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PARMER COUNTY, TEXAS

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

* * *

WORKS PROGRESS ADMINISTRATION

GROUND-WATER SURVEY

PROJECT 6426

C. R. Follett and E. L. Bradshaw,
Project Superintendents

* * *

Analyses made, data assembled,
and report mimeographed by

WORKS PROGRESS ADMINISTRATION
PROJECT 6507-5112

* * *

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

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Austin, Texas
Apr. 25, 1938

PARMER COUNTY,

* * *

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

The purpose of this survey was to obtain information concerning existing wells and the quantity and quality of water they yield, and to put down test holes where additional information was needed.

This project was part of a statewide Works Progress Administration project known as a "Statewide Inventory of Water Wells," sponsored by the State Board of Water Engineers. The Division of Ground Water of the Geological Survey, United States Department of the Interior, cooperated in the technical direction of the project and the Bureau of Industrial Chemistry of The University of Texas furnished laboratory space and equipment and supervised the chemical analyses.

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

The field work in Parmer County was started on September 13, 1937. This work was done as Project 6426 of Administrative Field Office 16 of the Works Progress Administration, Amarillo, Texas. For a short time at the start of the project, L. C. Smyers, a geologist, was project superintendent. On October 2, Mr. Smyers left the project to accept other employment, and E. L. Bradshaw, an engineer, was appointed project superintendent. When Mr. Bradshaw resigned on December 15, he was succeeded by C. R. Follett, an engineer, who completed the project on February 16, 1938. All three of these men should be given credit for their interest in the work and for the extra time they spent on the project. The Amarillo office of the Works Progress Administration made this work possible by their constant help and cooperation. The Parmer County Commissioners' Court cooperated by furnishing transportation for the workers during the project.

This release contains the well records and well logs obtained by the project superintendents, logs of the test holes drilled by the W.P.A. labor, the chemical analyses of water from privately-owned wells, and cross sections compiled from W.P.A. test wells in dry lakes, sinks, creeks, or draws. Locations of all wells listed are shown on the map in the back of the release.

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

Records of wells in Parmer 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 Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-ple-ted	Depth of well (ft.)	Diam-eter of well (in.)
d/ 1	16 miles northwest	32, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T.2 N., R.1 E.	R. H. Schueler	--	Old	137	5
2	15 miles north	34, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	T. Brown	--	Old	201	4
3	14 $\frac{1}{2}$ miles north	33, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.2 N., R.2 E.	G. W. Taylor	R. Kinsley	1910	187	4
4	15 $\frac{1}{2}$ miles north	32, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.2 N., R.3 E.	Ivan Thompson	--	1912	253	5
5	18 miles northeast	31, SW $\frac{1}{4}$ NW $\frac{1}{4}$	T.2 N., R.4 E	J. F. Miller	--	—	196	4
6	17 $\frac{1}{2}$ miles northeast	4, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.1 N., R.4 E	—	—	—	221	4
7	18 miles northeast	10, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Farwell Bros.	--	1926	177	4 $\frac{1}{2}$
d/ 8	19 $\frac{1}{2}$ miles northeast	2, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	—	—	—	172	4
d/ 9	22 miles northeast	5, SE $\frac{1}{4}$ SW $\frac{1}{4}$	Gregg C.S.L., blk. 2	J. E. Kehljehr	--	—	145	4 $\frac{1}{2}$
d/ 10	23 $\frac{1}{2}$ miles northeast	17, NW $\frac{1}{4}$ SW $\frac{1}{4}$	Harrah sur.	Carl Fry	-- McDade	1937	170	12
d/ 11	21 $\frac{1}{2}$ miles northeast	8, SE $\frac{1}{4}$ NW $\frac{1}{4}$	Davis sur.	T. J. Hawks	-- Hays	1937	160	14
d/ 12	21 miles northeast	7, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	R. E. Thomas	--	—	124	4 $\frac{1}{2}$
d/ 13	20 miles northeast	SE $\frac{1}{4}$ SE $\frac{1}{4}$	English & Black sur.	English & Black	--	—	152	—
14	do.	17, SW $\frac{1}{4}$ SW $\frac{1}{4}$	Davis sur.	Black School	--	—	151	4
d/ 15	do.	20, NW $\frac{1}{4}$ SW $\frac{1}{4}$	T.1 N., R.5 E.	A. C. Hays	--	1910	165	9
d/ 16	do.	20, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	A. C. & C. Hays	--	1910	200	—
d/ 17	do.	do.	do.	do.	--	1910	220	—
d/ 18	19 miles northeast	SE $\frac{1}{4}$ SW $\frac{1}{4}$	English & Black sur.	Santa Fe R.R.	S. S. Thomas	1908	170	8- 5/3
19	do.	do.	do.	do.	D. T. Craig	1910	220	10
d/ 20	21 miles northeast	7, SW $\frac{1}{4}$ SW $\frac{1}{4}$	Harrah sur.	J. W. Cobb	Ware & Haney	1937	185	12
21	20 $\frac{1}{2}$ miles northeast	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	Roberts sur.	J. W. Hauch	--	—	131	—
22	19 miles east	21, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.4 $\frac{1}{2}$ S.	Lakeview School	Chas. Adams	1927	240	—
* 23	do.	1, NW $\frac{1}{4}$ NW $\frac{1}{4}$	Sullivan sur., blk. R	T. Manderscheid	Bob Hicks	1929	248	3 $\frac{1}{2}$

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

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

Records obtained by C. R. Follett and E. L. Bradshaw, Project Superintendents
 (Chemical analyses of water from these wells are in the table of analyses.)

No.	Height of measuring point above ground (ft.)	Water Level below measuring point (ft.) ^{e/}	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
1	1	134.3	Jan. 6, 1938	None	N	Flat	Reported well sanded up. Water level taken inside column pipe.
2	2	195	do.	C,W	D,S	Gentle slope	Reported yield, 4 gallons a minute. Never fails.
3	--	172	e/	C,W	D,S	Hill-side	Iron casing. Water reported in sand and gravel.
4	0.8	243.3	Oct. 25, 1937	C,W	D,S	Flat	200 feet of wrought iron casing.
5	--	181	e/	C,W	D,S	Slope	190 feet of wrought iron casing; 3-inch tubing. Reported pumps sand in
6	1	174.6	Oct. 25, 1937	C,W	S	Flat	Iron casing; 2-inch <u>high winds.</u> tubing.
7	0.5	159.8	Jan. 12, 1938	C,W	D,S	Gentle slope	Steel casing. Reported yield, 3 gallons a minute.
8	1.7	161.4	Oct. 25, 1937	C,W	--	Flat	Iron casing; 2-inch tubing.
9	3	142	Jan. 12, 1938	C,W	D,S	Gentle slope	Steel casing.
10	--	111	e/	T,Ng, 55	I	Flat	Concrete curb; wrought iron casing. Water reported in sand, 110 to 130
11	--	120	e/	Cf,G, 85	I	Ridge-top	Steel casing. Pump set at <u> </u> feet. 140 feet; 10 feet of suction pipe.
12	2	113.5	Jan. 12, 1938	C,W	S	Slope	Steel casing.
13	0.4	114.2	Aug. 19, 1937	C,W	D,S	Rolling	Located 0.4 mile west of small lake.
14	1.2	149.1	Oct. 26, 1937	C,W	D	Flat	Iron casing; 2-inch tubing.
15	1	140.1	June 23, 1937	None	N	do.	Irrigation well 15 feet to west.
16	--	--	--	None	N	Gentle slope	Never used.
17	--	--	--	None	N	do.	Reported filled above water level.
18	--	--	--	None	N	do.	Reported previous yield, 35 gallons a minute. Located 125 feet east of
19	--	--	--	T,Ng, 45	Ind	do.	Reported yield, 550 <u>used well.</u> gallons a minute. See log.
20	2	108.7	Dec. 18, 1937	T,G, 85	I	do.	140 feet steel casing at top. Pump set at 140 feet; 18 feet of suction pipe. Reported yield, 825 gallons a
21	0.8	122.7	Dec. 17, 1937	C,W	D,S	do.	Reported strong supply. <u> </u> minute.
22	--	--	--	C,W	P	do.	Do.
23	--	218	e/	C,W	D,S	do.	Reported yield, 3 gallons a minute.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Records of wells in Parmer County--Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-ple-ted	Depth of well (ft.)	Diam-eter of well (in.)
d/ 24	15 miles east	26, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.4 S	O. E. Massey	—	—	260	6
25	15 $\frac{1}{2}$ miles northeast	14, NE $\frac{1}{2}$ SE $\frac{1}{2}$	do.	H. Trimbling	—	—	223	4
d/ 26	12 $\frac{1}{2}$ miles northeast	17, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	W. D. Medcaries	—	—	203	4
d/ 27	12 miles east	29, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. H. White	—	—	264	4
d/ 28	10 miles northeast	30, NW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	C. L. Syndicate	—	—	255	4
29	10 $\frac{1}{2}$ miles northeast	24, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	E. W. Pate	—	—	224	4
d/ 30	11 $\frac{1}{2}$ miles northeast	18, NW $\frac{1}{2}$ NW $\frac{1}{2}$	do.	Farwell "C" Farm	Prairie Oil & Gas Co.	1921	3,675	8 $\frac{1}{2}$
d/ 31	12 $\frac{1}{2}$ miles northeast	7, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Mrs. Minnie Goodwine	—	—	179	4
d/ 32	do.	6, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	B. Hicks	B. Hicks	1925	151	4
d/ 33	do.	do.	do.	J. R. Walker	—	Old	132	4 $\frac{1}{2}$
34	13 miles northeast	6, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	City of Friona	L. G. Sympson	1935	192	10
d/ 35	do.	do.	do.	do.	Lea McDade	1929	216	10
d/ 36	do.	31, SE $\frac{1}{4}$ SW $\frac{1}{4}$	T.1 N., R.4 E.	L. G. Simpson	—	—	151	5
d/ 37	do.	36, SE $\frac{1}{4}$ NE $\frac{1}{4}$	T.1 N., R.3 E.	Marvin Whaley	—	—	130	5
d/ 40	14 $\frac{1}{2}$ miles northeast	24, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	G. E. McGredie	Henry Stanley	—	158	4
d/ 42	15 miles northeast	13, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	F. L. Read	do.	1917	176	4
43	16 $\frac{1}{2}$ miles northeast	12, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Mrs. — Terry	—	—	190	4
44	13 $\frac{1}{2}$ miles northeast	11, SW $\frac{1}{4}$ SW $\frac{1}{4}$	Chas. E. Harding sur.	—	—	—	234	4
45	12 $\frac{1}{2}$ miles northeast	23, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	—	—	—	106	4
46	11 miles northeast	27, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. B. McFarland	— Drager	1926	204	4
48	12 miles northeast	35, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.1 N., R.3 E.	—	—	—	171	4
d/ 49	do.	2, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.3 S.	E. V. Rushing	—	—	171	5
50	11 $\frac{1}{2}$ miles northeast	2, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	F. H. Corcoran	—	—	187	4
51	do.	34, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.1 N., R.3 E.	O. G. Turner	R. H. Kinsley	1920	180	4
52	11 miles northeast	36, SE $\frac{1}{4}$ SE $\frac{1}{4}$	Chas. E. Harding sur.	—	—	—	192	4
54	9 miles north	31, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	V. M. Sedtle	L. McQuirtem	1937	187	5

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
24	—	230	e/	C,W	D,S	—	Iron casing. Water reported in sand, 129 to 260 feet.
25	1	205.9	Dec. 20, 1937	C,W	D,S	Gentle slope	Steel casing. Reported yield, 3 gallons a minute.
26	0.8	184.4	Dec. 6, 1937	C,W	D,S	Hill-side	Iron casing; open end.
27	2.5	229.2	do.	None	N	Flat	Do.
28	1.3	241.3	Nov. 2, 1937	C,W	D,S	do.	Do.
29	1.1	204.6	do.	C,W	D,S	do.	Do.
30	—	—	—	None	N	—	Oil test. See log.
31	1.1	154.2	Nov. 2, 1937	None	N	Hill-side	
32	1.2	127.4	June 23, 1937	None	N	Creek bottoms	Located in Frio Draw.
33	1.2	126.8	Aug. 17, 1937	None	N	Valley floor	Do.
34	—	145	e/	T,E, —	P	Gentle slope	Composite sample of wells 34 and 35 taken from hydrant. Reported yield of both wells, 1,700,000 gallons a month.
35	—	145	e/	T,E, 25	P	do.	Pump set at 200 feet. 5-inch column pipe. — Reported yield, 150 gallons a minute.
36	1	140.4	Sept. 28, 1937	C,W	N	Flat	
37	0	61.5	do.	C,W	N	do.	
40	0.2	134.8	Oct. 25, 1937	C,W	D,S	do.	Iron casing; 2-inch tubing. Reported strong supply.
42	—	160	e/	—	D,S	do.	Iron casing; 3-inch tubing.
43	—	174	e/	C,W	—	do.	Reported weak supply.
44	0.8	276	Oct. 20, 1937	C,W	D,S	do.	Iron casing; 1½-inch galvanized tubing.
45	0.5	102.9	do.	C,W	D,S	do.	Iron casing; 2-inch tubing.
46	2.5	190.9	do.	C,W	D,S	do.	Water reported in sand, 192 to 200 feet. Reported has blown gas out.
48	0.3	156.4	do.	C,W	—	do.	Iron casing; 2-inch tubing. <u>side of casing.</u>
49	0.7	155.2	Sept. 28, 1937	C,W	D,S	do.	
50	0.5	165.3	Oct. 20, 1937	C,W	D	do.	Iron casing; open end.
51	—	160	e/	C,W	D,S	do.	Do.
52	0.5	163.9	Oct. 20, 1937	C,W	D,S	—	Do.
54	0.5	169.3	Jan. 7, 1938	C,W	D,S	Gentle slope	Steel casing. Strong supply reported at 170 feet.

Records of wells in Panhandle County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com- plet-ed	Depth of well (ft.)	Diam- eter of well (in.)
d/ 53	10½ miles north	30, NW $\frac{1}{4}$ NE $\frac{1}{4}$	Chas. E. Harding sur.	Mrs. B. W. Chenoweth	--	1906	226	4 $\frac{1}{2}$
d/ 57	11½ miles north	19, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. Guyar	--	Old	194	4 $\frac{1}{2}$
58	do.	13, SW $\frac{1}{2}$ SW $\frac{1}{2}$	Rhea Bros. sur., blk. B	W. H. Fuqua Est.	--	--	163	5
60	9 miles north	19, SW $\frac{1}{4}$ SW $\frac{1}{4}$	Rhea Bros. sur., blk. A	Lloyd King	--	--	193	4
62	8 miles north	12, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	F. L. Spring	--	--	130	4
63	8½ miles north	13, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Ray Davies	--	1907	183	4
64	9 miles north	17, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	M. M. Shirley	Jess Vestal	1930	160	4
65	11 miles north	7, SE $\frac{1}{4}$ SW $\frac{1}{4}$	Rhea Bros. sur., blk. B	J. E. Johnston	--	--	118	4
66	do.	5, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Floyd Schlinker	R. H. Kinsley	1917	168	4
d/ 67	do.	36, SE $\frac{1}{4}$ SE $\frac{1}{4}$	Rhea Bros. sur., blk. A	do.	Stanolind Oil Co.	1937	222	6
68	do.	25, NE $\frac{1}{4}$ NE $\frac{1}{4}$	Rhea Bros. sur., blk. C	Rhea School	--	--	179	4
69	9 miles north	15, NE $\frac{1}{4}$ NW $\frac{1}{4}$	Rhea Bros. sur., blk. A	H. J. Helms	J. H. Drager	1923	92	4
70	8 miles northwest	6, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. T. Abbot	--	--	167	5
71	11 miles northwest	26, NE $\frac{1}{4}$ SE $\frac{1}{4}$	Rhea Bros. sur., blk. C	J. E. Johnston	--	--	179	4
72	11½ miles northwest	27, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	C. E. Stevens	--	1916	215	4
d/ 73	13 miles northwest	28, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Mrs. R. Landrum	--	--	237	4
74	12½ miles northwest	20, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. G. Palamateer	F. Fashtolz	1935	175	4
d/ 75	10½ miles northwest	16, NW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Bivins & Ward	--	Old	164	4 $\frac{1}{2}$
d/ 76	9½ miles northwest	4, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	M. C. Kelly	--	--	47	4 $\frac{1}{2}$
77	10 miles northwest	8, NW $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. B	Harry Reisinger	Bill Romer	1923	244	4
78	3 miles northwest	3, SE $\frac{1}{4}$ NE $\frac{1}{4}$	Rhea Bros. sur., blk. C	Walter Landers	--	1928	256	4
d/ 79	7½ miles northwest	5, NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. B	Panhandle County	— Oil Co.	1937	301	--
d/ 80	7 miles northwest	4, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	N. L. Tharp	J. F. Vestal	1938	--	--
81	6½ miles northwest	12, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	S. Jersig	--	--	205	4
82	5 miles northwest	14, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	F. W. Ayres	F. Faltscholtz	1907	187	4
83	4½ miles northwest	15, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	N. L. Tharp	--	--	238	4 $\frac{1}{2}$

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) a/	Water Level		Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
		Depth below measuring point (ft.)	Date of measurement				
56	—	196	e/	C,W	D,S	Gentle slope	Steel casing.
57	1	183.9	Jan. 7, 1938	C,W	D,S	do.	Do.
58	0.3	154.1	Oct. 25, 1937	C,W	D,S	Hill-side	Iron casing; open end. Reported strong supply.
60	1.6	173.6	Oct. 17, 1937	C,W	D,S	do.	Do.
62	—	158	e/	C,W	D	Creek bottoms	Reported slight drawdown.
63	1.6	162.1	Oct. 17, 1937	C,W	D,S	Flat	Iron casing; 3-inch tubing.
64	2.2	149.1	do.	C,W	D,S	Slope	Iron casing; 2-inch tubing.
65	1	103.7	Oct. 20, 1937	C,W	D,S	Flat	Do.
66	—	160	e/	C,W	D,S	do.	Reported strong supply.
67	0	140.1	Oct. 17, 1937	--	--	do.	Oil test. No casing. Reported depth, 300 feet before shooting.
68	—	165	e/	C,W	P	do.	Iron casing; 2-inch tubing. Reported strong supply.
69	1.9	85.2	Oct. 17, 1937	C,W	D,S	Slope	Do.
70	0.5	140.6	Jan. 18, 1938	C,W	D,S	do.	Located near Frio Draw. Steel casing.
71	1.6	164.3	Oct. 20, 1937	C,W	D,S	Flat	Reported strong supply.
72	2.2	186.7	do.	C,W	D,S	do.	Iron casing; open end; 2-inch tubing.
73	0.5	220	Jan. 6, 1938	C,W	S	Gentle slope	Used very little.
74	0.5	158.9	Dec. 30, 1937	C,W	D,S	do.	Steel casing. Reported yield, 5 gallons a minute from sand at 160
75	—	—	—	C,W	S	Side or draw	gallons a minute from sand at 160 feet. Steel casing. Located near Frio Draw.
76	—	—	—	C,W	S	Ridge-top	Steel casing. Reported obstruction at 47 feet.
77	1.2	170.1	Dec. 3, 1937	C,W	S	Flat	236 feet steel casing; 8 feet of screen. Water reported in sand and
78	2.7	241.2	do.	C,W	D,S	Ridge-top	gravel at 100 feet. Iron casing; open end.
79	0	211.7	Jan. 3, 1938	None	N	Gentle slope	Oil test. See log.
80	—	—	—	—	I	do.	New well; not completed in Jan., 1938.
81	—	180	e/	C,W	D,S	Flat	200 feet iron casing; open end. Reported strong supply.
82	1.3	168.9	Oct. 11, 1937	C,W	D,S	Gentle slope	Iron casing; open end. Reported pumps air after 80 hours. Pumps sand.
83	—	—	—	C,W	D,S,I	do.	Irrigates small garden.

Records of wells in Farmer County--Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-ple-ted	Depth of well (ft.)	Diam-eter of well (in.)
d/ 84	5 miles north	15, NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. B	N. L. Tharp	-- Oil Co.	1937	302	—
d/ 88	6 miles north	1, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. T. Reynolds	do.	1937	87	5
d/ 89	5 $\frac{1}{2}$ miles north	3, SE $\frac{1}{4}$ SE $\frac{1}{4}$	Rhea Bros. sur., blk. A	J. H. Grayson	—	Old	190	4 $\frac{1}{2}$
97	do.	2, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	J. Vestal	1938	232	4
d/ 99	6 $\frac{1}{2}$ miles north	7, SW $\frac{1}{4}$ SW $\frac{1}{4}$	C. L. Syndicate sur., blk. C	Mrs. F. Givens	—	—	173	4
100	5 miles north	19, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	H. P. Bishop	—	1926	325	4
d/101	6 miles northeast	17, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	L. H. Sudderth	—	1937	295	4
d/102	7 miles northeast	16, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. T. Camp	—	1928	254	4
103	6 $\frac{1}{2}$ miles northeast	29, NE $\frac{1}{4}$ SE $\frac{1}{4}$	T.3 S.	C. L. Syndicate	—	—	330	4
104	7 $\frac{1}{2}$ miles northeast	28, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	T. E. Blackburn	—	—	280	8
d/105	8 $\frac{1}{2}$ miles northeast	15, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. L. Shaffer	R. Kinsley	1938	255	4
106	9 $\frac{1}{2}$ miles northeast	12, SE $\frac{1}{4}$ SE $\frac{1}{4}$	C. L. Syndicate sur., blk. C	A. L. Sims	—	—	222	6
d/107	9 miles northeast	26, NE $\frac{1}{4}$ SE $\frac{1}{4}$	T.3 S.	C. A. Turner	-- Adams	1926	205	—
108	9 $\frac{1}{2}$ miles east	1, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.6 S.	R. Blankenship	—	—	230	4
d/109	13 miles east	3, SW $\frac{1}{4}$ NE $\frac{1}{4}$	T.5 S.	C. L. Syndicate	—	—	182	8
d/110	11 $\frac{1}{2}$ miles east	9, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	F. F. Bell	—	—	190	4
d/111	12 miles east	16, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. L. Syndicate	—	—	196	4
d/112	14 miles east	11, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	—	—	154	4
d/117	do.	23, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	—	—	157	6
d/118	17 $\frac{1}{2}$ miles east	9, NW $\frac{1}{4}$ SW $\frac{1}{4}$	T.5 $\frac{1}{2}$ S.	M. B. Buchanan	—	—	164	6
d/119	19 $\frac{1}{2}$ miles east	14, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. L. Syndicate	—	—	203	4
d/120	do.	23, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	—	—	137	6
d/121	do.	30, NW $\frac{1}{4}$ NW $\frac{1}{4}$	Thos. Kelly sur., blk. H	L. D. Millsap	—	1930	144	4
122	19 miles east	57, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Delbert Hudnall	—	—	164	6
d/123	18 miles east	49, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Atlas Life Ins. Co.	—	—	169	4
d/124	17 miles east	19, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	E. C. Wells	—	—	163	4

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
84	—	—	—	None	N	Gentle slope	Oil test. See log.
88	—	—	—	None	N	do.	Oil test. Caved at 87 feet.
89	1.2	191	Jan. 6, 1938	C,W	S	do.	Steel casing. Used slightly.
97	0.3	261.1	Oct. 11, 1937	C,W	D,S	do.	Iron casing; open end; 2-inch tubing. Reported strong supply.
99	1.0	174	Dec. 30, 1937	C,W	N	do.	Reported caved to water level.
100	—	300	e/	C,W	D,S	Ridge-top	Iron casing; open end.
101	1.7	271.7	Dec. 6, 1937	C,W	S	do.	Iron casing; open end. Water reported in fine sand at 200 to 295 feet.
102	2.8	222.9	do.	C,W	D,S	Flat	Iron casing; open end. Reported strong supply.
103	0.3	167.5	Dec. 3, 1937	C,W	D,S	Gentle slope	Do.
104	1.4	268.5	Dec. 6, 1937	C,W	D,S	Flat	Do.
105	1.3	232.8	do.	C,W	D,S	do.	Do.
106	4.8	206.1	do.	C,W	D,S	Gentle slope	
107	0.3	186.9	do.	None	N	Flat	2-inch tubing; no casing.
108	1.1	202.7	Nov. 2, 1937	C,W	D,S	Hill-side	Iron casing.
109	0.5	142.4	Dec. 6, 1937	C,W	S	Lake-side	Steel casing; open end. Used slightly.
110	0.9	164.1	Nov. 23, 1937	C,W	D,S	do.	Iron casing; open end.
111	1.4	169.3	do.	C,W	D,S	Flat	
112	0.5	152.6	do.	C,W	D,S	Lake-side	Used intermittently.
117	0.3	127.1	Nov. 24, 1937	C,W	D,S	do.	Iron casing; open end. Water reported in fine sand, 100 to 157 feet.
118	2.0	156.5	Nov. 23, 1937	C,W	S	do.	Iron casing.
119	—	190	e/	C,W	D,S	—	Iron casing; open end. Reported strong supply.
120	2.2	131.4	Nov. 23, 1937	C,W	S	Lake-side	Ranch well; waters 100 head of stock.
121	0.5	134.1	do.	C,W	D,S,I	Flat	Irrigates small garden. Water in coarse sand.
122	0.8	157.5	Dec. 7, 1937	C,W	D,S	Ridge-top	Iron casing; open end. Reported waters 60 head of stock.
123	1.7	115.9	Nov. 23, 1937	C,W	D,S	Side of draw	Iron casing; open end.
124	2.3	138.4	do.	C,W	D,S	do.	Do.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-pleted	Depth of well (ft.)	Diam-eter of well (in.)
125	14 miles east	15, NE $\frac{1}{4}$ NE $\frac{1}{4}$	Thos. Kelly sur., blk. H	G. F. Williams	—	—	168	4
127	15 miles southeast	52, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. F. Armstrong	—	—	197	4
d/128	13 miles southeast	12, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. L. Bewley	R. Kinsley	1927	210	4
129	12 $\frac{1}{2}$ miles southeast	5, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	M. G. Jesko	—	—	159	—
130	12 miles southeast	8, NE $\frac{1}{4}$ NE $\frac{1}{4}$	Doud & Keefer sur.	W. J. Coffman	—	—	167	4 $\frac{1}{2}$
d/132	11 $\frac{1}{2}$ miles southeast	4, SW $\frac{1}{4}$ SW $\frac{1}{4}$	Thos. Kelly sur., blk. H	Jesko School	—	—	171	4
133	11 miles southeast	5, NE $\frac{1}{4}$ NW $\frac{1}{4}$	Doud & Keefer sur.	Martha Jesko	R. Kinsley	1908	163	4
134	10 miles southeast	1, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.11 S.	C. L. Syndicate	—	Old	202	4
136	9 miles east	2, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	—	—	188	4
d/137	9 $\frac{1}{2}$ miles east	25, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.6 S.	—	—	—	—	—
139	9 miles east	24, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	A. H. Boatman	J. Pennington	1928	234	4
d/141	10 $\frac{1}{2}$ miles east	17, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.5 S.	C. L. Syndicate	—	1912	233	4
d/142	10 miles east	18, NW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Chas. Briscoe	Chas. Adams	—	248	4
d/143	8 $\frac{1}{2}$ miles east	12, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.6 S	C. L. Syndicate	—	1914	320	4
d/144	8 miles east	11, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	—	—	151	4
d/145	7 miles east	3, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	—	—	189	8
d/146	6 miles northeast	33, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.3 S.	do.	— Adams	1929	249	4
147	5 $\frac{1}{2}$ miles east	8, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.6 S.	do.	—	—	280	4
148	6 miles east	16, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	—	—	225	—
149	5 $\frac{1}{2}$ miles east	28, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	do.	—	—	186	6
150	5 $\frac{1}{2}$ miles southeast	29, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	—	—	189	4 $\frac{1}{2}$
d/151	6 miles southeast	5, NW $\frac{1}{4}$ NE $\frac{1}{4}$	T.11 S.	Mrs. Lonnie Baker	—	—	196	—
d/152	7 miles southeast	3, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. W. Morris	—	—	227	4
153	7 $\frac{1}{2}$ miles southeast	34, SE $\frac{1}{4}$ SW $\frac{1}{4}$	T.6 S.	C. L. Syndicate	—	1926	232	4
d/154	8 $\frac{1}{2}$ miles southeast	11, NW $\frac{1}{4}$ SW $\frac{1}{4}$	T.11 S.	do.	—	—	163	6

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Denta below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
125	—	140	e/	C,W	D,S,I	Side of draw	Iron casing; open end. Irrigates small garden. Strong supply reported in gravel, 130 to 180 feet.
127	2.4	180.3	Nov. 8, 1937	C,W	D,S	Flat	Iron casing; open end. Reported weak supply.
128	—	160	e/	C,W	D,S,I	do.	Irrigates small garden.
129	—	—	—	C,W	D,S	do.	Located in bed of dry lake. Reported strong supply.
130	0.2	154.3	Feb. 5, 1938	C,W	D,S	Gentle slope	Steel casing.
132	2.6	167.1	Nov. 8, 1937	C,W	D	do.	Well at abandoned school. Reported weak supply.
133	—	138	e/	C,W	D,S	do.	Iron casing; open end. Reported oldest well in county.
134	1.0	163.1	Nov. 8, 1937	C,W	D,S	Flat	Iron casing; open end. Reported strong supply.
136	1.7	162.5	Nov. 17, 1937	C,W	D,S	Gentle slope	Do.
137	—	—	—	—	—	—	Obstructed.
139	2.2	159.7	Nov. 8, 1937	C,W	D,S	Flat	Iron casing; open end. Strong supply reported in gravel, 170 to
141	1.3	175.8	Nov. 2, 1937	C,W	—	do.	Iron casing; open end. <u>238 feet.</u>
142	—	—	—	—	—	—	Do.
143	—	296	e/	C,W	—	Flat	Reported strong supply.
144	—	—	—	C,W	—	do.	Reported dry when visited, Nov., 1937.
145	1.4	164.4	Dec. 6, 1937	C,W	S	Lake-side	Steel casing; open end.
146	1.1	211.7	Dec. 4, 1937	C,W	D,S	Flat	Iron casing; open end.
147	—	240	e/	C,W	D,S	do.	Do.
148	—	—	—	C,W	N	—	Reported sanded up.
149	1.0	123.7	Feb. 5, 1938	C,W	S	Side of draw	Steel casing.
150	3.0	170.6	do.	C,W	D,S,I	Gentle slope	Steel casing. Irrigates vegetable garden.
151	2.7	158.9	Nov. 17, 1937	C,W	N	Flat	Reported windmill does not pump water.
152	—	186	e/	C,W	D,S	do.	Iron casing.
153	0.3	130.1	Nov. 17, 1937	C,W	D,S	—	Reported strong supply.
154	1.2	141.4	Nov. 19, 1937	C,W	S	Lake-side	Iron casing; open end. Strong supply reported in fine sand. Ranch well; waters 1,000 head of stock.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-pleted	Depth of well (ft.)	Diam-eter of well (in.)
d/155	7 miles southeast	17, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.11 S.	D. W. Carpenter	Jess Vestal	1927	184	4
156	7 $\frac{1}{2}$ miles southeast	20, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Lee Dozier	—	—	171	4 $\frac{1}{2}$
d/157	6 miles southeast	13, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.10 S.	L. H. Sudderth	—	—	244	4
d/158	do.	7, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.11 S.	C. L. Syndicate	—	—	198	4
159	5 $\frac{1}{2}$ miles southeast	7, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Joe Hromas	Jess Vestal	1925	194	4
166	4 miles southeast	30, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T.6 S.	C. Wilbur	—	—	208	4 $\frac{1}{2}$
167	3 $\frac{1}{2}$ miles east	18, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. L. Syndicate	—	—	187	4
170	3 miles northeast	1, SW $\frac{1}{4}$ NW $\frac{1}{4}$	T.7 S.	Laura K. Hill	—	—	270	4
d/171	2 miles northeast	11, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. L. Syndicate	—	—	235	4
175	3 $\frac{1}{2}$ miles north	27, SW $\frac{1}{4}$ SW $\frac{1}{4}$	C. L. Syndicate sur., blk. C	Mrs. J. A. Tidenburg	— Paul	1912	240	4
176	3 $\frac{1}{2}$ miles northwest	18, SE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. B	L. P. Starr	—	Old	40+	6
177	4 miles northwest	19, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	M. H. Martin	—	—	174	4
178	4 $\frac{1}{2}$ miles west	29, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. G. Charles	Jess Vestal	1926	192	4
179	6 miles northwest	21, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Mrs. A. Jersig	—	—	216	4
d/180	7 miles west	27, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	F. W. Jersig	—	—	165	4
181	7 $\frac{1}{2}$ miles west	23, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	do.	—	—	210	4
182	9 miles northwest	9, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Paul Jones	— Sanders	1918	260	6
183	9 miles west	25, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	A. J. Pipes	—	—	210	4
d/184	do.	W of 40, SW cor.	do.	Mrs. B. F. Bell	—	1924	188	4
185	8 miles west	26, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. H. Snodderly	M. Craig	1920	202	4
186	7 miles west	27, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. L. Jones	Jess Vestal	1936	203	4
d/187	6 $\frac{1}{2}$ miles west	6, NW $\frac{1}{4}$ NW $\frac{1}{4}$	C. L. Syndicate sur., blk. A	W. H. Jarrell	C. Mason	1924	174	4
d/188	6 miles west	37, SW $\frac{1}{4}$ SW $\frac{1}{4}$	C. L. Syndicate sur., blk. B	H. W. Osborne	do.	1926	195	4
189	5 miles west	37, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	J. F. Pesch	Jess Vestal	1926	188	4 $\frac{1}{2}$

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

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

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) a/	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topographic situation	Remarks
155	1.1	169.9	Nov. 19, 1937	C,W	D,S	Flat	Iron casing; open end. Water reported in fine sand.
156	0.5	168.8	Feb. 5, 1938	C,W	D,S,I	do.	Steel casing. Irrigates vegetable garden and trees.
157	1.4	191	Nov. 19, 1937	C,W	D,S	do.	Iron casing; open end. Water reported in fine sand.
158	--	165	e/	C,W	D,S	do.	Do.
159	--	187	e/	C,W	D,S	do.	Steel casing. Reported strong supply.
166	1.0	172.9	Feb. 5, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates vegetable garden and trees.
167	0.8	169.2	Nov. 2, 1937	C,W	—	Flat	Iron casing; open end.
170	1.3	200.3	Dec. 3, 1937	C,W	D,S	do.	Do.
171	1	167.2	June 22, 1937	C,W	D,S	Ridge-top	Steel casing. Estimated yield, 2 gallons a minute.
175	0	216	Dec. 3, 1937	C,W	D,S	Side of draw	Iron casing; open end. Reported strong supply.
176	--	--	--	C,W	D,S,I	Flat	Obstructed at 40 feet. Irrigates vegetable garden.
177	--	156	e/	C,W	D,S	Side of draw	Iron casing; open end.
178	2.3	176.9	Dec. 2, 1937	C,W	D,S	Flat	Do.
179	--	185	e/	C,W	D,S	do.	Do.
180	--	--	--	C,W	S	Bed of lake	Located on floor of dry lake. Well dry when visited, Dec., 1937.
181	0.8	196.6	Dec. 2, 1937	C,W	D,S	Ridge-top	Iron casing; open end.
182	0	180.3	do.	C,W	D,S	do.	Reported located at highest elevation in Farmer County.
183	0.4	198.3	do.	C,W	D,S	Flat	Iron casing; open end.
184	1.4	170.1	Oct. 11, 1937	C,W	D	Gentle slope	Iron casing; open end; 2-inch tubing. Reported strong supply. Located in
185	0.8	188.4	Dec. 2, 1937	C,W	D,S	Flat	Water in Curry Co., New Mexico. gravel, 200 to 202 feet. Reported
186	0.8	185.3	do.	C,W	D,S	do.	Water in drilled to 226 feet. gravel, 200 to 203 feet. Reported casing resting on sardstone at 204
187	0.5	167.6	Oct. 11, 1937	C,W	D	do.	Iron casing; open end; 2- inch tubing.
188	1.1	168.9	do.	C,W	D,S	do.	Iron casing; open end; 2-inch tubing. Reported waters 15 head of stock.
189	1.0	164.9	Feb. 4, 1938	C,W	D,S	Lake-side	Steel casing; open end. Estimated yield, 3 gallons a minute.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-pleted	Depth of well (ft.)	Diam-eter of well (in.)
d/190	4 miles west	36, SE $\frac{1}{4}$ SE $\frac{1}{4}$	C. L. Syndicate sur., blk. B	Amer. Cont. Life Ins. Co.	—	—	173	4
191	do.	35, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	E. M. Ross	F. Faltscholtz	1916	193	4
193	2 $\frac{1}{4}$ miles west	34, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Norton & Robbins	—	1926	172	4
194	2 miles west	2, NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. A	E. M. Metcalf	—	1912	198	4
d/195	$\frac{1}{4}$ mile north	Bovina Townsit, W end	T.7 S.	Santa Fe R.R.	—	—	—	—
d/196	$\frac{1}{4}$ mile northwest	do.	do.	do.	—	—	—	—
d/197	$\frac{1}{2}$ mile north	Bovina Townsit, N end	do.	— Davison	—	1928	165	4
d/198	$\frac{1}{4}$ mile north	do.	do.	R. B. Ezell	—	1915	150	—
199	$\frac{1}{4}$ mile southeast	Bovina Townsit, S end	do.	Bovina School	—	1924	180	—
d/203	2 miles south	28, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	A. Berggren	—	1918	297	4
d/204	3 $\frac{1}{2}$ miles south	3, NW $\frac{1}{4}$ NE $\frac{1}{4}$	T.10 S.	C. L. Syndicate	—	—	188	4
205	do.	4, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	L. W. Hobart	—	—	185	—
d/206	2 miles south	28, NW $\frac{1}{4}$ SW $\frac{1}{4}$	T.7 S.	J. M. Gunn	—	1935	192	4
207	2 $\frac{1}{2}$ miles southwest	18, NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. A	E. F. Johnson	Jess Vestal	1930	198	4 $\frac{1}{2}$
208	1 $\frac{3}{4}$ miles west	16, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. H. Pesch	do.	1934	192	4
209	2 miles west	15, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	C. F. Hastings	—	1910	183	4
210	2 $\frac{1}{2}$ miles west	3, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. D. Ross Est.	—	Old	184	4 $\frac{1}{2}$
211	3 $\frac{1}{2}$ miles west	3, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Barnes & Hastings	—	—	205	—
d/212	do.	do.	do.	do.	—	Old	200	6
d/213	4 miles west	13, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	J. C. Donny	—	—	194	4
214	do.	13, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Lora Dickson	—	Old	184	4 $\frac{1}{2}$
d/215	4 $\frac{1}{4}$ miles southwest	20, SE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	R. L. Douglass	Jess Vestal	1934	185	4
d/217	do.	30, cen.	do.	Jack Dunn	—	—	125	6
218	6 miles southwest	28, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	A. Beckman	—	1908	219	4 $\frac{1}{2}$

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Depth below measurement point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
190	0.3	153.3	Oct. 11, 1937	C,W	D,S	Flat	Iron casing; open end; 2-inch tubing. Reported waters 16 head of stock.
191	0.3	172.6	Oct. 7, 1937	C,W	D,S	Hill-top	Iron casing; open end; 2-inch tubing. Reported waters 80 to 100 head of
193	0.8	156.9	do.	C,W	D	Gentle slope	Iron casing; open end; 2-inch tubing. Water reported in fine
194	1.2	159.5	do.	C,W	D,S	Flat	Iron casing; open end; 2-inch tubing. Water reported in fine sand. Irrigates garden and waters 250 head
195	--	--	--	T,-, --	Ind	Gentle slope	Not in use when visited, Jan., 1938. of stock.
196	--	--	--	C,W	D	do.	Used for section gang.
197	2	148.4	June 21, 1937	C,-	N	--	Unusd. Located 0.2 mile north of dry lake.
198	0.3	142.9	Sept. 24, 1937	C,W	N	Flat	Not used since owner obtained city supply.
199	--	--	--	C,E, $1\frac{1}{2}$	P	do.	Reported strong supply.
203	0.1	167.4	Sept. 24, 1937	C,W	D,S	do.	Iron casing.
204	0	176.7	Nov. 19, 1937	C,W	D,S	Gentle slope	Iron casing; open end. Water reported in fine sand.
205	0.2	181.6	Sept. 24, 1937	C,W	D,S	Flat	Measured yield, 3 gallons a minute.
206	1	169.1	June 22, 1937	C,W	D,S,I	Ridge-top	Irrigates small garden. Reported strong supply.
207	3.0	175.1	Jan. 28, 1938	C,W	D,S	Flat	Steel casing. Open end.
208	1.0	157.9	Oct. 7, 1937	C,W	D,S	Hill-side	Iron casing; open end; 2-inch tubing. Estimated yield, 2 gallons a minute. Water reported in gravel, 130 to 161 feet; fine sand, 161 to 192 feet.
209	1.0	156.8	do.	C,W	D	do.	Iron casing; open end; 2-inch tubing. Reported weak supply. Pumps fine
210	0.8	165.4	Feb. 3, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates sand. vegetable garden.
211	1.0	183.8	do.	C,W	D,S	Flat	
212	1.0	183.4	do.	C,-	N	do.	Steel casing.
213	--	--	--	C,W	D,S	Slope	Iron casing; open end. Reported strong supply.
214	--	165	e/	C,W	D,S,I	do.	Steel casing. Reported yield, 5 gallons a minute. Reported irrigates vegetable garden and orchard.
215	0.9	169.3	Dec. 3, 1937	C,W	D,S	Flat	Iron casing; open end.
217	2.0	105.1	do.	C,W	S	Draw	Iron casing; open end. Water in coarse sand, 50 to 125 feet.
218	1.0	201.1	Jan. 23, 1938	C,W	D,S	Flat	Steel casing. Reported yield, 5 gallons a minute.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-ple- ted	Depth of well (ft.)	Diam- eter of well (in.)
d/219	6 miles west	22, NE $\frac{1}{4}$ NE $\frac{1}{4}$	C. L. Syndicate sur., blk. A	J. B. Finley	—	1912	175	4
220	5 miles west	13, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	E. M. Ware	—	—	173	4 $\frac{1}{2}$
d/221	5 $\frac{1}{2}$ miles west	5, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. E. Hermes	— Kinsley	1911	175	4
d/222	6 miles west	6, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	F. J. Hormes	Ollie Bass	1920	148	6
d/228	7 $\frac{1}{2}$ miles west	10, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. M. Langford	—	1907	200	6
d/229	3 $\frac{1}{2}$ miles west	9, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	C. L. Syndicate	—	—	—	5
d/230	7 miles west	10, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Mrs. B. Meltwin	—	1910	177	4
231	7 $\frac{1}{2}$ miles west	23, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	J. D. Peters	—	1930	208	4 $\frac{1}{2}$
d/232	8 $\frac{1}{2}$ miles southwest	36, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Jack Dunn	—	—	—	4 $\frac{1}{2}$
233	10 $\frac{1}{2}$ miles southwest	48, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	J. D. Hamlin	—	—	200	4 $\frac{1}{2}$
d/234	10 miles southwest	28, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.9 S.	R. Hammond	—	—	210	4
d/235	9 $\frac{1}{2}$ miles southwest	21, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. L. Syndicate	—	—	205	5
d/236	8 miles southwest	43, SW $\frac{1}{2}$ NW $\frac{1}{4}$	C. L. Syndicate sur., blk. A	Mrs. A. F. Parker	— Witt	1917	222	4
d/237	7 $\frac{1}{2}$ miles southwest	40, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Jack Dunn	—	—	208	4
d/238	7 miles southwest	11, SW $\frac{1}{2}$ SW $\frac{1}{2}$	T.9 S.	J. A. Jones	—	—	220	5
d/239	6 $\frac{1}{2}$ miles southwest	12, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	L. H. Suddeth	—	—	232	5
d/240	8 $\frac{1}{2}$ miles southwest	26, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	E. Smith	—	1923	191	5
d/241	8 miles southwest	24, SE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	J. O. Ford	—	—	215	5
d/242	8 miles south	19, SW $\frac{1}{2}$ SW $\frac{1}{2}$	T.10 S.	D. K. Roberts	—	1933	190	4
d/243	8 $\frac{1}{2}$ miles south	30, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	A. L. Tandy	—	1918	180	5
244	do.	29, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	J. T. Hanna	—	1924	169	4 $\frac{1}{2}$
245	do.	33, NE $\frac{1}{2}$ NW $\frac{1}{2}$	do.	Clyde Perkens	—	—	187	4 $\frac{1}{2}$
d/246	7 miles south	21, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Albert Taylor	—	1929	180	4
248	6 miles south	16, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	C. C. Christian	—	1919	219	5
d/249	5 $\frac{1}{2}$ miles south	8, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	A. E. Berry	—	—	230	3
d/250	do.	8, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Minnie C. Green	—	1933	255	4

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) <u>a/</u>	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
219	0	155.1	Nov. 22, 1937	C,W	S	Slope	Iron casing; open end. Was school well previous to 1930.
220	—	—	—	C,W	D,S	Flat	Estimated yield, 5 gallons a minute.
221	1.9	167.6	Nov. 22, 1937	C,W	D,S	Ridge-top	Iron casing; open end. Water reported in fine sand.
227	1.0	85	do.	C,W	D,S	Lake-side	Reported water level affected by lake. Water in fine sand.
228	—	178	<u>e/</u>	—	D,S,I	Slope	Iron casing; open end. Irrigates small garden. Water in coarse sand.
229	—	—	—	C,W	S	Creek bottoms	Steel casing. Reported obstructed at 124 feet.
230	0.2	165.1	Nov. 22, 1937	C,W	D,S	In draw	Iron casing; open end. Ranch well. Reported waters 100 head of stock.
231	2.2	194.9	Feb. 3, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates vegetable garden.
232	—	151	<u>e/</u>	C,W	S	Ridge-top	Steel casing. Reported obstructed at 151 feet.
233	1.0	195.2	Jan. 14, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates small garden. Reported waters 400 head of cattle.
234	0.9	186.1	Sept. 25, 1937	C,W	D,S	Flat	Iron casing; open end. Reported strong supply.
235	0.2	190.9	do.	C,W	D,S	do.	Do.
236	5	214.3	June 22, 1937	C,W	D,S	Ridge-top	Steel casing.
237	0.7	200.2	Nov. 22, 1937	C,W	D,S	Flat	Iron casing; open end.
238	1	211.3	June 21, 1937	C,W	D,S,I	do.	Steel casing. Reported weak supply.
239	2	224.3	Sept. 24, 1937	C,W	D,S	do.	Iron casing.
240	1	180.8	do.	C,W	D,S,I	do.	Iron casing. Reported irrigates 65 trees.
241	0.5	191.1	Jan. 13, 1938	C,W	D	Gentle slope	Steel casing. Reported used slightly.
242	—	170	<u>e/</u>	C,W	D,S	Flat	Steel casing; open end. Reported yield, 3 gallons a minute.
243	1.7	167.2	Sept. 24, 1937	C,W	D,S	do.	Iron casing; open end. Reported waters 150 head of stock.
244	1.0	165.7	Jan. 13, 1938	C,W	D,S,I	Gentle slope	Steel casing; open end. Irrigates small garden. Estimated yield, 2
245	1.0	164.5	Feb. 4, 1938	C,W	D,S	do.	Steel casing. <u>1</u> gallons a minute. Estimated yield, 3 gallons a minute.
246	2.5	179.5	Sept. 24, 1937	C,W	D,S	Flat	Iron casing; open end. Located near lake.
248	1.2	208.3	do.	C,W	D,S,I	do.	Iron casing; open end. Irrigates 100 trees. Estimated yield, 3 gal-
249	—	200	<u>e/</u>	C,W	D,S	—	Iron casing; open <u>l</u> gallons a minute. end. Water reported in fine sand,
250	3.3	204.8	Nov. 22, 1937	C,W	D,S	Flat	Iron casing; open <u>1</u> 20 to 230 feet. end. Water in fine sand.

Records of wells in Pottawatomie County--Continued

No.	Distance from Pawnee	Sec- tion	Range, Township, Block or Survey	Owner	Driller	Date com- plete- ted	Depth of well (ft.)	Diam- eter of well (in.)
d/253	5 $\frac{1}{2}$ miles south	9, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T.10 S.	F. S. Gober	J. F. Bryant	1937	210	4
d/254	4 $\frac{1}{2}$ miles south	10, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	W. J. Sides	--	--	210	4
d/255	5 $\frac{1}{2}$ miles south	11, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	Jess Vestal	1926	208	4
d/256	7 $\frac{1}{2}$ miles south	26, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	--	--	1924	210	3
255	3 $\frac{1}{2}$ miles south	26, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	G. E. Roberts	E. Foschold	1917	180	4
d/256	do.	27, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	F. E. Kepley	--	1920	175	5
257	do.	34, SW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	J. W. Magness	--	1922	175	4
258	9 miles south	33, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Oklahoma School	--	1920	175	4
259	do.	34, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Mrs. J. W. Bradshaw	--	1912	160	5
261	9 $\frac{1}{2}$ miles south	3, NE $\frac{1}{4}$ NE $\frac{1}{4}$	T.15 S.	C. M. Favillie	--	1920	150	5
262	do.	34, SE $\frac{1}{4}$ SE $\frac{1}{4}$	T.10 S.	H. H. Henson	--	1929	150	--
d/263	do.	2, NE $\frac{1}{4}$ NW $\frac{1}{4}$	T.15 S.	G. W. Magness	-- Romans	1920	166	4 $\frac{1}{2}$
d/264	do.	36, SE $\frac{1}{4}$ SW $\frac{1}{4}$	T.10 S.	W. N. Foster	--	1917	160	4 $\frac{1}{2}$
266	10 miles south	6, NE $\frac{1}{4}$ NW $\frac{1}{4}$	T.14 S.	B. T. Hendrickson	--	1917	160	5
267	8 miles southeast	30, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.11 S.	-- Hardidge	--	--	199	4 $\frac{1}{2}$
d/268	10 miles southeast	33, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	L. H. Saunders	--	--	175	4 $\frac{1}{2}$
d/269	11 $\frac{1}{2}$ miles southeast	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	T.14 S.	C. L. Syndicate	--	--	158	5
270	12 miles southeast	35, NE $\frac{1}{4}$ SE $\frac{1}{4}$	T.11 S.	Midway School	-- Tandy	1937	183	--
271	11 $\frac{1}{2}$ miles southeast	26, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Mrs. R. C. Wiley	--	--	169	4 $\frac{1}{2}$
272	12 miles southeast	18, NW $\frac{1}{4}$ SE $\frac{1}{4}$ sur.	Doud & Keefer	S. B. Tabor	--	--	162	4 $\frac{1}{2}$
273	13 $\frac{1}{2}$ miles southeast	21, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Ernest Templor	Tom Smith	1928	176	5
d/274	14 $\frac{1}{2}$ miles southeast	22, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Ed Blaine	--	--	145	6
275	16 $\frac{1}{2}$ miles southeast	36, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Chas. Hinkson	J. B. McCarty	1937	240	15 $\frac{1}{2}$

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) ^{e/}	Water Level Depth below measuring point (ft.)	Date of measurement ^{e/}	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
251	1.0	201.1	Nov. 22, 1937	C,W	D,S	Flat	Iron casing; open end. Water in caving sand, 100 to 210 feet.
252	1.8	198.9	Sept. 24, 1937	None	N	do.	Iron casing.
253	--	197	^{e/}	C,W	D,S	do.	Iron casing; open end.
254	0.5	181.5	Feb. 5, 1938	C,W	D,S,I	do.	Steel casing. Irrigates vegetable garden. Reported yield, 3 gallons a minute.
255	1.5	155.8	Feb. 8, 1938	C,W	D,S,I	do.	Do.
256	1	165.4	Sept. 22, 1937	C,W	D,S	do.	Iron casing; open end.
257	--	--	--	C,W	D,S	do.	Iron casing. Estimated yield, 2.5 gallons a minute.
258	--	--	--	C,W	P	do.	Steel casing. Reported yield, 3 gallons a minute.
259	1.3	141.6	Sept. 22, 1937	C,W	D,S	do.	Iron casing; open end. Measured drawdown, 2.9 feet after pumping 3 gallons a minute for 1 hour.
261	--	--	--	C,W	D,S	do.	Iron casing; open end. Reported weak supply.
262	1.2	141.4	Sept. 22, 1937	C,W	D,S	do.	Reported strong supply.
263	--	139	^{e/}	C,W	D,S,I	Gentle slope	Steel casing. Irrigates vegetable garden. Estimated yield, 3 gallons a minute.
264	0.5	147.8	Feb. 8, 1938	C,W	D,S,I	do.	Do. a minute.
266	2.1	142.8	Sept. 25, 1937	C,W	D,S	Flat	Iron casing; open end. Drawdown, 1.29 feet after pumping 2 gallons a minute.
267	0.5	168.5	Feb. 5, 1938	C,W	D,S,I	do.	Steel casing. minute for 0.2 hour. Irrigates vegetable garden. Estimated yield, 3 gallons a minute.
268	1.0	159.5	Feb. 8, 1938	C,W	D,S,I	do.	Do.
269	1.0	146.2	Dec. 28, 1937	C,W	S	Gentle slope	Steel casing.
270	3.5	153.7	Sept. 27, 1937	C,W	D,S	Flat	Reported yield, 2 gallons a minute. Water in coarse gravel, 154 to 180 feet.
271	1.0	160.4	Jan. 27, 1938	C,W	D,S	do.	Steel casing. feet.
272	2.0	153.7	Feb. 5, 1938	C,W	S	do.	Steel casing. Estimated yield, 3 gallons a minute.
273	--	--	--	C,W	D,S	do.	Iron casing; open end. Estimated yield, 2.5 gallons a minute.
274	0.7	135.6	Sept. 27, 1937	C,W	D,S	do.	
275	0.2	139.2	Sept. 23, 1937	Cf,D, 100	I	do.	Reported yield, 1,500 gallons a minute. Pump set at 160 feet; 10 feet of suction pipe. Irrigated 650 acres in 1937. Water in sand and sandstone, 132 to 240 feet. 1 ¹ / ₂ foot of 15 ¹ / ₂ -inch steel casing, 60 feet of 12-inch perforated casing.

Records of wells in Farmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)
276	16 $\frac{1}{2}$ miles southeast	69, SW $\frac{1}{4}$ SW $\frac{1}{2}$	Thos. Kelly sur., blk. H	Joe Paul	—	—	169	5
277	17 $\frac{1}{2}$ miles southeast	70, SE $\frac{1}{2}$ NE $\frac{1}{2}$	do.	Bill Sherley	—	1926	159	5
d/278	do.	66, NW $\frac{1}{4}$ NW $\frac{1}{2}$	do.	Mrs. A. Sherley	—	Old	152	4
d/279	19 $\frac{1}{2}$ miles southeast	72, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Dan. A. Tarter	—	—	154	5
d/280	20 miles southeast	73, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	S. G. Wilson	—	—	165	5
d/281	do.	73, NW $\frac{1}{4}$ NW $\frac{1}{2}$	do.	W. R. Wilson	Magnolia Pet. Co.	1932	5,830	20
d/282	21 miles southeast	74, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	—	—	138	5
d/283	21 $\frac{1}{2}$ miles southeast	62, NW $\frac{1}{4}$ SW $\frac{1}{2}$	do.	John Garmon	—	—	150	4
284	do.	62, NE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	do.	—	—	161	4
285	22 $\frac{1}{2}$ miles southeast	78, SE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	Rufus Carter	—	—	109	6
d/286	do.	91, NW $\frac{1}{4}$ SW $\frac{1}{2}$	do.	Mrs. A. Steinbock	Ed. Krupps	—	144	5
d/287	do.	95, SE $\frac{1}{2}$ SW $\frac{1}{2}$	do.	C. E. Brisco	Ike. Barton	—	188	20
288	21 miles southeast	96, SW $\frac{1}{2}$ SW $\frac{1}{2}$	do.	E. A. Seaton	—	Old	140	5
299	19 $\frac{1}{2}$ miles southeast	87, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	A. L. Wood	—	—	141	4
d/290	do.	98, NW $\frac{1}{4}$ SW $\frac{1}{2}$	do.	David Smith	—	1937	140	4
291	20 miles southeast	103, NW $\frac{1}{4}$ NW $\frac{1}{2}$	do.	J. D. Carpenter	— Cropt	1927	120	4
292	18 miles southeast	37, NE $\frac{1}{4}$ NE $\frac{1}{4}$	Doud & Keefer sur.	O. L. Jarmon	—	—	—	4
293	do.	86, NW $\frac{1}{4}$ NW $\frac{1}{2}$	W.D. & F.W. John- son sur., blk. Y	F. L. Wenner	Tom Smith	1927	117	6
d/294	16 $\frac{1}{2}$ miles southeast	39, NE $\frac{1}{2}$ NE $\frac{1}{4}$	Doud & Keefer sur.	R. George	—	—	113	4 $\frac{1}{2}$
d/295	do.	40, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	E. T. Jennings	W. F. Tandy	1933	95	5
d/296	16 miles southeast	46, SW $\frac{1}{2}$ SW $\frac{1}{2}$	W.D. & F.W. John- son sur., blk. Y	Mrs. C. L. Holman	do.	1929	80	5
297	15 $\frac{1}{2}$ miles southeast	46, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	Frank C. Mason	—	—	112	4 $\frac{1}{2}$
298	14 miles southeast	14, SE $\frac{1}{2}$ NE $\frac{1}{4}$	T. 14 S.	C. L. Syndicate	—	—	117	4
299	13 miles southeast	15, NW $\frac{1}{4}$ NW $\frac{1}{2}$	do.	do.	—	—	138	4 $\frac{1}{2}$
d/300	14 miles southeast	29, NE $\frac{1}{4}$ NW $\frac{1}{2}$	W.D. & F.W. John- son sur., blk. X	John Beran	—	Old	95	4

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height cf measuring point above ground (ft.) <i>e/</i>	Water Level Dep't. below measur- ing point (ft.)	Date of measure- ment	Pump and power <i>b/</i>	Use of water <i>c/</i>	Topo- graphic situ- ation	Remarks
276	1	141.1	Sept. 27, 1937	C,W	D,S	Flat	Iron casing. Estimated yield, 3 gallons a minute.
277	1.1	155.6	do.	C,W	D	do.	Do.
278	--	--	--	C,-	N	Lake- side	Steel casing.
279	1.1	150.6	Sept. 27, 1937	C,W	D,S	Flat	Iron casing.
280	1.5	149.9	do.	C,W	D	do.	Iron casing. Reported weak supply.
281	--	--	--	None	N	--	Oil test. See log.
282	3	126.9	Sept. 27, 1937	C,W	D,S	Flat	Iron casing. Reported strong supply.
283	1.8	55.6	Dec. 7, 1937	C,W	S	Side of draw	Iron casing; open end. Reported waters 120 head of stock.
284	1.0	104.8	do.	C,W	D,S	Ridge- top	Iron casing; open end.
285	1.3	107.6	Sept. 27, 1937	C,W	D,S	Flat	Iron casing; open end. Measured yield, 3 gallons a minute.
286	0.8	118.6	do.	C,W	D,S,I	do.	Iron casing. Irrigates small garden and 25 trees.
287	0.3	122.4	do.	T,D, 60	I	do.	150 feet of 15-inch casing at top. Reported yield, 1,000 gallons a minute. Reported pumps dry in 72 hours. Irrigated 400 acres in 1937.
288	--	--	--	C,W	D,S,I	Gentle slope	Steel casing. Reported yield, 5 gallons a minute. Irrigates garden.
289	3.0	125.5	Dec. 29, 1937	C,W	D,S	do.	Steel casing. Estimated yield, 2 gallons a minute.
290	--	102	<i>e/</i>	C,W	D,S	do.	Steel casing. Water in red sand.
291	2.0	105.4	Dec. 29, 1937	C,W	D,S	do.	Steel casing. Reported yield, 3 gallons a minute.
292	--	--	--	C,W	D,S	Flat	Steel casing. Obstructed at 55 feet. Estimated yield, 3 gallons a minute.
293	0.7	86.5	Sept. 23, 1937	C,W	D,S	do.	Iron casing; open end. Water re- ported in gravel at 82 feet.
294	3.0	103.8	Feb. 7, 1938	C,W	D,S	Gentle slope	Steel casing. Estimated yield, 3 gallons a minute.
295	--	--	--	C,W	D,S	Flat	Iron casing; open end.
296	1.3	60.1	Sept. 23, 1937	C,W	D,S	do.	Do.
297	2.0	84.8	Jan. 27, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates small vege- table garden.
298	3.8	98.6	Dec. 28, 1937	C,W	N	do.	Unused. Old school well.
299	0	90.8	do.	C,W	S	Lake- side	Steel casing. Water level taken while pumping. Estimated yield, 5
300	2.0	86.7	do.	C,W	N	Gentle slope	Not used last gallons a minute. 2 years.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-pleted	Depth of well (ft.)	Diam-eter of well (in.)
301	15 miles southcast	26, SW $\frac{1}{4}$ SW $\frac{1}{4}$	W.D.& F.W. John- son sur., blk. Y	R. N. Cranfield, Jr.	—	—	84	5
d/302	15 miles south	30, SW $\frac{1}{4}$ NW $\frac{1}{4}$	W.D.& F.W. John- son sur., blk. X	Bob Kennedy	—	Old	90	4 $\frac{1}{2}$
d/303	14 $\frac{1}{2}$ miles south	28, SW $\frac{1}{4}$ SE $\frac{1}{4}$	do.	Ross Glaze	—	—	93	5
304	14 miles south	17, NE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	E. & D. Culley	—	—	90	4
305	do.	16, SE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	E. J. Kickerbocker	—	—	82	5
d/306	13 $\frac{1}{2}$ miles south	1, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	Tom Radney	—	—	104	—
307	do.	1, SE $\frac{1}{4}$ SE $\frac{1}{4}$	W.D.& F.W. John- son sur., blk. Z	J. H. Barger	Harold Mardis	1926	110	6
d/308	14 miles south	2, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	C. L. Syndicate	Humble Oil & Ref. Co.	1927	3,500	20
d/310	13 $\frac{1}{2}$ miles south	15, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	—	—	—	110	5
d/311	13 miles south	17, NE $\frac{1}{4}$ SW $\frac{1}{4}$	do.	H. C. Holt	—	—	112	4
d/312	do.	17, SW $\frac{1}{4}$ NE $\frac{1}{4}$	do.	Santa Fe R.R.	—	1916	150	10
d/313	12 $\frac{1}{2}$ miles south	16, SW $\frac{1}{4}$ SW $\frac{1}{4}$	T. 15 S.	H. A. Daude	—	—	106	5
314	do.	15, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	D. Robertson	Ollie Boss	—	115	5
315	11 miles south	10, SW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	J. C. Robertson	—	—	143	5
d/316	do.	9, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	C. L. Syndicate	—	1928	143	—
317	10 $\frac{1}{2}$ miles south	8, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	do.	—	—	145	6
318	9 $\frac{1}{2}$ miles south	4, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	W. G. Hurst	Tom Smith	1929	149	4 $\frac{1}{2}$
319	do.	5, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	— Christian	—	1917	156	4 $\frac{1}{2}$
d/320	10 miles south	6, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	do.	—	—	138	4
321	10 $\frac{1}{2}$ miles south	1, SE $\frac{1}{4}$ SE $\frac{1}{4}$	do.	—	—	1924	138	4 $\frac{1}{2}$
322	11 $\frac{1}{2}$ miles south	7, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	H. A. Haselhoff	Tom Smith	1934	162	4 $\frac{1}{2}$
d/323	12 miles south	17, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	W. L. Clampitt	—	1922	109	3 $\frac{1}{2}$
325	12 $\frac{1}{2}$ miles south	32, NE $\frac{1}{4}$ NE $\frac{1}{4}$	W.D.& F.W. John- son sur., blk. Z	Geries Est.	Tom Smith	1937	103	4 $\frac{1}{2}$
326	do.	18, SW $\frac{1}{4}$ SE $\frac{1}{4}$	T. 15 S.	Mrs. Ada Middleton	—	—	110	4
327	13 miles south	33, NW $\frac{1}{4}$ NE $\frac{1}{4}$	W.D.& F.W. John- son sur., blk. Z	Geries Est.	—	1915	118	4 $\frac{1}{2}$
328	do.	33, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	G. W. Magness	—	1926	130	4

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Depth below measurement point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
301	0	72.3	Sept. 23, 1937	C,W	D,S	Flat	Iron casing. Reported 1.5 feet drawdown after pumping 2 gallons a minute for 0.3 hour.
302	0.5	65.1	Jan. 27, 1938	C,-	D,S	Near lake	Steel casing.
303	2	73.9	Sept. 22, 1937	C,W	S	Flat	Iron casing.
304	1.5	80.1	Jan. 27, 1938	C,W	D,S,I	Near lake	Galvanized casing. Irrigates small garden.
305	2.8	77.3	Sept. 23, 1937	C,W	D,S	Flat	Iron casing. Reported 0.4 foot drawdown after pumping $2\frac{1}{2}$ gallons a minute for $\frac{1}{2}$ hour.
306	1	97.1	do.	C,W	S	do.	
307	--	90	e/	C,W	D,S,I	do.	Estimated yield, 6 gallons a minute. Reported irrigates 53 trees.
308	--	--	--	None	N	--	Oil test. Reported altitude, 3,991 feet. See log.
310	1.5	97.2	Sept. 16, 1937	C,W	D,S	Flat	Iron casing.
311	0	102.7	June 21, 1937	C,-	D	do.	Steel casing. Used slightly.
312	0	103.9	Sept. 16, 1937	None	N	do.	Reported previously had strong supply from sand and gravel but was
313	0.5	89.6	Sept. 22, 1937	C,W	D,S	do.	Iron casing. allowed to sand up. Estimated yield, 3 gallons a minute.
314	0.3	113.5	do.	C,W	D,S	do.	Do.
315	0.5	118.3	do.	C,W	--	do.	Estimated yield, 2 gallons a minute. Temperature, 59° F.
316	1	112.9	do.	C,W	D,S	do.	Water in loose sand.
317	1.0	121.9	Jan. 13, 1938	C,W	D,S	Slope	Steel casing. Estimated yield, 2 gallons a minute.
318	2.0	133.3	Feb. 8, 1938	C,W	D,S,I	do.	Steel casing. Irrigates small garden. Estimated yield, 3 gallons a minute.
319	0.5	144.5	Jan. 13, 1938	C,W	D,S	Flat	Steel casing. Estimated minute. yield, 4 gallons a minute.
320	2.5	132.4	Sept. 25, 1937	None	N	do.	
321	1.5	126.9	Feb. 4, 1938	C,W	D,S,I	do.	Irrigates small garden and trees. Estimated yield, 4 gallons a minute.
322	2.0	123.6	do.	C,W	D,S,I	Gentle slope	Irrigates small garden and trees. Estimated yield, 3 gallons a minute.
323	2	104.8	June 22, 1937	C,W	D,S	Flat	Reported sands up.
325	3.0	95.4	Jan. 13, 1938	C,W	D,S	Gentle slope	Weak supply reported from red sand, 95 to 105 feet. Reported yield, 4 gallons a minute.
326	0.7	104.3	Sept. 16, 1937	C,W	D,S	Flat	Estimated yield, 2 gallons a minute.
327	0	104.9	Feb. 8, 1938	C,W	D,S,I	Gentle slope	Steel casing. Irrigates vegetable garden. Estimated yield, 4 gallons a minute.
328	--	--	--	C,W	D,S	Flat	Estimated yield, 3 gallons a minute.

Records of wells in Parmer County—Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com-pleted	Depth of well (ft.)	Diam-eter of well (in.)
320	12 $\frac{1}{2}$ miles south	13, SW $\frac{1}{2}$ SW $\frac{1}{4}$	T. 16 S.	H. McMillan	—	1922	136	4
330	7 $\frac{1}{2}$ miles south	12, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	R. C. Mitzelfelt	—	1922	133	4 $\frac{1}{2}$
331	11 miles south	1, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	—	—	—	147	4 $\frac{1}{2}$
332	10 miles southwest	2, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	A. L. Tandy	—	1935	160	4 $\frac{1}{2}$
d/333	do.	35, NW $\frac{1}{2}$ SW $\frac{1}{4}$	T. 9 S.	G. M. Moore Est.	— Moore	1917	211	4 $\frac{1}{2}$
334	10 $\frac{1}{2}$ miles southwest	28, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	J. D. Hamlin	—	Old	178	6
d/335	12 miles southwest	32, SW $\frac{1}{2}$ SE $\frac{1}{4}$	do.	C. L. Syndicate	—	—	176	4 $\frac{1}{2}$
d/337	11 $\frac{1}{2}$ miles southwest	31, NE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	Young & Peters	—	Old	176	5
d/338	do.	49, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Sam Lawrence	—	—	188	5
d/339	12 miles southwest	30, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	U. S. Dept. of Agriculture	—	1917	200	6
d/340	do.	do.	do.	do.	—	1917	200	6
d/341	11 $\frac{1}{2}$ miles southwest	30, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	W. C. Harden	—	Old	183	4
342	12 miles southwest	31, SE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	Mrs. — Thompson	Earl Burgens	1930	187	4 $\frac{1}{2}$
343	do.	31, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	F. W. McElroy	—	1922	181	5
d/344	12 $\frac{1}{2}$ miles southwest	31, SE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	Mrs. C. T. Dycus	—	1915	185	6
345	do.	31, NE $\frac{1}{2}$ SW $\frac{1}{4}$	do.	C. L. Syndicate	—	Old	300	8
348	13 $\frac{1}{2}$ miles southwest	7, NW $\frac{1}{2}$ NW $\frac{1}{4}$	T. 16 S.	C. L. Purselley	—	1920	180	4
349	12 $\frac{1}{2}$ miles southwest	5, SW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	Phillips & Massengill	—	1918	200	4 $\frac{1}{2}$
d/351	11 $\frac{1}{2}$ miles southwest	4, SE $\frac{1}{2}$ NE $\frac{1}{4}$	do.	Fred Barker	W. L. Roman	1920	175	5
d/352	do.	do.	do.	H. W. Osborne	Henry Curtis	1915	176	5
353	do.	11, SW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	T. E. Lovelace	W. L. Roman	1934	153	—
d/354	12 $\frac{1}{2}$ miles southwest	10, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	W. S. McDaniel	—	1909	187	5
355	13 miles southwest	16, NW $\frac{1}{2}$ NW $\frac{1}{4}$	do.	J. P. Tate	—	Old	166	4 $\frac{1}{2}$
356	13 $\frac{1}{2}$ miles southwest	16, NW $\frac{1}{2}$ SW $\frac{1}{4}$	do.	A. J. Donelson	—	1931	152	4 $\frac{1}{2}$
d/357	do.	49, NE $\frac{1}{2}$ NW $\frac{1}{4}$	W. D. & F. W. John- son sur., blk. Z	F. W. McElroy	—	1907	135	4
358	14 miles southwest	64, NE $\frac{1}{2}$ SE $\frac{1}{4}$	do.	C. M. Cook	—	1915	135	4 $\frac{1}{2}$

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) ^{a/}	Water Level Depth below measuring point (ft.)	Date of measurement	Pump and power b/	Use of water c/	Topo-graphic situation	Remarks
329	2	126.2	June 22, 1937	C,W	L,S,I	Flat	Reported sanded up in 1936.
330	0.5	125.9	Feb. 4, 1938	C,W	D,S,I	Gentle slope	Irrigates vegetable garden. Reported yield, 5 gallons a minute.
331	1.5	129.7	do.	C,W	D,S	do.	Estimated yield, 3 gallons a minute.
332	--	--	--	C,W	D,S,I	do.	Irrigates vegetable garden. Estimated yield, $\frac{1}{2}$ gallon a minute.
333	1.0	164.5	Feb. 2, 1938	C,W	D,S,I	Ridge-top	Irrigates small garden. Reported yield, 3 gallons a minute.
334	1.0	171.1	Jan. 27, 1938	C,W	D	Gentle slope	Steel casing.
335	1.2	160.7	Feb. 2, 1938	C,W	D,S	do.	Steel casing. Not used at present.
337	1.0	173.4	Feb. 3, 1938	C,W	N	Flat	Reported sands up quickly.
338	1.2	178.1	Sept. 25, 1937	C,W	D,S,I	do.	Irrigates small garden.
339	--	--	--	None	N	do.	Used only 1 year. Drilled for "Western Tire Co."
340	--	--	--	None	N	do.	Do.
341	2.5	175.5	June 21, 1937	C,W	D,S,I	do.	Steel casing; 183 feet column pipe. Irrigates small garden.
342	2.0	175.9	Feb. 4, 1938	C,W	D,S,I	do.	Irrigates small garden. Estimated yield, 2 gallons a minute.
343	1	172	do.	C,W	D,S,I	do.	Irrigates small garden. Estimated yield, 3 gallons a minute.
344	1.8	177.9	Sept. 24, 1937	C,W	S,I	do.	Irrigates small garden.
345	--	177	e/	T,E, 15	P	do.	Steel casing. Reported yield, 85 gallons a minute. Pump set at 250
348	1.1	169.5	Sept. 16, 1937	C,W	D,S	do.	Iron feet ; 6-inch column pipe. casing. Reported sands up every 12 months.
349	--	194	e/	C,W	D,S,I	do.	Temperature, 58° F. gates small garden. Reported yield,
351	0.3	158.2	Sept. 15, 1937	C,W	D,S	do.	Reported 3 gallons a minute. waters 40 head of stock and irrigates small garden.
352	2.7	155.1	do.	C,W	--	do.	Iron casing. gates small garden.
353	1.5	145.8	June 22, 1937	C,W	D,S,I	do.	Steel casing.
354	--	151	1917 e/	C,W	D,S	do.	Iron casing; open end. Water in sand.
355	--	152	e/	C,W	D,S	do.	Irrigates garden and orchard. Reported yield, $2\frac{1}{2}$ gallons a minute.
356	0.5	139.2	Feb. 2, 1938	C,W	D,S,I	do.	Irrigates small garden. Estimated yield, 3 gallons a minute.
357	--	--	--	C,W	D,S	do.	Iron casings.
358	--	100	e/	C,W	D,S,I	Gentle slope	Irrigates vegetable garden. Estimated yield, 4 gallons a minute.

Records of wells in Parmer County--Continued

No.	Distance from Bovina	Sec-tion	Range, Township, Block or Survey	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)
d/359	15 miles southwest	63, SW $\frac{1}{4}$ NW $\frac{1}{4}$	W.D. & F.W. Johnson sur., blk. Z	E. E. Hughes	--	1926	134	4
d/360	do.	66, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	--	--	--	135	5
d/361	14 $\frac{1}{2}$ miles southwest	75, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	John Armstrong	--	1924	150	5
d/362	15 miles southwest	75, NW $\frac{1}{4}$ NW $\frac{1}{4}$	do.	P. B. Grady	--	Old	146	4 $\frac{1}{2}$
363	do.	76, NE $\frac{1}{4}$ NE $\frac{1}{4}$	do.	W. C. Watkins	C. Mason	1922	143	6
364	14 $\frac{1}{2}$ miles southwest	18, NW $\frac{1}{4}$ SW $\frac{1}{4}$	do.	H. Overstreet	--	--	172	6
d/365	15 $\frac{1}{2}$ miles southwest	74, NE $\frac{1}{4}$ NW $\frac{1}{4}$	do.	P. B. Grady	--	1901	129	4 $\frac{1}{2}$

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

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

C. R. Follett and E. L. Bradshaw, Project Superintendents

No.	Height of measuring point above ground (ft.) <i>a/</i>	Water Level		Pump and power <i>b/</i>	Use of water <i>c/</i>	Topo- graphic situ- ation	Remarks
		Depth below measure- ment (ft.)	Date of measure- ment (month year)				
359	1	114.9	Sept. 16, 1937	C,W	D,S	Flat	Iron casing; open end. Water in sand and gravel. Reported yield, 2.5
360	3.2	121.1	do.	C,W	S	do.	Iron casing. <u>1 gallon a minute.</u>
361	0.8	136.7	do.	C,W	D,S	do.	Iron casing. Reported has sanded up in past.
362	1.5	141.5	Feb. 2, 1938	C,-	N	Gentle slope	Windmill broken.
363	1.3	126.6	do.	C,W	D,S,I	do.	Irrigates vegetable garden. Reported yield, 3 gallons a minute.
364	0.3	160.3	Sept. 16, 1937	C,W	--	Flat	Iron casing.
365	1.0	25.8	Feb. 8, 1938	C,-	N	Gentle slope	Steel casing. Windmill broken.

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

d/ No water sample collected for analysis.

e/ Water level reported.

Table of Drillers' Logs, Parmer County, Texas

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 19</u>		
Santa Fe R.R. 19 miles northeast of Bovina.		
Clay	30	30
Sandy clay	30	60
Limestone	10	70
Clay	10	80
Coarse-grained sand	140	220
TOTAL DEPTH		220

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 30</u>		
Farwell "C" Farm. 11½ miles northeast of Bovina.		
Surface soil	4	4
Chalky rock	5	9
Clay	21	30
Sand	165	195
Water sand	85	280
Sandy clay	20	300
Water sand	92	392
Sand	16	408
Clay	22	430
Sand	14	444
Clay	516	960
Water sand	30	990
"Shell"	5	995
Clay	115	1110
Shale	30	1140
Lime	20	1160
Red clay	175	1335
Clay	90	1425
Sand	30	1455
Clay	90	1545
Clay and shells	45	1590
"Shell"	10	1600
Clay	70	1670
Clay and shells	50	1720
Sandy clay	230	1950
Clay and salt, showing of gas	140	2090
TOTAL DEPTH		3675

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 79</u>		
Parmer County, side of county road. 7½ miles northwest of Bovina.		
Surface soil	5	5
Caliche and clay	9	14
Red sand and clay	29	43
Sandstone and packed sand	177	220
Sandstone	45	265
Sandy brown clay	36	301
TOTAL DEPTH		301

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 84</u>		
N. L. Tharp farm. 5 miles north of Bovina.		
Surface soil	5	5
Caliche	13	18
Sandy red clay	35	53
Sandstone and packed sand	125	178
Water sand and boulders	67	245
Sandstone and packed sand	31	276
Red clay	26	302
TOTAL DEPTH		302

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 281</u>		
W. R. Wilson farm. 20 miles southeast of Bovina.		
Surface soil	30	30
Sand	340	370
Red sand	20	390
Sard and mud	50	440
Red beds	10	450
Red rock	70	520
Red shale	15	535
Red rock	30	565
Sand	40	605
Red rock and shells	45	650
Red rock and sand	90	740
Sand	60	800
Red rock	20	820
Red rock and shells	40	860
Red rock and sand	20	880
Red rock	30	910
Red rock and sand	85	995
Red rock	15	1010
Sand	20	1030
Red beds	10	1040
Red sand	25	1065
Red beds and shells	25	1090
Red rock and sand	10	1100
Red rock and shells	40	1140
Red rock and sand	10	1150
Red rock and shells	20	1170
Pink shale	15	1185
Red rock and shells	75	1260
Sand	50	1310
Red rock and shells	80	1390
Sandy lime	30	1420
Red rock and shells	20	1440
Sand and mud	110	1550
Red rock	10	1560
Sand	70	1630
Red rock	10	1640

(Continued on next page)

Table of Drillers' Logs, Farmer County—Continued

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 281—Continued</u>		
Red rock and sand	100	1740
Anhydrite	60	1800
TOTAL DEPTH		5830

<u>Driller's log of well 308</u>		
C. L. Syndicate tract. 14 miles south of Bovina		
Surface sand	100	100
Quicksand	285	385
Gumbo	385	770
Clay	110	880
Slate	10	890
Shale	10	900
Blue sand	25	925
Light-packed sand	30	955
Blue shale	35	990
Light-packed sand	20	1010
Red shale	5	1015
Clay and shale	15	1030

	Thickness (feet)	Depth (feet)
<u>Driller's log of well 308—Continued</u>		
Red shale	15	1045
Gray sand	20	1065
Red shale	15	1080
Red rock	28	1108
Sandy shell	7	1115
Red rock	70	1185
Yellow clay	20	1205
Red clay	10	1215
Red rock	20	1235
Red clay	40	1275
Red rock	75	1350
Sand and salt water	8	1358
TOTAL DEPTH		3500

Logs of test wells drilled by W. P. A. labor in Parmer County, Texas
 Samples examined and classified by C. R. Follett and E. L. Bradshaw,
 Project Superintendents.

	Thickness (feet)	Depth (feet)
<u>Well 38</u>		
Flat, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T.1 N., R.4 E., 13 $\frac{1}{2}$ miles northeast of Bovina.		
Top soil - - - - -	1	1
Caliche and red clay - - -	1	2
Sandy red clay - - - -	8	10
No water sample collected.	Sept. 28, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 39</u>		
Flat, side of county road, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T.1 N., R.3 E., 14 miles northeast of Bovina.		
Reddish calcareous clay - -	4	4
White clay with calca- reous particles - - - -	4	8
Reddish-gray sand and limestone - - - - -	12	20
White calcareous clay and sand - - - - -	17	37
Caliche - - - - -	9	46
Stopped in caliche at 46 feet.		
No water sample collected.	Oct. 30, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 41</u>		
Flat, side of county road, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T.1 N., R.3 E., 15 miles northeast of Bovina.		
Gray calcareous clay - - -	2	2
Red calcareous clay - - -	5	7
Red calcareous clay and sand - - - - -	9	16
White calcareous clay and sand - - - - -	20	36
White clay and sand - - -	12	48
Caliche - - - - -	4	52
Stopped in caliche at 52 feet.		
No water sample collected.	Oct. 30, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 47</u>		
Flat, side of county road, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T.3 S., 12 $\frac{1}{2}$ miles northeast of Bovina.		
Top soil - - - - -	2	2
Sandy red clay - - - -	2	4
Caliche and clay - - - -	7	11
Brown clay - - - - -	2	13
Caliche and clay - - - -	5	18
Sandy red clay - - - -	6	24
No water sample collected.	Sept. 28, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 53</u>		
Bed of dry lake, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, Chas. E. Harding survey,		

	Thickness (feet)	Depth (feet)
<u>Well 53—Continued</u>		
blk. H, 9 $\frac{1}{2}$ miles northeast of Bovina.		
Top soil - - - - -	3	3
Sand and red clay - - - -	9	12
White sand - - - - -	18	50
Rock - - - - -		30
No water sample collected.	Oct. 23, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 55</u>		
NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, Rhea Bros. survey, blk. A, 8 $\frac{1}{2}$ miles north of Bovina.		
Top soil - - - - -	3	3
Red sand and clay - - - -	8	11
White sand - - - - -	19	30
Rock - - - - -		30
No water sample collected.	Oct. 23, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 59</u>		
Flat, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, Rhea Bros. survey, blk. B, 9 $\frac{1}{2}$ miles north of Bovina.		
Top soil - - - - -	3	3
Caliche and clay - - - -	9	12
Sand and clay - - - - -	30	42
Coarse gravel - - - - -		42
No water sample collected.	Oct. 20, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 61</u>		
Bottom of Frio Draw, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, Rhea Bros. survey, blk. A, 8 miles north of Bovina. This log is one of 33 logs shown graphically on Group 61 cross section in back of this report.		
Reddish-brown top soil - - -	6	6
Sandy red clay - - - - -	3	9
Sandy gray clay - - - - -	2	11
Coarse-grained sand - - -	4	15
Sandy red clay and caliche -	5	20
Caliche - - - - -		20
No water sample collected.	Jan. 3, 1938.	

	Thickness (feet)	Depth (feet)
<u>Well 85</u>		
Gentle slope, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, C. L. Syndicate survey, blk. B, 6 miles northwest of Bovina.		
Reddish-brown top soil - - -	2	2
Sandy red clay and caliche -	2	4
Caliche with sand and clay -	5	9
Red sand with caliche and clay - - - - -	5	14
Hard caliche - - - - -	1	15
No water sample collected.	Jan. 25, 1938.	

Logs of W. P. A. test wells in Permer County—Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 86</u>					
Gentle slope, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, C. L. Syndicate survey, blk. B, 6 miles northwest of Bovina.					
Reddish-brown top soil- - -	3	3			
White caliche- - - - -	2	5			
Pink caliche with sand and clay- - - - -	6	11			
Sandy red clay and caliche- -	10	21			
Fine-grained red sand with caliche pebbles- - - - -	4	25			
No water sample collected. Jan. 25, 1938.					
<u>Well 87</u>					
Gentle slope, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, C. L. Syndicate survey, blk. B, 6 miles northwest of Bovina.					
Reddish-brown top soil- - -	3	3			
Pink caliche with sand and clay- - - - -	14	17			
Chalky white caliche- - - -	5	22			
Fine-grained red sand and caliche pebbles- - - - -	7	29			
No water sample collected. Jan. 25, 1938.					
<u>Well 90</u>					
Gentle slope, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, Rhea Bros. survey, blk. A, 5 $\frac{1}{2}$ miles north of Bovina.					
Reddish-brown top soil- - -	3	3			
Caliche- - - - -	2	5			
Caliche with sand and clay- -	19	24			
Red sand with caliche pebbles- - - - -	1	25			
No water sample collected. Jan. 24, 1938.					
<u>Well 91</u>					
Gentle slope, side of county road, NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, Rhea Bros. survey, blk. A, 6 miles north of Bovina.					
Reddish-brown top soil- - -	3	3			
Caliche with sand and clay- - - - -	7	10			
Rock- - - - -		10			
No water sample collected. Jan. 24, 1938.					
<u>Well 92</u>					
Gentle slope, side of county road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, Rhea Bros. survey, blk. A, 6 $\frac{1}{2}$ miles north of Bovina.					
Reddish-brown top soil- - -	3	3			
Caliche with sand and clay -	10	13			
Sandy red clay and caliche -	2	15			
No water sample collected. Jan. 24, 1938.					
<u>Well 93</u>					
Flat, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, Rhea Bros. survey, blk. A, 6 $\frac{1}{2}$ miles north of Bovina.					
Reddish-brown top soil- - - -	3	3			
Caliche with sand and clay- -	14	17			
Sandy red clay and caliche- -	6	23			
Sandy, dark-red clay and caliche- - - - -	5	28			
No water sample collected. Jan. 20, 1938.					
<u>Well 94</u>					
Flat, side of county road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, Rhea Bros. survey, blk. A, 7 miles north of Bovina.					
Reddish-brown top soil- - - -	2	2			
Sandy red clay- - - - -	2	4			
Caliche with sand and clay- -	10	14			
Fine-grained red sand with clay and caliche- - - - -	8	22			
Sandy red clay- - - - -	11	33			
No water sample collected. Jan. 20, 1938.					
<u>Well 95</u>					
Slope away from draw, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, Rhea Bros. survey, blk. A, 7 $\frac{1}{2}$ miles north of Bovina.					
Reddish-brown top soil- - - -	3	3			
Red sand and clay- - - - -	3	6			
Caliche with sand and clay- -	11	17			
Sandy red clay and caliche- -	4	21			
Caliche with sand and clay- -	7	28			
No water sample collected. Jan. 20, 1938.					
<u>Well 96</u>					
Ridgetop, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, Rhea Bros. survey, blk. A, 7 $\frac{1}{2}$ miles north of Bovina.					
Reddish-brown top soil- - - -	2	2			
Silty red sand- - - - -	3	5			
Caliche with sand and clay -	13	18			
Sandy red clay and caliche- -	9	27			
No water sample collected. Jan. 19, 1938.					
<u>Well 98</u>					
Flat, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, C. L. Syndicate survey, blk. C, 5 $\frac{1}{2}$ miles north of Bovina.					
Top soil- - - - -	3	3			
Clay and caliche- - - - -	9	12			
Clay and sand- - - - -	8	20			
Sand- - - - -	18	38			
No water sample collected. Oct. 11, 1937.					

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

	Thickness (feet)	Depth (feet)
<u>Well 113</u>		
Edge of lake, C. L. Syndicate tract, SW $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 24, T.5 S., 14 miles east of Bovina.		
Top soil- - - - -	3	3
Sandy gray clay - - - - -	3	6
Fine sand and caliche pebbles- - - - -	2	8
Gray clay- - - - -	2	10
Red sand and caliche pebbles- - - - -	2	12
Sand and caliche pebbles- -	8	20
Sandy clay- - - - -	6	26
Red sand- - - - -	2	28
Sandy red clay- - - - -	2	30
No water sample collected. Dec. --, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 114</u>		
Edge of lake, C. L. Syndicate tract, SE $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 24, T.5 S., 14 miles east of Bovina.		
Top soil- - - - -	6	6
Sandy gray clay - - - - -	17	23
Gray sand- - - - -	2	25
Sandy gray clay- - - - -	2	27
Gray sand- - - - -	10	37
No water sample collected. Dec. --, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 115</u>		
Edge of lake, C. L. Syndicate tract, SE $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 24, T.5 S., 14 miles east of Bovina.		
Brown top soil- - - - -	3	3
Sandy gray clay and caliche pebbles- - - - -	5	8
Gray clay- - - - -	5	13
Gray sand- - - - -	5	18
Sandy gray clay with rusty spots- - - - -	5	23
Light-gray sand- - - - -	12	35
No water sample collected. Dec. --, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 116</u>		
Edge of lake, C. L. Syndicate tract, SE $\frac{1}{2}$ NE $\frac{1}{4}$ sec. 24, T.5 S., 14 miles east of Bovina.		
Brown top soil- - - - -	3	3
Sandy gray clay - - - - -	7	10
Gray sand- - - - -	16	26
Gray sand and caliche pebbles	7	33
No water sample collected. Dec. --, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 126</u>		
Bottom of Runningwater Draw, side of county road, NW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 35, Thos. Kelly survey, blk. H, 14 $\frac{1}{2}$ miles east		

	Thickness (feet)	Depth (feet)
<u>Well 126—Continued</u>		
of Bovina. This log is one of four logs shown graphically on Group 126 cross sec- tion in back of this report. Creek bed, 7 feet below ground, hole at center of east side of bridge.		
Surface soil- - - - -	4	4
Red sand, caliche pebbles and clay- - - - -	7	11
Fine-grained red sand and caliche pebbles- - - - -	15	26
No water sample collected. Dec. 17, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 131</u>		
Side of draw, side of county road, NW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 4, Doud and Keefer survey, 12 miles southeast of Bovina.		
Top soil- - - - -	3	3
Sand and clay - - - - -	15	18
Clay- - - - -	13	31
Clay and sand- - - - -	9	40
No water sample collected. Nov. 20, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 135</u>		
Bottom of Runningwater Draw, side of county road, SW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 31, T.5 S., 10 miles east of Bovina.		
Top soil- - - - -	3	3
Sand and clay - - - - -	15	18
Sand- - - - -	12	30
No water sample collected. Nov. 15, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 138</u>		
Flat, side of county road, SW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 19, T.5 S., 9 $\frac{1}{2}$ miles east of Bovina.		
Clay top soil- - - - -	3	3
Clay- - - - -	11	14
Caliche and clay- - - - -	18	32
Sand and clay- - - - -	16	48
No water sample collected. Nov. 4, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 140</u>		
Flat, side of county road, SW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 18, T.5 S., 9 $\frac{1}{2}$ miles east of Bovina.		
Top soil- - - - -	4	4
Red sand and clay - - - - -	8	12
Red clay- - - - -	14	26
Red sand and clay- - - - -	16	42
No water sample collected. Nov. 4, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 160</u>		
Dry lake basin, C. L. Syndicate tract, SE $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 3, T.10 S., 4 miles southeast of Bovina.		
Top soil- - - - -	4	4

(Continued on next page)

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

	Thickness (feet)	Depth (feet)
<u>Well 160--Continued</u>		
Sand and clay	17	21
Red sand	21	42
Sand	18	60
Fine-grained sand	19	79
No water sample collected.	---, 1937.	

Well 161

Dry lake basin, C. L. Syndicate tract, SW $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 2, T.10 S., 4 miles south of Bovina.	
Top soil	4
Sand and clay	14
Sand	11
Coarse-grained sand	19
Fine-grained sand	18
No water sample collected.	---, 1937.

Well 162

Dry lake basin, C. L. Syndicate tract, NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 2, T.10 S., 3 $\frac{1}{2}$ miles south- east of Bovina.	
Top soil	3
Clay	18
Sand and clay	15
Red sand	25
No water sample collected.	Nov. 28, 1937.

Well 163

Dry lake basin, C. L. Syndicate tract, SW $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 25, T.7 S., 3 $\frac{1}{2}$ miles south- east of Bovina.	
Top soil	5
Sand and clay	31
Red sand	18
Sand	8
No water sample collected.	Nov. 26, 1937.

Well 164

Dry lake basin, C. L. Syndicate tract, SW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 35, T.7 S., 3 $\frac{1}{2}$ miles south- east of Bovina.	
Top soil	6
Sand and caliche	11
Sand and clay	24
Sand	19
No water sample collected.	Nov. 26, 1937.

Well 165

Dry lake basin, side of county road, SE $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 27, T.7 S., 2 $\frac{1}{2}$ miles so th- east of Bovina. This log is one of six logs shown graphically on Group 165 cross section in back of this report.	
Reddish-brown top soil	3
Caliche with sand and clay	2

	Thickness (feet)	Depth (feet)
<u>Well 165--Continued</u>		
Red sand with clay and caliche	6	11
Red sand and clay	17	23
No water sample collected.	Feb. 5, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 168</u>		
Flat, side of county road, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T.7 S., 3 $\frac{1}{2}$ miles east of Bovina.		
Top soil	3	3
Caliche, clay and sand	9	12
Sand and caliche	18	30
Red sand	19	49
Caliche		49
No water sample collected.	Nov. 3, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 169</u>		
Flat, side of county road, SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T.7 S., 2 $\frac{1}{2}$ miles east of Bovina.		
Top soil	3	3
Clay	9	12
Clay and caliche	18	30
Sand and red clay	22	52
Rock		52
No water sample collected.	Nov. 3, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 172</u>		
Bottom of draw, side of Highway 60, SW $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 9, C. L. Syndicate survey, blk. E, 1 mile northeast of Bovina.		
Top soil	4	4
Sand and clay	6	10
Sand, clay and caliche	16	26
Caliche	17	43
No water sample collected.	Nov. 11, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 173</u>		
Slope toward draw, side of county road, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, C. L. Syndicate survey, blk. E, 1 mile north of Bovina.		
Top soil	10	10
Clay and sand	20	30
Clay	8	33
Sand and gravel	10	48
Rock		48
No water sample collected.	Oct. 6, 1937.	

	Thickness (feet)	Depth (feet)
<u>Well 174</u>		
Gentle slope, side of county road, SW $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 3, C. L. Syndicate survey, blk. E, 3 miles north of Bovina.		
Top soil	3	3
Caliche	27	30
Red clay and sand	10	40
No water sample collected.	Oct. 11, 1937.	

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

	Thickness (feet)	Depth (feet)
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Well 192

Dry lake basin, side of county road, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, C. L. Syndicate survey, blk. A, 3 $\frac{1}{2}$ miles west of Bovina. This log is one of 11 logs shown graphically on Group 192 cross section in back of this report.

Gummy black top soil- - - -	9	9
Gray clay- - - - -	2	11
Powdery white sand with caliche pebbles- - - -	22	33
Caliche- - - - -		33
No water sample collected. Feb. 4, 1938.		

Well 200

Creek bottoms, side of county road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 7 S., $\frac{3}{4}$ mile south of Bovina.

Brown top soil- - - - -	2	2
Gray sand, clay and caliche pebbles- - - - -	4	6
Sandy gray clay and caliche pebbles- - - - -	4	10
No water sample collected. Dec. 20, 1937.		

Well 201

Creek bottoms, side of county road, SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 7 S., $\frac{3}{4}$ mile south of Bovina.

Top soil- - - - -	4	4
Coarse-grained sand and silt- -	3	7
Gray sand, silt and caliche pebbles- - - - -	3	10
Red clay and caliche pebbles- - - - -	1	11
No water sample collected. Dec. 20, 1937.		

Well 202

Bottom of Runningwater Draw, side of county road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 7 S., $\frac{3}{4}$ mile south of Bovina. 7 feet below creek bottoms.

Top soil- - - - -	4	4
Sandy brownish-red clay- - -	5	9
Coarse-grained gray sand - -	2	11
Red sand and caliche pebbles- - - - -	26	37
No water sample collected. Dec. 20, 1937.		

Well 216

Creek bottoms, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, C. L. Syndicate survey, blk. A, 4 $\frac{1}{2}$ miles southwest of Bovina. This log is one of eight logs shown graphically on Group 216 cross section in back of this report.

	Thickness (feet)	Depth (feet)
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Well 216--Continued

Brown top soil- - - - -	5	5
Reddish-brown sandy clay- - -	5	10
Coarse-grained sand and caliche pebbles- - -	7	17
Red sand and caliche- - -	7	24
No water sample collected. Dec. 22, 1937.		

Well 222

Edge of lake, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, C. L. Syndicate survey, blk. A, 5 $\frac{1}{2}$ miles west of Bovina.

Top soil- - - - -	4	4
Fine-grained sandy gray clay- - - - -	21	25
Gray sand - - - - -	5	30
Sandy rusty-red clay- - -	4	34
No water sample collected. Dec. 21, 1937.		

Well 223

Edge of lake, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, C. L. Syndicate survey, blk. A, 5 $\frac{1}{2}$ miles west of Bovina.

Top soil- - - - -	3	3
Sandy gray clay - - - - -	29	32
Gray sand- - - - -	10	42
No water sample collected. Dec. 21, 1937.		

Well 224

Dry lake basin, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, C. L. Syndicate survey, blk. A, 5 $\frac{1}{2}$ miles west of Bovina.

Top soil- - - - -	3	3
Fine-grained sandy gray clay- - - - -	27	30
No water sample collected. Dec. 21, 1937.		

Well 225

Edge of lake, side of county road, NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, C. L. Syndicate survey, blk. A, 6 miles west of Bovina.

Top soil- - - - -	6	6
Sandy gray clay - - - - -	15	21
Fine-grained gray sand- - -	5	26
Sandy gray clay- - - - -	1	27
Coarse-grained sand- - - -	17	44
Fine-grained red sand- - -	12	56
No water sample collected. Dec. 21, 1937.		

Well 226

Dry lake basin, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, C. L. Syndicate survey, blk. A, 6 miles west of Bovina.

Top soil- - - - -	5	5
Sandy gray clay - - - - -	18	23
Coarse-grained gray sand- -	23	46
No water sample collected. Dec. 21, 1937.		

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

	Thickness (feet)	Depth (feet)
<u>Well 247</u>		
Dry lake basin, C. L. Syndicate tract, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T.10 S., 7 miles south of Bovina. This log is one of nine logs shown graphically on Group 247 cross sec- tion in back of this report.		
Reddish-brown clay top soil- - - - -	2	2
Caliche and red clay- - - - -	2	4
Dark-red sandy clay and caliche- - - - -	11	15
Rock- - - - -		15
No water sample collected. Feb.7, 1938.		

	Thickness (feet)	Depth (feet)
<u>Well 260</u>		
Flat, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T.10 S., 9 miles south of Bovina.		
"Rich" brown loam- - - - -	2	2
Red clay- - - - -	3	5
Caliche and clay - - - - -	6	11
Sandy brown clay- - - - -	7	18
Caliche and clay- - - - -	13	31
Brown sand and clay- - - - -	3	34
No water sample collected. Sept.24, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 265</u>		
Flat, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T.14 S., 10 miles south of Bovina.		
Brown loam- - - - -	4	4
Caliche and clay- - - - -	6	10
Brown clay- - - - -	9	19
Gray clay- - - - -	2	21
Brown clay- - - - -	1	22
Gray clay- - - - -	4	26
No water sample collected. Sept.25, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 309</u>		
Flat, side of county road, SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T.15 S., 12 $\frac{1}{2}$ miles south of Bovina.		
Sandy brown top soil- - - -	2	2
Caliche- - - - -	4	6
Brown clay- - - - -	9	15
Sandy red clay- - - - -	15	30
No water sample collected. Sept.23, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 324</u>		
Flat, side of Highway 70, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, W. D. & F. W. Johnson survey, blk. Z, 12 $\frac{1}{2}$ miles sout ^h of Bovina.		
Chocolate-colored loam- - -	3	3
Caliche and clay- - - - -	4	7
Brown clay- - - - -	7	14
Red clay- - - - -	3	17
Brown clay- - - - -	5	22
Caliche- - - - -	2	24
Sandy brown clay and caliche- - - - -	6	30
No water sample collected. Sept.22, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 336</u>		
Flat, side of Highway 70, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T.9 S., 11 $\frac{1}{2}$ miles southwest of Bovina.		
Sandy red top soil- - - - -	1	1
Caliche- - - - -	5	6
Caliche and clay- - - - -	3	9
Brown clay- - - - -	10	19
Caliche- - - - -	1	20
Caliche and clay- - - - -	5	25
Rock- - - - -	1	26
Caliche and clay- - - - -	4	30
No water sample collected. Sept.14, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 346</u>		
Flat, side of county road, NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T.16 S., 13 miles southwest of Bovina.		
Brown top soil- - - - -	3	3
Caliche and clay- - - - -	12	15
Brown sand and caliche- - - -	9	24
Brown sand and clay- - - -	1	25
No water sample collected. Sept.16, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 347</u>		
Flat, side of county road, SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T.16 S., 14 miles southwest of Bovina.		
Brown top soil- - - - -	3	3
Caliche- - - - -	6	9
Sandy brown clay- - - - -	6	15
Brown clay and caliche- - - -	4	19
No water sample collected. Sept.16, 1937.		

	Thickness (feet)	Depth (feet)
<u>Well 350</u>		
Flat, side of Highway 70, NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T.16 S., 11 $\frac{1}{2}$ miles southwest of Bovina.		
Brown top soil- - - - -	3	3
Caliche- - - - -	1	4
Caliche and clay- - - - -	2	6
Brown clay- - - - -	5	11
Caliche- - - - -	3	14
Caliche and clay- - - - -	6	20
Sand and clay- - - - -	1	21
No water sample collected. Sept.14, 1937.		

Partial analyses of water from wells in Parmer County, Texas

(Analyzed at the University of Texas under the direction of Dr. E. P. Schuch, Director of the Bureau of Industrial Chemistry; by J. F. Stulken, D. F. Ridell, H. T. Davidson, Floyd H. Ward and F. G. Steer, Chemists; and J. A.

Harmaza, Martin Wieland, and Jack Ramsey, Assistant Chemists. Nitrate determined by E. W. Lehr, U. S. Geological Survey. 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 (calculated)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate (HCO ₃)	Sul-phate (SO ₄)	Chlo-ride (Cl)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calculated)
2	T. Brown	201	Jan. 6, 1938	315	-	-	-	256	36	18	20	-
3	G. T. Taylor	187	Oct. 25, 1937	279	89	18	45	256	35	16	a/	171
4	Ivan Thompson	253	do.	246	52	20	15	232	25	20	a/	212
5	J. F. Miller	196	do.	237	40	20	26	256	18	7	a/	182
6	--	221	do.	253	41	19	30	214	33	10	a/	182
7	Farwell Bros.	177	Jan. 12, 1938	224	45	25	7	250	18	6	a/	216
14	Black School	151	Oct. 26, 1937	259	61	19	12	256	29	12	a/	273
19	Santa Fe R. R.	220	Dec. 18, 1937	320	47	29	35	293	47	10	a/	235
21	J. W. Hauch	131	Dec. 17, 1937	223	52	24	-	238	22	8	a/	230
22	Lakeview School	240	do.	249	54	32	-	287	15	7	a/	265
23	T. Manderscheid	248	do.	269	61	28	5	365	18	7	a/	267
25	H. Trimbling	223	Dec. 20, 1937	260	59	19	15	262	25	13	a/	227
29	E. W. Pate	224	Nov. 2, 1937	243	64	17	5	232	25	18	a/	231
34	City of Friona	192	Dec. 20, 1937	286	43	29	26	262	39	20	a/	228
43	Mrs. -- Terry	190	Oct. 25, 1937	265	51	31	9	293	18	12	a/	255
44	--	234	Oct. 20, 1937	252	51	15	28	238	26	21	a/	190
45	--	106	do.	301	-	-	-	244	50	19	a/	-
46	J. B. McFarland	204	do.	267	-	-	-	244	31	15	a/	-
48	--	171	do.	385	69	45	8	256	77	60	a/	358
50	E. H. Corcoran	187	do.	269	37	31	24	256	31	20	a/	218
51	O. G. Turner	180	do.	321	-	-	-	244	50	32	a/	-
52	--	192	do.	251	42	26	18	238	35	13	a/	211
54	V. M. Sedtle	187	Jan. 7, 1938	258	38	24	29	256	25	16	a/	195
58	W. H. Fuqua Est.	163	Oct. 25, 1937	267	55	18	23	268	20	11	a/	212
60	Lloyd King	193	Oct. 17, 1937	229	-	-	-	226	20	10	a/	-
62	F. L. Spring	180	do.	195	-	-	-	195	16	8	a/	-
63	Ray Davies	188	do.	264	42	19	35	250	28	17	a/	182
64	M. M. Shirley	160	do.	259	-	-	-	250	26	11	a/	-
65	J. E. Johnston	118	Oct. 20, 1937	298	-	-	-	232	43	30	a/	-
66	Floyd Schlinker	168	Oct. 17, 1937	321	-	-	-	207	58	38	a/	-
68	Rica School	179	do.	249	48	20	20	238	28	16	a/	202

a/ Nitrate less than 20 parts per million.

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate HCO ₃	Sul-phate (SO ₄)	Chloride (Cl)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calculated)
69	J. J. Helms	92	Oct. 17, 1937	261	-	-	-	244	28	14	a/	-
70	G. T. Abbot	167	Jan. 18, 1938	281	54	22	23	256	36	20	a/	224
71	J. E. Johnston	179	Oct. 20, 1937	254	-	-	-	220	35	16	a/	-
72	C. E. Stevens	215	do.	245	-	-	-	214	31	17	a/	-
74	J. G. Palmateer	175	Dec. 30, 1937	284	-	-	-	220	39	20	a/	-
77	Harry Reisinger	244	Dec. 3, 1937	223	41	29	3	226	29	10	a/	223
78	Walter Landers	256	do.	334	-	-	-	220	65	28	a/	-
81	S. Jersig	205	Dec. 2, 1937	229	43	28	6	232	25	13	a/	222
82	F. W. Ayres	187	Oct. 11, 1937	303	-	-	-	232	43	27	a/	-
83	N. L. Tharp	238	Jan. 28, 1938	290	34	17	54	244	36	20	a/	156
97	J. H. Grayson	282	Oct. 11, 1937	268	53	18	24	244	39	12	a/	206
100	H. P. Bishop	325	Dec. 3, 1937	249	-	-	-	207	25	15	a/	-
103	C. L. Syndicate	330	do.	239	-	-	-	207	22	13	a/	-
104	T. E. Blackburn	280	Dec. 6, 1937	182	34	17	13	139	18	7	a/	155
106	A. L. Sims	222	do.	223	55	19	3	226	22	7	a/	217
108	R. F. Blankenship	230	Nov. 2, 1937	276	-	-	-	256	29	16	a/	-
122	Delbert Hudnall	164	Dec. 7, 1937	249	53	27	5	262	18	8	a/	242
125	G. F. Williams	168	Nov. 24, 1937	268	-	-	-	256	22	10	a/	-
127	J. F. Armstrong	197	Nov. 8, 1937	271	-	-	-	250	28	17	a/	-
129	M. G. Jesko	159	do.	228	-	-	-	183	29	17	a/	-
130	W. J. Coffman	167	Feb. 5, 1938	229	47	29	-	232	22	17	a/	238
133	Martha Jesko	163	Nov. 8, 1937	232	44	23	13	220	26	18	a/	204
134	C. L. Syndicate	202	do.	271	61	21	14	256	32	17	a/	238
136	do.	188	Nov. 17, 1937	245	50	23	12	232	29	17	a/	219
139	A. H. Boatman	234	Nov. 8, 1937	245	48	22	16	232	28	17	a/	209
147	C. L. Syndicate	280	Dec. 4, 1937	220	42	23	11	226	22	11	a/	199
148	do.	225	Nov. 2, 1937	252	52	22	14	244	29	15	a/	219
149	do.	186	Feb. 5, 1938	244	45	27	12	244	25	15	a/	222
150	do.	189	do.	232	47	28	3	244	22	12	a/	232
153	do.	232	Nov. 17, 1937	238	58	23	2	250	18	14	a/	239
156	Lee Dozier	171	Feb. 5, 1938	259	51	29	5	232	32	20	a/	248
159	Joe Hromas	194	Feb. 7, 1938	244	52	26	3	220	29	18	a/	236
166	C. Wilbur	208	Feb. 5, 1938	248	52	24	6	256	22	8	a/	230
167	C. L. Syndicate	187	Nov. 2, 1937	296	58	22	16	214	37	17	46	234
170	Laura K. Hill	270	Dec. 3, 1937	232	42	34	-	268	18	6	a/	246

a/ Nitrate less than 20 parts per million.

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicarbon-ate (HCO ₃)	Sul-phate (SO ₄)	Chlo-ride (Cl)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calculated)
175	Mrs. J. A. Tidenburg	240	Dec. 3, 1937	258	-	-	-	220	29	14	a/	-
176	L. P. Starr	404	Jan. 28, 1938	259	-	-	-	232	29	18	a/	-
177	M. H. Martin	174	Dec. 2, 1937	420	-	-	-	244	86	51	a/	-
178	J. G. Charles	192	do.	251	45	21	23	244	29	13	a/	198
179	Mrs. A. Jersig	216	do.	254	41	27	20	244	28	18	a/	212
181	F. W. Jersig	210	do.	228	38	22	20	226	25	12	a/	184
182	Paul Jones	260	do.	223	51	19	8	220	23	14	a/	207
183	A. J. Pipes	210	do.	292	52	39	8	329	19	12	a/	289
185	J. H. Snodderly	202	do.	221	46	24	5	237	22	10	a/	215
186	J. L. Jones	203	do.	228	46	26	3	201	39	15	a/	221
188	J. F. Pesch	188	Feb. 4, 1938	248	46	23	16	226	29	14	a/	209
191	E. M. Ross	193	Oct. 7, 1937	217	30	27	12	195	16	12	24	187
193	Norton & Robbins	172	do.	246	-	-	-	238	22	13	a/	-
194	E. M. Metcalf	198	do.	256	-	-	-	242	32	13	a/	-
199	Bovina School	180	Dec. 21, 1937	252	46	26	14	238	25	17	a/	221
205	L. W. Hobart	185	Sept. 24, 1937	267	-	-	-	256	24	15	a/	-
207	E. F. Johnson	198	Jan. 28, 1938	260	42	22	28	244	36	12	a/	194
208	L. H. Pesch	192	Oct. 7, 1937	238	48	20	17	244	32	11	a/	202
209	C. F. Hastings	183	do.	226	-	-	-	207	25	13	a/	-
210	W. D. Ross Est.	184	Feb. 3, 1938	253	44	23	22	244	29	15	a/	204
211	Barnes & Hastings	205	do.	253	50	23	15	232	32	19	a/	219
214	Lora Dickson	184	do.	259	54	22	15	250	32	13	a/	224
218	A. Beckman	219	Jan. 28, 1938	226	46	24	7	226	25	13	a/	215
220	E. M. Ware	173	do.	263	46	24	18	220	43	16	a/	215
231	J. D. Peters	208	Feb. 3, 1938	266	53	27	11	244	36	19	a/	241
233	J. D. Hamlin	2004	Jan. 14, 1938	253	39	21	31	250	25	14	a/	183
244	J. T. Hanna	169	Jan. 13, 1938	261	43	29	17	250	25	24	a/	228
245	Clyde Perkens	187	Feb. 4, 1938	248	48	26	12	256	22	14	a/	226
248	C. C. Christian	219	Sept. 24, 1937	238	46	26	9	232	25	18	a/	221
255	G. E. Roberts	180	Feb. 8, 1938	228	48	18	13	220	22	12	a/	196
257	J. W. Magness	175	Sept. 24, 1937	242	-	-	-	232	19	16	a/	-
258	Oklahoma School	175	Dec. 28, 1937	304	56	34	6	214	43	43	a/	281
259	Mrs. J. W. Bradshaw	160	Sept. 22, 1937	217	50	23	1	220	21	14	a/	219
261	C. M. Favillie	150	do.	276	-	-	-	244	25	26	a/	-

a/ Nitrate less than 20 parts per million.

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate (HCO ₃)	Sul-phate (SO ₄)	Chlo-ride (Cl)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calculated)
262	H. H. Henson	150	Sept. 22, 1937	407	-	-	-	220	98	52	a/	-
266	B. T. Hendrickson	160	Sept. 25, 1937	233	-	-	-	232	16	13	a/	-
267	-- Hardidge	199	Feb. 5, 1938	243	48	30	1	233	25	13	a/	244
270	Midway School	183	Sept. 27, 1937	267	53	26	11	244	30	18	a/	241
271	Mrs. R. C. Wiley	169	Jan. 27, 1938	256	54	26	6	232	29	18	a/	241
272	S. E. Tabor	162	Feb. 5, 1938	238	44	24	13	220	25	16	a/	210
273	Earnest Templar	176	Sept. 27, 1937	265	-	-	-	244	24	20	a/	-
275	Chas. Hinkson	240	Sept. 23, 1937	311	42	22	50	299	36	14	a/	194
276	Joe Paul	169	Sept. 27, 1937	299	43	38	16	250	51	28	a/	263
277	Bill Sherley	169	do.	233	49	26	5	250	14	16	a/	231
284	John Gammon	161	Dec. 7, 1937	231	51	27	-	244	22	11	a/	237
285	Rufus Carter	109	Sept. 27, 1937	255	-	-	-	232	26	18	a/	-
288	E. A. Seaton	140	Dec. 29, 1937	359	73	29	17	256	57	40	a/	303
299	A. L. Wood	141	do.	445	-	-	-	268	96	50	a/	-
291	J. D. Carpenter	120	do.	295	-	-	-	250	36	18	a/	-
292	O. L. Jarmon	55	do.	365	-	-	-	250	57	44	a/	-
293	F. L. Wenner	117	Sept. 23, 1937	261	-	-	-	244	29	13	a/	-
297	Frank C. Mason	112	Jan. 27, 1938	303	59	28	14	244	47	27	a/	262
298	C. L. Syndicate	117	Dec. 28, 1937	298	55	29	20	299	25	22	a/	258
299	do.	138	do.	272	46	24	24	250	29	18	a/	215
301	R. N. Cranfield, Jr.	84	Sept. 23, 1937	337	72	20	25	244	54	38	a/	262
304	E. & D. Culley	90	Jan. 27, 1938	302	-	-	-	220	50	33	a/	-
305	E. J. Kickerbocker	82	Sept. 23, 1937	570	92	59	17	226	205	62	24	471
307	J. H. Barger	110	do.	392	-	-	-	220	80	54	a/	-
314	David Robertson	115	Sept. 22, 1937	329	-	-	-	214	54	46	a/	-
315	J. C. Robertson	143	do.	302	56	23	24	226	54	28	a/	234
317	C. L. Syndicate	145	Jan. 13, 1938	286	55	25	16	232	43	25	a/	241
318	W. G. Hurst	149	Feb. 8, 1938	267	51	28	12	244	32	24	a/	242
319	-- Christian	156	Jan. 13, 1938	294	56	34	5	232	50	35	a/	281
321	--	138	Feb. 4, 1938	314	64	20	26	232	50	40	a/	243
322	H. A. Haseloff	162	do.	349	60	38	11	220	89	43	a/	309
325	Geries Est.	103	Jan. 13, 1938	314	62	26	17	214	57	36	a/	261
326	Mrs. Ada Middleton	110	Sept. 16, 1937	296	56	28	13	220	47	36	a/	257
327	Geries Est.	118	Feb. 8, 1938	438	54	23	76	256	93	56	a/	229
328	G. W. Magness	130	Sept. 16, 1937	437	-	-	-	220	105	64	a/	-

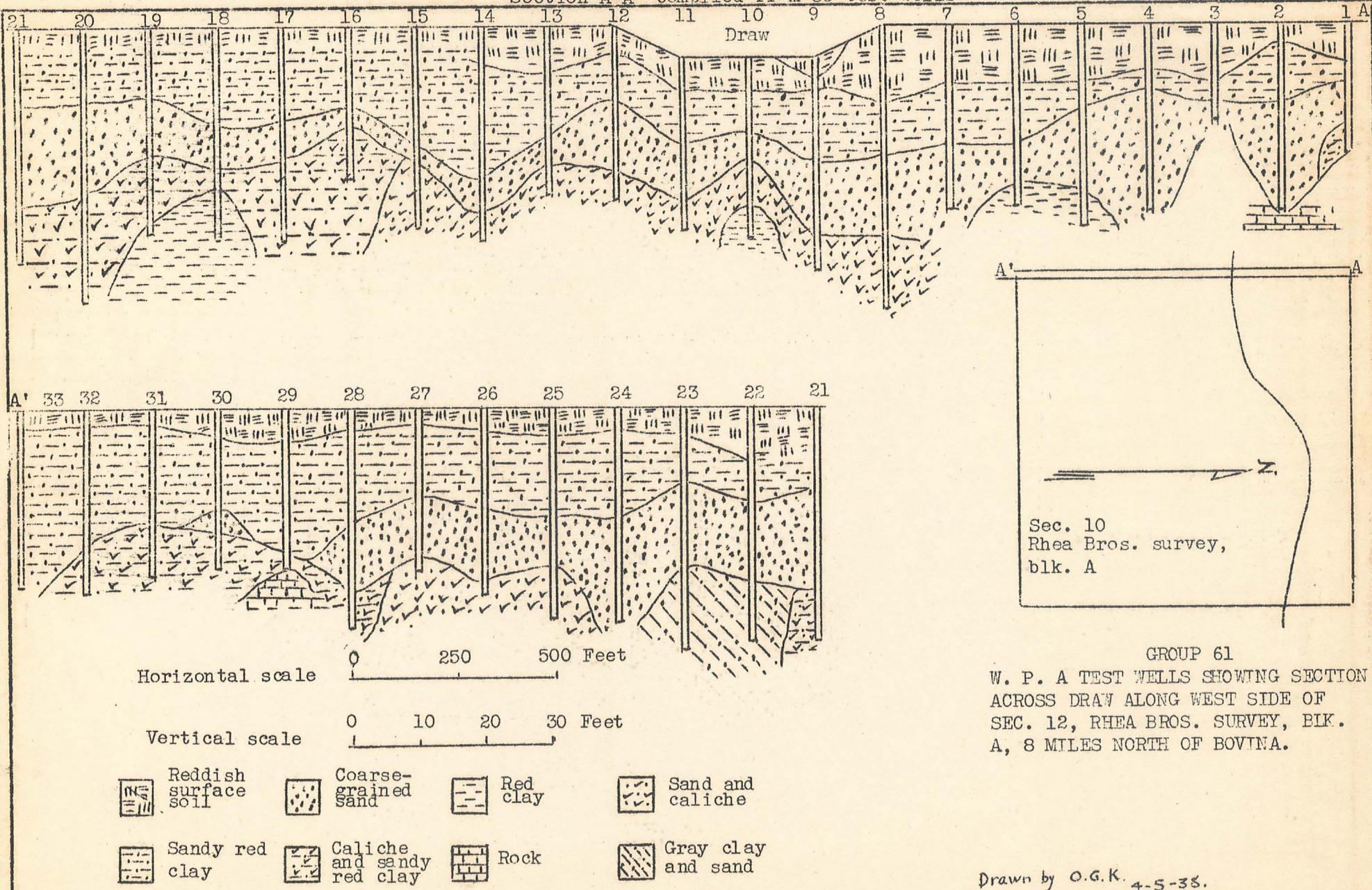
a/ Nitrate less than 20 parts per million.

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

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calculated)	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calculated)	Bicar-bonate (HCO_3)	Sul-phate (SO_4)	Chlo-ride (Cl)	Ni-trate (NO_3)	Total hardness as CaCO_3 (calculated)
329	H. McMillan	136	June 22, 1937	401	66	46	10	207	100	75	a/	359
330	R. C. Mitzelfelt	133	Feb. 4, 1938	361	59	44	9	201	82	68	a/	327
331	--	147	do.	329	58	39	6	214	75	46	a/	304
332	A. L. Tandy	160	Feb. 2, 1938	275	49	19	28	220	36	28	a/	202
334	J. D. Hamlin	178	Jan. 27, 1938	277	55	19	22	232	36	23	a/	217
342	Mrs. --Thompson	127	Feb. 4, 1938	254	40	23	25	220	36	22	a/	194
343	F. W. McElroy	131	do.	252	48	26	12	232	32	20	a/	226
345	C. L. Syndicate	300	Jan. 13, 1938	270	38	22	37	232	36	18	a/	184
348	C. L. Purselley	180	Sept. 16, 1937	322	-	-	-	207	61	42	a/	-
349	Phillips & Massengill	200	Feb. 2, 1938	321	50	24	34	201	75	39	a/	225
353	T. E. Lovelace	153	June 22, 1937	365	64	40	18	220	89	64	a/	325
355	J. P. Tate	166	Feb. 2, 1938	328	59	29	18	189	68	53	a/	268
356	A. J. Donelson	152	do.	306	55	28	18	207	57	39	a/	252
358	C. M. Cook	135	Feb. 8, 1938	409	69	36	25	214	118	56	a/	323
359	W. C. Watkins	143	Feb. 2, 1938	504	85	44	30	226	154	80	a/	392
364	H. Overstreet	172	Sept. 16, 1937	335	-	-	-	201	69	46	a/	-

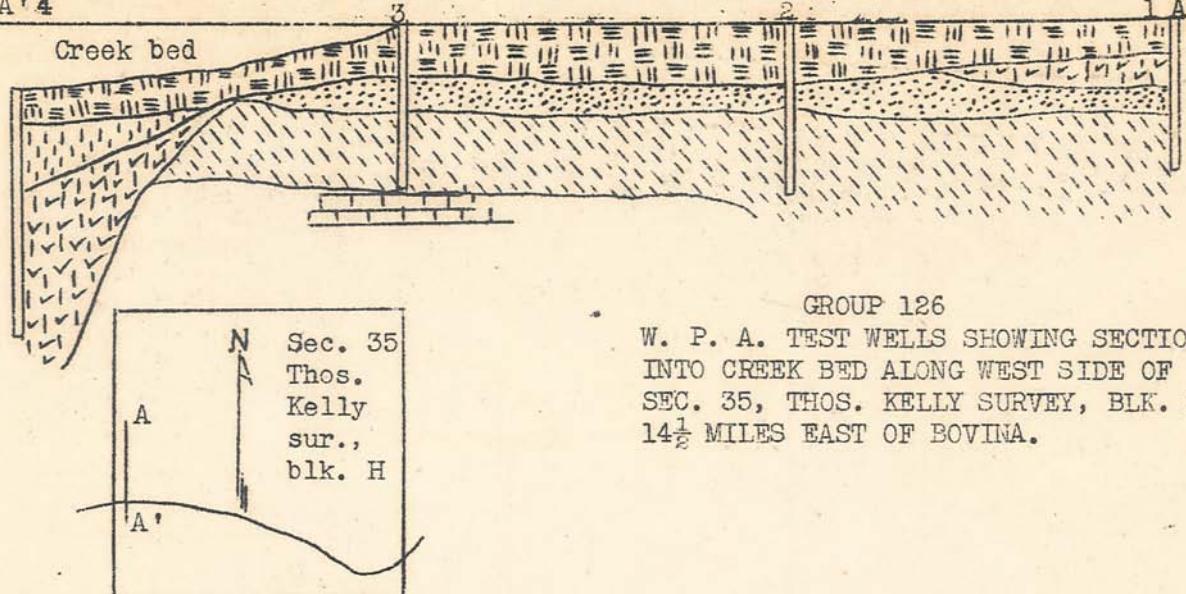
a/ Nitrate less than 20 parts per million.

Section A-A' compiled from 33 test wells



SECTION A-A' COMPILED FROM 4 TEST WELLS

A' 4



GROUP 126

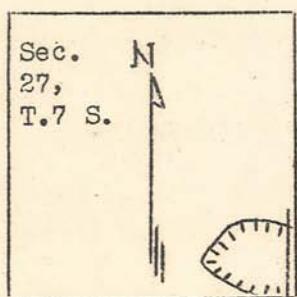
W. P. A. TEST WELLS SHOWING SECTION
INTO CREEK BED ALONG WEST SIDE OF
SEC. 35, THOS. KELLY SURVEY, BLK. H,
14½ MILES EAST OF BOVINA.

Horizontal scale 0 50 100 150 Feet

Vertical scale 0 10 20 30 Feet

SECTION B-B' COMPILED FROM 6 TEST WELLS

B' 6 5 4 3 2 1 B



Horizontal scale 0 100 200 Feet

Vertical scale 0 10 20 Feet

GROUP 165

W. P. A. TEST WELLS
SHOWING SECTION THROUGH
EDGE OF DRY LAKE ALONG
EAST SIDE OF SEC. 27,
T. 7 S., 2½ MILES SOUTH-
EAST OF BOVINA.

[Hatched] Reddish surface soil [Dotted] Clear sand [Cross-hatched] Red sand, clay, and caliche

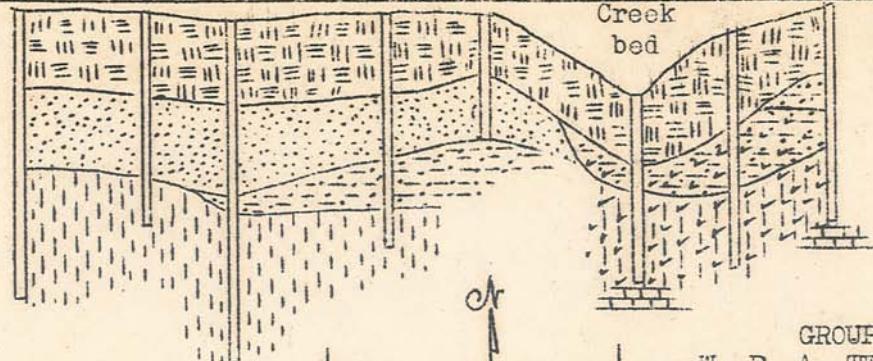
[Dotted] Gray sand [Cross-hatched] Red sand and caliche [Cross-hatched] Red sand and clay

[Hatched] Red sand [Rock] Rock [Cross-hatched] Caliche, sand and clay

Drawn by O. G. K
4-5-38.

SECTION A-A' COMPILED FROM 8 TEST WELLS

A' 8 7 6 5 4 3 2 1 A



Horizontal scale

0 100 200 300 Feet

Vertical scale

0 10 20 30 Feet

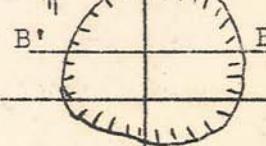
GROUP 216
W. P. A. TEST WELLS
SHOWING SECTION ACROSS
CREEK BED ALONG WEST
SIDE OF SECS. 19 & 30,
C. L. SYNDICATE SURVEY,
BLK. A, $4\frac{1}{2}$ MILES SOUTH-
WEST OF BOVINA.

SECTION B-B' COMPILED FROM 9 TEST WELLS

B' 9 8 7 6 5 4 3 2 1 B

Horizontal scale 0 100 200 300 Feet

Vertical scale 0 10 20 30 Feet

Sec. 21 Sec. 22,
T. 10 S.

Reddish surface soil

Gray clay and sand

Gray sand

Caliche, sand and clay

Sandy red clay

Red sand

Red sand and caliche

clay and caliche

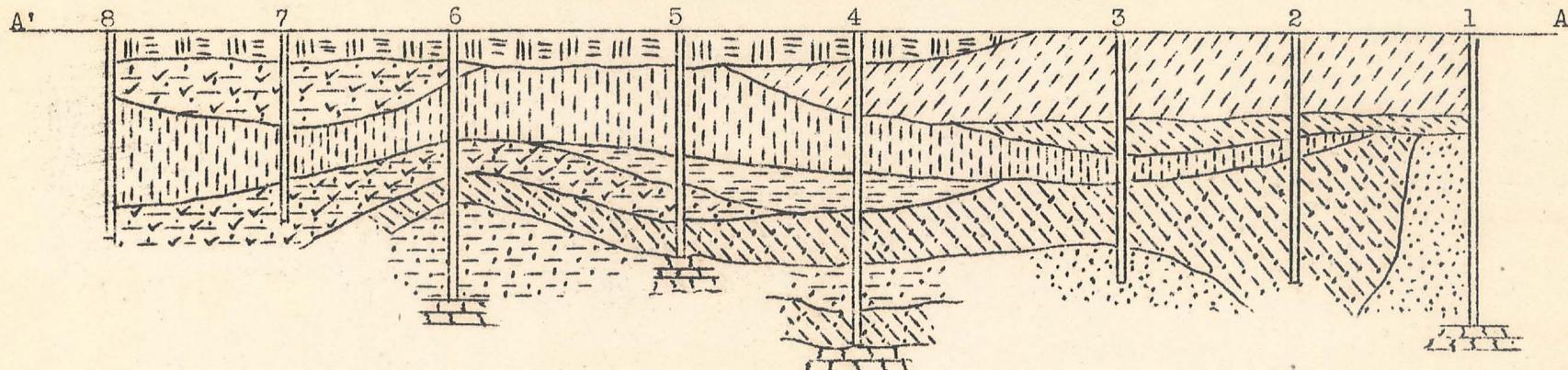
Gray clay

Rock

GROUP 247

W. P. A. TEST WELLS SHOWING SECTION
ACROSS DRY LAKE ALONG SOUTH SIDE OF
SECS. 21 & 22, T. 10 S., 7 MILES
SOUTH OF BOVINA.

SECTION A-A' COMPILED FROM 8 TEST WELLS



Horizontal scale 0 100 200 300 Feet

Vertical scale 0 10 20 30 Feet

Reddish surface soil

Red clay

Gray clay and sand

Black surface soil

Caliche and sandy red clay

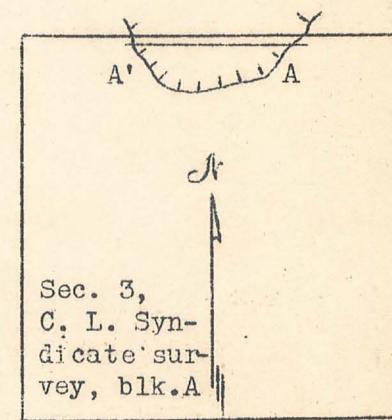
Sandy red clay

Fine-grained white sand

Gray clay

Red sand

Rock



GROUP 192

W. P. A. TEST WELLS SHOWING SECTION ACROSS
DRY LAKE ALONG NORTH SIDE OF SEC. 3, C. L.
SYNDICATE SURVEY, BLK. A, $3\frac{1}{2}$ MILES WEST OF
BOVINA.

Drawn by O. G. K.

4-8-38.

