill	-	June 3, 1938	318	-	-	-	317	32	8	b/	-	-
138	B. C. Aylor	-	July 5, 1938	457	-	-	-	226	85	97	b/	-	-
139	J. F. Morris	130	July 6, 1938	265	60	29	-	262	28	10	b/	268	-
140	Byron Gist	270	Oct. 31, 1937	313	50	23	34	244	54	20	b/	219	-
143	B. C. Aylor	137	July 5, 1938	260	42	35	8	268	28	15	b/	252	-
146	Ward Public School	145	Nov. 26, 1937	264	57	13	25	250	25	15	b/	198	-
155	J. L. Woodford	160	Dec. 28, 1937	308	39	44	19	329	36	8	b/	277	-
156	H. G. Conkwright	-	July 6, 1938	308	-	-	-	275	40	17	b/	-	-
157	J. F. Hickman	-	do.	247	-	-	-	268	12	6	b/	-	-
167	Daniels Public School	110	Dec. 4, 1937	229	42	34	-	250	20	10	b/	246	-
168	Mrs. J. F. Matthews	167	Nov. 26, 1937	311	58	41	3	329	36	11	b/	316	-
201	Hood & Williams	212	Dec. 11, 1937	291	34	23	49	287	29	15	b/	179	-

a/ Sulphate less than 10 parts per million.

b/ Nitrate Less than 20 parts per million.

Partial analyses of water from wells in Deaf Smith County--Continued

Results are in parts per million.

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)	Fluoride (F)
211	Lester Galley	174	Nov. 12, 1937	349	71	44	-	336	50	16	b/	357	-
217	W. E. Neal	120	Sept. 17, 1937	349	49	44	20	311	68	15	b/	302	-
220	C. T. Wimberly	180	Aug. 27, 1937	349	50	40	26	329	61	10	b/	290	-
221	Dawn Public School	95	Dec. 4, 1937	340	58	46	5	244	43	65	b/	334	-
222	Santa Fe R. R.	100	Mar. 12, 1937	340	-	-	-	293	58	11	b/	-	-
262	Progressive School	65	Dec. 4, 1937	302	44	46	7	305	32	22	b/	299	-
263	D. Wallace	110	Aug. 27, 1937	305	41	44	17	281	54	18	b/	282	-
325	City of Hereford	200	Dec. 11, 1937	526	59	60	46	329	168	28	b/	392	-
337	Rieneaur Bros.	175	Oct. 27, 1937	248	47	29	7	250	32	10	b/	238	-
339	George Robertson	150	Dec. 11, 1937	332	71	27	21	342	32	13	b/	287	-
349	J. W. Alexander	120	do.	292	56	32	12	299	32	13	b/	270	-
373	Wyche School	85	do.	282	71	19	12	299	15	13	b/	257	-
384	E. F. Smith	-	July 15, 1938	290	-	-	-	232	28	24	b/	-	-
388	H. A. Halbert	193	do.	291	24	14	71	244	40	22	b/	119	-
402	O. V. Ellison	165	July 8, 1938	291	38	23	43	250	28	30	b/	189	-
406	Fred Colliet	128	do.	613	78	36	92	177	129	181	b/	342	-
412	E. W. Wilson	22	July 9, 1938	978	87	39	216	458	230	138	41	379	2.2
413	J. C. Garrett	100	do.	223	35	24	21	256	12	5	b/	185	-
422	J. N. Brown	56	do.	601	63	38	106	305	133	104	b/	313	1.5
428	Kansas City Life Ins. Co.	300	July 8, 1938	285	28	19	59	256	28	25	b/	147	-
429	Stockmen's Cattle Loan Co.	300	July 7, 1938	252	48	12	37	256	20	8	b/	167	1.2
437	C. R. Smith	272	July 8, 1938	282	25	17	64	244	28	28	b/	130	-
439	G. W. Medley	-	July 7, 1938	275	-	-	-	256	28	10	b/	-	-
444	F. A. Robbins	108	July 9, 1938	220	43	26	8	262	a/	6	b/	216	1.6
447	J. L. Smith	260	do.	5,843	184	120	1,818	104	960	2,710	b/	954	0.6
460	T. E. Seigler	-	July 7, 1938	334	-	-	-	256	48	31	b/	-	-
462	Walcott Public School	-	do.	237	34	20	32	250	20	8	b/	167	-
471	C. V. Williams	-	July 5, 1938	304	-	-	-	256	32	21	b/	-	-
473	G. F. Johnson	190	July 13, 1938	287	32	14	62	256	32	21	b/	139	-
478	Price & David	255	do.	260	40	19	35	244	32	14	b/	177	-
482	do.	265	do.	304	44	27	38	299	36	9	b/	222	2.8

a/ Sulphate less than 10 parts per million.

b/ Nitrate less than 20 parts per million.

Partial analyses of water from wells in Deaf Smith County--Continued

Results are in parts per million.

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na / K) (calc.)	Bicarbonate (HCO ₃)	Sulphate (SO ₄)	Chloride (Cl)	Nitrate (NO ₃)	Total hardness as CaCO ₃ (calc.)	Fluoride (F)
489	P. S. Mathews	176	July 14, 1938	264	38	42	8	317	14	4	b/	268	2.2
490	A. C. Pierce	110	Apr. 6, 1937	-	-	-	-	-	69	62	b/	-	-
491	M. W. Stephens	73	July 7, 1938	336	49	45	24	390	12	9	b/	308	5.4
492	R. M. Gunn	200	Nov. 13, 1937	285	46	39	11	323	25	5	b/	274	-
503	West Way School	-	Dec. 3, 1937	310	46	40	16	281	47	20	b/	280	-

a/ Sulphate less than 10 parts per million.

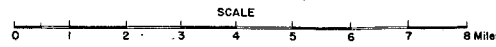
b/ Nitrate less than 20 parts per million.

- 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
- ◻ TEST WELL DRILLED BY W.P.A. LABOR
- SPRING
- ESCARPMENT
- SINK
- IMPROVED ROAD
- - - UNIMPROVED ROAD



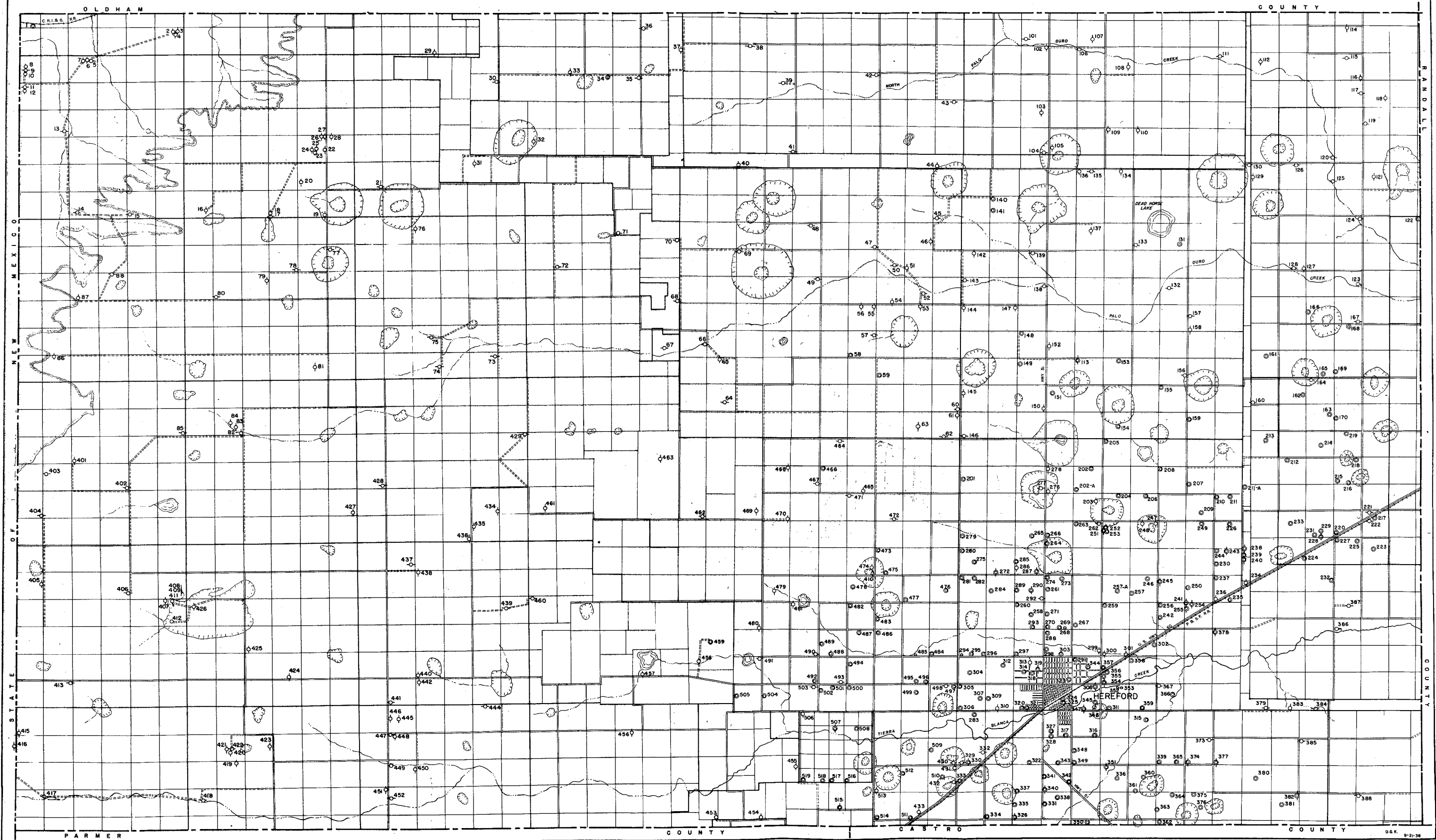
MAP OF DEAF SMITH COUNTY, TEXAS SHOWING LOCATIONS OF WATER WELLS LISTED



FIELD WORK BY
JOE W. LANG - C.R.FOLLETT

BASE COMPILED FROM
LAND OWNERSHIP MAP
AND FIELD NOTES

GEOLOGICAL SURVEY
U.S. DEPARTMENT OF THE INTERIOR
COOPERATING WITH
TEXAS BOARD OF WATER ENGINEERS
AND
WORKS PROGRESS ADMINISTRATION



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