TEXAS BOARD OF WATER ENGINEERS

C. S. Clark, Chairman
A. H. Dunlap, Member
J. W. Pritchett, Member

HARDEMAN COUNTY, TEXAS

PREPARED IN COOPERATION WITH THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY

OCTOBER 1935

REPRINTED OCTOBER 1950

Please do not destroy or throw away this publication. If you have no further use for it, write to the State Board of Water Engineers at Austin and ask for postage to return it.

TEXAS

* * *

STATE BOARD OF WATER ENGINEERS
C. S. Clark, Chairman
A. H. Dunlap, Member
J. W. Pritchett, Member

* * * *

HARDEMAN COUNTY, TEXAS

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

* * * *

WORKS PROGRESS ADMINISTRATION

GROUND WATER SURVEY

PROJECT 2090

F. E. Russell and L. P. Huggins
Project Superintendents

* * * * *

Analyses made, maps prepared, data
assembled, and report mimeographed by
WORKS PROGRESS ADMINISTRATION
PROJECT 6909

* * * * * * * * *

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

* * * * * * * * *

Austin, Texas
Oct. 15, 1936

HARDEMAN COUNTY, TEXAS

Introduction

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

The purpose of this survey was to obtain information concerning existing wells and springs and the quantity and quality of water they yield, and put down test holes where additional information is 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 U. S. Geological Survey cooperated in the technical direction of the project and the Bureau of Industrial Chemistry of the University of Texas furnished laboratory space and equipment and supervised the chemical analyses.

The analyses were made by chemists employed on Works Progress Administration Project 6909 at Austin, Texas, sponsored by the State Planning Board and the State Board of Water Engineers. This release was typed and assembled by typists and draftsmen employed on this project.

The field work was started in Hardeman County on December 19, 1935, as Project 2090 of District 18 of the Works Progress Administration, Wichita Falls, Texas. F. E. Russell, a geologist, was project superintendent from November 19, 1935, until March 10, 1936, when he resigned to accept private employment. L. P. Huggins, an engineer, took his place and finished the eastern part of the County. This project also included Foard, Knox, and Haskell Counties. Mr. Huggins has completed the field work in Foard County and is now working in Knox County.

Credit should be given to the Wichita Falls District Office of the Works Progress Administration for their cooperation on this project. Mr. Russell should be given credit for his great interest in the work and for the use of much geologic information he had previously obtained in this area. Mr. Huggins deserves credit for the many extra hours he has worked.

This release contains the well and spring records and well logs obtained by the project superintendents, logs of the test holes drilled by the W. P. A. labor, and the chemical analyses of water from privately owned wells and springs. Locations of all wells and springs listed are shown on Plates 1 to 3, inclusive, 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.

Geologic Section

The formations have been named or described in table under "Water bearing bed." Letters A to L have been used tentatively to designate beds in the Blaine gypsum that are believed to be recognizable throughout a large part of the county. Bed A is the lowest and bed L the highest bed in the formation. The correlations of the geologic formations given in the well tables were made by F.E.Russell, and while it is believed that they are correct, the sponsors take no responsibility for their accuracy.

Records of wells in Hardeman County, Texas
(All wells are bored or drilled unless otherwise noted in remarks.)

Well	Distance from Goodlett See plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
1	15½ miles north	Sec. 2, N.½, C.& M.R.R.	T.D.Wallace	1920	18	36	Quaternary sand	0
2	15 miles north	do.	C. E. Webb	1935	8	36	do.	0
g/3	do.	Sec.4, SW.¼, C.& M.R.R.	Ira Camden	--	70	6	do.	0
4	do.	Sec.4, SW.¼, C.& M.R.R.	R.C.Camden	--	70	6	do.	0
5	14 miles north	Sec.5, SE.¼, C.J. & D.	H.P.Watson	--	120	6	F & G	0
6	15 miles north	Sec.5, SE.¼, C.& M.R.R.	B. E. Harper	--	90	6	do.	0
7	16 miles north	Sec.6, SE.¼, C.& M.R.R.	J.D.Hughes	--	125	6	do.	0
8	14½ miles north	Sec.10, C.J.& D.	H.H.Lightfoot	1916	125	6	do.	0
g/9	14 miles north	Sec.9, SE.¼, C.J.& D.	W.P.A. test well	1936	40	3	Quaternary sand	--
10	do.	Sec.11, SE.¼, C.J.& D.	F.D.Caskey	1919	125	6	F & G	0
g/11	do.	Sec.14, NW. Cor. C.J.& D.	W.P.A. test well	1936	37	3	Quaternary sand	--
12	do.	Sec.12, H.E.& W.T.R.R.	B.D.Porterfield	--	160	6	F & G	0
g/13	do.	Sec.9, SE.¼, C.& M.R.R.	W.P.A. test well	1936	37	3	Quaternary sand	--
14	13½ miles north	Sec.10, SW.¼, C.& M.R.R.	Mrs.Henry Watson	192[illegible]	100	6	F & G	0
15	13 miles north	Sec.11, SE.¼, G.C.S.F. R.R.	Homer Watson	--	100	6	do.	0
g/16	12½ miles north	Sec.32, NE¼, C J. & D.	D.I.Fellers	--	150	6	do.	0
17	13 miles north	Sec.26, SE. Cor. C.J.& D.	E.B.Caskey	--	146	6	do.	0
g/18	do.	Sec.25, NE.¼ C J.& D.	W.P.A. test well	1936	40	3	Quaternary sand	--

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records obtained by F. F. Russell and L. P. Huggins, Project Superintendents
(Chemical analyses of water from these wells are
given in the table of analyses)

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
1	12	f/	C,W	D,S	Dug well with concrete curbing. Permanent supply.
2	4	f/	C,W	D,S	Do.
3	66	f/	C,W	D,S	Permanent supply.
4	60	f/	C,W	D,S	Do.
5	90	f/	C,W	D,S	Permanent supply. Lower 16 feet of casing is perforated.
6	40	f/	C,W	D,S	Do.
7	108	f/	C,W	D,S	Permanent supply.
8	80	f/	C,W	D,S	Do.
9	--	--	None	N	No water. See log.
10	120	f/	C,W	D,S	Permanent supply.
11	--	--	None	N	No water. See log.
12	120	f/	C,W	S	Permanent supply.
13	--	--	None	N	No water. See log.
14	70	f/	C,W	D,S	Permanent supply. Reported 5 foot drawdown after pumping 6 gallons a minute for 48 hours.
15	70	f/	C,W	D,S	Do.
16	90	f/	C,W	D,S	Permanent supply.
17	70	f/	C,W	D,S	Do.
18	--	--	None	N	No water. See log.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public supply; D, domestic; S, stock; N, not used.
f/ Water level reported, usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/19	13 miles north	Sec.25,SE¼, C.J.& D.	R. Allen	--	125	6	F & G	0
20	do.	Sec.34,NE¼, C.J.& D.	J.D.Chesshir	--	120	6	do.	0
g/21	12¼ miles north	Sec.36,NW¼, C.J.& D.	J.W.McGee	--	180	6	do.	0
22	do.	Sec.340,NE¼, W.& N.W.Blk.H.	F.J.McGee	--	120	6	do.	0
23	14 miles north	Sec.16,NW¼, C.J.& D.	-- Dial	--	118	6	Quaternary sand	0
g/24	12½ miles north	Sec.340,NW¼, W.& N.W.Blk.H.	J.T.Coleman	--	190	6	F & G	0
25	13 miles north	Sec.341,NE¼, W.& N.W.Blk.H.	J.C.Lindsey	1920	165	6	F & G	0
g/26	do.	Sec.21,South cen.C.J.& D.	F. Hines	--	86	6	do.	0
27	14 miles north	Sec.3,SE¼, C.& M. R.R.	H.H.Lightfoot	1923	72	6	do.	0
28	13 miles north	Sec.370,NE¼, W.& N.W.Blk.H.	E. F. Riley	--	54	6	Quaternary sand	0
29	13½ miles north	Sec.19,SE¼, C.J.& D.	B.K.McCaskle	--	200	6	F & G	0
30	do.	Sec.2,SE¼, C.J.& D.	-- Vaughn	--	194	6	do.	0
31	14½ miles north	Sec.1,S.½, C.& M.R.R.	W.E.Trolinder	--	177	6	do.	0
32	13½ miles north	Sec.370,NW¼, W.& N.W.Blk.H.	W. E. Horton	--	180	6	do.	0
33	13 miles north	Sec.371,SE¼, W.& N.W.Blk.H.	J. E. Howard	1905	200	6	do.	0
34	12½ miles north	Sec.369,NW¼, W.& N.W.Blk.H.	H. P. Watson	1930	210	6	Gypsum bed	0
35	12 miles north	Sec.372,SE¼, W.& N.W.Blk.H.	N. C. Sanders	1906	176	6	F & G	0
36	do.	Sec.369,SE¼, W.& N.W.Blk.H.	J. C. Lindsey	--	260	6	do.	0
37	do.	Sec.369,NE¼, W.& N.W.Blk.H.	J.S.McWharter	1906	96	6	do.	0
38	do.	Sec.341,SW¼, W.& N.W.Blk.H.	L. W. Warren	--	180	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County -- Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
19	100	f/	C,W	D,S	Permanent supply.
20	100	f/	C,W	D,S	Do.
21	139	f/	C,W	D,S	Do.
22	90	f/	C,W	D,S	Do.
23	88	f/	C,W	S	Do.
24	165	f/	C,W	D,S	Small supply.
25	100	f/	C,W	D,S	Lower ten feet perforated. Permanent supply.
26	51	f/	C,W	D,S	Permanent supply.
27	36	f/	C,W	D,S	Do.
28	44	f/	B,H	D,S	Do.
29	150	f/	C,W	D,S	Do.
30	100	f/	C,W	S	Drilled by Noah McClung. Permanent supply.
31	60	f/	C,W	S	Permanent supply.
32	140	f/	C,W	D,S	Lower 10 feet perforated. Permanent supply.
33	160	f/	C,W	D,S	Do.
34	180	f/	C,W	S	Permanent supply.
35	76	f/	C,W	S	Lower ten feet perforated.
36	180	f/	C,W	S	Permanent supply.
37	66	f/	C,W	D,S	Do.
38	140	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
39	12½ miles north	Sec.370,SE¼, W.&N.W.Blk.H.	E. F. Riley	--	73	6	Quaternary sand	0
40	12 miles north	Sec.341,SE¼, W.&N.W.Blk.H.	E. S. Sanders	--	250	6	F & G	0
41	do.	Sec.342,NE¼, W.&N.W.Blk.H.	J. W. Parker	1920	270	6	do.	0
42	11½ miles north	Sec.342,NW¼, W.&N.W.Blk.H.	A. A. Lindsey	--	190	6	do.	0
43	do.	Sec.343,SE¼, W.&N.W.Blk.H.	Lilliand Wright	1925	220	6	do.	0
44	12 miles north	Sec.339,NW¼, W.&N.W.Blk.H.	D.H.Kahldenn	--	120	6	do.	0
g/45	do.	Sec.340,SE¼, W.&N.W.Blk.H.	G.Y.Marshall	--	185	6	do.	0
46	11½ miles north	Sec.339,NE¼, W.&N.W.Blk.H.	Jimmie Watson	1910	150	6	do.	0
47	11 miles north	Sec.306,SE¼, W.&N.W.Blk.H.	W.F.Williams	--	125	6	do.	0
g/48	11½ miles north	Sec.30,C.J. & D.	Griff. Little	--	80	6	do.	0
49	12 miles north	Sec.33,SE¼, C.J.& D.	C. I. Fellers	--	160	6	do.	0
50	11½ miles north	Sec.29,NE¼, C.J.& D.	-- Gibson	--	150	6	do.	0
51	11 miles north	Sec.305,NE¼, W.& N.W.Blk.H.	W. F. Williams	1923	109	6	do.	0
52	do.	Wheeler Co. School land	M. S. Winsbury?	--	130	6	do.	0
53	do.	Sec.12,SE¼, G.C.& S.F.R.R.	W. F. Williams	--	109	6	do.	0
54	12 miles north	Sec.14,SW¼, Wheeler School land	M. S. Winsbury	--	160	6	do.	0
55	do.	Sec.15,N½, H.E.& W.T.	do.	--	110	6	do.	0
56	11½ miles north	Sec.16,N.½, H.E.& W.T.	Joe Manus	--	80	6	do.	0
57	do.	Sec.17,N.½, H.E.& W.T.	Federal Land Bank	--	80	6	do.	0
58	11 miles north	Sec.17,N.½, Wheeler School land	W. J. Jackson	--	125	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
39	63	f/	C,W	D,S	Section overlain by windblown sand.
40	150	f/	C,W	S	Sometimes fails.
41	170	f/	C,W	S	Starts in windblown sand.
42	150	f/	C,W	D,S	Permanent supply.
43	125	f/	C,W	D,S	Do.
44	70	f/	C,W	D,S	Do.
45	145	f/	C,W	S	Do.
46	120	f/	C,W	S	Do.
47	85	f/	C,W	S	Do.
48	40	f/	C,W	D,S	Do.
49	110	f/	C,W	D,S	Permanent supply.
50	95	f/	C,W	D,S	Do.
51	73	f/	C,W	D,S	Do.
52	90	f/	C,W	S	Reported 10 foot drawdown pumping 6 gallons a minute for 24 hours.
53	79	f/	C,W	D	Do.
54	140	f/	C,W	D,S	Permanent supply.
55	100	f/	C,W	D,S	Do.
56	50	f/	C,W	D,S	Do.
57	74	f/	C,W	D,S	Do.
58	110	f/	C,W	D,S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
59	11 miles north	Sec.16,S½, H.E.& W.T.	W.J.Jackson	--	125	6	F & G	0
60	10½ miles north	Sec.17,S½, H.E.& W.T.	C. R. Fogg	--	100	6	do.	0
61	10 miles north	Sec.2,SW¼, B. & B.	A. J. Norton	--	95	6	do.	0
62	9 miles north	Sec.4,NW¼, --Norton	D.B.Porterfield	1925	89	6	do.	0
63	10 miles north	Sec.2,NE¼, Robt.Young	A. J. Norton	1928	67	6	do.	0
64	do.	Sec.16,SW¼, H.E.& W.T.	J. T. Stovall	--	85	6	do.	0
65	8½ miles north	Sec.269,SE¼, W.& N.W.Blk.H.	W. H. Collins	1925	144	6	do.	0
66	do.	Sec.269,SW¼, W.& N.W.Blk.H.	A. A. Lindsey	--	125	6	do.	0
67	do.	Sec.270,SE¼, W.& N.W.Blk.H.	E. E. Horton	--	300	6	do.	0
68	9 miles north	Sec.303,SE¼, W.& N.W.Blk.H.	W. F. Williams	1929	140	6	do.	0
69	10 miles north	Sec.2, N¼, Robt.Young	do.	1920	120	6	do.	0
70	do.	Sec.304,NW¼, W.& N.W.Blk.H.	do.	1924	125	6	do.	0
g/71	do.	Sec.307,SE¼, W.& N.W.Blk.H.	do.	--	120	6	do.	0
g/72	do.	Sec.307,SW¼, W.& N.W.R.R.	Walter F. Williams	1935	703	8¼	--	C
73	9 miles north	Sec.308,NW¼, W.& N.W.Blk.H.	Mrs. Jess Williams	--	165	6	F & G	0
74	do.	Sec.344,SE¼, W.& N.W.Blk.H.	J.R.Williams	--	150	6	do.	0
75	9½ miles north	Sec.344,SW¼, W.& N.W.Blk.H.	do.	--	225	6	do.	0
g/76	10½ miles north	Sec.343,SE¼, W.& N.W.Blk.H.	W. H. Jenkins	--	75	6	L	0
77	11 miles north	Sec.343,SW¼, W.& N.W.Blk.H.	do.	--	80	6	L	0
78	11½ miles north	Sec.368,SW¼, W.& N.W.Blk.H.	Joe Lindsey	1920	230	6	F & G	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
59	105	f/	C,W	D,S	Lower 10 feet of casing is perforated.
60	88	f/	C,W	D,S	Reported 10 foot drawdown pumping 3 gallons a minute for 2 hours.
61	60	f/	C,W	S	Permanent supply.
62	50	f/	C,W	D,S	Do.
63	42	f/	C,W	D,S	Do.
64	65	f/	C,W	D,S	Do.
65	126	f/	C,W	S	Do.
66	80	f/	C,W	S	Reported 10 foot drawdown pumping 6 gallons a minute for 48 hours.
67	200	f/	C,W	S	Permanent supply.
68	100	f/	C,W	S	Do.
69	60	f/	C,W	D,S	Do.
70	85	f/	C,W	S	Do.
71	87	f/	C,W	S	Do.
72	--	f/	--	--	Pulled out 66 feet of casing. Left 264 feet in hole.
73	105	f/	C,W	S	Permanent supply.
74	120	f/	C,W	S	Do.
75	195	f/	C,W	S	Do.
76	45	f/	C,W	D,S	Do.
77	50	f/	C,W	S	Do.
78	170	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
79	12 miles north	Sec.373,NW¼, W.& N.W.Blk.H	J.C.Lindsey	1920	230	6	F & G	0
g/80	11½ miles north	Sec.373,S½, W.& N.W.Blk.H	F. Hines	--	105	6	do.	0
81	10½ miles north	Sec.367,NW¼, W.& N.W.Blk.H	N.C.Sanders	--	100	6	do.	0
82	do.	do.	do.	--	250	6	do.	0
83	10 miles northwest	Sec.376,NW¼, W.& N.W.Blk.H	Troy Hackler	Old	160	6	do.	0
g/84	do.	Sec.376,NE¼, W.& N.W.Blk.H	F. Hines	--	26	6	Quaternary gravel	0
85	do.	Sec.366,NW¼, W.& N.W.Blk.H	Frank Hines	--	146	6	F & G	0
86	9 miles northwest	Sec.366,SE¼, W.& N.W.Blk.H	Sanders Estate	Old	120	6	do.	0
87	do.	Sec.366,NE¼, W.& N.W.Blk.H	do.	--	100	6	do.	0
88	do.	Sec.345,SE¼, W.& N.W.Blk.H	N.W.Gailbrath	1935	144	6	do.	0
89	8½ miles northwest	Sec.365,SW¼, W.& N.W.Blk.H	B. F. Jones	1910	80	6	do.	0
90	8 miles northwest	Sec.364,NE¼, W.& N.W.Blk.H	Kent McSpaddin	Old	110	6	do.	0
91	do.	do.	B.F.Swindell	--	79.5	6	do.	0
92	do.	Sec.346,SW¼, W.& N.W.Blk.H	F. Hines	--	132	6	do.	0
93	7½ miles northwest	Sec.346,SE¼, W.& N.W.Blk.H	E. S. Hale	1932	127	6	do.	0
94	7 miles north	Sec.335,SW¼, W.& N.W.Blk.H	F. Hines	--	125	6	do.	0
95	8 miles north	Sec.346,NE¼, W.& N.W.Blk.H	Frank Hines	--	98	6	do.	0
96	do.	Sec.336,SE¼, W.& N.W.Blk.H	E. I. Flint	--	100	6	do.	0
97	do.	Sec.309,SW¼, W.& N.W.Blk.H	H. L. Powell	--	120	6	do.	0
g/98	8½ miles north	Sec.309,NW¼, W.& N.W.Blk.H	J. C. Baker	--	80	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
79	130	f/	C,W	S	Permanent supply.
80	40	f/	C,W	S	Reported 10 foot drawdown pumping 6 gallons a minute for 48 hours.
81	90	f/	B,H	D,S	Well starts in Quaternary sands.
82	240	f/	C,W	S	Permanent supply.
83	150	f/	C,W	S	Lower 10 feet of casing is perforated.
84	11	f/	C,G	D,S	Reported 10 foot drawdown pumping 10 gallons a minute for 48 hours.
85	42	f/	C,W	S	Permanent supply.
86	90	f/	C,W	S	Do.
87	30	f/	C,W	S	Do.
88	114	f/	C,W	S	Drilled by Troy Finley.
89	40	f/	C,W	D,S	Permanent supply.
90	90	f/	C,W	S	Do.
91	66.8	Jan. 23, 1936	C,W	S	Do.
92	50	do.	C,W	S	Do.
93	57	f/	C,W	S	Do.
94	33	f/	C,W	S	Do.
95	66	Jan. 4, 1936	C,W	S	Do.
96	40	f/	C,W	S	Do.
97	100	f/	C,W	S	Do.
98	55	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
99	9½ miles north	Sec.309,NE¼, W.& N.W.Blk.H	L.E.Hodges	--	97	6	F & G	0
100	8 miles north	Sec.309,SE¼, W.& N.W.Blk.H	J.L.Bryant	1933	85	6	do.	0
g/101	7½ miles north	Sec.310,NW¼, W.& N.W.Blk.H	F. Hines	1923	127	6	do.	0
102	7 miles north	Sec.310,SE¼, W.& N.W.Blk.H	W. T. Newman	1895	120	6	do.	0
103	6½ miles north	Sec.300,NW¼, W.& N.W.Blk.H	W. H. Young	--	125	6	do.	0
104	7 miles north	Sec.301,SE¼, W.& N.W.Blk.H	I.J.Penniston	--	130	6	do.	0
105	6½ miles north	Sec.273,NW¼, W.& N.W.Blk.H	Marvin Word	Old	105	6	do.	0
106	7 miles north	Sec.301,NE¼, W.& N.W.Blk.H	I.J.Penniston	--	170	6	do.	0
107	8 miles north	Sec.271,SE¼, W.& N.W.Blk.H	C.F.Reynolds	--	120	6	do.	0
108	6½ miles north	Sec.266,NW¼, W.& N.W.Blk.H	J.T.Stovall	1890	128	6	do.	0
109	7 miles north	Sec.267,S½, W.& N.W.Blk.H	E.L.Horton	1912	96	6	do.	0
110	do.	Sec.236,SW¼, W.& N.W.Blk.H	J.M.Williams	--	120	6	do.	0
111	8½ miles north	Sec.1,NW¼, Robert Young	R.F.Turnbow	1924	90	6	do.	0
112	do.	Sec.1,NE¼, Robert Young	B. E. Riley	1925	90	6	do.	0
113	7½ miles north	Sec.235,SE¼, W.& N.W.Blk.H	J. B. Busby	1924	105	6	do.	0
114	6½ miles north	Sec.234,SW¼, W.& N.W.Blk.H	J.M.Williams	--	83	6	do.	0
115	do.	Sec.234,SE¼, W.& N.W.Blk.H	do.	--	70	6	do.	0
g/116	do.	Sec.233,NE¼, W.& N.W.Blk.H	do.	--	58	6	do.	0
g/117	6 miles north	Sec.233,SE¼, W.& N.W.Blk.H	W. L. Wilson	1915	50	6	Quaternary gravel	0
g/118	5½ miles north	do.	S. H. Spears	--	32	6	--	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
99	67	f/	C,W	S	Permanent supply.
100	65	f/	C,W	S	Do.
101	50.1	Jan. 24, 1936	C,W	S	Do.
102	90	f/	C,W	S	Do.
103	100	f/	C,W	S	Do.
104	105	f/	C,W	S	Do.
105	75	f/	C,W	S	Do.
106	140	f/	C,W	S	Well located on low hill.
107	110	f/	C,W	S	Permanent supply.
108	88	f/	C,W	S	Do.
109	56	f/	C,W	S	Do.
110	90	f/	C,W	S	Do.
111	60	f/	C,W	S	Lower 10 feet of casing is perforated.
112	50	f/	C,W	S	Permanent supply.
113	80	f/	C,W	S	Do.
114	66	f/	C,W	S	Do.
115	65	f/	C,W	S	Do.
116	46	Mar. 27, 1936	C,W	S	Do.
117	37	f/	C,W	D	Water level same as in 1915.
118	29	f/	C,W	D	Permanent supply.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
119	5½ miles north	Sec.233,SW¼, W.& N.W.Blk.H	C.F.Reynolds	--	30	6	F & G	0
120	6 miles northeast	Sec.233,NW¼, W.& N.W.Blk.H	J.M.Williams	--	45	6	do.	0
121	6 miles north	Sec.238,NE¼, W.& N.W.Blk.H	J.E.Buttrill	--	39	6	do.	0
122	do.	Sec.237,SE¼, W.& N.W.Blk.H	J.M.Williams	--	60	6	do.	0
123	do.	Sec.238,NW¼, W.& N.W.Blk.H	F. A. Word	--	54	6	do.	0
124	5 miles north	Sec.274,SE¼, W.& N.W.Blk.H	J.A.Stephens	--	110	6	do.	0
125	6 miles north	Sec.266,SW¼, W.& N.W.Blk.H	T.J.Stovall	--	92	6	do.	0
126	do.	Sec.273,NE¼, W.& N.W.Blk.H	H.C.Becknell	--	102	6	do.	0
127	5½ miles north	Sec.273,SE¼, W.& N.W.Blk.H	Robert Word	1934	107	6	do.	0
128	do.	Sec.299,NE¼, W.& N.W.Blk.H	J. T. Baker	--	52	6	do.	0
129	6 miles north	Sec.300,SW¼, W.& N.W.Blk.H	W. H. Young	1926	72	48	do.	0
130	do.	Sec.311,SE¼, W.&N.W.Blk.H	Minnie K. Fielding	1934	70	6	do.	0
131	do.	Sec.312,NW¼, W.& N.W.Blk.H	J.M.McSpaddin	1915	70	6	do.	0
132	7 miles north	Sec.334,SW¼, W.& N.W.Blk.H	T.S.Penniston	--	60	6	do.	0
133	do.	Sec.347,SE¼, W.& N.W.Blk.H	J. A. Allen	--	85	6	do.	0
134	7 miles northwest	Sec.348,NW¼, W.& N.W.Blk.H	J. H. Haynes	--	120	6	do.	0
135	7½ miles northwest	Sec.347,SE¼, W.& N.W.Blk.H	A.& L. Lydia	--	80	6	do.	0
136	do.	Sec.363,SE¼, W.& N.W.Blk.H	W.H.Gailbreath	--	36	6	do.	0
137	6 miles northwest	Sec.349,SW¼, W.& N.W.Blk.H	Will Howard	1933	52	6	do.	0
g/138	5½ miles northwest	Sec.239,SE¼, W.& N.W.Blk.H	B. O. Smith	1925	40	6	do.	0
139	5 miles northwest	Sec.350,SE¼, W.& N.W.Blk.H	Mrs. M. I. Simmons	--	47	6	Above H	0
140	do.	Sec.332,SE¼, W.& N.W.Blk.H	Mrs. T. J. Penniston	--	Spring	--	H	--

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
119	22	f/	C,W	S	Permanent supply.
120	40	f/	C,W	S	Do.
121	25	f/	C,W	S	Do.
122	35	f/	C,W	S	Do.
123	34	f/	C,W	S	Do.
124	70	f/	C,W	S	Do.
125	55	f/	C,W	S	Do.
126	72	f/	C,W	S	Do.
127	72	f/	C,W	S	Do.
128	22	f/	C,W	S	Reported drawdown of 10 feet pumping 6 gallons a minute for 48 hours.
129	57	f/	C,W	S	Permanent supply.
130	40	f/	C,W	S	Do.
131	30	f/	C,W	S	Do.
132	40	f/	C,W	S	Do.
133	45	f/	C,W	S	Do.
134	90	f/	C,W	S	Reported drawdown of 10 feet pumping 6 gallons a minute for 48 hours.
135	70	f/	C,W	S	Lower 10 feet of casing is perforated.
136	21	f/	C,W	S	Permanent supply.
137	32	f/	C,W	S	Reported drawdown of 32 feet pumping 6 gallons a minute for 1 hour.
138	30	f/	C,W	S	Permanent supply.
139	30	f/	C,W	S	Do.
140	Flows	Feb. 16, 1936	None	D	Flowing 2 gallons a minute. Fails during dry seasons.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
141	5 miles northwest	Sec.332,NE¼, W.& N.W.Blk.H	J.B.Penniston	1924	38	6	F & G	0
142	4½ miles north	Sec.313,SE¼, W.& N.W.Blk.H	W. I. Thomas	--	30	6	H	0
143	4 miles north	Sec.297,NW¼, W.& N.W.Blk.H	C. A. Vestal	--	76	6	F & G	0
144	3½ miles north	Sec.297,NE¼, W.& N.W.Blk.H	W. L. Howard	1933	116	6	do.	0
145	3 miles north	Sec.276,SW¼, W.& N.W.Blk.H	Jennie Malone	--	112	6	do.	0
146	do.	Sec.263,SW¼, W.& N.W.Blk.H	H.A.Thompson	1928	110	6	do.	0
147	4 miles north	Sec.240,SE¼, W.& N.W.Blk.H	J.C.Marshall	--	165	6	do.	0
148	5 miles north	Sec.231,SE¼, W.& N.W.Blk.H	Mrs. C. F. Henry	--	69	6	do.	0
149	3½ miles northeast	Sec.230,NW¼, W.& N.W.Blk.H	J.C.Marshall	1915	105	6	do.	0
150	3 miles northeast	Sec.241,SE¼, W.& N.W.Blk.H	J.F.Stewart	1904	165	6	do.	0
d/151	do.	do.	Lee Steward	1918	137	6	do.	0
152	2½ miles northeast	Sec.242,NE¼, W.& N.W.Blk.H	Tom Ford	--	114	6	do.	0
153	3½ miles northeast	Sec.229,NW¼, W.& N.W.Blk.H	S.J.Matthews	--	68	6	do.	0
154	do.	Sec.229,NE¼, W.& N.W.Blk.H	J.T.McCullough	1928	45	6	do.	0
155	1½ miles northeast	Sec.242,SW¼, W.& N.W.Blk.H	Tom Ford	--	42	6	do.	0
156	1¼ miles northeast	Sec.261,SE¼, W.& N.W.Blk.H	J.V.Roulston	--	80	6	do.	0
157	1 mile north	Sec.278,NE¼, W.& N.W.Blk.H	S.M.Roustin	--	110	6	do.	0
158	1¼ miles north	do.	F.B.Wrinkle	--	85	6	do.	0
159	2 miles north	Sec.277,NE¼, W.& N.W.Blk.H	C. A. Vestal	--	130	6	do.	0
160	2¾ miles north	Sec.296,NW¼, W.& N.W.Blk.H	E.Z.Phillips	--	100	6	do.	0
161	2½ miles northwest	Sec.315,SW¼, W.& N.W.Blk.H	Mrs. I. R. Thomas	1904	117	6	do.	0
162	2 miles northwest	Sec.295,NW¼, W.& N.W.Blk.H	W. I. Tabor	--	90	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
141	28	f/	C,W	S	Permanent supply.
142	19.5	Feb. 20, 1936	B,H	S	Very weak well.
143	46	do.	C,W	S	Permanent supply.
144	56	f/	C,W	S	Do.
145	82	f/	C,W	S	Lower 10 feet of casing is perforated.
146	80	f/	C,W	S	Do.
147	65	f/	C,W	S	Do.
148	50	f/	C,W	S	Do.
149	65	f/	C,W	S	Permanent supply.
150	70	f/	C,W	S	Do.
151	70	f/	C,W	I	Lower 10 feet of casing is perforated.
152	74	f/	C,W	S	Do.
153	43	Mar. 6, 1936	C,W	S	Permanent supply.
154	35	f/	C,W	S	Do.
155	33	f/	C,W	S	Do.
156	50	f/	C,W	S	Do.
157	60	Mar. 6, 1936	C,W	S	Do.
158	55	f/	C,W	S	Lower 10 feet of casing is perforated.
159	90	f/	C,W	S	Do.
160	57.3	f/	C,W	S	Permanent supply.
161	87	f/	C,W	S	Lower 10 feet of casing is perforated.
162	65	f/	C,W	S	Permanent supply.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
163	3½ miles northwest	Sec.329,NE¼, W.& N.W.Blk.H	John King	1914	125	6	F & G	0
g/164	3¾ miles northwest	Sec.330,SW¼, W.& N.W.Blk.H	W. I. Tabor	1928	115	6	do.	0
g/165	4½ miles northwest	Sec.351,SE¼, W.& N.W.Blk.H	do.	1924	108	6	do.	0
166	5 miles northwest	Sec.351,NW¼, W.& N.W.Blk.H	do.	1923	47	6	do.	0
167	5 miles west	Sec.358,NE¼, W.& N.W.Blk.H	J. F. Ross	--	120	6	do.	0
168	5½ miles west	Sec.357,SW¼, W.& N.W.Blk.H	do.	1905	100	6	do.	0
169	5½ miles west	Sec.356,NW¼, W.& N.W.Blk.H	T. E. Curry	1912	105	6	do.	0
170	do.	Sec.356,SW¼, W.& N.W.Blk.H	M. B. Dowlin	--	98	6	do.	0
171	4¾ miles west	Sec.355,SE¼, W.& N.W.Blk.H	M. S. Curry	1933	105	6	do.	0
172	4½ miles west	Sec.355,NE¼, N.& N.W.Blk.H	C. Arnett	--	111	6	do.	0
173	do.	do.	J. M. Finley	1910	110	6	do.	0
g/174	4¼ miles west	do.	-- Leonard	--	118	6	do.	0
175	5 miles west	Sec.355,NW¼, W.& N.W.Blk.H	T. E. Curry	1910	85	6	do.	0
176	4½ miles west	Sec.354,Cen. W.& N.W.Blk.H	J. F. Ross	--	100	6	do.	0
177	do.	Sec.354,NW¼, W.& N.W.Blk.H	do.	--	80	6	do.	0
178	do.	Sec.353,Cen. W.& N.W.Blk.H	A. Roberts	--	130	6	do.	0
179	4 miles west	Sec.353,SE¼, W.& N.W.Blk.H	Arthur Roberts	1931	135	6	do.	0
g/180	3½ miles west	Sec.328,NE¼, W.& N.W.Blk.H	-- Clemmans	1925	142	6	do.	0
181	do.	Sec.328,SW¼, W.& N.W.Blk.H	W. M. Scott	1915	111	6	do.	0
182	do.	Sec.327,NE¼, W.& N.W.Blk.H	do.	1905	112	6	do.	0
183	do.	Sec.327,SW¼, W.& N.W.Blk.H	do.	1934	111	6	do.	0
184	do.	do.	do.	--	96	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
163	120	f/	C,W	S	This well caved in at bottom.
164	85	f/	C,W	S	Reported highly corrosive on pipe.
165	78	f/	C,W	S	Drilled by Troy Finley.
166	35	f/	C,W	S	Well starts on "H" bed.
167	90	f/	C,W	S	Permanent supply.
168	70	f/	C,W	S	Do.
169	65	f/	C,W	D,S	Do.
170	68	f/	C,W	S	Do.
171	65	f/	C,W	D,S	Do.
172	66	f/	C,W	S	Do.
173	75	f/	C,W	D,S	Do.
174	88	f/	C,W	S	Reported drawdown of 30 feet pumping 6 gallons a minute for 8 hours.
175	45	f/	C,W	D,S	Drilled by Noah McClung.
176	70	f/	C,W	S	Permanent supply.
177	30	f/	C,W	S	Do.
178	65	f/	C,W	D,S	Lower 5 feet of casing is perforated.
179	70	f/	C,W	D,S	Drilled by Noah McClung.
180	94	f/	C,W	S	Permanent supply.
181	86	f/	C,W	S	Do.
182	82	f/	C,W	S	Do.
183	81	f/	C,W	S	Do.
184	66	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
185	3¼ miles west	Sec.326,SW¼, W.& N.W.Blk.H	H. T. Lane	1890	85	6	F & G	0
186	2½ miles southwest	Sec.319,SE¼, W.& N.W.Blk.H	M. L. Walkup	--	46	6	do.	0
g/187	2 miles southwest	Sec.319,NE¼, W.& N.W.Blk.H	J.M.Anderson	1933	128	6	do.	0
g/188	do.	Sec.293,SW¼, W.& N.W.Blk.H	E.E.Wrinkle	1930	101	6	do.	0
189	do.	Sec.318,SE¼, W.& N.W.Blk.H	Mrs.P.Williams	--	65	6	do.	0
190	2½ miles west	Sec.318,NW¼, W.& N.W.Blk.H	G.Y.Gillispie	--	80	6	do.	0
191	1¾ miles west	Sec.318,NE¼, W.& N.W.Blk.H	P.F.Ratliff	--	75	6	do.	0
192	1¼ miles west	Sec.294,SE¼, W.& N.W.Blk.H	Chas.Vestal	--	108	6	do.	0
g/193	¾ mile west	Sec.279,SW¼, W.& N.W.Blk.H	H.F.Montgomery	--	80	6	do.	0
194	½ mile west	Sec.294,SW¼, W.& N.W.Blk.H	S. D. Kerr	--	90	6	do.	0
195	¼ mile west	Sec.279,SE¼, W.& N.W.Blk.H	City of Goodlett	--	65	6	do.	0
196	At Goodlett	do.	E.E.Wrinkle	1928	121	6	do.	0
g/197	do.	Sec.279,SE¼, City of Goodlett	W. D. Keith	--	83	6	do.	0
198	½ mile east	do.	G. Collins	1932	108	6	do.	0
199	½ mile south	Sec.280,NE¼, W.& N.W.Blk.H	S. D. Terry	--	115	6	do.	0
200	½ mile east	Sec.260,SW¼, W.& N.W.Blk.H	G. Collins	--	75	6	do.	0
201	1¼ miles east	Sec.260,NE¼, W.& N.W.Blk.H	G.H.Alexandra	--	56	6	do.	0
202	1½ miles east	Sec.243,NW¼, W.& N.W.Blk.H	D.H.Womack	1921	55	6	do.	0
203	1½ miles south	Sec.258,NE¼, W.& N.W.Blk.H	M.M.Hankins	--	75	6	do.	0
204	4 miles southeast	Sec.225,NE¼, W.& N.W.Blk.H	J. T. Taylor	--	98	6	do.	0
205	do.	Sec.226,SE¼, W.& N.W.Blk.H	L. Minshaw	--	78	6	do.	0
206	4½ miles southeast	Sec.224,NE¼, W.& N.W.Blk.H	J.T.McCullough	--	80	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
185	65	f/	C,W	S	Permanent supply.
186	16	f/	C,W	S	Do.
187	108	f/	C,W	S	Do.
188	61	f/	C,W	S	Do.
189	35	f/	C,W	S	Do.
190	60	f/	C,W	S	Do.
191	45	f/	C,W	S	Drilled by Troy Finley.
192	93	f/	C,W	S	Drilled by Noah McClung. Water occurs under hard rock. Lime rock reported at 90 to 108 feet.
193	77	f/	C,W	S	Permanent supply.
194	72	f/	C,W	S	Do.
195	45	f/	C,W	S	Do.
196	71	f/	C,W	S	Do.
197	53	f/	C,W	S	Do.
198	68	f/	C,W	S	Do.
199	75	f/	C,W	S	Lower 10 feet of casing is perforated.
200	35	f/	C,W	S	Permanent supply.
201	24	f/	C,W	S	Do.
202	30	f/	C,W	S	Do.
203	57	f/	C,W	S	Do.
204	63	f/	C,W	D,S	Do.
205	44	f/	C,W	S	Do.
206	55	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
207	5 miles south	Sec.223,NW¼, W.& N.W.Blk.H	E.W.Stringer	--	80	6	F & G	0
208	5½ miles south	Sec.223,SE¼, W.& N.W.Blk.H	Mose Devol	1918	90	6	do.	0
209	5 miles south	Sec.248,NE¼, W.& N.W.Blk.H	M.T.McCracken	--	90	6	do.	0
210	do.	Sec.255,SE¼, W.& N.W.Blk.H	Mona Youngblood	--	80	6	do.	0
211	4½ miles south	Sec.247,Cen. W.& N.W.Blk.H	Nina McAdams	--	90	6	do.	0
212	4 miles south	Sec.256,NE¼, W.& N.W.Blk.H	D. A. Ford	1895	50	6	do.	0
213	3¼ miles south	Sec.257,SE¼, W.& N.W.Blk.H	I.M.McWharter	--	50	6	H	0
214	do.	Sec.256,NW¼, W.& N.W.Blk.H	F. M. Kyle	1927	75	6	F & G	0
215	3 miles south	Sec.283,NE¼, W.& N.W.Blk.H	W.H.Quisenberry	1906	105	6	do.	0
216	2½ miles south	Sec.282,NE¼, W.& N.W.Blk.H	C. R. Mann	1889	110	6	do.	0
217	2½ miles south	Sec.257,NW¼, W.& N.W.Blk.H	Annie Jones	--	105	6	do.	0
218	2¾ miles south	Sec.291,SE¼, W.& N.W.Blk.H	C. C. Ford	--	100	6	do.	0
219	3 miles south	Sec.291,SW¼, W.& N.W.Blk.H	D. A. Ford	1906	63	6	do.	0
220	4 miles south	Sec.290,NW¼, W.& N.W.Blk.H	J. Y. Lane	--	75	6	do.	0
g/221	4½ miles south	Sec.289,NE¼, W.& N.W.Blk.H	M.E.Wheeler	--	75	6	do.	0
g/222	do.	do.	do.	1912	75	6	do.	0
223	3¾ miles south	Sec.321,NE¼, W.& N.W.Blk.H	J. Y. Lane	--	114	6	do.	0
224	3½ miles south	Sec.320,SE¼, W.& N.W.Blk.H	E. A. Carl	1905	60	6	do.	0
225	3¾ miles southwest	Sec.325,NE¼, W.& N.W.Blk.H	W. E. Reeves	1905	55	6	do.	0
226	4½ miles southwest	Sec.47,Cen.N line,EL&RR.RR.	R.W.Griffin	--	90	6	do.	0
g/227	5 miles southwest	W. G. Darke	Julia Graham	1935	109	6	do.	0
228	6½ miles southwest	Sec.45,SE¼, EL. & RR.	Ethel Bohanan	1915	90	6	do.	0
229	8 miles southwest	Sec.4,Cen.N.line GC. & SF. R.R.	Will Gregory	Old	90	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of water d/	Use of water e/	Remarks
207	40	f/	C,W	S	Drilled by F. S. Stewart.
208	70	f/	C,W	S	Lower 10 feet of casing is perforated. Drilled by Noah McClung.
209	85	f/	C,W	S	Lower 10 feet of casing is perforated.
210	40	f/	C,W	S	Do.
211	65	f/	C,W	S	Permanent supply.
212	47	f/	C,W	S	Do.
213	45	f/	C,W	S	Do.
214	35	f/	C,W	S	Do.
215	55	f/	C,W	S	Do.
216	70	f/	C,W	S	Do.
217	75	f/	C,W	S	Do.
218	40	f/	C,W	S	Do.
219	58	f/	C,W	S	Do.
220	55	f/	C,W	S	Lower 10 feet of casing is perforated.
221	35	f/	C,W	S	Permanent supply.
222	35	f/	C,W	S	Do.
223	74	f/	C,W	S	Do.
224	50	f/	C,W	S	Do.
225	39	f/	C,W	S	Do.
226	60	f/	C,W	S	Do.
227	69	f/	C,W	S	Do.
228	60	f/	C,W	S	Do.
229	60	f/	C,W	S	Lower 10 feet of casing is perforated.

d/ C, cylinder; B, bucket or bailer; E,electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Goodlett See Plate 1	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
230	7½ miles southwest	Blk.34,NW¼ EL. & RR.	R.L.Harbeson	1918	140	6	E	0
231	6½ miles southwest	NE¼, M.J.Moore	H. Gibson	--	140	6	F & G	0
232	do.	Sec.50, EL. & RR.RR.	J. W. Walkup	--	125	6	do.	0
g/233	5½ miles southwest	Sec.323,SE¼, W.& N.W.Blk.H	O. E. Lucas	1895	100	6	E	0
234	6½ miles southwest	Sec.2,NW¼, E.T. R.R.	J.J.Summers	--	Spring	--	Base of bed F	--
235	7¼ miles southwest	Sec.31,N½, EL. & RR.RR.	J. Hammond	1915	133	6	F & G	0
236	8 miles southwest	Sec.31,S½, El. & RR.RR.	J.B.Barclay	1900	80	6	San Angelo sandstone	0

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
300	11 miles north	Sec.13,NE¼, -- Norton	W.T.Bakenall	1924	91	6	F & G	0
301	do.	Sec.1,SW¼, -- Howard	S.J.Mathem	1920	50	6	do.	0
g/302	10 miles north	Sec.9,NE¼, -- Norton	A.J.Norton	1925	75	6	do.	0
g/303	do.	Sec.4,NW¼, -- Howard	S.L.Henderson	1924	45	6	do.	0
304	9½ miles north	Sec.12,W½. -- Howard	E.R.McGinnis	1925	85	6	do.	0
305	9 miles north	Sec.6,SW¼, -- Howard	S.L.Henderson	1934	68	6	do.	0
g/306	do.	Sec.2,S½, J. Gibson	W.P.A. test well	1936	17	3	---	--
307	8½ miles north	Sec.1,NE¼, J. Gibson	W. A. Mosley	--	76	6	F & G	0
308	8 miles north	Sec.2,NE¼, G.C.& S.F.R.R.	G. W. Redford	--	65	6	do.	0
309	7 miles north	Sec.1,SE¼ G.C.& S.F.R.R.	E. B. Vaskey	--	48	6	do.	0
310	do.	Sec.1,SW¼, G.C.& S.F.R.R.	do.	--	160	6	do.	0
311	do.	Sec.1,S½, J. Gibson	J. C. Barbee	1920	70	6	do.	0
g/312	7½ miles north	Sec.2,SE¼, J. Gibson	W.P.A. test well	1936	9	3	--	--

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of water d/	Use of water e/	Remarks
230	120	f/	C,W	S	Permanent supply.
231	120	f/	C,W	S	Do.
232	105	f/	C,W	S	Reported drawdown of 10 feet after pumping 6 gallons a minute for 24 hours.
233	40	f/	C,W	S	Permanent supply.
234	Flows	Jan. 10, 1936	None	D,S	Measured production of 6 gallons a minute.
235	123	f/	C,W	S	Small supply.
236	60	f/	C,W	S	Reported pumping 4 gallons a minute.

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
300	41	f/	C,W	S	Permanent supply.
301	20	f/	C,W	D	Permanent supply. Lower 5 feet of casing is perforated.
302	35	f/	C,W	S	Permanent supply. Lower 10 feet of casing is perforated.
303	25	f/	C,W	S	Permanent supply. Lower 5 feet of casing is perforated.
304	35	f/	C,W	S	Lower 10 feet of casing is perforated.
305	52	f/	C,W	D,S	
306	--	1936	None	N	No water. See log.
307	70	f/	C,W	D	
308	34	f/	C,W	D	
309	30	f/	C,W	D	Permanent supply.
310	29	f/	C,W	D	
311	60	f/	C,W	S	
312	--	--	None	N	No water. See log.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
313	7½ miles north	Sec.2,SW¼, J. Gibson	W. H. Hersley	--	70	6	F & G	0
314	8 miles north	Sec.201,NE¼, W.& N.W.Blk.H	L. Earing	1925	80	6	do.	0
315	do.	Sec.8,SE¼, -- Howard	Howard & Caskey	--	65	6	do.	0
316	8½ miles north	Sec.2,Cen. John H.Gibson	W. C. Howard	1934	65	6	do.	0
317	do.	Sec.9,SE¼, -- Howard	Harry Little	1936	72	6	do.	0
g/318	8 miles north	Sec.201,NW¼, W.& N.W.Blk.H	J. W. Chesshir	1920	130	6	do.	0
g/319	8½ miles north	Sec.7,SW¼, -- Howard	R.L.Henderson	1924	90	6	do.	0
g/320	9 miles north	Sec.14,SE¼, J.P.Taylor	E. B. Smith	--	112	6	do.	0
g/321	do.	Sec.14,SW¼, J.P.Taylor	Guy Hunter	--	134	6	--	0
g/322	do.	Sec.202,NW¼, W.& N.W.Blk.H	-- Hoopingarner	--	50	6	--	0
g/323	8 miles north	Sec.202,SW¼, W.& N.W.Blk.H	Chas. Hunter	--	29	6	Quaternary gravel	0
g/324	do.	Sec.203,NW¼, W.& N.W.Blk.H	E. I. Flynt	--	40	6	F & G	0
325	do.	Sec.202,SE¼, W.& N.W.Blk.H	J. L. Grisham	--	100	6	Quaternary gravel	0
g/326	do.	do.	H. F. Easley	1900	140	6	--	0
g/327	do.	Sec.201,SW¼, W.& N.W.Blk.H	E. I. Flynt	--	144	6	--	0
g/328	7½ miles north	Sec.200,NW¼, W.& N.W.Blk.H	W.P.A. test well	1936	16	3	--	--
329	7 miles north	Sec.200,NE¼, W.& N.W.Blk.H	W. B. Kyle	--	50	6	F & G	0
g/330	6½ miles north	Sec.199,NW¼, W.& N.W.Blk.H	-- Norton	--	350	--	--	--
331	5½ miles north	Sec.172,SW¼, W.& N.W.Blk.H	F. W. Howard	--	Spring	--	F	--
g/332	6 miles north	Sec.172,NE¼, W.& N.W.Blk.H	W.P.A. test well	1936	10	3	--	--
333	6½ miles north	Sec.12,SW¼, J. P. Taylor	E. I. Flynt	--	60	6	F & G	0
g/334	do.	Sec.12,SW¼, J. P. Taylor	W.P.A. test well	1936	18	3	--	--
g/335	do.	Sec.12,NE¼, J. P. Taylor	E. I. Flynt	--	102	6	F & G	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of water d/	Use of water e/	Remarks
313	45	f/	C,W	D,S	
314	70	f/	C,W	D,S	
315	30	f/	C,W	D	
316	55	f/	C,W	D,S	Permanent supply.
317	51	f/	C,W	S	
318	100	f/	C,W	D,S	
319	30	f/	C,W	D,S	
320	92	f/	C,W	D	
321	75	f/	C,W	D	
322	45	f/	C,W	D	Permanent supply.
323	27	f/	C,W	D	Water level reported same as in 1930.
324	25	f/	C,W	D	Water level reported same as in 1920.
325	50	f/	C,W	D	Water level same as in 1930.
326	60	f/	C,W	D	
327	74	f/	C,W	D	Water level reported same as in 1932.
328	--	--	None	N	No water. See log.
329	35	f/	C,W	D	Reported 15 foot drawdown after 1 hour pumping 6 gallons a minute.
330	--	--	None	N	Frizzell Oil Company oil test. See log.
331	Flows	Feb. 20, 1936	--	D,S	Flowing 6 gallons a minute from limestone just above contact with shale.
332	--	--	None	N	No water. See log.
333	39	f/	C,W	S	Permanent supply.
334	--	--	None	N	No water. See log.
335	53	f/	C,W	D,S	Lower 10 feet of casing is perforated.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
336	7 miles north	Sec.12,NW¼, J.P.Taylor	E. I. Flynt	1934	50	6	F & G	0
337	7½ miles north	Sec.23,NW¼, J. S. Rice	do.	--	100	6	do.	0
338	7 miles north	NW¼,Wheeler Co.School Land	Y. R. Nowell	1910	102	6	do.	0
339	6½ miles north	Sec.12,NE¼, J.P.Taylor	Machell Methca	--	100	6	do.	0
g/340	6 miles north	Sec.12,SE¼, Wheeler Co.School Land	W.P.A.test well	1936	14	3	--	--
g/341	do.	Sec.171,NW¼, W.& N.W.Blk.H	do.	1936	12	3	--	--
342	5 miles north	Sec.171,SE¼, W.& N.W.Blk.H	C. T. Watkins	--	80	6	F & G	0
g/343	5½ miles north	do.	D. D. Carter	--	86	6	do.	0
344	6 miles north	Sec.171,NE¼, W.& N.W.Blk.H	C. I. Bush	--	98	6	do.	0
g/345	7 miles north	Sec.1,NE¼, G.C.& S.F.RR.	E. B. Caskey	--	78	6	do.	0
346	do.	Sec.13,NW¼, C. & M. RR.	J.T.McCullough	--	63	6	do.	0
g/347	6½ miles north	Sec.13,SW½, C. & M. RR.	do.	--	73	6	do.	0
g/348	6 miles north	Sec.13,SW¼, C. & M. RR.	W.P.A. test well	1936	41	3	--	--
g/349	do.	Sec.13,SE¼, C. & M. RR.	do.	1936	19	3	--	--
350	5 miles north	Sec.2,NW¼, T. T. RR.	Joe Richardson	--	78	6	F & G	0
351	do.	Sec.2,SW¼, T. T. RR.	C.T.Watkins	--	80	6	do.	0
g/352	5½ miles north	Sec.9,SE¼, B. S. & F.	Hamover Life Ins. Co.	--	58	6	--	0
g/353	do.	Sec.5,NE¼, H.E.& W.T.RR.	First National Bank	--	32	6	F & G	0
g/354	5 miles north	Sec.10,N½, B.S.& F.RR.	H.C.Brinkley	--	41	6	--	1
g/355	5½ miles north	Sec.6,E½, H.E.& W.T.RR.	R. O'Hair	1920	90	6	--	0
356	do.	Sec.6,SE¼, H.E.& W.T.RR.	do.	1910	90	6	--	0
357	6 miles northeast	Sec.3,SE¼, H.E.& W.T.RR.	C.E.Swindell	--	40	6	--	0
g/358	6½ miles northeast	Sec.1,SW¼, H.E.& W.T.RR.	Lon O'Dell	1920	50	6	--	1

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

No.	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of water d/	Use of water e/	Remarks
336	35	f/	C,W	D	Lower 8 feet of casing is perforated.
337	50	f/	C,W	D,S	
338	84	f/	C,W	D	
339	80	f/	C,W	D,S	Permanent supply.
340	--	--	None	N	No water. See log.
341	--	--	None	N	Do.
342	78	f/	C,W	D	
343	78	f/	C,W	S	
344	90	f/	C,W	S	Permanent supply.
345	53	f/	C,W	D	
346	40	f/	C,W	D	
347	60	f/	B,H	D	
348	--	--	None	N	No water. See log.
349	--	--	None	N	Do.
350	69	f/	C,W	D	
351	72	f/	C,W	D,S	Lower 10 feet of casing is perforated.
352	45	f/	C,W	D	
353	30	f/	C,W	D	Lower 5 feet of casing is perforated.
354	33	f/	C,W	D	
355	75	f/	C,W	D	Drilled by Noah McClung.
356	75	f/	C,W	I	Lower 10 feet of casing is perforated.
357	40	f/	C,W	S	
358	43	Mar. 23, 1936	C,W	D	

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
359	6 miles northeast	Sec.97,SE¼, W.& N.W.Blk.H	R. O'Hair	--	51	6	--	0
g/360	5½ miles northeast	Sec.97,SW¼, W.& N.W.Blk.H	W.P.A. test well	1936	12	3	--	--
g/361	do.	Sec.98,SE½, W.& N.W.Blk.H	Rosa Coker	--	42	6	--	0
g/362	5 miles northeast	do.	W.P.A. test well	1936	20	3	--	--
g/363	4½ miles northeast	Sec.121,SE¼, W.& N.W.Blk.H	T. S. Derrick	--	44	6	--	0.5
g/364	5 miles northeast	Sec.121,NE¼, W.& N.W.Blk.H	Will Hunter	--	70	6	F & G	0
g/365	4½ miles north	Sec.10,SW¼, B.S.& F. RR.	E. Woodson	--	61	6	--	0
g/366	do.	Sec.9,SE¼, B.S.& F. RR.	Willowview School	--	44	6	F & G	1
367	do.	Sec.121,NW¼, W.& N.W.Blk.H	C. B. White	--	43	6	--	1
g/368	4 miles north	Sec.121,SW¼, W.& N.W.Blk.H	C. L. Brandon	--	39	6	--	1
g/369	3½ miles north	Sec.123,NW¼, W.& N.W.Blk.H	W.P.A. test well	1936	7	6	--	--
g/370	do.	do.	do.	1936	5	6	--	--
g/371	3 miles north	do.	do.	1936	3	6	--	--
g/372	do.	do.	do.	1936	5	3	---	--
g/373	3½ miles north	Sec.145,SW¼, W.& N.W.Blk.H	C. T. Watkins	--	16	48	--	2
g/374	4½ miles north	Sec.2,S½, T. & T. RR.	J.C.Richardson	--	80	6	--	0
g/375	do.	Sec.2,NE¼, T. & T. RR.	do.	1930	113	6	--	0
g/376	4¾ miles north	Sec.11,NE¼, T. & T. RR.	C. T. Watkins	--	90	6	F & G	0
g/377	4½ miles north	Sec.170,NE½, W.& N.W.Blk.H	Jack Howard	--	144	6	do.	0
378	3 miles north	Sec.146,SW½, W.& N.W.Blk.H	C. T. Watkins	--	Spring	--	F	--
379	3½ miles north	Sec.174,SE¼, W.& N.W.Blk.H	Certainteed Prods. Corp.	--	Spring	--	--	--
380	5½ miles north	Sec.173,NW½, W.& N.W.Blk.H	W. W. Howard	--	Spring	--	F	--
381	6 miles northwest	Sec.205,SW¼, W.& N.W.Blk.H	H. C. Ellis	--	80	6	F & G	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
359	42	f/	C,W	S	
360	--	--	None	N	No water. See log.
361	35	Mar. 23, 1936	C,W	D	Permanent supply.
362	--	--	None	N	
363	31.5	Mar. 24, 1936	C,W	D	
364	52	f/	C,W	D	
365	40	f/	C,W	D	No drawdown reported pumping 6 gallons a minute for 4 hours.
366	34	f/	C,H	D,S	
367	26.5	Mar. 24, 1936	C,W	D	
368	28	do.	C,W	D	
369	--	--	None	N	No water. See log.
370	--	--	None	N	Do.
371	--	--	None	N	Do.
372	--	--	None	N	Do.
373	15	f/	C,?	S	Reported 1 foot drawdown pumping 6 gallons a minute for one hour. Dug.
374	75	f/	C,W	D,S	Permanent supply.
375	78	f/	C,W	S	Reported no drawdown pumping 6 gallons a minute for 24 hours.
376	72	f/	C,W	S	Lower 10 feet of casing is perforated.
377	102	f/	C,W	S	Permanent supply.
378	Flows	Feb. 20, 1936	None	D	Flowing 3 gallons a minute. Source concealed by recent deposits.
379	Flows	do.	None	S	Flows 3 gallons a minute from base of dolomitic limestone.
380	Flows	do.	None	S	Flows 10 gallons a minute. Many seeps for 100 yards along creek bank.
381	62	Mar. 6, 1936	--	S	

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
382	5½ miles northwest	Sec.205,NW¼, W.& N.W.Blk.H	W. A. Saacks	1934	70	6	F & G	0
383	5 miles northwest	Sec.205,NE¼, W.& N.W.Blk.H	J. E. Stewart	--	80	6	do.	0
384	3¼ miles west	Sec.194,NW¼, W.& N.W.Blk.H	L.S.K.Smith	1929	90	6	do.	0
g/385	2½ miles north	Sec.144,SE¼, W.& N.W.Blk.H	C. T. Watkins	--	102	6	do.	0
g/386	3 miles north	Sec.123,SW¼, W.& N.W.Blk.H	Country Club	--	100	6	do.	0
g/387	2¾ miles northeast	do.	Ed. Maloy	--	19	48	Quaternary gravel	0
g/388	2½ miles northeast	Sec.124,NE¼, W.& N.W.Blk.H	Jake Claybourne	1910	44	6	F & G	0
g/389	2 miles northeast	Sec.143,NE¼, W.& N.W.Blk.H	S.J.Matthews	--	51	6	do.	0
390	do.	Sec.124,SW¼, W.& N.W.Blk.H	Mrs.--Howze	--	135	6	do.	0
g/391	1½ miles northeast	Sec.146,Cen.N.W.P.A. test line,W.& N.W.RR.	W.P.A. test well	1936	17	3	--	--
g/392	do.	Sec.146,NE¼, W.& N.W.RR.	do.	1936	22	3	--	--
393	2½ miles northeast	Sec.124,SE¼, W.& N.W.Blk.H	W.G.Crowder	--	50	6	Gravel and sand	0.5
g/394	4 miles northeast	Sec.100,NW¼, W.& N.W.RR.	W.P.A. test well	1936	12	3	--	--
g/395	4½ miles east	Sec.94,NW¼, W.& N.W.Blk.H	Mollie Evans	--	452	---	--	--
396	5 miles east	Sec.93,SE¼, W.& N.W.Blk.H	J.C. Kerley	--	20	36	Sand and gravel	1
397	4 miles east	Sec.102,NW¼, W.& N.W.Blk.H	W.T.Dickey Estate	--	30	6	--	0
398	3½ miles east	Sec.101,SW¼, W.& N.W.Blk.H	M. Evans	--	60	6	--	0
399	3 miles east	Sec.118,SE¼, W.& N.W.Blk.H	C. Halcomb	--	60	6	F & G	0
400	2½ miles east	Sec.117,NW¼, W.& N.W.Blk.H	Lydia Parker	--	123	6	do.	0
401	do.	Sec.118,SW¼, W.& N.W.Blk.H	J. H. Moore	--	62	6	do.	0
g/402	1½ miles east	Sec.125,SW¼, W.& N.W.Blk.H	Jim Harris	--	28	6	Quaternary gravel	0
403	In Quanah	Cor. of Main and 7th St.	E. Moran	1900	77	6	F & G	0
404	do.	1005 E. 5th St.	W. H. Horsley	Old	65	6	do.	0
405	do.	606 E. 8th St.	-- Lanco	1915	55	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
382	50	f/	C,W	S	Lower 10 feet of casing is perforated.
383	50	f/	C,W	S	Do.
384	60	f/	C,W	S	
385	86	f/	C,W	S	Reported drawdown of 16 feet pumping 6 gallons a minute for 4 hours.
386	72	f/	C,W	I	
387	15	f/	None	N	Dug. Now abandoned.
388	30.5	Mar. 24, 1936	C,W	S	
389	47	do.	C,W	S	
390	75	f/	C,W	S,I	
391	--	--	None	N	No water. See log.
392	--	--	None	N	Do.
393	41	f/	C,W	S	Permanent supply.
394	--	--	None	N	No water. See log.
395	--	--	None	N	Oil test. See driller's log.
396	14	Apr. 1, 1936	C,W	D	Dug. Water level reported same as in 1934.
397	20	f/	C,W	D	Permanent supply.
398	33	f/	C,W	D	Do.
399	34	f/	C,W	S	
400	50	f/	C,W	S	Lower 20 feet of casing is perforated.
401	54	f/	C,W	D	Permanent supply.
402	26	Mar. 30, 1936	C,W	S	Reported apparently affected by City disposal plant $\frac{1}{4}$ mile southwest.
403	52	f/	C,W	D	Reported best water in city.
404	48	f/	C,W	D	Reported apparently affected by city wells located in 400 and 500 block east 3rd. st.
405	35	f/	C,W	I	

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
406	In Quanah	1001 E. 5th St.	W. H. Hersley	1900	63	6	F & G	0
407	do.	1002 E. 5th St.	R. H. Wilson	1915	65	6	do.	0
g/408	do.	505 Star St.	O.R.Buckholtz	1900	80	6	do.	0
g/409	do.	310 E. 3rd St.	J. J. Glenn	1912	65	6	do.	0
410	do.	310 E. 5th St.	W. J. Altman	1910	90	6	do.	0
411	do.	16 blks.E.of Quanah C.O.CO.	Quanah Cotton Oil Co.	--	50	--	B	0
412	do.	Cor.of Dodge & 7th St.	E. F. Elton	Old	80	6	Quaternary gravel	0
413	do.	500 blk. E 2nd St.	Quanah Water Co.	1920	85	6	B	0
g/414	do.	903 E. 6th St.	C. A. Wallace	--	65	6	F & G	0
g/415	do.	9th and Dubose Sts.	F. G. Tyne	--	60	6	do.	0
g/416	do.	810 E. 9th St.	W. B. Gibson	--	80	6	do.	0
g/417	do.	511 E. 10th St.	John Ferguson	--	75	6	do.	0
g/418	do.	601 Star St.	A. M. Cobb	--	80	6	do.	0
g/419	do.	806 E. 9th St.	R. H. Brazil	1934	69	6	do.	0
g/420	do.	710 E. 4th St.	Bill Cotton	1925	52	6	do.	0
424	do.	Sec.151,SW¼, W.& N.W.Blk.H	-- Williams No. 1	--	580	--	--	--
425	2 miles west	Sec.178,SE½, W.& N.W.Blk.H	W. S. Winbury	--	100	6	F & G	0
426	3 miles west	Sec.193,SE½, W.& N.W.Blk.H	Wm. Griffin	--	80	6	do.	0
427	do.	Sec.194,NE¼, W.& N.W.Blk.H	L.S.K.Smith	--	60	6	do.	0
428	4¾ miles west	Sec.211,NW¼, W.& N.W.Blk.H	J.B.Addison	--	85	6	do.	0
429	4 miles west	Sec.211,NE¼, W.& N.W.Blk.H	R. R. Drake	--	90	6	do.	0
430	2¾ miles southwest	Sec.179,NW¼, W.& N.W.Blk.H	S. E. Wilson	1906	60	6	do.	0
431	4½ miles southwest	Sec.212,NE½, W.& N.W.Blk.H	C. T. Watkins	--	80	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
406	53	f/	C,H	D,S	Reported affected by city wells.
407	51	f/	B,H	D	Do.
408	74	f/	None	D	Small supply.
409	55	f/	C,H	D	
410	80	f/	B,H	D	
411	30	f/	E	S	Located near city disposal plant.
412	65	f/	C,W	D	
413	65	f/	C,E	P	
414	50	f/	C,H	D	Permanent supply.
415	48	f/	C,W	I	Do.
416	65	f/	C,H	D	
417	63	f/	C,H	D	Permanent supply.
418	67	f/	C,H	D	
419	58	f/	None	D	
420	48	Feb. 12, 1936	B,H	D	Lower 10 feet of casing is perforated.
424	--	--	--	--	Oil test. Drilled by Lawrence Flannery.
425	92	f/	C,W	S	
426	45	f/	C,W	S	Permanent supply.
427	30	f/	C,W	S	
428	47	f/	C,W	S	
429	50	f/	C,W	S	Reported drawdown of 10 feet pumping 6 gallons a minute for 24 hours.
430	20	f/	C,W	S	
431	55	f/	C,W	S	

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
432	4¾ miles southwest	Sec.212,SE¼, W.& N.W Blk.H	Bob Reed	--	85	6	F & G	0
433	4½ miles southwest	Sec.191,SW¼, W.& N.W.Blk.H	Federal Life Ins. Co.	--	110	6	do.	0
g/434	4 miles southwest	Sec.191,SE¼, W.& N.W.Blk H	J. B. Taylor	--	100	6	do.	0
435	do.	Sec.180,SW¼, W.& N.W.Blk.H	H.W.Stringer	1905	100	6	do.	0
436	3 miles southwest	Sec.163,NE¼, W.& N.W.Blk.H	J. I. Belmay	1911	85	6	do.	0
437	2½ miles southwest	Sec.164,SW¼, W.& N.W.Blk.H	Eugene B.Smith	--	82	6	do.	0
438	do.	Sec.179,SE¼, W.& N.W.Blk.H	J. M. Belmay	--	85	6	do.	0
439	2 miles southwest	Sec.164,NW¼, W.& N.W.Blk.H	Mary Ledbetter	--	85	6	do.	0
440	2 miles south	Sec.164,NE¼, W.& N.W.Blk.H	D. A. Womack	--	100	6	do.	0
g/441	2¾ miles south	Sec.163,NE¼, W.& N.W.Blk.H	J. L. Belmay	--	85	6	do.	0
442	3 miles south	Sec.128,SW¼, W.& N.W.Blk.H	J. A. Stepp	1900	75	6	E	0
443	2 miles southeast	Sec.127,NW¼, W.& N.W.Blk.H	J.H.Williams	1930	82	6	do.	0
g/444	do.	do.	R. G. Cass	1908	96	6	do.	0
445	2¼ miles southeast	do.	J.H.Williams	1930	82	6	do.	0
446	2½ miles southeast	Sec.127,NE¼, W.&N.W.Blk.H	L. E. Forbes	--	110	6	do.	0
447	3¼ miles east	Sec.116,NW¼, W.& N.W.Blk.H	T.M.Dickerson	--	50	6	do.	1
448	4½ miles southeast	Sec.115,SE¼, W.& N.W.Blk.H	Hardeman Co. Irrig.Co.	--	48	6	do.	0
449	4½ miles east	Sec.103,NE¼, W.& N.W.Blk.H	West Texas Utilities	--	16	6	--	11
g/450	5 miles east	Sec.104,NE¼, W.& N.W.Blk.H	F. Hook	1895	22	42	E	0
g/451	5½ miles east	Sec.91,NW¼, W.& N.W.Blk.H	E.J.Johnson	1926	21	6	CD	0
g/452	5½ miles southeast	Sec.105,NE¼, W.& N.W.Blk.H	Hardeman Co. Irrig.Co.	1933	48	6	do.	0
453	do.	Sec.113,SW¼, W.& N.W.Blk.H	Mrs. Pearl Williams	--	80	5	A	0
454	3½ miles south	Sec.138,NE¼, W.& N.W.Blk.H	B. L. Elbert	--	30	42	E	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
432	35	f/	C,W	S	
433	98	f/	C,W	S	Reported drawdown of 10 feet pumping 6 gallons a minute for 12 hours.
434	72	f/	C,W	S	
435	80	f/	C,W	S	Lower 10 feet of casing is perforated.
436	55	f/	C,W	S	
437	57	f/	C,W	S	
438	50	f/	C,W	S	
439	65	f/	C,W	S	
440	98	f/	C,W	S	
441	55	f/	C,W	S	Small supply.
442	55	f/	C,W	S	Permanent supply.
443	52	f/	C,W	S	
444	66	f/	C,E	S	Permanent supply.
445	52	f/	C,W	S	Drilled by H. Edwards.
446	60	f/	C,W	S	Originally produced from 80 foot horizon, but became weak and was deepened.
447	30	Apr. 1, 1936	C,W	D	
448	28	f/	C,W	D,S	Permanent supply.
449	10	Apr. 1, 1936	C,W	S	Water level reported same as in 1934.
450	18.5	f/	B,H	S	Dug.
451	13	f/	C,W	S	
452	28	f/	C,W	S	Drilled by Harve Edwards.
453	60	f/	C,W	S	Reported production of 2 gallons a minute.
454	20	f/	C,W	S	Do.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
455	4 miles south	Sec.138,SE¼, W.& N.W.Blk.H	B. L. Elbert	--	60	6	E	0
456	4½ miles south	Sec.127,NW¼, W.& N.W.Blk.H	A. Moseley	--	16	42	Quaternary sand	0
457	do.	Sec.154,NE¼, W.& N.W.Blk.H	H. R. Wiseman	--	16	42	do.	0
458	5 miles south	Sec.154,SW¼, W.& N.W.Blk.H	Empire Mortgage Co.	1915	65	6	E	0
459	do.	Sec.161,NE¼, W.& N.W.Blk.H	G. W. Radford	1932	55	6	Quaternary gravel	0
460	4½ miles south	Sec.154,NW¼, W.& N.W.Blk.H	Lester Davis	1930	65	6	E	0
461	3½ miles south	Sec.153,SE¼ W.& N.W.Blk.H	Garrett Hawkins	--	85	6	do.	0
462	4 miles south	Sec.162,SE¼, W.& N.W.Blk.H	Erra Arrington	--	90	6	do.	0
463	4½ miles south	Sec.161,NW¼, W.& N.W.Blk.H	G.W.Radford	1900	65	6	do.	0
464	do.	Sec.182,NE¼, W.& N.W.Blk.H	J.M.Williams	1920	82	6	Quaternary gravel	0
465	4½ miles south	Sec.181,SE¼, W.& N.W.Blk.H	L. & V. Tice	1930	84	6	F & G	0
466	3½ miles south	Sec.162,NW¼, W.& N.W.Blk.H	A. L. Seaman	--	100	6	E	0
467	4 miles southwest	Sec.181,NW¼, W.& N.W.Blk.H	Earl Regan	1905	80	6	F & G	0
468	4½ miles southwest	Sec.190,SE¼, W.& N.W.Blk.H	J. A. Pardue	--	100	6	do.	0
469	do.	Sec.190,NW¼, W.& N.W.Blk.H	J. B. Taylor	1915	100	6	do.	0
470	5 miles southwest	Sec.213,NE¼, W.& N.W.Blk.H	M. W. Webb	1905	120	6	do.	0
471	5½ miles southwest	Sec.213,SE¼, W.& N.W.Blk.H	R.H.Henderson	--	147	6	do.	0
g/472	5 miles southwest	Sec.190,Center W.& N.W.Blk.H	J.A.Pardue	---	100	6	do.	0
473	5½ miles southwest	Sec.189,NE¼, W.& N.W.Blk.H	Earl Regan	1905	120	6	do.	0
474	do.	Sec.189,NE¼, W.& N.W.Blk.H	Jack Phillips	1905	100	6	do.	0
g/475	5½ miles south	Sec.138,SW¼, W.& N.W.Blk.H	D. C. Tyler	1929	38	6	Quaternary gravel	0
476	6 miles south	Sec.160,SW¼, W.& N.W.Blk.H	I.T.Leonard	--	65	42	E	0
477	5½ miles south	Sec.160,NE¼, W.& N.W.Blk.H	F. F. Elton	1925	82	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
455	52	f/	C,W	S	
456	22	f/	C,W	D,S	
457	11	f/	C,H	D,S	Dug.
458	25	f/	C,W	D,S	Reported drawdown of 10 feet pumping 6 gallons a minute for 24 hours.
459	45	f/	C,W	D,S	Reported drawdown of 5 feet pumping 6 gallons a minute for 48 hours.
460	45	f/	C,W	D,S	Lower 5 feet of casing is perforated.
461	55	f/	C,W	S	
462	75	f/	C,W	S	
463	45	f/	C,W	S	Lower 5 feet of casing is perforated.
464	52	f/	C,W	D	Do.
465	71	f/	C,W	S	
466	85	f/	C,W	S	Lower 10 feet of casing is perforated.
467	60	f/	C,W	S	Do.
468	72	f/	C,W	S	
469	88	f/	C,W	S	
470	80	f/	C,W	S	Permanent supply.
471	132	f/	C,W	S	Do.
472	82	f/	C,W	S	Do.
473	105	f/	C,W	S	
474	90	f/	C,W	S	
475	20	f/	C,W	S	Lower 5 feet of casing is perforated.
476	60	f/	C,W	S	Dug.
477	29	f/	C,W	S	No drawdown reported after pumping 6 gallons a minute for 24 hours.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
478	6 miles south	Sec.156,SW¼, W.& N.W.Blk.H	C. Davis	1931	60	6	E	0
g/479	7 miles south	Sec.184,NW¼, W.& N.W.Blk.H	-- Wheat No.1	--	2,642	--	--	--
480	do.	Sec.159,SE¼, W.& N.W.Blk.H	J. F. Oneal	--	82	6	E	0
481	do.	Sec.156,SW¼, W.& N.W.Blk.H	F. F. Brazil	--	70	6	E	0
482	7½ miles south	Sec.157,NW¼, W.& N.W.Blk.H	Mrs. F. D. Clisbee	1913	55	6	E	0
483	8 miles south	do.	do.	1930	60	6	E	0
484	7½ miles south	Sec.134,NW¼, W.& N.W.Blk.H	J. W. Jones	1920	36	6	E	0
485	7 miles south	Sec.156,SE¼, W.& N.W.Blk.H	Frank Elton	1934	30	6	E	0
486	6½ miles south	Sec.135,NE¼, W.& N.W.Blk.H	J.S.Milligan	--	20	42	E	0
487	5½ miles south	Sec.135,NW¼, W.& N.W.Blk.H	L. P. Eddins	1935	75	6	E	0
488	8 miles southeast	Sec.88,SE¼, W.& N.W.Blk.H	W. S. Newman	1925	125	6	San Angelo sandstone	0
489	8½ miles south	Sec.13,Cen.N. line,EL.&RR.Sur.	E. B. Caskey	1931	38	42	E	0
g/490	9½ miles south	Martha Reeves, A-697	F. D. Clisbee	1928	4,310	20	--	0
g/491	11 miles south	Sec.435,Blk.A, Hopkins County School Land	M.M.Hankins	1927	40	6	San Angelo sandstone	0
g/492	do.	Vestal 320 acres NW¼	G. H. Vestal	--	60	6	Base of San Angelo sandstone	0
g/493	11½ miles south	Hopkins Co. School Land SE¼	-- Hamm	--	65	6	San Angelo sandstone	0
494	12 miles south	Sec.398,NW¼, H.& T.C.Blk.A	R.E.Patillo	--	61	None	do.	0
495	12½ miles south	do.	W. C. Howard	--	Spring	--	do.	--
496	12 miles south	do.	do.	--	Spring	--	do.	--
497	13 miles south	do.	do.	--	Spring	--	do.	--
g/498	14 miles south	Sec.399,SE¼, H.& T.C.Blk.A	Sam Grange	--	Spring	48	Quaternary gravel	0
499	12½ miles south	Sec.436,SW¼, H.& T.C.Blk.A	Stepp Bros.	--	60	6	San Angelo sandstone	0
500	13 miles south	Sec.472,NE¼, H.& T.C.Blk.A	Joe Murphy	--	60	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
473	52	f/	C,W	S	Lower 5 feet of casing is perforated.
479	--	--	--	--	Oil test well. See driller's log.
480	62	f/	C,W	S	
481	40	f/	C,W	S	Permanent supply.
482	35	f/	C,W	S	
483	40	f/	C,W	S	
484	26	f/	C,W	S	
485	26	f/	C,W	D,S	Small supply.
486	16	f/	C,W	I	Dug.
487	55	f/	B,H	D,S	Permanent supply.
488	105	f/	C,W	S	Lower 18 feet of casing is perforated.
489	28	f/	C,W	D	Dug. Becomes weak during dry periods.
490	--	--	--	N	Oil test. Drilled by The Texas Company. See log.
491	24	f/	C,W	S	Permanent supply.
492	40	f/	C,W	S	Reported drawdown of 10 feet pumping 6 gallons a minute for 24 hours.
493	45	f/	C,W	S	
494	57	f/	B,H	D,S	Permanent supply.
495	--	Jan. 4, 1936	None	D,S	Flowing 3 gallons a minute from base of San Angelo sandstone.
496	--	do.	--	D,S	Flowing 6 gallons a minute from base of San Angelo sandstone.
497	--	do.	--	D,S	Do.
498	13	f/	C,W	S	Permanent supply.
499	30	f/	C,W	S	Lower 5 feet of casing is perforated.
500	30	f/	C,W	D,S	Permanent supply.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Quanah See Plate 2	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/600	9½ miles northwest	Sur.12,SE¼, HE.& W.T.RR.	W.P.A. test well	1936	25	3	--	0
601	10 miles north	Sur.1e,NW¼, HE.& W.T. RR.	W. G. Mulkey	--	44	6	--	1
g/602	do.	Sur.16,S½ C.& M. RR.	J. B. Mulkey	--	21	6	Sand	½
g/603	9½ miles north	do.	J. D. Mulkey	--	36	6	do.	2
604	do.	Sur.1,N½ T.T. RR.	J.H.Hayhurst	--	39	6	do.	1
605	9 miles north	Sur.2,SE¼, GC.& SF. RR.	Elm Grove School	--	44	6	--	2
g/606	do.	Sur.1,S½ TT. RR.	J.H.Hayhurst	--	57	6	--	3
g/607	do.	Sur.2,SE¼, TT. RR.	do.	--	34	6	--	1
g/608	do.	Sur.2,SE¼ TT. RR.	do.	--	35	6	--	1½
609	9 miles north	Sur.2,Cen. TT. RR.	do.	--	30	6	--	0
610	9½ miles north	Sur.2,N½ TT. RR.	do.	--	45	6	Sand	1½
611	10 miles north	Sur.1,NW¼, GC.& SF. RR.	E. B. Caskey	--	Spring	--	Porous dolomite	--
612	9 miles north	Sur.2,W½, GC.& SF. RR.	J. G. Ayres	--	55	6	Gravel and sand	2½
613	8½ miles north	Sec.6,NE¼, W.& N.W.Blk.H	J.E.Plummer	--	33	6	Gravel	¾
g/614	do.	Sur.2,S½, GC.& SF. RR.	A. Nealy	--	30	48	--	1/3
615	7½ miles north	Sec.2,NW¼, W.& N.W.Blk.H	J. G. Ayers	--	32	6	--	¾
g/616	7 miles north	do.	do.	--	38	6	Gravel	½
617	7½ miles north	Sec.5,NE¼, W.& N.W.Blk.H	do.	--	52	6	--	2
g/618	8 miles north	Sec.6,SE¼, W.& N.W.Blk.H	P.T.Plummer	--	28	6	Sand and gravel	1
g/619	do.	Sec.6,SW¼, W.& N.W.Blk.H	do.	--	38	6	--	1
620	7½ miles north	Sec.7,SE¼, W.& N.W.Blk.H	W. P. Bryant	--	56	6	Sand and gravel	¾
g/621	8½ miles north	Sec.7,NE¼, W.& N.W.Blk.H	J.H.Hayhurst	--	39	6	Gravel	3
622	8 miles north	Sec.7,SW¼, W.& N.W.Blk.H	W. R. White Estate	--	30	6	do.	½

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
600	24	1936	None	N	Hole abandoned on account of quicksand.
601	36	f/	C,W	D,S	
602	13	Apr. 13, 1936	C,W	D,S	Water level reported same as in 1929.
603	32	do.	C,W	D,S	Do.
604	34	do.	C,W	D,S	Permanent supply.
605	39	do.	C,H	D,S	Lower 10 feet of casing is perforated.
606	6	do.	C,W	D,S	Do.
607	6	do.	C,W	D,S	Do.
608	30	do.	C,W	D,S	Permanent supply.
609	26	f/	C,W	S	Water level reported same as in 1930.
610	40	f/	C,W	S	
611	--	Mar. 13, 1936	--	S	Reported yield of 200 gallons a minute of strong "Gyp" water.
612	28½	Apr. 10, 1936	B,H	S	Water level reported same as in 1924.
613	27	do.	C,W	D,S	Water level reported same as in 1935.
614	27½	do.	C,W	D,S	Do.
615	31	f/	C,W	D,S	Water level reported same as in 1934.
616	31	Apr. 10, 1936	C,H	D,S	Water level reported same as in 1931.
617	42	f/	C,W	D,S	Lower 10 feet of casing is perforated.
618	23½	Apr. 10, 1936	C,W	D,S	Lower 5 feet of casing is perforated.
619	33	do.	C,W	D,S	
620	43	do.	C,W	D,S	Water level reported same as in 1930.
621	33	do.	B,H	D,S	Water level reported same as in 1934.
622	24	do.	C,W	D,S	Water level reported same as in 1932.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/623	8 miles north	Sec.8,NE¼, W.& N.W.Blk.H	W. R. White Estate	--	47	6	--	2
624	8½ miles north	Sec.8,NW¼, W.& N.W.Blk.H	Ray McClinic	--	49	6	--	3
g/625	do.	Sec.9,NE¼, W.& N.W.Blk.H	H. R. White	--	60	6	--	1
g/626	do.	Sec.10,SW¼, W.& N.W.Blk.H	W. G. Mulkey	--	42	6	Sand and gravel	1
g/627	9 miles north	Sec.10,NW¼, W.& N.W.Blk.H	do.	--	45	6	do.	½
628	9½ miles northwest	Sec.11,NE¼, W.& N.W.Blk.H	N. Allen	--	35	6	Gravel	2
629	9 miles northwest	Sec.11,NW¼, W.& N.W.Blk.H	Well No.1 Quanah Water Co.	1930	89	8¼	B	0
630	do.	Sec.11,SW¼, W.& N.W.Blk.H	Well No.2 Quanah Water Co.	1930	95	8¼	B	0
631	do.	do.	Well No.3 Quanah Water Co.	1930	100	8¼	B	0
632	8½ miles northwest	Sec.11,SE¼, W.& N.W.Blk.H	A. B. Ward	--	50	6	Gravel and sand	1
g/633	do.	Sec.10,SW¼, W.& N.W.Blk.H	R.L.Wickley	--	36	6	Gravel	1
634	9 miles northwest	Sur.11,N½, HE.& WT.RR.	Tom King	--	36	6	Sand and gravel	1
635	do.	Sur.11,S½, HE.& WT.RR.	O.O.Gilliham	--	40	6	Porous clay	1½
636	do.	Sur.8,Cen. HE.& WT.RR.	E. L. Lewis	--	51	6	Quaternary gravel	0
637	9½ miles northwest	Sur.7,E½ HE.& WT.RR.	J.M.Jackson	1920	51	6	do.	0
638	do.	Sur.7,Cen. HE.& WT.RR.	T.E.Jackson	--	33	6	do.	0
639	8½ miles northwest	Sur.11,SW¼, HE.& WT.RR.	O.O.Gilliham	--	35	6	--	½
g/640	8 miles northwest	Sec.12,SW¼, W.& N.W.Blk.H	J.M.Bouldin	--	26	6	Gravel and sand	1
g/641	8½ miles northwest	Sec.12,NW¼, W.& N.W.Blk.H	Oscar Stout	--	37	6	Sand and gravel	3
642	8 miles northwest	Sec.12,NE¼, W.& N.W.Blk.H	R.L.Wickley	--	50	6	Porous clay	2
643	do.	Sec.12,SE¼, W.& N.W.Blk.H	M. P. Oswalt	--	43	6	Gravel and sand	2
644	7½ miles northwest	Sec.13,SE¼, W.& N.W.Blk.H	E. C. Onsby	--	56	6	--	2
g/645	7½ miles north	Sec.14,SW¼, W.& N.W.Blk.H	H. R. White Estate	--	80	6	--	1

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
623	33	Apr. 13, 1936	C,W	D,S	Permanent supply.
624	30	do.	C,W	D,S	Do.
625	42	f/	C,W	D,S	Water level reported same as in 1918.
626	34	f/	C,W	D,S	Permanent supply.
627	35	f/	C,W	D,S	Do.
628	20	f/	C,W	D,S	Water level reported same as in 1920.
629	77	f/	C,E, 15	P	Drilled by W. A. Edwards. See log.
630	79	f/	C,E	P	Do.
631	85	f/	C,E, --	P	Reported production of 210 gallons a minute. Drilled by W.A.Edwards. See log.
632	41.3	Apr. 6, 1936	C,W	D,S	
633	29	do.	C,W	D,S	Water level reported same as in 1931.
634	30	f/	C,W	D,S	Well with cement curbing. Water level same as in 1929.
635	27	f/	C,W	D,S	Water occurs in porous clay at 36 feet.
636	39	Apr. 6, 1936	C,W	D,S	Lower 10 feet of casing is perforated.
637	31	f/	C,W	S	Do.
638	26	Mar. 30, 1936	C,W	S	Water level reported same as in 1928.
639	30	Apr. 6, 1936	B,H	D,S	
640	21⅝	do.	B,H	D,S	Water level reported same as in 1934.
641	27	do.	B,H	D,S	Water level reported same as in 1923.
642	29	f/	C,W	D,S	Water level reported same as in 1934.
643	41	Apr. 6, 1936	None	N	Abandoned well. Water level reported same as in 1930.
644	49	Apr. 13, 1936	C,W	D,S	
645	45	f/	C,W	D,S	Permanent supply.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/646	7 miles north	Sec.15,SW¼, W.& N.W.Blk.H	W.E.Graham	--	87	6	--	1
g/647	do.	Sec.15,SE¼, W.& N.W.Blk.H	B.H.Smith	--	65	6	--	1
648	6½ miles north	Sec.18,NW¼, W.& N.W.Blk.H	L.W.Weeter	--	70	6	--	1
g/649	do.	do.	W.P.A.test well	1936	26	3	--	--
650	6 miles north	Sec.17,NW¼, W.& N.W.Blk.H	L. Potts	1900	155	6	--	½
g/651	5½ miles north	Sur.3,W½ L.Becthel	do.	--	18	6	--	3
g/652	5 miles north	Sur.1,Cen.W line,Seale Morris	F.L.Moffatt	--	25	6	--	1
g/653	do.	Sur.1,SE¼, Seale Morris	do.	--	24	6	--	1
g/654	5½ miles north	Sec.19,SW¼, W.& N.W.Blk.H	B. McGinnis	--	26	6	--	2
g/655	5 miles north	Sec.20,SE¼, W.& N.W.Blk.H	D. Hendrix	--	31	6	--	1½
656	5 miles northwest	do.	Johnnie Bryant	--	13	36	--	0
657	5½ miles north	Sec.20,NE¼, W.& N.W.Blk.H	J. Nuckles	--	17	6	--	1
g/658	do.	Sec.19,NW¼, H.& T.C.RR.	Van Lance	--	13	6	--	1
g/659	6 miles north	Sec.18,SE¼, W.& N.W.Blk.H	do.	--	24	6	--	0
660	do.	do.	E. Lance	--	16	6	--	1
661	do.	Sec.18,SW¼, W.& N.W.Blk.H	W. B. Baker	--	42	6	--	1
g/662	6½ miles north	Sec.18,NW¼, W.& N.W.Blk.H	J.J.Morgan	--	13	6	Sand and gravel	½
g/663	do.	Sec.21,NE¼, W.& N.W.Blk.H	D. Williams	--	35	6	do.	1
664	6½ miles northwest	Sec.21,SW¼, W.& N.W.Blk.H	W.E.Ramsey	--	50	6	--	1
g/665	6 miles northwest	Sec.20,NW¼, W.& N.W.Blk.H	J.T.Bryant	--	45	6	--	½
g/666	do.	Sec.20,SW¼, W.& N.W.Blk.H	W. B. Baker	--	39	6	--	1
g/667	6½ miles northwest	Sec.22,SE¼, W.& N.W.Blk.H	J.H.Nuckles	--	62	6	--	½

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
646	51	f/	C,W	D,S	Water level reported same as in 1926.
647	45	f/	C,W	D,S	
648	50	f/	C,W	D,S	Water level same as in 1922.
649	--	--	None	N	No water. Hole abandoned on account of quicksand. See log.
650	30	f/	C,W	S	Reported weak supply until 1925 when water rose and now inexhaustable supply. Fields are now soggy during wet years ½ mile south of this well.
651	4	Apr. 10, 1936	C,H	S	
652	17	f/	C,W	S	Permanent supply.
653	16½	Apr. 9, 1936	C,W	S	Do.
654	12	Apr. 10, 1936	C,W	S	Water level reported same as in 1930.
655	16	do.	C,W	S	Do.
656	7	Apr. 13, 1936	C,W	S	Dug.
657	12	Apr. 10, 1936	C,H	S	Reported 5 foot drawdown after pumping 6 gallons a minute for 24 hours.
658	6.3	do.	C,W	S	Water level reported same as in 1934.
659	4	do.	C,W	D,S	Water level reported same as in 1930.
660	3	f/	C,W	D,S	Water level reported same as in 1931.
661	3	f/	C,W	D,S	Water level stands at surface during heavy rains.
662	7	Apr. 10, 1936	C,W	D,S	Water level reported same as in 1930.
663	25	f/	C,W	D,S	
664	38	f/	C,W	S	Permanent supply.
665	30	f/	C,W	S	Do.
666	13	Apr. 13, 1936	C,W	S	Lower 10 feet of casing is perforated.
667	56	f/	C,W	S	Water level reported same as in 1928.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County-Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/668	7 miles northwest	Sec.27,SE¼, W.& N.W.Blk.H	J. T. Tyler	--	15	6	--	2½
669	do.	do.	do.	--	28	6	--	2
670	6 miles northwest	Sec.26,SE¼, W.& N.W.Blk.H	J. B. Richie	--	36	6	--	1
g/671	6½ miles northwest	Sec.26,NW¼, W.& N.W.Blk.H	M.A.Steward	--	19	36	--	1
672	7 miles northwest	Sec.29,SE¼, W.& N.W.Blk.H	T. J. Rogers	--	8	36	--	0
673	8½ miles northwest	Sec.73,NE¼, W.& N.W.Blk.H	R. Flippen	--	60	6	--	0
674	8½ miles northwest	Sec.73,NE¼, W.& N.W.Blk.H	J.D.Hamilton	--	40	6	Gravel and sand	0
g/675	9 miles northwest	Sec.73,NW¼, W.& N.W.Blk.H	T.E.Jackson	--	35	6	--	0
676	8½ miles northwest	Sec.73,SE¼, W.& N.W.Blk.H	do.	--	33	6	--	0
g/677	7 miles northwest	Sec.30,NE¼, W.& N.W.Blk.H	R.C.Lovelace	--	10	36	--	0
g/678	6½ miles northwest	Sec.25,NE¼, W.& N.W.Blk.H	Joe Knuckles	1931	23	6	--	1
g/679	5½ miles northwest	Sec.32,NW¼, W.& N.W.Blk.H	W. B. Murphee	--	40	6	--	1
680	4¾ miles northwest	Sec.32,SE¼, W.& N.W.Blk.H	do.	--	37	6	--	1
681	4¼ miles northwest	Sec.62,SW¼, H.& T.C.Blk.10	O. H. Dodson	--	26	6	--	1
682	4 miles northwest	Sec.49,NW¼, H.& T.C.Blk.10	do.	--	22	36	--	2
g/683	3¾ miles northwest	Sec.49,NE¼, H.& T.C.Blk.10	J.W.Whittle	--	52	6	--	3
684	5 miles northwest	Sec.24,NE¼, W.& N.W.Blk.H	T.B.Knuckles	--	2	36	--	0
g/685	4¾ miles northwest	Sur.4,E.½ EL.& RR.Sur.	J.H.Knuckles	--	29	6	--	1½
g/686	5 miles north	NW¼ J.F.Mocdy Sur.	T. F. Riley	--	19	36	--	3
687	4 miles north	Sec.48,NE¼, H.& T.C.Blk.10	O. H. Dodson	--	15	36	--	1
g/688	3½ miles north	Sec.48,SE¼, H.& T.C.Blk.10	do.	--	43	6	--	2
g/689	3 miles north	Sec.47,NW¼, H.& T.C.Blk.10	R.Hamilton	--	36	6	--	1
g/690	do.	Sec.47,SE¼, H.& T.C.Blk.10	do.	--	62	6	--	1

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
668	13½	Apr. 13, 1936	C,W	S	Permanent supply.
669	15½	do.	C,W	S	Water level reported same as in 1916.
670	18.8	do.	C,W	S	Water level reported lowered 2 feet since 1928.
671	12	do.	C,W	S	Dug.
672	3.3	do.	C,W	S	Dug. Water level reported same as in 1907.
673	40	f/	C,W	D	Water level reported same as in 1930.
674	25	f/	C,W	D,S	Water level reported same as in 1928.
675	32	Mar. 30, 1936	C,W	S	Permanent supply.
676	25	do.	C,W	S	Water level reported same as in 1930.
677	7	Apr. 13, 1936	B,H	S	Dug. Water level reported same as in 1907.
678	19½	do.	C,W	S	Water level reported same as in 1931.
679	31	Apr. 17, 1936	C,W	S	Permanent supply.
680	17	do.	C,W	S	
681	15	f/	C,W	S	Permanent supply.
682	21	Apr. 17, 1936	C,W	S	Dug.
683	16	Apr. 9, 1936	C,W	S	
684	18	Apr. 13, 1936	C,W	S	Dug. Water level reported same as in 1932.
685	23	f/	C,W	S	
686	14½	Apr. 9, 1936	C,W	S	Dug.
687	13	Apr. 10, 1936	C,W	S	Do.
688	15½	do.	C,W	S	Water level reported same as in 1931.
689	17	do.	C,W	S	Reported drawdown of 17 feet pumping 6 gallons a minute for 1 hour.
690	32	f/	C,H	S	Water level reported same as in 1931.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/691	2¾ miles north	Sec.35,SW¼, H.& T.C.Blk.10	R.E.Stephenson	--	37	36	--	3
g/692	3¾ miles north	Sec.35,SW¼, H.& T.C.Blk.10	B. A. Dillard	--	18	6	--	1
g/693	4½ miles north	Sec.35,NE¼, H.& T.C.Blk.10	L. J. Potts	--	30	6	--	0
694	do.	Sec.34,SE¼, H.& T.C.Blk.H	F.L.Moffatt	--	27	6	--	1
g/695	do.	Sec.22,NE¼, H.& T.C.Blk.10	H. R. White Estate	--	26	6	--	½
g/696	3½ miles north	Sec.33,SW¼, H.& T.C.Blk.10	F.L.Moffatt	--	31	6	--	1
g/697	3 miles north	do.	do.	--	39	36	--	1
g/698	do.	Sec.32,NW¼, H.& T.C.Blk.10	do.	--	30	6	--	0
g/699	do.	do.	T.B.Farrington	--	35	6	--	1
g/700	3½ miles northeast	do.	F.L.Moffatt	--	40	36	--	0
g/701	3¼ miles north	Sec.33,SW¼, H.& T.C.Blk.10	do.	--	29	36	--	2
g/702	do.	Sec.33,SE¼, H.& T.C.Blk.10	do.	1889	100	6	--	1
g/703	3¾ miles northeast	Sec.22,SW¼, H.& T.C.Blk.10	H. R. White Estate	--	31	6	--	1
g/704	3½ miles northeast	Sec.23,NW¼, H.& T.C.Blk.10	F.L.Moffatt	--	30	36	--	2
g/705	3½ miles northeast	do.	do.	--	32	6	--	1
g/706	1½ miles northeast	Sec.38,SE¼, H.& T.C.Blk.10	C.W.Underwood	--	30	6	--	½
g/707	¾ mile northeast	Sec.38,SW¼, H.& T.C.Blk.10	A. W. Brown	--	45	6	--	0
g/708	1 mile northeast	do.	W. O. Duke	--	40	6	--	0
g/709	1½ miles north	Sec.38,NW¼, H.& T.C.Blk.10	C. M. Moore	--	22	48	--	1
710	2 miles north	Sec.37,NE¼, H.& T.C.Blk.10	R.E.Stephenson	--	71	6	--	½
g/711	2½ miles north	do.	do.	--	36	6	--	0
712	do.	Sec.46,NW¼, H.& T.C.Blk.10	J.H.Knuckles	--	39	6	--	½
g/713	2¾ miles northwest	Sec.50,SE¼, H.& T.C.Blk.10	W. C. Owens	--	62	6	--	1

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
691	24	Apr. 9, 1936	B,H	D,S	Dug.
692	10	Apr. 10, 1936	C,W	S	Water level reported same as in 1929.
693	9.5	Apr. 9, 1936	C,W	S	Permanent supply.
694	9.5	do.	C,W	D,S	
695	16	f/	C,W	S	Lower 5 feet of casing is perforated.
696	19.8	Apr. 9, 1936	C,H	S	Reported drawdown of 11 feet pumping 6 gallons a minute for ½ hour.
697	21.8	do.	C,W	S	Dug.
698	17.7	do.	C,W	S	Water level reported same as in 1930.
699	25	f/	C,W	S	Reported drawdown of 5 feet pumping 6 gallons a minute for 24 hours.
700	16.5	Apr. 9, 1936	C,W	S	Dug.
701	19	do.	B,H	D,S	Dug. Permanent supply.
702	30	f/	C,W	S	Lower 10 feet of casing is perforated.
703	19	Apr. 9, 1936	C,W	S	Reported no drawdown at 6 gallons a minute for 24 hours.
704	19	do.	C,W	S	Dug. Water level reported same as in 1929.
705	22	f/	C,W	S	Permanent supply.
706	20	f/	C,W	S	Lower 10 feet of casing is perforated.
707	30	f/	C,W	D,S	Permanent supply.
708	20	f/	C,W	D,S	Water level reported same as in 1930.
709	19.5	Apr. 8, 1936	C,H	D,S	Dug. Reported drawdown of 2 feet pumping 4 gallons a minute for 1 hour.
710	31.5	Apr. 9, 1936	C,W	D,S	Water level reported same as in 1928.
711	22	f/	C,H	D,S	No drawdown reported pumping 2 gallons a minute for 2 hours.
712	25.5	Apr. 8, 1936	C,W	D,S	Permanent supply.
713	30	do.	C,W	S	Lower 10 feet of casing is perforated.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/714	2½ miles northwest	Sec.51,NE¼, H.& T.C.Blk.10	C. M. Lance	--	60	6	--	1
715	2½ miles northwest	Sec.50,SW¼, H.& T.C.Blk.10	W. V. Lance	--	62	6	--	1
g/716	2¾ miles northwest	Sec.61,SE¼, H.& T.C.Blk.10	W. R. Piper	--	74	6	--	1½
717	do.	Sec.60,NE¼, H.& T.C.Blk.10	C.B.Knuckles	--	14	6	--	0
718	2 miles northwest	Sec.60,SE¼, H.& T.C.Blk.10	Joe Knuckles	--	39	6	--	1
g/719	4 miles northwest	Sur.1,SW¼, E.L.& R.R.RR.	R. H. Butts	--	20	6	--	0
720	4½ miles northwest	Sec.33,NE¼, W.& N.W.Blk.H	Joint Stock Land Bank	--	21	36	--	2
721	do.	do.	S. W. Kirk	--	21	36	--	0
722	4¾ miles northwest	Sec.33,SW¼, W.& N.W.Blk.H	do.	--	18	36	--	2
723	4¾ miles west	Sec.36,SW¼, W.& N.W.Blk.H	T. J. Ford	--	100	6	B	[illegible]
724	5¾ miles west	Sec.35,SW¼, W.& N.W.Blk.H	S.H.Crosley	--	12	36	Sand and gravel	0
725	6 miles west	Sec.68,SE¼, W.& N.W.Blk.H	W. T. Green	Old	29	6	--	½
726	do.	Sec.35,NW¼, W.& N.W.Blk.H	H. M. Hill	--	11	48	Sand and gravel	1
727	6 miles northwest	Sec.34,NW¼, W.& N.W.Blk.H	Frank Lamburton	--	47	6	do.	1
728	6½ miles west	Sec.69,SW¼, W.& N.W.Blk.H	L. D. King	--	12	6	do.	1
g/729	7 miles west	Sec.69,NW¼, W.& N.W.Blk.H	L. P. King	--	43	6	--	½
730	8 miles west	Sec.79,NW¼, W.& N.W.Blk.H	A.Packheiser	--	31	6	Sand and gravel	1
g/731	7½ miles west	Sec.79,SW¼, W.& N.W.Blk.H	Hardeman Co. Irrig.Co.	--	100	6	San Angelo sandstone	0
g/732	do.	Sec.80,NE¼, W.& N.W.Blk.H	Dr. D. W. Redford	--	28	24	--	0
g/733	do.	Sec.81,NE¼, W.& N.W.Blk.H	Hardeman Co. Irrig.Co.	1933	50	6	A	0
g/734	7 miles west	Sec.80,SE¼, W.& N.W.Blk.H	G.W.Radford	1935	90	6	A	0
g/735	6 miles west	Sec.67,SW¼, W.& N.W.Blk.H	Hardeman Co. Irrig.Co.	1933	14	42	A	0
g/736	5½ miles west	Sec.39,NE¼, W.& N.W.Blk.H	do.	--	50	6	A	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
714	27	Apr. 8, 1936	C,H	S	Water level reported same as in 1932.
715	52.3	do.	C,W	S	Reported drawdown of 4 feet pumping 4 gallons a minute for 24 hours.
716	31.1	do.	C,W	S	Water level reported same as in 1930.
717	9.8	do.	C,W	S	Reported drawdown of 3 feet pumping 4 gallons a minute for 1 hour.
718	26.5	do.	C,W	S	Reported drawdown of 13 feet pumping 4 gallons a minute for 4 hours.
719	15	Apr. 17, 1936	C,W	S	Reported drawdown of 5 feet pumping 4 gallons a minute for ½ hour.
720	15	do.	C,W	S	Small supply. Dug.
721	19	do.	C,W	S	Dug.
722	10	do.	C,W	S	Dug. No drawdown reported pumping 6 gallons a minute for 24 hours.
723	40	f/	C,W	D,S	Lower 10 feet of casing is perforated.
724	9	f/	C,W	S	Dug. Water level reported same as in 1930.
725	18.3	Apr. 17, 1936	C,W	S	
726	10	Apr. 1, 1936	B,H	S	Dug.
727	29	f/	C,W	S	Water level reported same as in 1933.
728	11	Apr. 1, 1936	C,W	S	
729	33	Apr. 17, 1936	C,W	S	Permanent supply.
730	25	f/	C,W	S	Water level reported same as in 1935.
731	65	f/	C,G	S	Drilled by Harve Edwards.
732	24	Apr. 17, 1936	C,W	S	Dug. Permanent supply.
733	45	f/	C,W	S	Drilled by Harve Edwards.
734	50	f/	C,W	S	
735	12	f/	C,W	S	Dug. Permanent supply.
736	45	f/	C,W	S	

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
737	4½ miles west	Sec.37,NW¼, W.& N.W.Blk.H	A. Laird Estate	1933	70	6	B	0
738	do.	Sec.37,SW¼, W.& N.W.Blk.H	Laird Estate	--	32	8	A	0
g/739	1¾ miles west	Sec.59,SE¼, H.& T.C.Blk.10	H.C.Farrington	--	16	6	Sandstone	0
740	1½ miles west	Sec.52,SW¼, H.& T.C.Blk.10	do.	--	32	6	Upper part of San Angelo sandstone	0
741	¾ mile northwest	Sec.52,NE¼, H.& T.C.Blk.10	B.M.Gentry	--	25	36	--	1
g/742	½ mile northwest	Sec.45,SW¼, H.& T.C.Blk.10	First State Bank	--	120	6	--	0
743	½ mile north	Sec.39,NW¼, H.& T.C.Blk.10	do.	--	24	6	--	0
g/744	¾ mile northeast	do.	L.J.Knuckles	--	40	6	--	0
g/745	1¼ miles northeast	Sec.39,NE¼, H.& T.C.Blk.10	do.	--	40	6	--	0
746	1½ miles northeast	Sec.30,NW¼, H.& T.C.Blk.10	S. Word	--	50	6	--	0
g/747	1¼ miles east	Sec.39,SW¼, H.& T.C.Blk.10	F.L.Moffatt	--	57	6	--	½
g/748	1½ miles east	Sec.39,NW¼, H.& T.C.Blk.10	J. Bryant	--	34	6	--	3
g/749	do.	Sec.29,SW¼, H.& T.C.Blk.10	do.	--	25	6	--	1
g/750	1 mile east	Sec.39,SW¼, H.& T.C.Blk.10	R.D.Thompson	--	36	36	--	½
g/751	¾ mile east	do.	do.	--	34	6	--	0
752	1 mile southeast	Sec.43,SE¼, H.& T.C.Blk.10	I.H.Hendrix	1920	47	6	San Angelo sandstone	0
753	1¼ miles south	Sec.54,NE¼, H.& T.C.Blk.10	C.Y.Harrington	--	40	6	do.	0
754	2 miles southeast	Sec.41,SW¼, H.& T.C.Blk.H	H. Y. Coats	1935	18	72	do.	0
g/755	2¾ miles south	Sur.2,W½ EL.& RR.RR.	C.Higginsbotham	1933	21	6	Red clay	1
756	2 miles south	Sec.55,NE¼, H.& T.C.Blk.10	Luther Lance	1928	32	36	Quaternary sand	0
757	2½ miles south	Sec.56,NE¼, H.& T.C.Blk.10	W. R. Piper	--	70	6	San Angelo or deeper	0
758	4¼ miles southwest	Sec.43,SE¼, W.& N.W.Blk.H	H. Cole	--	40	6	Middle of San Angelo sandstone	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
737	20	f/	C,W	D,S	Drilled by H. Edwards.
738	22	f/	C,W	S	Reported drawdown of 10 feet pumping 2 gallons a minute for 10 hours.
739	14	f/	C,W	D	Drilled by C. Lloyd.
740	18	f/	C,W	S	Do.
741	23.8	Apr. 6, 1936	C,W	D,S	Water level reported same as in 1930.
742	60	f/	C,W	D,S	Lower 20 feet of casing is perforated.
743	20	Apr. 17, 1936	C,W	D,S	Permanent supply.
744	26	f/	C,W	S	Water level reported same as in 1930.
745	25	f/	C,W	D,S	Water level reported same as in 1929.
746	30	f/	C,W	D,S	Affected by drought.
747	38.5	Apr. 9, 1936	C,W	D,S	Water level reported same as in 1930.
748	31	do.	C,W	D,S	Do.
749	18	do.	C,W	D,S	Lower 5 feet of casing is perforated.
750	31.5	do.	C,G	Ind	Reported drawdown pumping 25 gallons a minute for 24 hours. Water level reported same as in 1930. Dug.
751	24	f/	C,W	D,S	Permanent supply.
752	35	f/	C,W	D,S	Reported drawdown of 7 feet after pumping 6 gallons a minute for 24 hours.
753	45	f/	C,W	D,S	
754	14	f/	B,H	D,S	Dug.
755	7	f/	B,H	D,S	Reported no drawdown after pumping 4 gallons a minute for 24 hours.
756	28	f/	C,W	D,S	Dug well with concrete curbing.
757	40	f/	C,W	D,S	Drilled by W. R. Emerson.
758	15	f/	C,G	D,S	Reported no drawdown after pumping 20 gallons a minute for 1 hour.

d/ C, cylinder; B, bucker or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
g/759	4½ miles southwest	Sec.43,SW¼, W.& N.W.Blk.H	C. Siebert	--	32	6	Upper part of San Angelo	0
760	do.	Sec.56,NE¼, W.& N.W.Blk.H	T.B.Knuckles	--	32	6	Middle of San Angelo sandstone	0
761	5 miles west	do.	J.R.Holdaness	1935	34	6	Near top San Angelo sandstone	0
g/762	6 miles west	Sec.65,SE¼, W.& N.W.Blk.H	Mace Brooks	1890	80	6	San Angelo sandstone	0
g/763	8 miles west	Sec.82,NW¼, W.& N.W.Blk.H	N. C. Conley	1905	50	42	A	0
764	8½ miles southwest	Sec.84,NW¼, W.& N.W.Blk.H	J. L. Jones	1928	116	6	San Angelo sandstone	0
g/765	9 miles southwest	Sec.85,SE¼, W.& N.W.Blk.H	W. O. Neal	1924	2,812	--	--	--
g/766	7 miles southwest	Sec.61,NE¼, W.& N.W.Blk.H	R.H.Cleming	1936	60	6	San Angelo sandstone	0
767	6½ miles southwest	do.	-- Hix	1936	45	6	do.	0
768	6 miles southwest	Sec.60,NE¼, W.& N.W.Blk.H	C. H. Welsh	--	100	6	Top of San Angelo sandstone	0
g/769	5 miles southwest	Sec.44,NW¼, W.& N.W.Blk.H	K.C.M.& O. RR.Co.	1905	83	288	Base of San Angelo sandstone	0
770	do.	NW¼,B.L. West Sur.	Gene Kennedy	--	40	--	do.	--
g/771	4¼ miles southwest	Cen.East line EL. & RR.RR.	Mrs.Xula Hix	1900	60	6	do.	0
772	5 miles south	Sec.71,SE¼, H.& T.C.Blk.16	Ed Mabary	--	46	6	do.	0
773	4½ miles south	Sec.71,NE¼, H.& T.C.Blk.16	State Experiment Station	--	20	6	Quaternary sand	0
774	3¾ miles south	Sec.56,SW¼ H.& T.C.Blk.16	Chris Schumacher	1929	65	6	San Angelo sandstone base	0
775	4¾ miles south	Sec.67,NE¼, H.& T.C.Blk.16	P. N. Durham	---	65	6	do.	0
776	5½ miles south	Sec.67,SE¼, H.& T.C.Blk.16	do.	--	65	6	Sand in Clear Fork formation	0
777	6½ miles south	Sec.66,SE¼, H.& T.C.Blk.16	R.N.Harvey	---	55	6	do.	0
778	5½ miles south	Sec.72,SE¼, H.& T.C.Blk.16	W. C. Davis	--	62	6	do.	0
779	7 miles south	Sec.101,NE¼, H.& T.C.Blk.16	Lester Ball	--	92	6	Base of San Angelo or lower	0
g/780	6½ miles south	Sec.102,NE¼, H.& T.C.Blk.16	W. G. Baker	--	38	6	San Angelo sandstone	0
g/781	6 miles south	Sec.105,SW¼, H.& T.C.Blk.16	T. L. Walser	--	40	6	Base of San Angelo sandstone	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
759	9	f/	C,W	D,S	Permanent supply.
760	24	f/	C,W	S	Weak supply reported.
761	25	f/	C,W	D,S	
762	60	f/	C,W	S	Lower 10 feet of casing is perforated.
763	48	f/	C,W	N	Dug well with small supply.
764	96	f/	C,W	S	
765	--	--	--	N	Oil test. Drilled by Oklahoma Star Oil Co. See log.
766	45	f/	C,H	D,S	Lower 10 feet of casing is perforated.
767	30	f/	None	D,S	Permanent supply.
768	80	f/	C,W	S	Reported unfit for domestic or irrigation.
769	24	f/	None	N	Dug well now filled. Reported production of 200 gallons a minute, good water.
770	--	--	C,W	D,S	
771	20	f/	C,W	D,S	Permanent supply.
772	30	f/	C,W	D,S	Do.
773	16	f/	C,W	D,S	Lower 5 feet of casing is perforated.
774	50	f/	C,W	D,S	Permanent supply.
775	20	f/	C,W	D,S	Well now getting water 45 feet above bottom. Drilled by P. N. Durham.
776	6	f/	C,W	D,S	Lower 5 feet of casing is perforated.
777	20	f/	C,W	D,S	
778	42	f/	C,W	D,S	Failed to get sufficient water at base of San Angelo sandstone.
779	74	f/	C,W	D,S	Permanent supply.
780	18	f/	C,W	D,S	Cased with 36 feet of 6-inch galvanized casing.
781	10	f/	C,W	D,S	Lower 10 feet of casing is perforated.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public; D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given.
g/ No water sample collected for analysis.

Records of wells in Hardeman County--Continued

Well	Distance from Chillicothe See Plate 3	Section and survey a/	Owner	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing bed b/	Height of measuring point above ground (ft.) c/
782	7½ miles south	Sec.103,NW¼, H.& T.C.Blk.16	W. W. Cole	--	30	6	Sand in Clear Fork formation	0
783	7 miles south	Sec.104,SW¼, H.& T.C.Blk.16	Mrs.J.B.Forbes	1932	42	6	San Angelo sandstone	0
g/784	7½ miles southwest	Sec.47,SW¼, W.& N.W.Blk.H	S. Z. Bailey	1915	40	6	do.	0
g/785	8 miles southwest	Sec.48,NE¼, W.& N.W.Blk.H	S.J.Matthews	1905	42	6	do.	0
g/786	7 miles southwest	Sec.53,SE¼, W.& N.W.Blk.H	J. T. Barney	--	36	6	do.	0
787	9½ miles southwest	Sec.3,NE¼, TT. RR.	J.W.Sturmar	1908	55	6	do.	0
g/788	10 miles southwest	Sec.4,SE¼, TT.RR.	L.A.Gilland	--	30	42	do.	0
789	11 miles southwest	Sec.4,NW¼, FL. & R. RR.	C.E.Scharnagle	--	45	45	do.	0
g/790	11½ miles southwest	Sec.2,Cen. ET.& RR. RR.	W. E. Reeves	--	4,500	20	--	--
g/791	9 miles south	Sec.283,NE¼, W.W.White	O. H. Dodson	1920	64	6	Base of San Angelo sandstone	0
792	8½ miles south	Sec.98,NW¼, H.& T.C.Blk.16	J.J.Creighton	--	42	6	do.	0
793	9 miles south	Sec.98,SW¼, H.& T.C.Blk.16	do.	--	10	6	do.	0
g/794	do.	Sec.95,NE¼, H.& T.C.RR.	O. H. Dodson	1933	15	48	Quaternary gravel	0
g/795	do.	Sec.76,NW¼, H.& T.C.RR.	T.B.Knuckles	--	38	48	Sand in Clear Fork formation	0
g/796	7½ miles south	Sec.65,SW¼, H.& T.C.RR.	T.E.Alexandria	1915	12	6	do.	0

a/ Description does not always fit map location but it is not known which is in error.

b/ See geologic section in introduction.

c/ Measuring point was usually top of casing, top of curb, or top of water pipe clamp.

Records of wells in Hardeman County--Continued

Well	Water level: Depth below measuring point (ft.)	Water level: Date of measurement	Pump and kind and amount of power d/	Use of water e/	Remarks
782	20	f/	C,W	D,S	Permanent supply.
783	32	f/	C,W	D,S	Do.
784	35	f/	C,W	D,S	Reported drawdown of 5 feet after pumping 3 gallons a minute for 1 hour.
785	30	f/	C,W	D,S	Permanent supply.
786	32½	f/	C,W	D,S	Do.
787	35	f/	C,W	D,S	Do.
788	15	f/	C,W	D,S	Dug well with rock curbing.
789	25	f/	C,W	D,S	Dug.
790	--	--	--	N	Oil test well. Drilled by Milhan Corporation of Texas.
791	44	f/	C,W	D,S	Permanent supply.
792	32	f/	C,W	D,S	Reported drawdown of 3 feet after pumping 4 gallons a minute for 24 hours.
793	5	f/	None	N	Water level lowers in dry periods.
794	11½	f/	C,W	D,S	Dug.
795	12	f/	C,W	D,S	Do.
796	12	f/	C,W	D,S	Drilled by S. D. Wiging.

d/ C, cylinder; B, bucket or bailer; E, electric; G, gasoline engine; W, windmill; H, hand.
e/ I, irrigation; Ind, industrial; P, public. D, domestic; S, stock; N, not used.
f/ Water level reported and usually no date given
g/ No water sample collected for analysis.

Table of drillers' logs, Hardeman County, Texas

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

Well 72

Stanley E. Dorrill et. al., - Walter F. Williams No. 1; SW¼, Sec. 307, W. & N. W. RR. survey, Block H; 10 miles north of Goodlett.

Surface clay and gravel	16	16	Blue shale	93	318
Red beds	14	30	Gray lime rock	2	320
Gypsum	58	88	Salt water sand	8	328
Water sand and gravel	6	94	Blue sticky shale	2	330
Blue shale	106	200	Blue shale	340	670
White lime	3	203	Red shale	4	674
Water sand	3	206	Black lime rock	4	678
Sticky shale	4	210	White lime	12	690
Red shale	4	214	Gray shale	5	695
Sticky shale gray	8	222	Sandy lime	5	700
Gray lime rock	3	225	White lime rock	3	703
Blue shale	93	318	TOTAL DEPTH		703

Well 330

Frizell Oil Co., Nor ton No. 1; NW¼, Sec. 199, W. & N. W. RR. survey, Block H; 6½ miles north of Quanah.

Sand	60	60	Gypsum	10	230
Gypsum	8	68	Shale	65	295
Shale and gravel	11	79	Rock	4	299
Shale and gypsum	40	119	Shale	19	318
Gypsum	74	193	Rock	4	322
Clay	7	200	Shale	20	342
Gypsum and shale	12	212	Rock	2	344
Shale	8	220	Shale	6	350

Well 395

Texhoma Refining Co., - Mollie Evans No. 1; NW¼, Sec. 94, W. & N. W. RR. survey Block H; 4 miles northeast of Quanah.

Yellow clay	2	2	Shale and lime shells	123	250
Lime	15	17	Sand, some water	10	260
Red rock	35	52	Red shale	62	322
Hard lime	10	62	Sandy lime	10	332
Red shale	65	127	Red rock	120	452

Well 479

Wheat No. 1; NW¼, Sec. 184, W. & N. W. RR. survey, Block H; 7 miles south of Quanah.

Soil	2	2	Blue shale	3	148
Red clay	61	63	Hard shell	3	151
Soft gray shell	21	84	Red clay	10	161
Clay and blue shale	3	87	Blue shale	4	165
Hard shell	13	100	Red clay	10	175
Clay and blue shale	9	109	Blue shale	5	180
Hard lime and shale	2	111	Red clay	20	200
Blue shale	16	127	Blue shale	3	203
Red shale	13	140	Red beds	181	384
Lime shell	5	145	Hard blue lime shell	6	390

(Continued on next page)

Table of drillers' logs, Hardeman County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Well 479--Continued					
Soft red shell	19	409	Red gravel	4	1784
Hard red rock	6	415	Blue shale	28	1812
Red clay	2	417	? ?	18	1830
Flint shell	13	430	Lime shale	5	1835
Red bed	10	440	Blue and white shale	25	1860
Red rock	5	445	Lime shale	3	1863
Red bed	5	450	Blue shale	37	1900
Conglomerate	10	460	Lime shale	3	1903
Red rock	5	465	Blue and white shale	37	1940
Conglomerate	30	495	Lime	5	1945
Red shale	135	630	Water at 1910 feet.		
Hard shell	20	650	Blue and white shale	25	1970
Red shale	30	680	Lime shale	3	1973
Red rock shell	10	690	Blue and white shale	31	2104
Red shale	65	755	Blue shale	21	2125
White gypsum	5	760	Broken sand	15	2140
Red rock	195	955	Black shale	30	2170
Sand	5	960	Black lime	5	2175
Red rock	150	1110	Blue shale	5	2180
Black lime	8	1118	Gray lime	4	2184
Blue shale	64	1182	Blue shale	8	2192
Blue lime	3	1185	Gypsum	23	2215
Blue shale and hard lime	25	1210	Blue and white shale	75	2290
Red shale and lime	85	1295	Hard lime	3	2293
Blue shale	90	1385	Blue and white shale	37	2330
Gray lime	17	1402	Gypsum	4	2334
Sand, oil showing	10	1412	Blue and white shale	26	2360
Brown shale	53	1465	Gypsum	5	2365
Blue shale	37	1502	Sandy rock	50	2415
Hard lime	14	1516	Blue shale	8	2423
Soft gray lime	18	1534	Sandy lime	89	2512
Blue and white shale	70	1604	Blue and white shale	15	2527
Red gravel	8	1612	Sandy lime	23	2550
Blue and white shale	123	1735	White sand	25	2575
Black lime	6	1741	Water	65	2640
Blue and white shale	39	1780	Lime, oil sand	2	2642

Well 490, partial log

Texas Company, F. D. Clisbee No. 1, Martha Reeves survey, A-697; 9½ miles south of Quanah, Texas.

Surface blue shale	20	20	White lime	10	1000
Blue shale	45	65	Red bed	19	1019
Red rock	175	240	Blue shale	56	1075
Water sand	11	251	Red bed	150	1225
Red bed	34	285	Red rock	30	1255
Blue sand	10	295	Red bed	165	1420
Red bed	140	435	Red rock	70	1490
Brown sand	5	440	Red bed	5	1495
Red bed	95	535	Blue shale and shells	20	1515
Red rock	220	755	Red rock	5	1520
Red bed	35	790	Light shale and shells	10	1530
Red rock	50	840	Blue shale	50	1580
Red bed	130	970	Gray shale	35	1615
Gray lime	8	978	TOTAL DEPTH		4310
Red bed	12	990			

CASING RECORD: 20-inch to 178 feet; 15½-inch to 583 feet; 12½-inch to 1019 feet; 10-inch to 1428 feet; 8½-inch to 2453 feet; and 6-5/8-inch to 4173 feet.

Table of drillers' logs, Hardeman County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)

Well 629

Quanah Water Co., No. 1, in the SE corner of the NW¼, Section 11, W. & N. W. Block H.

Surface soil	3	3	Blue clay	2	51
Yellow sand	9	12	White rock	1	52
Yellow water sand	3	15	Brown clay	2	54
Gray water sand	4	19	Blue clay	8	62
Brown water sand	3	22	Brown clay	3	65
Gray water sand and gravel	3	25	Brown clay and shell	2	67
Gray rock	1	26	Blue clay	11	78
Coarse sand and gravel	6	32	Brown clay	9	87
Coarse gravel and clay	4	36	Blue clay	2	89
Coarse brown sand and gravel	2	38	Gravel walled using 10 cubic yards of		
Blue clay	4	42	gravel. Tested at 250 gallons a minute		
Brown clay	7	49	when completed.		

Well 630

Quanah Water Co., No. 2 in the NE corner of the SW¼, section 11, W. & N.W.,Block H.

Surface soil	2	2	Brown clay	16	70
Sandy clay	10	12	Red clay	6	76
Yellow sand	4	16	Blue clay	5	81
Sand and gravel	7	23	Brown clay	5	86
Coarse sand and gravel	16	39	Red clay	6	92
Coarse gravel	3	42	Gypsum rock	3	95
Blue clay	4	46	Tested at 225 gallons a minute when		
Brown clay	4	50	well was completed.		
Blue clay	4	54			

Well 631

Quanah Water Co., No.3,1,360 feet north of the SE corner of the SW¼, section 11, W. & N.W. Block H.

Surface soil	2	2	Blue clay	2	66
Sandy clay	3	5	Brown clay	7	73
Yellow sand	7	12	Blue rock	1	74
Brown sand	3	15	Brown clay	2	76
Gray water sand	5	20	Blue clay	8	84
Gray water sand and gravel	14	34	Brown clay	2	86
Rock	2	36	Blue clay	2	88
Sand and gravel	4	40	Brown clay	7	95
Gray sand and clay	6	46	Gypsum rock	3	98
Blue clay	5	51	Red clay	2	100
Brown clay	5	56	Tested at 210 gallons a minute when		
Gypsum rock	3	59	well was completed.		
Brown clay	5	64			

Well 765, partial log

Oklahoma-Star Oil Co., W.).Neal No.1, SE¼,Sec.85,W.& N.W. RR. survey, Block H, 9 miles southwest of Chillicothe.

Surface soil	2	2	Water sand	5	165
Gypsum rock	3	5	Red shale	25	190
Blue shale	15	20	Water sand	5	195
Red shale	140	160	Red shale	65	260

(Continued on next page)

Table of drillers' logs, Hardeman County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
Well 765, partial log--Continued					
White lime	20	280	Red shale	190	910
Red shale	265	545	White lime	10	920
Red rock	25	570	Red shale	540	1460
Red shale	130	700	TOTAL DEPTH		2812
White lime	20	720			

Well 790, partial log

Milham Corporation of Texas, W. E. Reeves No. 1, near center of Sec. 2, E.L.& R.R. RR. Co., survey, 11½ miles southwest of Chillicothe.

Red rock	40	40	Brown shale	10	1025
Gray lime	10	50	Red rock	80	1105
Red rock	25	75	White shale	35	1140
Gray lime	15	90	Blue shale	10	1150
Red rock	25	115	Red rock	10	1160
Gray lime	15	130	Blue shale	4	1164
Blue shale	10	140	White lime	16	1180
Gray lime, gas show at	15	155	Blue shale	60	1240
Blue shale	8	163	Gray lime	5	1245
Gray lime	22	185	Blue shale	5	1250
Blue shale	5	190	Gray lime	5	1255
Red rock	35	225	Blue shale	25	1280
Gray lime	20	245	Brown shale	50	1330
Brown shale	10	255	Blue shale	5	1335
Gray shale	50	305	Brown shale	15	1350
Brown shale	70	375	Red rock	130	1480
Red rock	90	465	Gray lime	5	1485
Gray lime	15	480	Brown shale	5	1490
Red rock	345	825	Red rock	10	1500
Brown shale	40	865	TOTAL DEPTH		4500
Red rock	150	1015			

Logs of test wells drilled by W.P.A. labor in Hardeman County, Texas. Samples examined and classified by F.E. Russell and L.P.Huggins, Project Superintendents.

Well 9

14 miles north of Goodlett, in low sand hills in SE¼, sec. 9, C. J. & D.

	Thickness (feet)	Depth (feet)
Sandy soil	2	2
Brown sand	7	9
White spotted red sand	4	13
Coarse brown sand	7	20
Fine brown sand	3	23
White sand	1	24
Fine brown sand	4	28
Sandy red clay	2	30
Red sand	3	33
White sand	2	35
Coarse red sand	1	36
Gray sandy clay	4	40

Well 11

14 miles north of Goodlett, in NW cor., Sec. 14, C.J.& D.

Sandy soil	3	3
Fine brown sand	1	4
Fine red sand	2	6
Fine brown sand	15	21
Coarse red sand	4	25
Fine brown sand	4	29
Coarse light brown sand	1	30
Fine white sand	1	31
Fine light brown sand	2	33
Red clay and sand	1	34
Sand, streaked gray and brown	2	36
Brown sand and pebbles	1	37

Well 13

14 miles north of Goodlett, in SE cor. Sec.9, C.& M. RR.

Sandy surface soil	5	5
Fine light sand	2	7
Coarse brown sand	2	9
Red sandy clay	1	10
Light brown sand	7	17
Brown sandy clay	1	18
Brown sand	3	21
Gray sandy clay	5	26
Coarse brown sand	1	27
Fine yellow sand	2	29
Yellow sand, brown streaks	1	30
Gray sand	1	31
Coarse yellow sand	2	33
Brown sand	2	35
Coarse gray sand, brown saturated streaks	2	37

Well 18

14 miles north of Goodlett, in NE cor. Sec.25, C. J. & D.

Sandy soil	3	3
Fine brown sand	4	7
Coarse red sand	3	10
Coarse red and white sand	3	13
Fine red sand	7	20
Fine brown sand	4	24
Red sandy clay	1	25
Fine brown sand	3	28
Fine gray sand	2	30
Dark gray sandy soil	1	31
White fine sand	2	33
Brown streaked, fine, gray, sandy clay	2	35
Fine white sand	5	40

Well 306

9 miles north of Quanah, in sand hills in S.½, Sec.2, J. Gibson survey.

Surface sand	3	3
Dark brown sand	1	4
Fine brown sand and red clay	7	11
Fine dark brown sand and red clay	1	12
Fine brown sand and red clay	3	15
Fine red sand and red clay	2	17

Well 312

7½ miles north of Quanah, SE½, Sec.2, J. Gibson survey.

Surface sand	2	2
Fine brown sand	2	4
Coarse red sand	4	8
Coarse red sand and gravel	1	9
Gypsum at 9 feet, no water.		

Well 328

7½ miles north of Quanah, in sand hills in NW¼, Sec.200, W. & N.W. RR., Block H.

Surface sand	4	4
Fine brown sand	3	7
Coarse red sand	1	8
Silt	1	9
Fine gray sand	1	10
Coarse red sand	6	16
Gravel		16

Logs of W. P. A. test wells--Continued

	Thickness (feet)	Depth (feet)
Well 332		
6 miles north of Quanah, in sand hills, in NE¼, Sec. 172, W.& N.W. RR.Block H.		
Surface sand	2	2
Fine brown sand and gravel	8	10
No water.		
Well 334		
6½ miles north of Quanah, in sand hills in SW¼, Sec. 12, J.P.Taylor Survey.		
Surface sand	5	5
Silt	3	8
Brown fine sand	10	18
Gravel		18
Well 340		
6 miles north of Quanah; in sand hills in SE¼, Sec. 12, Wheeler County School land.		
Surface sand	2	2
Fine brown sand	12	14
Gravel at 14 feet. No water.		
Well 341		
6 miles north of Quanah; in sand hills in NW¼, Sec. 171, W.& N.W. RR. survey, Block H.		
Surface sand	1	1
Fine brown sand	2	3
Coarse red sand	3	7
Coarse red sand, red clay	5	12
Gravel at 12 feet. No water.		
Well 348		
6 miles north of Quanah; in sand hills in SW¼, Sec.13, C.& M. RR. survey.		
Surface sand	3	3
Fine brown sand	6	9
Brown fine sand and clay	28	37
Red fine sand	3	40
Coarse red sand	1	41
Well 349		
6 miles north of Quanah, in sand hills in SE¼, Sec.13, C.& M. RR. survey.		
Surface sand	2	2
Brown sand	7	9
Gray sand	3	12
Gray sand and gypsum	1	13
Blue shale	3	16
Light brown sand	1	17
Red shale	2	19

	Thickness (feet)	Depth (feet)
Well 360		
5½ miles northeast of Quanah, in SW¼, Sec. 97, W. & N. W. RR. survey,Block H.		
Surface soil	2	2
Sand	8	10
Clay	2	12
Well 362		
5 miles northeast of Quanah, on creek bank in SE¼, Sec. 98, W.& N.W. RR. survey, Block H.		
Surface sand	2	2
Red sand	4	6
Red clay	6	12
White sand	1	13
Red sand	2	15
Red clay	4	19
Sand and gravel	1	20
Water at 20 feet.		
Well 369		
3½ miles north of Quanah, in bed of creek, in NW¼, Sec.123, W.& N.W. RR. survey, Block H.		
Fine brown sand and clay	5	5
Clay and shale	2	7
Gypsum at 7 feet.		
Well 370		
3½ miles north of Quanah, in creek bed, NW¼, Sec. 123, W.& N.W. RR. survey, Block H.		
Fine brown sand and clay	4	4
Blue clay and shale	2	6
Gypsum at 6 feet.		
Well 371		
3 miles north of Quanah, in creek bed in NW¼, Sec. 123, W.& N.W. RR. survey, Block H.		
Brown shale and clay	1	1
Blue clay and shale	2	3
Gypsum at 3 feet.		

Logs of W. P. A. test wells--Continued

	Thickness (feet)	Depth (feet)
Well 372		
3 miles north of Quanah, in creek bed in NW¼ Sec. 123, W. & N. W. RR. survey, Block H.		
Brown sand, gravel and clay	3	3
Blue clay and shale	2	5
Gypsum at 5 feet.		
Well 391		
1½ miles northeast of Quanah, center of north line, Sec. 140, W. & N. W. RR. survey, Block H.		
Surface sand	3	3
Fine brown sand	2	5
Red clay and brown sand	3	8
Red clay and chalk	2	10
Red clay, fine brown sand	7	17
Gravel at 17 feet.		
Well 392		
1½ miles north of Quanah, NE¼, Sec. 146, W. & N. W. RR. Survey, Block H.		
Surface sand	1	1
Fine brown sand, red clay	10	11
Fine gray sand	3	14
Fine red sand	3	17
Coarse red sand	3	20
Coarse red sand and gravel	2	22
Gravel at 22 feet.		

	Thickness (feet)	Depth (feet)
Well 394		
4 miles northeast of Quanah, in NW¼, sec. 100, W. & N. W. RR., survey, Block H.		
Surface soil	10	10
Red clay	2	12
Hard rock at 12 feet.		
Well 600		
9½ miles northwest of Chillicothe, in sand hills in SE. cor. survey 12, H. E. & W. T. RR.		
Surface sand	5	5
Fine brown sand	4	9
Fine white sand	4	13
Yellow sand	3	16
Light brown sand	3	19
Coarse light brown sand	2	21
Coarse brown sand	2	23
Coarse light brown sand	1	24
Water and quicksand	1	25
Well 649		
6 miles north of Chillicothe, in sand hills, in NW¼, Sec. 18, W. & N. W. RR. survey, Block H.		
Surface sand	2	2
White sand	2	4
Sand and clay	8	12
White sand	4	16
Red sand	4	20
White sand	2	22
Brown sand	4	26
No water.		

Partial analyses of water from wells in Hardeman County, Texas

(Analyzed at the State University under the direction of Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry, by J. E. Stullken, C. R. Stewart, D. F. Riddell, and Alfred J. Kelly, Chemists, and J. A. Harmaza, Martin Wieland and Jack Ramsey, Assistant Chemists. Results are in parts per million. Well numbers correspond to numbers in table of well records.)

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
1	T. D. Wallace	18	Feb. 10, 1936	1,146	131	38	249	268	224	370	435
2	C. E. Webb	8	do.	354	76	29	23	384	8	26	309
4	R. C. Camden	70	do.	870	173	54	57	390	251	140	655
5	H. P. Watson	120	Feb. 7, 1936	345	59	13	59	330	29	20	201
6	B. E. Harper	90	--	289	62	20	22	256	15	42	238
7	J. D. Hughes	125	Feb. 7, 1936	530	74	36	76	317	62	124	334
8	H. H. Lightfoot	125	Feb. 17, 1936	1,221	224	38	168	268	177	480	715
10	F. D. Caskey	125	Feb. 7, 1936	707	107	24	126	403	125	124	365
12	B.D.Porterfield	160	do.	540	59	38	83	305	111	92	305
14	Mrs.Henry Watson	100	do.	1,352	107	53	206	220	672	144	636
15	Homer Watson	100	do.	588	60	13	148	260	167	40	2,025
17	E. B. Caskey	146	Feb. 10, 1936	819	139	43	88	330	260	124	525
20	J. D. Chesshir	120	do.	1,146	232	70	47	384	538	67	868
22	F. J. McGee	120	do.	1,144	183	48	133	317	550	72	656
23	-- Dial	118	do.	336	39	18	64	213	47	62	172
25	J. C. Lindsay	165	Feb. 5, 1936	552	136	46	9	464	75	54	516
27	H. H. Lightfoot	72	Feb. 7, 1936	1,413	337	41	93	262	341	470	1,030
28	E. F. Riley	54	Jan. 28, 1936	334	74	20	21	230	62	17	267
29	B. K. McCaskle	200	do.	1,008	-	-	-	207	485	96	-
30	-- Vaughn	194	do.	1,532	216	85	187	317	467	425	888
31	W. E. Trolinder	177	Feb. 10, 1936	2,035	561	147	177	244	1,760	270	2,000
32	W. E. Horton	180	Jan. 23, 1936	1,118	196	56	128	342	227	340	718
33	J. E. Howard	200	do.	2,105	387	116	123	268	1,100	245	1,444
34	H. P. Watson	210	Feb. 4, 1936	2,524	478	121	100	210	1,605	115	1,695
35	W. C. Sanders	176	Feb. 5, 1936	2,968	535	144	162	156	1,970	79	1,918
36	C. Lindsey	260	Feb. 4, 1936	2,334	568	112	146	156	1,786	144	1,880
37	J. S. McWhorter	96	do.	300	45	19	52	342	a/	13	190
38	L. W. Warren	180	do.	2,879	571	169	70	222	1,820	138	2,127

a/ Sulfate less than 5 parts per million.

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
39	E. F. Riley	73	Jan. 23, 1936	658	75	60	95	456	55	145	435
40	E. S. Sanders	250	Feb. 5, 1936	1,590	373	78	18	210	858	158	1,250
41	J. W. Parker	270	do.	917	179	51	55	210	393	134	655
42	A. A. Lindsey	190	Jan. 28, 1936	1,833	354	82	127	268	1,030	106	1,223
43	Lilliand Wright	220	Feb. 5, 1936	2,237	476	11	74	153	1,530	70	1,659
44	D. H. Kohldeen	120	Feb. 4, 1936	1,767	345	93	82	216	1,005	134	1,238
46	Jimmie Watson	150	Feb. 7, 1936	823	123	77	92	60	316	245	625
47	W. F. Williams	125	Feb. 12, 1936	2,911	-	-	-	256	1,300	94	-
49	C. I. Fellers	160	Feb. 10, 1936	1,517	306	94	72	268	915	96	1,151
50	-- Gibson	150	do.	861	146	60	67	293	288	154	612
51	W. F. Williams	109	do.	2,913	589	145	108	268	1,750	186	2,068
52	M. S. Winsbury	130	do.	2,764	603	118	32	262	1,690	140	1,994
53	W. F. Williams	109	do.	1,441	238	84	119	311	675	170	940
54	M. S. Winsbury	160	-	889	204	65	3	274	316	164	778
55	do.	110	Feb. 11, 1936	1,024	101	80	150	354	306	210	580
56	Joe Manus	80	do.	678	74	37	156	312	87	168	339
57	Federal Land Bank	80	do.	716	82	35	136	360	135	148	349
58	W. J. Jackson	125	do.	772	85	44	154	310	84	100	394
59	do.	125	do.	2,006	80	34	550	378	1,085	68	338
60	C. R. Fogg	100	do.	876	129	50	79	374	355	76	531
61	A. J. Norton	95	Mar. 2, 1936	2,508	509	110	102	122	1,598	128	1,724
62	D.B.Porterfield	89	do.	1,983	423	88	63	165	1,212	110	1,418
63	A. J. Norton	67	Feb. 11, 1936	1,596	180	60	273	244	855	106	697
64	J. T. Stovall	85	do.	545	94	31	67	396	91	64	364
65	W. H. Collins	144	Jan. 24, 1936	2,591	507	118	148	220	1,540	168	1,755
66	A. A. Lindsey	125	do.	2,678	541	116	109	97	1,750	114	1,330
67	E. E. Horton	300	Feb. 11, 1936	2,937	563	116	192	207	1,765	194	1,882
68	W. F. Williams	140	Feb. 12, 1936	2,907	597	133	107	220	1,890	70	2,016
69	do.	120	Feb. 10, 1936	2,817	533	152	114	232	1,800	102	1,959
70	do.	125	Feb. 11, 1936	3,005	640	89	160	252	1,895	90	1,967
73	Mrs.Jesse Williams	165	Feb. 12, 1936	2,862	581	133	106	268	1,840	60	2,000
74	J. R. Williams	150	Jan. 23, 1936	1,342	337	73	129	146	1,178	52	1,140
75	do.	225	do.	273	46	29	22	293	a/	30	234
77	do.	80	Jan. 23, 1936	445	72	23	53	244	88	82	293

a/ Sulfate less than 5 parts per million.

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
78	Joe Lindsey	230	Jan. 28, 1936	2,576	486	104	145	146	1,705	63	1,643
79	J. C. Lindsey	230	Feb. 5, 1936	2,869	591	128	94	159	1,920	57	2,006
81	N. C. Sanders	100	Jan. 28, 1936	380	54	24	53	250	87	37	233
82	do.	250	do.	1,017	158	46	108	238	538	48	537
83	Troy Hackler	160	Jan. 23, 1936	3,016	454	252	117	207	1,830	210	2,171
85	Frank Hines	146	Jan. 24, 1936	2,941	525	164	182	252	1,810	134	1,987
86	Sanders Estate	120	Jan. 23, 1936	2,624	469	150	127	220	1,650	113	1,790
87	do.	100	do.	1,929	340	133	65	146	1,200	118	1,396
88	N. W. Gailbrath	144	do.	2,645	535	126	105	274	1,630	112	1,855
89	B. F. Jones	80	do.	2,498	566	99	54	207	1,620	56	792
90	Kent McSpaddin	110	do.	3,195	626	109	213	134	1,920	260	2,013
91	B. F. Swindell	795	do.	2,701	-	-	-	213	1,703	72	-
92	Frank Hines	132	Feb. 24, 1936	3,472	-	-	-	232	2,120	176	-
93	E. S. Hale	127	Jan. 24, 1936	2,948	412	180	240	252	1,880	100	1,780
94	Frank Hines	125	Jan. 28, 1936	3,423	547	153	425	288	2,440	96	1,998
95	do.	98	Jan. 24, 1936	2,836	575	66	122	276	1,870	66	1,700
96	E. I. Flint	100	Jan. 23, 1936	2,859	462	172	167	146	1,875	110	1,861
97	H. L. Powell	120	do.	3,153	510	247	83	171	2,070	158	2,340
99	L. E. Hodges	97	Feb. 4, 1936	2,616	573	145	13	207	1,700	82	2,028
100	J. L. Bryant	85	Feb. 12, 1936	2,886	-	-	-	232	1,825	70	-
102	W. T. Newman	120	Jan. 24, 1936	-	538	145	-	160	-	98	1,975
103	W. H. Young	125	do.	2,689	570	96	113	114	1,710	80	1,825
104	I.J.Penniston	130	do.	3,177	536	201	154	207	2,055	128	2,165
105	Marvin Word	105	do.	2,447	572	101	34	232	1,520	104	1,942
106	I.J.Penniston	170	do.	3,930	617	250	276	244	2,150	515	2,566
107	C. F. Reynolds	120	do.	2,888	572	131	134	207	1,790	158	1,967
108	J. T. Stovall	123	do.	2,851	534	109	137	183	1,952	78	1,783
109	E. L. Horton	96	do.	2,646	546	111	109	220	1,670	100	1,823
110	J. M. Williams	120	Mar. 9, 1936	3,220	-	-	-	195	1,835	290	-
111	R. F. Turnbow	90	Mar. 2, 1936	1,011	-	-	-	110	548	92	-
112	B. E. Riley	90	--	2,845	-	-	-	232	1,723	136	-
113	J. B. Busby	105	Mar. 9, 1936	1,174	245	52	60	250	604	88	827
114	J. M. Williams	83	Mar. 9, 1936	2,690	-	-	-	207	1,661	100	-
115	do.	70	Mar. 9, 1936	3,004	-	-	-	268	1,739	210	-
119	C. F. Reynolds	30	do.	3,243	-	-	-	195	2,012	148	-

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
120	J. M. Williams	45	Mar. 9, 1936	3,123	528	151	234	232	1,380	214	1,939
121	J. E. Buttrill	39	do.	2,453	-	-	-	263	1,426	138	-
122	J. M. Williams	60	do.	2,623	-	-	-	195	1,631	94	-
123	F. A. Word	54	Mar. 6, 1936	3,010	910	103	65	92	1,782	104	1,940
124	J. A. Stephens	110	Mar. 9, 1936	2,615	561	102	94	159	1,661	118	1,823
125	T. J. Stovall	92	Jan. 24, 1936	2,393	532	94	62	134	1,540	93	1,717
126	H. C. Becknell	102	do.	2,587	442	109	171	159	1,700	86	1,653
127	Robert Word	107	do.	2,470	580	73	74	220	1,555	78	1,749
128	J. T. Baker	52	do.	3,126	595	113	216	256	1,930	144	1,954
129	W. H. Young	72	do.	2,585	596	55	119	201	1,653	62	1,717
130	Minnie K.Fielding	70	Jan. 23, 1936	3,302	587	126	263	244	2,050	154	716
131	J. M. McSpaddin	70	do.	2,708	526	101	180	146	1,800	88	1,732
132	T. S. Penniston	60	do.	2,876	607	128	104	244	1,720	195	2,046
133	J. A. Allen	85	do.	3,001	569	128	186	268	1,800	184	1,951
134	J. H. Haynes	120	do.	3,006	560	140	181	268	1,785	206	1,876
135	A. and L. Lydia	80	do.	3,307	538	160	288	207	1,863	355	2,000
136	W.H.Gailbreath	36	Jan. 28, 1936	2,909	573	152	118	280	1,710	216	2,059
137	Will Howard	52	do.	2,607	511	95	165	135	1,600	101	1,668
139	Mrs.M.I.Simmons	47	Feb. 20, 1936	2,686	-	-	-	195	1,730	48	-
140	Mrs.I.J.Penniston	Spring	Feb. 16, 1936	3,188	-	-	-	281	1,848	216	-
141	J.B.Penniston	38	Jan. 23, 1936	1,871	469	170	72	183	1,785	190	1,871
142	W. I. Thomas	30	Feb. 20, 1936	2,917	590	137	118	293	1,800	126	2,036
143	C. A. Vestal	76	do.	2,615	578	80	77	183	1,615	74	1,774
144	W. L. Howard	116	Mar. 5, 1936	2,780	-	-	-	195	1,750	90	-
145	Jennie Malone	112	do.	3,864	-	-	-	146	2,260	475	-
146	H. A. Thompson	110	do.	3,004	-	-	-	201	1,880	100	-
147	J. C. Marshall	165	do.	3,671	530	238	280	256	2,220	275	2,300
148	Mrs.C.F.Henry	69	Mar. 9, 1936	3,327	587	129	241	220	1,954	216	1,996
149	J. C. Marshall	165	Mar. 5, 1936	2,900	610	100	145	207	1,790	152	1,932
150	J. F. Stewart	165	Mar. 5, 1936	5,661	606	214	1,030	183	2,030	1,640	2,396
152	Tom Ford	114	Mar. 6, 1936	4,295	-	-	-	201	2,230	620	-
153	S. J. Matthew	63	do.	3,678	-	-	-	244	1,954	375	-
154	J. T. McCullough	45	do.	5,249	-	-	-	159	2,530	1,160	-
155	Tom Ford	42	do.	4,484	566	119	780	110	1,834	1,130	190

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
156	J. V. Roulston	80	Mar. 6, 1936	3,198	-	-	-	146	1,797	340	-
157	S. M. Roustin	110	do.	2,961	-	-	-	220	1,711	240	-
158	F. B. Wrinkle	85	Mar. 5, 1936	3,002	-	-	-	183	1,825	170	-
159	C. A. Vestal	130	do.	2,800	-	-	-	201	1,720	128	-
160	E. Z. Phillips	100	Feb. 20, 1936	3,289	-	-	-	244	2,070	98	-
161	Mrs.I.R.Thomas	117	do.	3,088	-	-	-	159	1,740	315	-
162	W. I. Tabor	90	do.	2,549	-	-	-	183	1,618	68	-
163	John King	125	do.	3,635	623	156	312	159	1,970	495	2,200
166	W. I. Tabor	47	do.	2,676	-	-	-	134	1,760	46	-
167	J. F. Ross	120	Jan. 16, 1936	3,289	564	136	280	192	1,900	312	1,968
168	do.	100	Jan. 17, 1936	2,732	648	76	65	49	1,845	74	1,925
169	T. E. Curry	105	Jan. 16, 1936	2,545	616	73	58	207	1,613	82	1,840
170	M. B. Dowlin	93	Jan. 17, 1936	2,496	586	84	53	195	1,613	63	1,815
171	M. S. Curry	105	Jan. 16, 1936	2,738	649	99	44	244	1,750	74	2,028
172	G. Arnett	111	do.	2,734	625	76	107	220	1,730	86	1,876
173	J. M. Finley	110	do.	2,625	611	74	91	220	1,645	94	1,831
175	T. E. Curry	85	Jan. 17, 1936	2,571	586	92	70	207	1,630	90	1,842
176	J. F. Ross	100	Jan. 16, 1936	3,205	608	103	262	244	1,810	300	1,943
177	do.	80	Jan. 1, 1936	2,687	498	104	198	132	1,710	39	1,675
178	Arthur Roberts	130	Jan. 16, 1936	3,839	586	166	288	111	2,300	387	2,145
179	do.	135	do.	3,898	630	151	412	220	2,050	545	2,197
181	W. M. Scott	111	do.	3,345	520	127	298	220	1,910	320	1,973
182	do.	112	do.	3,473	760	132	128	186	2,050	310	2,445
183	do.	111	do.	2,370	599	74	17	189	1,510	76	1,801
184	do.	96	do.	2,870	397	40	595	147	1,885	80	905
185	H. T. Lane	85	Jan. 17, 1936	3,034	707	90	97	69	1,840	240	2,137
186	M. L. Walkup	46	do.	2,574	563	90	101	228	1,643	63	1,770
189	Mrs. P. Williams	65	do.	2,527	572	58	126	192	1,535	140	1,670
190	G. Y. Gillespie	80	do.	3,335	561	122	328	102	1,870	350	1,907
191	P. F. Ratliff	75	do.	3,186	546	119	294	87	1,810	330	1,857
192	Charles Vestal	108	Jan. 24, 1936	3,114	627	119	175	171	1,843	265	2,055
194	S. D. Kerr	90	Feb. 6, 1936	3,062	636	106	107	195	1,870	196	2,153
195	City of Goodlett	65	do.	2,200	490	65	97	84	1,360	104	2,491
196	E. E. Wrinkle	121	do.	2,433	538	72	114	216	1,500	100	1,643
198	G. Collins	108	do.	2,801	560	71	28	102	1,920	114	1,705

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
199	S. D. Terry	115	Feb. 6, 1936	1,152	530	79	124	180	150	179	1,697
200	G. Collins	75	do.	2,738	568	85	156	102	1,730	97	1,767
201	G. H. Alexandra	56	Mar. 5, 1936	2,966	-	-	-	195	1,731	226	-
202	D. H. Womack	55	do.	6,133	-	-	-	220	2,126	1,880	-
203	M. M. Hankins	75	Jan. 21, 1936	2,990	550	90	244	207	1,950	53	1,744
204	J. T. Taylor	98	--	2,641	534	104	117	147	1,800	13	1,763
205	L. Minshaw	78	Jan. 20, 1936	2,785	517	92	206	143	1,825	74	1,671
206	J. T. McCullough	80	do.	2,668	544	72	177	226	1,690	72	1,659
207	E. W. Stringer	80	do.	3,061	527	126	216	122	2,035	96	1,886
208	Mose Devol	90	do.	3,150	534	106	282	174	2,095	46	1,773
209	M. T. McCracken	90	do.	3,265	546	169	216	137	2,110	156	2,061
210	Mona Youngblood	80	Jan. 21, 1936	2,152	508	63	61	220	1,382	28	1,528
211	Nina McAdams	90	do.	2,579	550	104	88	165	1,675	80	1,803
212	D. A. Ford	50	do.	2,151	452	68	110	146	1,400	48	1,408
213	I. M. McWhorter	50	do.	2,876	573	99	170	207	1,845	86	1,842
214	F. M. Kyle	75	do.	2,867	558	124	144	195	1,870	74	1,903
215	W.H.Quisenberry	105	do.	2,996	539	123	207	195	1,940	90	1,850
216	C. R. Mann	110	do.	2,678	472	140	151	220	1,735	70	1,757
217	Annie Jones	105	do.	2,831	569	92	168	220	1,845	47	1,801
218	C. C. Ford	100	--	2,556	490	102	153	195	1,640	74	1,643
219	D. A. Ford	63	Jan. 21, 1936	2,802	551	136	110	198	1,800	106	1,937
220	J. Y. Lane	75	do.	2,702	479	121	152	159	1,755	116	1,695
223	do.	114	Jan. 20, 1936	3,300	544	109	320	87	2,155	80	1,810
224	E. A. Carl	60	Jan. 2, 1936	3,368	592	184	180	68	2,180	164	2,235
225	W. E. Reaves	55	Jan. 12, 1936	2,468	600	77	42	232	1,575	58	1,819
226	R. W. Griffin	90	do.	2,837	563	113	162	335	1,710	122	1,874
228	Ethel Bohanan	90	Jan. 22, 1936	2,728	566	99	138	207	1,880	142	1,822
229	Will Gregory	90	Jan. 23, 1936	-	-	-	-	-	1,565	54	-
230	R. L. Harbeson	140	Jan. 20, 1936	2,486	526	94	94	122	1,645	66	1,702
231	H. Gibson	140	Feb. 10, 1936	2,521	569	90	77	232	1,587	82	1,790
232	J. W. Walkup	125	Jan. 22, 1936	-	-	-	1,380	192	2,130	80	2,000
234	J. J. Summers	Spring	Jan. 10, 1936	2,542	606	90	40	268	1,649	23	1,884
235	J. Hammond	133	Jan. 22, 1936	2,779	504	177	120	111	1,910	56	1,992
236	J. B. Barclay	80	Jan. 23, 1936	5,743	519	124	1,450	50	1,370	1,730	1,310
300	W. T. Bakenall	91	Mar. 2, 1936	2,471	496	108	116	220	1,515	126	1,684

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
301	S. J. Matthew	50	Mar. 2, 1936	2,635	475	129	121	110	1,594	162	1,716
304	E. R. McGinis	85	do.	2,392	485	110	81	37	1,594	104	1,664
305	S. L. Henderson	68	do.	1,062	-	-	-	293	463	104	-
307	W. A. Mosley	76	Mar. 12, 1936	1,956	430	62	95	152	1,125	168	1,328
308	G. W. Radford	65	do.	1,572	-	-	-	305	852	72	-
309	E. B. Caskey	48	do.	1,411	-	-	-	207	768	98	-
310	do.	160	do.	1,297	-	-	-	159	735	80	-
311	J. C. Barbee	70	Mar. 25, 1936	1,660	370	74	38	220	1,003	60	1,230
313	W. H. Horlsey	70	Mar. 3, 1936	1,983	514	62	5	207	1,229	70	1,538
314	L. Earing	80	do.	904	-	-	-	262	348	124	-
315	Howard and Caskey	65	do.	2,783	-	-	-	195	1,707	130	-
316	W. C. Howard	65	Mar. 13, 1936	1,936	-	-	-	207	1,085	92	-
317	Harry Little	72	Mar. 2, 1936	2,427	480	110	104	183	1,500	142	1,684
325	J. L. Grisham	100	Mar. 27, 1936	403	69	27	44	281	65	58	283
329	W. B. Kyle	50	Mar. 13, 1936	185	51	16	-	201	8	10	192
331	F. W. Howard	Spring	Feb. 20, 1936	1,540	-	-	-	220	688	245	-
333	E. I. Flynt	60	Mar. 13, 1936	200	40	17	14	207	12	14	172
336	do.	50	do.	289	-	-	-	220	35	38	-
337	E. I. Flint	100	Mar. 2, 1936	620	80	40	63	134	312	58	365
338	Y. R. Howell	102	Mar. 12, 1936	644	72	35	93	159	321	44	324
339	Machell Methca	100	do.	384	32	30	69	244	69	62	204
342	C. T. Watkins	80	Mar. 25, 1936	750	170	61	10	323	150	198	678
344	C. I. Bush	98	do.	642	130	47	25	281	228	72	516
346	J. T. McCullough	63	Mar. 12, 1936	1,315	255	46	92	159	797	46	826
350	Joe Richardson	78	Mar. 25, 1936	365	61	25	46	317	34	41	253
351	C. T. Watkins	80	do.	329	77	27	11	231	18	56	303
356	R. O'Hair	90	Mar. 24, 1936	2,258	324	118	256	128	706	790	1,394
357	C. E. Swindell	40	Mar. 23, 1936	1,575	204	73	248	293	434	470	812
359	R. O'Hair	51	do.	2,453	586	59	94	281	1,456	118	1,708
367	C. B. White	43	Mar. 24, 1936	1,047	178	47	112	317	432	120	636
378	C. T. Watkins	Spring	Feb. 20, 1936	2,573	-	-	-	183	1,660	44	-
379	Certainteed Products Company	Spring	do.	2,544	600	84	54	219	1,653	44	1,846
380	W. W. Howard	Spring	do.	3,557	642	99	365	183	1,805	555	2,014
381	H. C. Ellis	80	Mar. 6, 1936	2,719	610	100	95	256	1,739	47	1,932

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
382	W. A. Saacks	70	Mar. 9, 1936	4,340	614	166	555	244	2,208	675	2,242
383	J. E. Stewart	80	Mar. 6, 1936	2,882	-	-	-	195	1,709	192	-
384	L. S. K. Smith	90	Mar. 3, 1936	2,695	-	-	--	195	1,730	54	-
390	Mrs. -- Howze	135	Mar. 30, 1936	1,476	268	74	50	275	813	134	972
393	W. G. Crowder	50	do.	1,240	202	69	141	378	364	275	788
396	J. C. Kerley	20	Apr. 4, 1936	4,752	-	-	-	147	3,010	240	-
397	W.T.Dickey Estate	30	Mar. 31, 1936	2,536	485	127	138	244	1,384	280	1,736
398	M. Evans	60	do.	3,414	621	93	306	232	2,170	108	1,936
399	C. Holcomb	60	do.	2,742	540	113	132	183	1,775	86	1,834
400	Lydia Parker	123	do.	3,710	651	94	326	146	2,480	86	2,012
401	J. H. Moore	62	do.	3,549	823	-	298	317	2,050	220	2,058
403	E. Moran	77	Feb. 18, 1936	562	92	40	50	275	175	68	395
404	W. H. Horsely	65	Feb. 7, 1936	516	80	37	48	232	171	64	355
405	-- Lance	55	Feb. 5, 1936	500	-	-	-	366	55	76	-
406	W. H. Horseley	63	Feb. 7, 1936	434	-	-	-	317	86	32	-
407	R. H. Wilson	65	May 7, 1936	670	-	-	-	299	250	44	-
410	W. J. Altman	90	Feb. 6, 1936	601	93	47	56	324	163	80	426
411	Quanah Cotton Oil Co.	50	do.	910	139	57	116	451	163	210	582
412	E. F. Elton	80	do.	815	157	55	43	268	296	130	617
413	Quanah Water Co.	85	Feb. 3, 1936	439	76	33	42	329	74	50	325
629	do.	100	Feb. 18, 1936	365	64	30	29	281	70	32	284
630	do.	95	do.	417	68	35	32	296	78	46	311
631	do.	89	do.	371	56	40	26	305	70	27	305
425	W. S. Winbury	100	Jan. 20, 1936	3,045	640	119	123	238	1,960	84	2,088
426	Wm. Griffin	80	do.	3,227	555	128	276	207	1,920	245	1,915
427	L. S. K. Smith	60	Mar. 5, 1936	2,306	-	-	-	165	1,475	52	-
428	J. B. Addison	85	Jan. 20, 1936	3,133	659	121	120	146	2,070	90	2,145
429	R. R. Drake	90	do.	3,395	708	147	109	183	2,250	90	2,388
430	S. E. Wilson	60	do.	2,644	601	85	75	128	1,735	34	1,851
431	C. T. Watkins	80	do.	3,919	707	194	88	189	2,270	566	2,569
432	Bob Reed	85	do.	3,415	584	199	200	195	2,000	335	2,275
433	Federal Life Insurance Co.	110	Jan. 14, 1936	-	-	-	117	235	2,474	115	2,715
435	H. W. Stringer	100	do.	2,965	583	144	123	202	1,900	114	2,050

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
436	J. I. Belmay	85	--	2,945	666	109	80	268	1,880	76	2,113
437	E. B. Smith	82	Jan. 27, 1936	3,049	634	128	123	293	1,920	98	2,111
438	J. M. Belmay	85	do.	2,450	553	109	15	160	1,670	65	1,833
439	Mary Ledbetter	85	Jan. 20, 1936	2,737	688	31	100	147	1,785	60	1,848
440	D. A. Womack	100	do.	2,904	570	107	168	183	1,890	78	1,864
442	J. A. Stepp	75	Jan. 27, 1936	2,838	576	122	128	232	1,740	156	1,943
443	J. H. Williams	82	Feb. 3, 1936	1,588	363	50	50	24	1,070	43	1,113
445	do.	82	do.	2,269	463	96	100	234	1,440	53	1,573
446	L. E. Forbes	110	do.	3,667	366	300	355	396	2,200	248	2,150
447	T. M. Dickerson	50	Apr. 1, 1936	2,715	-	-	-	140	1,615	200	-
448	Hardeman Co.Irr.Co.	48	Jan. 12, 1936	437	117	30	6	403	53	30	415
449	West Texas Utilities Company	116	Apr. 1, 1936	2,725	-	-	-	183	1,635	190	-
453	Mrs.Pearl Williams	80	Jan. 9, 1936	2,645	-	-	115	181	1,665	756	2,645
454	B. L. Elbert	30	Jan. 27, 1936	2,993	616	138	110	153	1,975	78	2,106
455	do.	60	do.	4,018	524	266	344	98	2,500	335	2,404
456	A. Mosley	16	do.	1,898	446	74	33	220	1,185	50	1,414
457	H. R. Wiseman	16	do.	1,528	310	80	58	270	900	45	1,100
458	Empire Mortgage Co.	65	Jan. 14, 1936	2,655	574	79	119	116	1,775	50	176
459	G. W. Radford	55	do.	2,394	642	54	10	226	1,512	63	1,829
460	Lester Davis	65	do.	2,693	631	54	124	269	1,670	80	1,800
461	Garrett Hawkins	85	Jan. 27, 1936	3,401	545	85	390	114	2,230	37	1,712
462	Erra Arrington	90	Jan. 14, 1936	1,802	62	83	-	214	1,512	38	1,883
463	G. W. Radford	65	do.	2,433	188	47	305	195	1,720	76	663
464	J. M. Williams	82	do.	2,698	645	81	55	165	1,780	54	194
465	L. and V. Tice	84	do.	2,768	581	103	112	159	1,850	43	1,875
466	A. L. Seaman	100	do.	3,286	712	130	104	220	2,140	90	2,312
467	Earl Regan	80	do.	2,664	572	136	53	202	1,630	172	1,992
468	J. A. Pardue	100	do.	3,266	552	149	236	171	2,170	74	199
469	J. B. Taylor	100	do.	3,458	761	93	169	195	2,180	158	2,285
470	M. W. Webb	120	do.	-	-	-	474	153	1,840	567	1,823
471	R. H. Henderson	147	--	-	-	-	366	194	1,870	680	2,215
473	Earl Regan	120	Jan. 14, 1936	2,533	586	103	30	177	1,695	31	1,889
474	Jack Phillips	100	do.	2,435	605	69	57	220	1,570	74	1,785
476	I. T. Leonard	65	Jan. 13, 1936	2,265	500	71	87	134	1,485	55	154

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
477	F. F. Elton	82	Jan. 13, 1936	2,227	494	79	76	232	1,435	27	1,558
478	C. Davis	60	Jan. 14, 1936	1,553	389	37	73	269	640	280	1,125
480	J. F. O'Neal	82	Jan. 13, 1936	3,076	500	204	152	153	1,970	174	2,091
481	F. F. Brazil	70	do.	2,464	518	137	45	244	1,570	72	185
482	Mrs.F.D.Clisbee	55	do.	2,408	516	120	46	195	1,515	114	1,783
483	do.	60	do.	2,849	614	127	78	268	1,730	166	2,084
484	J. W. Jones	36	Jan. 8, 1936	1,921	560	128	-	244	1,175	340	1,925
485	Frank Elton	30	--	2,348	552	88	38	219	1,512	49	560
486	J. S. Milligan	20	Jan. 8, 1936	2,167	552	192	4	274	1,042	260	2,167
487	L. P. Eddins	75	Jan. 27, 1936	615	103	43	50	415	176	36	436
488	W. S. Newman	125	Jan. 9, 1936	4,039	611	262	288	281	2,340	400	2,607
489	E. B. Caskey	38	Jan. 8, 1936	2,926	436	59	394	195	1,920	21	1,333
494	R. E. Patillo	61	Jan. 6, 1936	1,086	230	54	51	299	502	100	798
495	W. C. Howard	Spring	Jan. 4, 1936	1,738	-	-	-	244	970	104	-
496	do.	--	do.	3,576	515	161	383	256	2,157	232	1,950
497	do.	--	do.	981	-	-	-	305	402	102	-
499	Stepp Bros.	60	Jan. 13, 1936	2,003	197	37	297	220	1,170	192	645
500	Joe Murphy	60	do.	919	176	86	20	390	290	152	793
601	W. G. Mulkey	44	Apr. 13, 1936	511	72	40	59	330	117	58	345
604	J. H. Hayhurst	39	do.	487	74	33	60	317	121	41	319
605	Elm Grove School	44	do.	466	-	-	-	293	62	86	-
609	J. Hayhurst	30	do.	420	-	-	-	354	63	24	-
610	J. H. Hayhurst	46	do.	293	-	-	-	256	23	31	-
612	J. G. Ayers	55	Apr. 10, 1936	2,694	-	-	-	61	1,550	285	-
613	J. E. Plummer	34	do.	407	73	22	48	293	78	40	273
615	J. G. Ayers	32	do.	409	-	-	-	366	a/	68	-
617	do.	52	do.	397	80	24	37	317	60	32	293
620	W. P. Bryant	56	do.	264	-	-	-	195	35	34	-
622	W.R.White Estate	30	do.	513	-	-	-	215	180	52	-
624	Ray McClinic	49	do.	334	72	23	25	317	35	21	273
628	N. Allen	35	Apr. 6, 1936	361	14	21	100	244	68	36	122
632	A. B. Ward	50	do.	387	45	47	25	207	124	43	306
634	Tom King	36	do.	449	40	40	76	366	69	41	265
635	O. O. Gilliham	40	do.	2,770	-	-	-	171	1,670	168	-
636	E. L. Lewis	51	Mar. 30, 1936	650	78	54	69	281	269	40	417

a/ Sulfate less than 5 parts per million.

For analyses of wells 629, 630, and 631 see page 75 between wells 413 and 425.

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

Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calc.)	Calcium (Ca)	Magnesium (Mg)	Sodium and potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
637	J. M. Jackson	51	Mar. 30, 1936	2,692	563	103	141	122	1,820	104	1,832
638	T. E. Jackson	33	do.	1,360	250	58	110	220	730	52	826
639	O. O. Gilliham	35	Apr. 6, 1936	945	168	28	114	354	412	46	534
642	R. L. Wickley	50	do.	437	-	-	-	281	101	40	-
643	M. P. Oswalt	44	do.	955	-	-	-	269	472	40	-
644	E. C. Onsby	56	Apr. 13, 1936	471	104	25	29	281	133	40	363
648	L. W. Weeter	70	Apr. 10, 1936	207	47	24	-	159	20	37	218
650	L. Potts	155	do.	2,317	607	56	21	232	1,455	62	1,747
656	J. Bryant	13	do.	3,017	-	-	-	195	1,795	200	-
657	Joe Nuckles	17	do.	1,989	506	71	-	195	1,245	70	1,555
660	E. Lance	16	do.	368	-	-	-	281	76	18	-
661	W. B. Baker	42	do.	326	60	25	31	305	35	23	253
664	W. E. Ramsey	50	Apr. 13, 1936	2,006	-	-	-	330	1,130	84	-
669	J. T. Tyler	29	Apr. 10, 1936	4,275	-	-	-	244	2,340	485	-
670	J. B. Richie	35	do.	2,713	528	100	185	207	1,552	245	1,732
672	T. J. Rogers	9	do.	3,183	-	-	-	244	1,590	465	-
673	R. Flippin	60	Mar. 30, 1936	1,923	367	91	48	342	1,090	156	1,291
674	J. D. Hamilton	40	do.	887	169	35	71	244	465	25	564
676	T. E. Jackson	33	do.	3,268	592	147	238	390	1,331	265	2,084
680	W. B. Murphee	37	Apr. 17, 1936	4,858	543	286	628	183	2,415	890	2,555
681	O. H. Dodson	26	Apr. 10, 1936	3,148	-	-	-	122	1,665	440	-
682	do.	22	do.	4,948	587	119	187	207	1,940	122	1,956
684	T. B. Nuckles	22	do.	4,069	750	180	266	256	1,795	950	2,618
687	O. H. Dodson	15	do.	3,373	-	-	-	281	1,925	290	-
693	L. J. Potts	30	do.	5,419	-	-	-	159	3,290	400	-
694	F. L. Moffatt	27	Apr. 9, 1936	327	-	-	-	293	31	26	-
697	do.	40	do.	941	-	-	-	366	152	270	-
709	C. M. Moore	22	do.	603	-	-	-	427	73	94	-
710	R.E.Stephenson	71	Apr. 10, 1936	1,632	160	93	256	244	751	250	780
712	J. H. Nuckles	39	Apr. 9, 1936	2,604	78	112	675	268	1,000	605	654
715	W. V. Lance	62	do.	4,971	564	239	732	293	2,420	870	239
717	C. B. Nuckles	14	do.	3,716	459	219	416	464	2,170	220	2,047
718	J. Nickles	40	do.	3,543	-	-	-	232	2,070	270	-
720	Joint Stock Land Bank	21	Apr. 17, 1936	5,552	-	-	-	244	2,110	1,510	-

Partial analyses of water from wells in Hardeman County—Continued
Results are in parts per million.

Well No.	Owner	Depth of well (feet)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) calculated	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
721	S. K. Kirk	21	Apr. 17,1936	5,235	602	334	628	342	2,630	870	2,880
722	do.	18	do.	4,075	-	-	-	336	1,980	635	-
723	T. J. Ford	100	Apr. 1, 1936	4,469	-	-	-	92	2,780	290	-
724	S. H. Crosley	12	do.	1,881	-	-	-	232	2,150	370	-
725	W. T. Green	30	Apr.17, 1936	7,498	633	598	1,065	244	2,740	2,340	4,044
726	H. M. Hill	11	Mar. 31,1936	4,248	602	240	423	366	2,280	520	2,490
727	Frank Lamburton	47	Apr. 1,1936	5,007	515	414	510	256	2,600	830	2,992
728	L. D. King	12	do.	3,538	-	-	-	244	1,880	430	-
730	A. Packheiser	31	do.	3,424	-	-	-	196	1,990	285	-
737	A. Laird Estate	70	do.	2,419	-	-	-	232	1,500	66	-
738	do.	32	Jan. 3,1936	1,499	256	97	107	171	570	385	1,043
740	H. C. Farrington	32	Dec. 30,1935	2,224	201	47	490	402	1,040	245	695
741	B. M. Gentry	25	Apr. 9,1936	1,378	-	-	-	378	451	270	-
743	First State Bank	24	Apr.17, 1936	626	76	21	110	396	93	128	365
746	S. Word	50	Apr. 9,1936	306	-	-	-	244	27	42	-
752	T. H. Hendrix	47	Dec. 27,1935	-	-	-	115	240	26	200	300
753	C. Y. Harrington	50	do.	-	-	-	237	255	26	330	233
754	H. W. Coates	18	Dec. 30,1935	-	-	-	620	186	8	140	257
756	Luther Lance	32	Jan. 28, 1936	499	78	55	33	366	57	93	423
757	W. R. Piper	70	Dec. 30,1935	541	79	37	72	439	78	46	351
758	H. Colewier	40	do.	1,602	43	32	500	690	548	134	240
760	T. B. Nuckles	32	Jan. 3,1936	1,124	142	59	150	171	403	275	623
761	J. R. Holdaness	34	Jan.10, 1936	-	-	-	405	215	2,155	378	2,108
764	J. L. Jones	116	Jan. 9,1936	5,502	484	214	1,068	73	3,200	500	1,776
767	- Hix	45	Jan. 7,193-	-	-	-	145	225	409	191	600
768	C. H. Welsh	100	Jan. 10,1936	-	-	-	55	118	1,465	455	1,892
770	Gene Kennedy	40	Jan. 3,1936	451	85	37	38	396	23	70	743
771	Kula Higginbotham	60	Dec. 30,1935	-	-	-	127	224	2	250	299
772	Ed Marbary		do.	458	72	24	73	372	56	47	272
773	State Experiment Station	20	do.	492	65	25	88	372	78	50	267
774	Chris Shumacker	65	Dec. 20,1935	-	-	-	152	1,785	1,354	272	-
775	P. N. Durham	65	do.	-	-	-	223	353	26	285	300
776	do.		Dec. 30,1936	-	-	-	226	199	1,480	272	1,715

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

Results are in parts per million.

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids (calculated)	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulphate (SO_4)	Chloride (Cl)	Total hardness as $CaCO_3$ (calc.)
777	R. N. Harvey	47	Dec. 30,1935	322	78	15	29	342	a/	29	257
778	W. C. Davis	62	do.	642	100	27	166	476	48	63	360
779	Lester Ball	92	Jan. 10,1936	-	-	-	138	260	2	240	293
782	W. W. Cole	30	do.	-	-	-	58	268	78	107	377
783	Mrs. J.B. Forbes	45	Jan. 7,1936	-	-	-	280	276	352	358	529
787	J. W. Sturmer	55	Jan. 6,1936	846	148	64	55	330	274	140	633
789	C. E. Scharnagel	45	do.	668	108	42	68	305	220	78	443
792	J. J. Creighton	40	-	-	-	-	83	284	104	71	315
793	do.	10	Jan. 10,1936	-	-	-	83	396	115	138	486

a/Sulphate less than 5 parts per milliom.

EXPLANATION OF PLATES

Plate 1, Showing location of wells in the western part of Hardeman County, Texas.

Plate 2, Showing location of wells in the central part of Hardeman County, Texas.

Plate 3, Showing location of wells in the eastern part of Hardeman County, Texas.

Base map compiled from county ownership may and field notes.

Field work by F. E. Russell and L. P. Huggins.

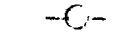
Work Progress Administration Project 2090.

Texas Board of Water Engineers assisted by U. S. Geological Survey.

- -

SYMBOLS USED


Well with hand pump.

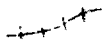

Well with windmill or small power pump.


Well with pumping plant -- 5 horsepower or larger.

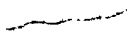

Well drilled to test for oil or gas.


Spring.


Test well drilled by W.P.A. labor.


Railroad.


State Highways.


Creek


Section or survey lines.

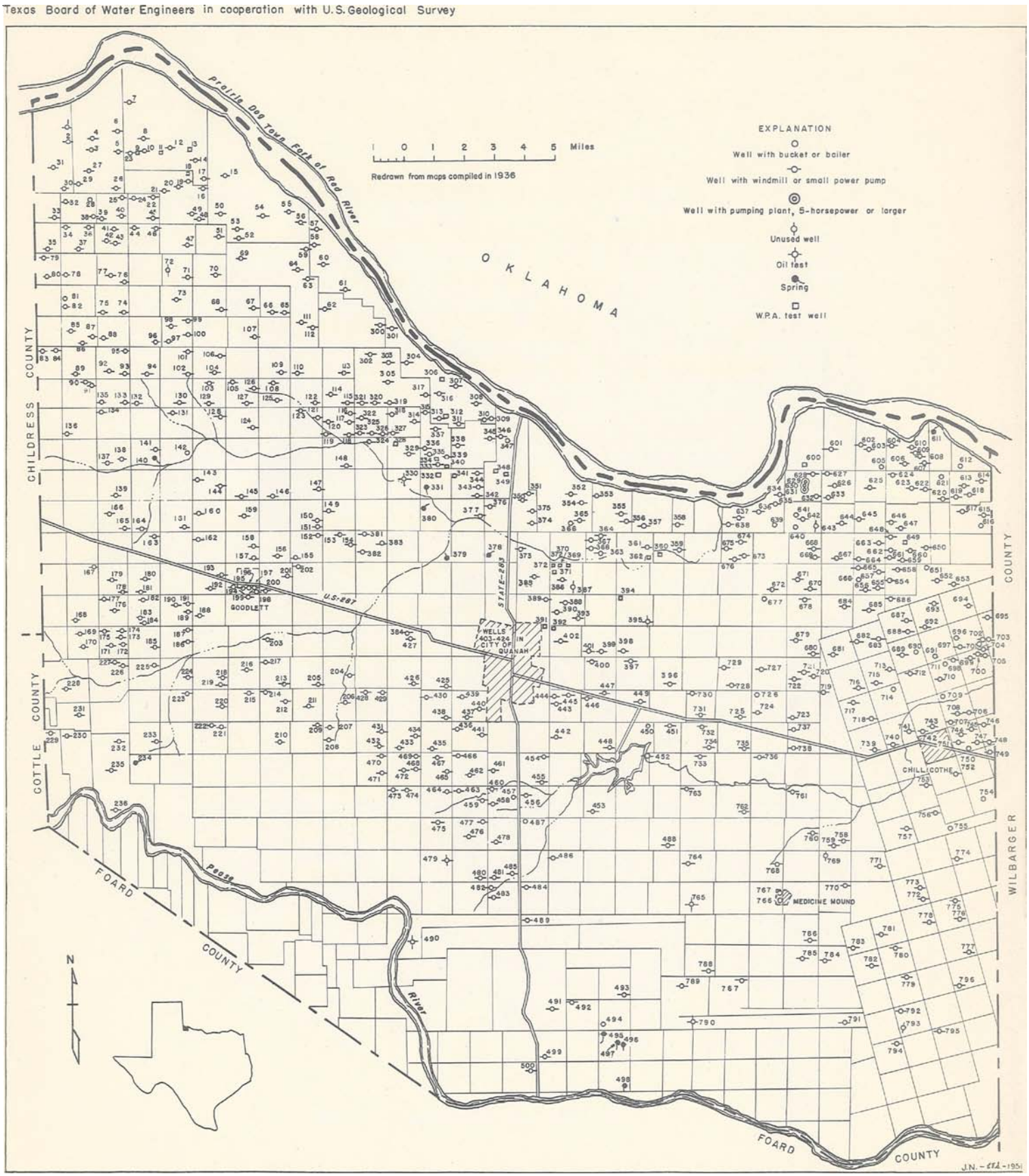


FIGURE 1-Map of Hardeman County, Tex. showing location of wells and springs