TEXAS BOARD OF WATER ENGINEERS

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

WASHINGTON COUNTY, TEXAS

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

APRIL 1943

WASHINGTON COUNTY, TEXAS

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

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Introduction

By

C. R. Follett

This publication contains records of 244 wells and 4 springs, drillers' logs of 34 wells and results of chemical analyses of water from 184 wells and springs in Washington County, Texas.

It also includes a map, showing the location of the wells and springs, each well being given a number on the map corresponding to the number assigned to it in the records. The field data were obtained at intervals in the summer and winter of 1942 in connection with a state-wide program of ground-water investigations in Texas conducted by the State Board of Water Engineers in cooperation with the United States Department of the Interior, Geological Survey.

The water analyses were made by W. W. Hastings, Chemist of the Quality of Water Division of the Federal Geological Survey, and by chemists employed by the Work Projects Administration under the supervision of Mr. Hastings, and Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry of The University of Texas. The results of the analyses, which relate only to the mineral constituents in the water, and not to its sanitary character, are tabulated in parts per million on pages 38 to 44. For the convenience of those who prefer a different form of expression the analyses of 27 samples are given in milligram equivalents per liter on page 45.

The records serve as a guide to land owners, officials of industrial plants, well drillers and others who need information regarding wells, the depth to ground water in different parts of the county, and the quantity and chemical character of water yielded by the wells.

A limited number of copies of this release are available for free distribution. They may be obtained by addressing a request to Mr. C. S. Clark, Chairman, Texas State Board of Water Engineers, 302 West 15th Street, Austin, Texas.

Records of wells and springs in Washington County, Texas
All wells are drilled unless otherwise stated under remarks

Well	Distance from Burton	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
1	6½ miles west	A. H. Fuehn	Walter E. Rinn	1932?	125	4	--
2	8 miles north	Fritz Eberhardt	do.	1940?	285	--	--
3	do.	do.	--	Old	101	8	1.0
4	7 miles north	J. F. Simon	Cullen and West Production Co.	1929	2,260	10	--
5	7 miles northeast	Malke Est.	--	Old	45	24	2.0
6	do.	Charlesville School	--	--	15	34	3.5
7	10 miles northeast	Gulf, Colorado and Santa Fe Ry.	Morrison and Coleman	1929	2,206	--	--
8	In Gay Hill	E. W. Wendt	--	Old	180	8	--
9	6½ miles northeast	T. Pelkemeyer	--	1880?	94	24	0
10	do.	Fritz Boehling	--	1880?	54	30	--
11	4¾ miles northeast	T. O. Gindorf	--	Old	150	10	0
12	do.	H. C. Winkelmann	G. C. Booth	1923	260	3	0
13	4½ miles northeast	do.	--	1942	70	5	.0
14	do.	F. W. Mueller	W. E. Andersen	1930	2,666	--	--
15	2¼ miles north	George Small	--	--	35	36	0
16	1 mile north	Farmers' National Bank	Joe Pomykal	1941	150	3	--
17	2 miles northwest	A. Witschorke Est.	Arkansas Fuel Oil Co.	1935	4,050	10	--
18	2¼ miles northwest	do.	--	Old	38	48	3.0
19	7½ miles northwest	A. G. Loewe	Walter E. Rinn	1927?	114	3	--
20	5½ miles northwest	G. Bresler Est.	--	1929	105	3	0.5
21	5 miles west	F. Graeber	--	Old	71	48	0
22	3¾ miles west	Mrs. Ed Wieke	--	1900?	70	8?	1.0
23	3½ miles west	do.	Fritz Fuchs	1929	2,025	10	--
24	5 miles southwest	Albert Hilscher	--	1890?	70	8?	0

a/ Plus (+) indicates water level is above ground.
b/ C, cylinder; B, bucket and rope; T, turbine; J, jet; A, air lift; H, hand; G, gasoline; E, electric; W, windmill. Number indicates horsepower.

Chemical analyses of water from some of these wells and springs are shown in a table of analyses on pages 38 to 45.

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
1	--	--	C,W	S	
2	--	--	None	N	Reported very small supply at 285 feet. Casing pulled and well abandoned.
3	46.57	Nov. 11, 1942	B	S	Tile curbing to bottom.
4	--	--	--	--	Oil test. See log.
5	45.80	Nov. 11, 1942	B	S	Dug. Concrete curbing to bottom.
6	13.00	do.	B	P	Dug. Concrete curbing to 8 feet.
7	--	--	--	--	Oil test. See log.
8	--	--	C,G, 2	D,S, Ind	Cased to bottom. Formerly supplied steam-operated gin.
9	d/10	Sept.15, 1942	B	D,S	Dug. Tile curbing to bottom.
10	--	--	B,E,W	D,S	Dug. Concrete curbing to 20 feet.
11	d/75	1939	C,G, 4	D,S, Ind	Tile curbing to bottom. Measured yield 4 gallons a minute. Formerly supplied steam-operated gin. Temperature 70½° F.
12	d/100	--	C,E	D,S	Cased to bottom.
13	7.38	Nov. 13, 1942	None	N	Seismograph test hole.
14	--	--	--	--	Oil test. See log.
15	d/33	--	C,W	D,S	Dug.
16	--	--	C,H	D,S	Cased to 140 feet. Sand reported from 140 to 160 feet.
17	--	--	--	--	Oil test. See log.
18	5.76	Nov. 12, 1942	B	D,S	Dug.
19	--	--	C,H	D,S	
20	51.23	Nov. 12, 1942	C,W	D,S	Cased to bottom.
21	d/55	--	C,W	D,S	Dug. Concrete curbing to 50 feet.
22	46.84	Nov. 12, 1942	C,W	D,S	Furnished water for drilling oil test.
23	--	--	--	--	Oil test. See log.
24	d/50	--	C,W	D,S	Tile curbing to bottom.

c/ P, putlic supply; D, domestic; S, stock; Ind, industrial; Irr, irrigation; N, not used.

d/ Water level reported by driller or owner.

Records of wells and springs in Washington County--Continued

Well	Distance from Burton	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
25	4 miles southwest	Paul Kessler	--	1890?	28	8?	0
26	In Burton	John D. Dixon	Walter E. Rinn	1932	248	3½	0
27	1¾ miles east	R. A. Fuchs	--	Old	126	6	--
28	do.	do.	--	Old	58	36	3.0
29	2 miles east	John Bethke	--	--	51	30	3.5
30	2 miles southeast	-- Brazier	--	Old	55	38	3.0
31	2¾ miles southeast	A. G. Boehnemann	Walter E. Rinn	1927?	145	3	0
32	3 miles southeast	Charles F. Kramer	--	1935	117	6, 4	0
33	3½ miles southeast	Robert Kramer	John Franks	1917	170	6, 4½	0.5
34	4 miles southeast	August Wensel	G. C. Booth	--	200	6	--
35	do.	Harold Wendler	--	1936	18	41	3.0
36	4½ miles southeast	Charles Fodde	John Franks	1915	161	6	3.0
37	4 miles southeast	R. Wendler	-- Fomill	1907	191	6	1.0
38	3½ miles southeast	E. G. Weinert	Walter E. Rinn	1935	192	5, 3	2.0
39	do.	do.	C. J. Leas	1935	3,774	10	--
40	do.	do.	Will Homeyer	1912	200	30, 6	3.0
41	4¼ miles east	W. L. Thomas	--	1922?	150+	6	0
42	do.	Texas Highway Department	--	1921?	80+	4	4.0
43	5½ miles southeast	C. O. Shawe	G. C. Booth	1917?	260	--	0
44	In Greenvine	F. Eckert	--	Old	40	30	0
45	3¾ miles south	A. H. Makowsky	Walter E. Rinn	1925	186	3	---
46	3½ miles south	August Makowsky	Speed Oil Co.	1938	5,500	10¾	--
47	do.	do.	do.	1938	900+	4?	--
48	4½ miles south	Mrs. Henry Kraemer	--	Old	80+	--	--
49	5½ miles south	Mrs. Helen Neumann	Oscar Waggoner	1910?	210	--	.5

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
25	d/ 5	--	C,W	D,S	Tile curbing to bottom. A nearby well was drilled to a depth of 100 feet and no water
26	d/40	1932	C,E, l	D,S,P	Cased to bottom with 20 was encountered. feet perforated at the bottom. Reported yield
27	--	--	C,W	D,S	2,000 gallons a day.
28	29.36	Nov. 20, 1942	B	D	Dug well. Concrete curbing to bottom.
29	16.04	do.	B	D,S	Dug well. Wood curbing to bottom
30	14.29	July 23, 1942	B	D,S	Dug well.
31	d/+15	--	Flows	D,S	Cased to bottom. Measured flow 2 gallons a minute 1 foot above ground. Temperature 72°F.
32	d/+12	1935	Flows C,H	D,S	Casing: 6-inch to 97 feet; perforated 4-inch from 97 to 117 feet. Very small flow in 1942.
33	10.75	July 23, 1942	C,H	D,S	Casing: 6-inch to 170 Temperature 76° F. feet; perforated 4-inch from 150 to 170 feet.
34	---	--	C,W	D,S	Cased Formerly flowed. Temperature 73° F. to bottom.
35	12.32	July 23, 1942	B	D,S	Dug well. Concrete curbing to 9 feet. Water from sandstone.
36	+	do.	Flows C,H	D,S	Cased to bottom. Measured flow ¼ gallon a minute 3 feet above ground. Temperature 73°F.
37	+	do.	Flows C,H	D,S	Very small flow 1 foot above ground. Flowed 18 feet above ground when drilled. Tempera-
38	+ 1.9	Sept.12, 1942	Flows	S	Cased to bottom with 20 feet ture 72° F. perforated at bottom. Measured flow 6 gallons a minute 2 feet above ground. Supplied water
39	--	--	--	--	Oil for drilling oil test. Temp. 73° F. test. See log.
40	19.12	July 23, 1942	C,W	D,S	Dug well to 74 feet, concrete curbing. Drilled from 74 to 200 feet; 6-inch casing
41	+	July 17, 1942	Flows T,G,5	D,P	Cased to bottom. Sup- from 70 to 200 feet. plies swimming pool. Measured flow 25 gallons a minute at ground level. Temp. 72° F 12 hours of pumping from well at a rate of 2
42	+17.6	do.	Flows	N	Mea- 200 gallons a minute required to fill sured flow 5.2 gallons a minute 4 pool.
43	d/25.	--	C,G, 2½	D,S	Tempera- feet below ground. Temp. 71° F. ture 72° F.
44	d/ 8	--	B,C,W	D,S	Dug well. Concrete curbing to bottom. Well drilled to 260 feet and later dug to 40 feet.
45	--	--	C,H	D,S	Cased to bottom.
46	--	--	--	--	Oil test. See log.
47	--	--	None	N	Supplied water for drilling oil test.
48	--	--	C,W	D,S	
49	+	July 20, 1943	Flows C,W	D,S	Very small flow 0.5 foot above ground.

Records of wells and springs in Washington County -- Continued

Well	Distance from Burton	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
50	5½ miles south	Fritz Steenken	--	1870?	36	36	0
51	6 miles south	Mrs. Ernest Menn	Walter E. Rinn	1932	165	3	2.0
52	6½ miles south	Hugo Krause	do.	1925	180	3	0
53	8 miles south	Seidel Bros.	McColloch Oil Co.	1930	3,017	--	--
54	7 miles south	do.	--	1900?	151	3	--
55	do.	O. Heins	Oscar Waggoner	1890?	71	5½	0
56	do.	Emil Drew	--	1897	32	32	0
57	do.	do.	--	1936?	80	--	--
58	9 miles southeast	F. Pomykal	A. B. Conklin	1940	140	4½	2.0
59	In Wesley	Wesley School	Joe Pomykal	1941	100±	--	--
60	do.	Ed Bormann	--	1880?	44	30	0

Well	Distance from Independence	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
61	6 miles west	H. F. Wendt	A. E. Dittrich	1932	2,585	8	--
62	do.	C. E. Dannheim	--	1874	75	60, 36,6	3.5
63	7 miles southwest	B. P. Sayles	--	--	Spring	--	--
64	6½ miles southwest	C. Hafer	G. C. Booth	1912	135	6	0
65	do.	Mound School	E. Gajeske	1938	70±	5	--
66	do.	Otto Janner	--	1840?	24	42	3.0
67	3½ miles southwest	Sun Oil Co.	Walter E. Rinn	1936	123	6	--
68	do.	do.	do.	1936	115	7, 6-5/8	1.0
69	3¼ miles west	do.	Sun Oil Co.	1929	2,710	13-3/8	--
70	3½ miles west	do.	Walter E. Rinn	1937	152	7	2.0
71	4 miles west	do.	Sun Oil Co.	1929	1,359	13-3/8	--
72	4¼ miles west	do.	do.	1929	141	6-5/8	--

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
50	d/18	--	C,W	D,S	Dug well. Rock curbing to bottom.
51	+ 5.0	Oct. 15, 1942	Flows	D,S	Cased to bottom. Measured flow of 3 gallons a minute 2 feet above ground. Temp. 71½° F.
52	+	July 20, 1942	Flows	D,S	Measured flow of 3 gallons a minute at ground level.
53	--	--	--	--	Oil test. See log.
54	--	--	C,E,½	D,S	Cased to bottom. Temperature 71° F.
55	d/45	--	C,G	D,S	Cased to bottom.
56	d/28	--	B	D,S	Dug well. Concrete curbing to bottom.
57	d/+	1936	None	N	Seismograph test hole. Flowed at surface when drilled.
58	8.91	July 16, 1942	C,H	D,S	Cased to bottom. Temperature 71° F.
59	--	--	J,E,	D,S,P	
60	d/38	--	C,W	D,S	Dug well. Tile curbing to bottom.

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
61	--	--	--	--	Oil test. See log.
62	58.02	July 2, 1942	C,W	D,S	Dug well to 67 feet; drilled from 67 to 75 feet.
63	--	--	Flows	S	Known as "Big Springs". In creek bed. Estimated flow of 10 gallons a minute.
64	d/65	--	C,G	D,S	Cased to 120 feet.
65	--	--	C,H	P	Cased to bottom.
66	15.93	July 2, 1942	C,W	D,S	Dug well. Rock curbing to 8 feet.
67	--	--	C,E,	D,S, Ind	No. 3 water well on Shrimer lease. Casing: 98 feet of 6-inch. 20 feet perforated at bottom. Reported yield 13 gallons a minute.
68	90.43	Nov. 13, 1942	None	N	No. 1 water well on Shrimer lease. Cased to bottom. 20 feet perforated at the bottom.
69	--	--	--	--	No. 1 oil test on C. Eimann lease. See log.
70	31.23	Nov. 13, 1942	--	--	No. 1 water well on Witt lease. Cased to bottom; casing perforated at 92-112 and 132-
71	--	--	--	--	Oil test. See log. 152 feet.
72	--	--	None	N	No. 1 water well on Landgraf lease. Cased to bottom; screen from 53 to 141 feet.

Records of wells and springs in Washington County--Continued

Well	Distance from Independence	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above groung (ft.)
73	4 miles west	Sun Oil Co.	Sun Oil Co.	1937	1,371	10¾	--
74	do.	do.	Walter E. Rinn	1937	160	5½	1.5
75	do.	do.	do.	1937	30	5	--
76	do.	do.	do.	1937	140	5	0
77	1¼ miles southwest	E. F. Clay	--	Old	27	42	2.5
78	do.	do.	Walter E. Rinn	1940	66	3	0
79	In Independence	C. F. Toalson	--	Old	57	6	1.5
80	1½ miles east	Louis Grimm	--	--	200+	--	--
81	1¾ miles northeast	Wm. Hoxie	Stapper Petroleum Corp.	1936	3,142	10	--
82	do.	C. F. Toalson	C. C. Booth	1910?	134	6	0
83	3¼ miles northeast	William Engel	--	Old	37	24	1.5
84	4¼ miles northeast	F. C. Sommers	Bob Felder	1910?	320	8	0
85	5 miles northeast	O. C. Gindorf	--	1892	375	8	0
86	5½ miles northeast	do.	Adolph Hafer	1932	275	--	0
87	5 miles northeast	Mrs. C. F. Schwartz	Laurel Oil and Gas Co.	1930	3,920	10	--
88	6 miles east	Minnie Gaskamp	Mid-Kansas Oil and Gas Co.	1930	3,514	10	--
89	5½ miles east	O. L. Sommers	--	Old	50	24	3.5
90	do.	do.	--	--	250	6?	--
91	4¼ miles east	W. Boenker	Powers Production Co.	1935	1,770	10	--
92	At Wm. Penn	W. C. Schwarze	--	1890?	85+	42	0
93	5 miles southeast	Herman Weghorst	--	1900	86	6	0
94	4 miles southeast	C. Ellermann	Wm. Roper	1937	237	5	2.0
95	5 miles southeast	F. Fuelberg	Mount Selman Oil Co.	1941	6,000+	10	0.0
96	do.	Wm. Pohlmeyer	--	Old	65	30	0
97	4½ miles south	Martin H. Sommers	G. C. Booth	1925	222	36, 5-5/8	0
98	4 miles south	do.	do.	1926	222	6	0
99	do.	do.	do.	1927	222	36, 3	2.5

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
73	--	--	--	--	Oil test. See log.
74	+	Nov. 13, 1942	Flows	S	No. 1 water well on Mrs. A. E. Draeger lease. Casing perforated from 120 to 160 feet. Tem-
75	--	--	None	N	No. 2 water well on Mrs. A. E. perature 74° F. Draeger lease. Casing perforated from 25 to 30
76	d/+	1937	None	N	No. 3 water well on Mrs. A. E. Draeger feet. lease. Casing perforated from 100 to 140 feet.
77	19.50	Nov. 17, 1942	C,W	D,S	Dug well. Abandoned.
78	d/ 56	1940	C,E, 1/2	D,S	Cased to bottom.
79	49.41	Nov. 16, 1942	B	D,S	Formerly supplied a sawmill.
80	--	--	C,W	D,S	
81	--	--	--	--	Oil test. See log.
82	d/ 55	--	C,W	S	Cased to bottom; screen from 114 to 134 feet.
83	54.39	Nov. 16, 1942	B	D,S	Dug well. Concrete curbing to bottom.
84	d/150	--	C,G	D,S, Ind	Cased to bottom. Supplies cotton gin.
85	d/150	--	C,W	D,S	Cased to 200 feet.
86	d/150	--	C,G	D,S	Cased to 245 feet. Water reported from sand- stone at 245 feet.
87	--	--	--	--	Oil test. See log.
88	--	--	--	--	Do.
89	42.2	Nov. 19, 1942	None	N	Dug well. Tile curbing to bottom.
90	--	--	C,W	D,S	
91	--	--	--	--	Oil test. See log.
92	d/ 70	--	C,W	D,S	Dug well. Rock curbing to 10 feet.
93	d/ 68	--	C,W	D,S	Cased to bottom.
94	64.00	Oct. 21, 1942	None	N	Cased to bottom; screen from 217 to 237 feet.
95	28.40	do.	--	--	Oil test.
96	d/ 65	--	C,W	D,S	Dug well. Tile curbing to bottom.
97	+	Oct. 21, 1942	Flows B	D,S	Dug well to 30 feet, tile curbing. Drilled from 30 to 222 feet, casing from 30 to 222 feet. Measured flow 2 gallons a minute 1.5 feet below
98	+	do.	Flows B	D,S	Cased to bottom. ground. Temperature 71° F. Water reported from white sand at 222 feet.
99	17.39	do.	B	D,S	Dug well to 30 feet, rock Temperature 71° F. curbing. Drilled from 30 to 222 feet, casing from 30 to 222 feet. Temperature 71° F.

Records of wells and springs in Washington County--Continued

Well	Distance from Brenham	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
100	6½ miles northeast	Henry Tallman	Sun Oil Co.	1932?	404	3	3.5
101	do.	Arnold Lammert	--	1940	100+	3	1.0
102	do.	Wm. Quebe	--	1884	57	30	--
103	3¾ miles northeast	L. C. Jeske	Ed Hafer	1930	218	3, 2	0
104	5½ miles north	Henry Loesch	A. Gajeske	1925?	82	8	0
105	6½ miles north	F. S. Bryan	--	Old	37	24	2.5
106	do.	do.	--	--	60	3	.0
107	do.	do.	--	1939	83	3	1.5
108	5½ miles northwest	Leo Arndt	E. Gajeske	1930	80	5	0
109	do.	do.	--	1938	59	2	3.0
110	do.	do.	E. Gajeske	1924	69	7	1.5
111	do.	J. D. Spinn	--	Old	22	48	0
112	4¾ miles northwest	Henry W. Hodde	--	1935	90+	11	.5
113	4½ miles northwest	do.	--	--	130	6	0
114	4¼ miles northwest	do.	--	Old	50	36	3.0
115	4½ miles northwest	J. F. Presley	--	1940?	123	3	1.5
116	do.	do.	--	1939?	70+	4	.5
117	3¼ miles northwest	August Neumann	John Felder	1918?	168	6	0
118	1½ miles northwest	T. S. Estes	L. B. Tannehill	1929	2,007	10	--
119	6 miles west	Albert Pricko	Walter E. Rinn	1938	130	--	--
120	do.	William Luedemann	--	1910	34	24	3.5
121	4 miles southwest	Charles Hodde	--	Old	76	6	0
122	In Brenham	Brenham Packing Co.	--	1942	48	5, 4	0
123	3 miles east	Prince Dever	--	1930	52	30	0
124	In Brenham	Blue Bell Creamery	E. Gajeske	1923?	180	6	0
125	do.	Brenham Cotton Oil Mill Inc.	--	1903	200+	8	0

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
100	+	July 1, 1942	Flows	D,S	Seismograph test hole. Cased to about 200 feet. Measured flow of 1 gallon a minute 3.3
101	+ 5	Oct. 21, 1942	Flows	D,S	Seismograph feet above ground. Temp. 71° F. test hole. Estimated flow 20 gallons a minute
102	--	--	C,G	D,S	Dug 1 foot above ground. Temp. 68½° F. well. Tile curbing to 35 feet.
103	d/+50	--	Flows	D,S, Irr	Cased to bottom. Wire wrapped perforated casing from 200 to 218 feet. Reported flow of 4
104	+	July 24, 1942	Flows C,H	D,S	Wood gallons a minute. Temperature 72½° F. casing to bottom. Temperature 71½° F.
105	18.91	do.	B	D,S	Dug well. Rock curbing to bottom.
106	13.50	do.	None	N	Seismograph test hole.
107	+ 4	Sept.11, 1942	Flows	D,S	Seismograph test hole. Measured flow of 12 gallons a minute 1.5 feet above ground. Tem-
108	d/20	Dec. 8, 1930	C,W	D,S	Tile casing to bottom. perature 71° F.
109	+	July 31, 1942	Flows	D,S	Seismograph test hole. Cased to 48 feet. Measured flow 1.5 gallons a minute 3 feet
110	+	do.	Flows	D,S	Wood above ground. Temperature 71° F. casing to bottom. Estimated flow 10 gallons
111	d/17	--	C,W,H	D,S	Dug well. a minute. Temperature 71½° F.
112	+	July 31, 1942	Flows	D,S	Oil test. Drilled to 2,806 feet and plugged back. Measured flow 2 gallons a minute 0.5
113	d/20	--	C,W,H	D,S	foot above ground. Temperature 72° F.
114	10.57	July 31, 1942	B	D,S	Dug well. Rock curbing to 15 feet.
115	+	July 24, 1942	Flows	S	Seismograph test hole. Cased to 60 feet. Sand from 93 to 123 feet. Measured flow 6.5 gallons a minute 1.5 feet above ground. Tem-
116	+	Sept.11, 1942	Flows	S	Seismograph test hole. perature 70½° F. Estimated flow 4 gallons a minute 0.5 foot
117	d/45	1918	C,W	D,S	Cased to above ground. Temp. 69° F. bottom.
118	--	--	--	--	Oil test. See log.
119	--	--	C,E	D,S	
120	26.51	July 22, 1942	C,H,G, 2	D,S	Dug well. Concrete curbing to bottom.
121	d/67	July 1942	C,W	D,S	Cased to bottom
122	d/32	May 1942	J,E, ⅛	Ind	Cased to bottom; perforated from 40 to 48 feet. Temperature 71° F.
123	d/47	--	C,H	I,S	Dug well. Concrete curbing to bottom.
124	d/30	--	A,E	Ind	Cased to bottom. Screen from 160 to 180 feet. Reported yield 25 gallons a minute.
125	d/40	July 1941	T,E, 3	Ind	Reported yield 40 gallons a minute. Temperature 72° F.

Records of wells and springs in Washington County--Continued

Well	Distance from Brenham	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
126	In Brenham	Texas Public Utilities Corp.	--	1907	785	12	0
127	do.	City of Brenham	--	1913?	206	8	1.0
128	do.	do.	--	1913?	185	12	1.0
129	do.	do.	--	1913	182	8	2.0
130	do.	do.	--	1913	96	12	2.5
131	do.	City of Brenham No. 5	Layne-Texas Co.	1933	1,515	12½, 8	0
132	do.	City of Brenham No. 6	J. W. Jackson	1935	200	10	--
133	do.	City of Brenham	--	--	Spring	--	--
134	do.	City of Brenham No. 8	J. W. Jackson	1934	198	10	--
135	do.	City of Brenham No. 9	C. C. Booth and Layne-Texas Co.	1934	1,504	16, 10.5-3/16	--
136	1½ miles southeast	Louise Stone	-- Posey	1895?	700±	8	0
137	1¼ miles south	George Stulken	R. P. Conklin	1928	600±	6	--
138	1¾ miles southwest	Henry Grimm	Walter E. Rinn	1940	81	3	0
139	2¼ miles south	Dr. Billy Burnes	do.	1940	107	4	0
140	3 miles south	Albert Kramer	do.	1938	102	3	--
141	3½ miles southwest	E. W. Sommerfeld	--	1910	75	30	2.5
142	3¾ miles southwest	Fred Weiss	--	1890?	41	24	1.0
143	do.	do.	Tom B. Owens et al.	1929	3,364	10	--
144	do.	Mrs. E. R. Hacker	--	1941	63	30	2.5
145	5½ miles southwest	William Draehm	G. C. Booth	1890?	94	4	--
146	do.	Dr. W. F. Hesskarl	Joe Pomykal	1940	394	4	0
147	7½ miles southwest	M. Kamas	The Standard Oil Co. of Kansas	1940	5,039	10¾	--
148	do.	C. Brinkmeyer	J. A. Conklin	1928	250	8	.5
149	8 miles southwest	Joe Pomykal	Joe Pomykal	1941	140	3	0

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
126	d/50	--	T,E, 10	Ind	Reported yield 100 gallons a minute. Temperature 81½° F.
127	58.07	Nov. 20, 1942	None	N	Reported yield about 100 gallons a minute. Wells 127 to 130 supplied city until 1934.
128	57.62	do.	None	N	Reported yield 150 gallons a minute.
129	60.80	do.	None	N	Reported yield about 100 gallons a minute.
130	13.08	June 23, 1942	None	N	Reported yield 50 gallons a minute.
131	d/42	Oct. 1933	T,E, 20	P	Drilled to 2,192 feet and plugged back. Casing: 12½-inch to 298 feet; 8-inch from 286 to 1,515 feet. Screen from 1,432 to 1,495 feet. Later the 8-inch casing was perforated at 1,210-1,240, 1,295-1,320 and 1,440-1,500 feet. Reported drawdown 243 feet while pumping 508 gallons a minute. Temperature 96° F.
132	--	--	T,E, 5	P	Wells 132 and 134 supply city. Well See log. 131 and spring 133 are auxiliary sources. Yield 215 gallons a minute. Temperature 71½°
133	--	--	T,E	P	Reported yield by pumping F. See log. 375,000 gallons a day. Temperature 69° F.
134	--	--	T,E, 5	P	Yield 160 gallons a minute. Temperature 72½° F.
135	--	--	None	N	Abandoned; casing pulled. See log.
136	d/35	--	C,E, 1	D,S	Originally cased to 1,500 feet and yielded 50 gallons a minute. Later well plugged at about
137	--	--	C,W	D,S	Casing has 20 feet of screen on 700 feet. bottom. Reported yield 200 gallons a minute
138	d/65	1940	C,G	D,S	Cased when drilled. Temperature 72° F. to bottom.
139	d/82	1940	C,E, 1	D,S	Do.
140	--	--	C,G, 2	D,S	Do.
141	43.64	July 15, 1942	C,G	D,S	Dug well.
142	32.74	do.	B	D,S	Dug well. Tile curbing to bottom.
143	--	--	--	--	Oil test. See log.
144	59.74	July 21, 1942	J,E, 1	D,S	Dug well. Concrete curbing to bottom.
145	--	--	C,W	D,S	Cased to bottom.
146	d/12	1940	J,E, ½	D,S	Cased to bottom, screen at 250-255 and 379-394 feet. Reported drawdown 8 feet after pumping 1,000 gallons an hour for 72 hours.
147	--	--	--	--	Oil test. See log.
148	+	July 16, 1942	Flows	S	Converted oil test. Measured flow 2 gallons a minute 0.5 foot above ground. Temperature
149	d/42	1941	C,G	D,S	Converted oil test, drilled to 365 76° F. feet and plugged back. Cased to 90 feet. Sand from 90 to 140 feet.

Records of wells and springs in Washington County--Continued

Well	Distance from Brenham	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
150	8 miles southwest	Fred A. Boecker No. 3	J. A. Conklin	1925	300	6	.5
151	7½ miles southwest	Mrs. Fannie Pomykal No. 2	Elsik and Pomykal	1930	226	6	--
152	do.	Pomykal Est.	A. B. Conklin	1940	125	4	1.0
153	do.	John Konieczny No. 1	Virginia Oil Corp.	1937	2,165	10¾, 6-5/8	--
154	do.	F. H. Schuerenberg No.1	Layne-Texas Co.	--	1,426	--	--
155	7 miles southwest	A. S. Kramer No. 1	Brenham Salt Dome Deep Test Oil Co.	1931	155	10	1.0
156	do.	A. S. Kramer	Walter E. Rinn	1910?	103	3	--
157	6½ miles southwest	Herman Lehmann	--	--	Spring	--	--
158	do.	do.	Joe Pomykal	1940	225	3	.5
159	do.	A. C. Lehmann	A. B. Conklin	1941	192	4	--
160	5 miles southwest	L. R. Lehrmann	--	--	40	30	--
161	4¼ miles south	A. F. Winkelmann	--	Old	80	30	0
162	5½ miles southeast	J. L. Tientek	G. C. Booth	1920?	100	6	0
163	do.	Louis Tiemann	do.	1911	120	6	0
164	do.	William Bosse	--	1933	15	24	--
165	do.	Fred Koester	Max Zettner	1919	120	3	0
166	4¾ miles southeast	Dr. W. A. Knolle	Walter E. Rinn	1940	92	--	--
167	4 miles southeast	F. M. Norot	--	1906	40	24	3.0
168	3 miles southeast	G. A. Peterkin	Joe Pomykal	1942	330	4	0
169	3¾ miles southeast	E. Y. Shaufler	Jim Duval	1925?	160	6	--

Well	Distance from Chapel Hill	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
170	4¾ miles southwest	Willie Pilski	--	Old	95	3	1.0
171	4¼ miles southwest	A. W. Kelling	Max Zettner	1919	148	3	--
172	4 miles southwest	Emmons Est.	Clark and Cowden	1933	3,690	10	--
173	3½ miles southwest	Dr. B. Rogers	--	1928?	100	4	--
174	8¾ miles southwest	Giddings and Giddings	Trinity Drillers Inc.	1928	3,043	10	--

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
150	+	June 24, 1942	Flows	N	Converted oil test. Cased to 296 feet. Temperature 74 1/2° F.
151	--	--	--	--	Oil test. Cased to 211 feet. Reported yield 300 barrels of water per day. See log.
152	57.38	July 16, 1942	C,E	D,S	Cased to 110 feet. Water reported in blue sand at 110 to 125 feet. Reported yield 75 gallons a minute. Temperature 74° F.
153	--	--	--	--	Oil test. See log.
154	--	--	--	--	Do.
155	37.44	July 15, 1942	C,W	S,Irr	Converted oil test. Drilled to 4,001 feet and plugged back. Cased to 155 feet; perforated at 140 feet. See log.
156	--	--	C,G	D,S	
157	+	July 15, 1942	Flows	D,S	On side of hill. Estimated flow 5 gallons a minute. Temperature 73° F.
158	d/ 98	Dec. 1940	C,E, 1/	D,S	Cased to 190 feet. Sand reported from 190 to 225 feet.
159	--	--	C,T	D,S	Cased to 176 feet. Sand reported from 176 to 192 feet.
160	--	--	C,W	D,S	Dug well. Tile curbing to bottom.
161	d/ 76	1940	C,W	D,S	Dug well. Concrete curbing to bottom.
162	d/ 75	--	C,E	D,S	
163	d/ 85	--	C,G	D,Irr	Cased to bottom. Formerly supplied steam-operated gin.
164	--	--	C,E	D,S	Dug well. Concrete curbing to bottom.
165	d/ 80	Sept. 1940	C,T	D,S	Cased to bottom with screen at bottom.
166	--	--	C,T	D,S	
167	29.47	June 30, 1942	E,C,W	D,S	Dug well. Tile curbing to bottom.
168	d/ 80	May 1942	--	--	Cased to 315 feet. Sand reported from 310 to 330 feet.
169	--	--	C,E, 3/	D,S	

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
170	d/ 83	June 1940	C,E,T	D,S	
171	--	--	C,G, 2/	D,W	Cased to bottom, screen from 140 to 148 feet.
172	--	--	--	--	Oil test. See log.
173	--	--	C,T	D,S	
174	--	--	--	--	Oil test. See log.

Records of wells and springs in Washington County - Continued

Well	Distance from Chapel Hill	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
175	2½ miles southwest	Mrs. Stella Krolczyk	--	Old	175±	6	--
176	3¾ miles southwest	Pauline Wiesner Estate	--	1909	75	30	3.0
177	2 miles southwest	Eddie Chadwick	--	Old	18	24	2.0
178	2½ miles south	do.	Joe Pomykal	1940	175	3	--
179	3¾ miles south	Mrs. Mary Twardowski	--	1939	38	24	1.0
180	do.	do.	--	1922	40	24	2.0
181	2 miles southeast	Lockhart Estate	Sunray Oil Co.	1939	210	8	--
182	do.	Lockhart Estate No. 1	do.	1939	7,508	10¾	--
183	do.	Lockhart Estate	--	Old	100	5	--
184	3¾ miles southeast	Lula Cummings	--	--	Spring	--	--
185	4¼ miles southeast	Armstrong School	--	1925?	130	8	--
186	4½ miles southeast	C. Janowski	G. C. Booth	1910?	129	6	0
187	5¾ miles southeast	Bruno Derkowski	--	--	30	24	--
188	3¾ miles southeast	Abbot Hill	--	1905?	85	6	2.0
189	3¾ miles southeast	E. J. Tucker	--	1905?	110±	6	--
190	4½ miles southeast	Albert Kitowski	"Shorty" Mills	1935	140±	5	--
191	4¾ miles east	Texas Highway Department	G. C. Booth	1925?	1,674	6,3	1.5
192	3¾ miles east	Steve Springer	do.	1915?	87	8	0
193	2¼ miles east	Pete Brzymialkiewicz	G. C. Booth	1912	92	6	--
194	1 mile southeast	Lockhart Estate	--	Old	135±	--	--
195	¾ mile southeast	Routt and Schaer	--	--	135±	6	--
196	do.	do.	G. C. Booth	Old	101	6	.3
197	1½ miles west	Abe Sampson	J. C. Bland	1942	211	6	1.5
198	2 miles west	do.	--	Old	190	6	2.0
200	3¼ miles northwest	Pulawski School	--	--	21	24	1.0
201	1¾ miles northwest	Abe Sampson	--	Old	190±	4	.5
202	do.	William Krolchek	--	Old	31	24	1.0

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
175	--	--	C,W	D,S	
176	63.77	June 30, 1942	C,W	D,S	Dug well. Concrete curbing to bottom.
177	12.48	July 14, 1942	B	D,S	Dug well. Tile curbing to bottom.
178	--	--	C,W	D,S	Cased to 146 feet. Sand reported from 146 to 175 feet.
179	20.66	July 14, 1942	B	D,S	Dug well. Concrete curbing to bottom.
180	25.67	do.	B	D,S	Do.
181	--	--	None	N	Abandoned after supplying water for drilling oil test.
182	--	--	--	--	Oil test. See log.
183	--	--	C,H,W	D,S	
184	+	July 14, 1942	Flows	D,S	In bank of creek. Estimated flow 10 gallons a minute. Temperature 73° F.
185	--	--	C,E	P	
186	d/ 65	1910?	C,W	D,S	Cased to 110 feet.
187	--	--	C,W	D,S	Dug well.
188	42.67	July 14, 1942	B	D,S	
189	--	--	C,W	D,S	
190	--	--	C,W	D,S	
191	+	July 13, 1942	Flows	N	Estimated flow 11 gallons a minute 1.5 feet above ground.
192	d/ 72	1915?	C,H,W	D,S	Cased to bottom.
193	--	--	C,W	D,S	Do.
194	--	--	C,W	D,S	
195	--	--	C,F	Ind	Formerly supplied steam-operated gin.
196	20.11	July 13, 1942	None	N	Do.
197	98.19	Nov. 17, 1942	J,E, 3	D,S	Cased to bottom; screen from 191 to 211 feet. Reported yield 17 gallons a minute.
198	84.32	do.	C,W	S	
200	10.16	do.	B	P	Dug well. Concrete curbing to bottom.
201	98.50	do.	C,W	S	
202	20.20	do.	B	D,S	Dug well. Concrete curbing to bottom.

Records of wells and springs in Washington County--Continued

Well	Distance from Chapel Hill	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
203	2½ miles northeast	San Antonio Loan and Trust Co.	--	Old	35	6?	--
204	5½ miles northeast	Farmers National Bank	--	--	--	--	7.0
205	4¾ miles northeast	Robert Schaer	--	--	21	6	.5
206	3½ miles north	H. Strzelcke	--	Old	165	--	--
207	4 miles north	W. H. Hughes	W. D. Anderson	1930	3,612	--	--
208	5 miles north	Union Grove School	--	--	27	24	--
209	6½ miles north	Washington County	--	1941?	--	3½	.0
210	7 miles north	John Sommers	--	--	135±	5½	0
211	7½ miles north	do.	Mid-Kansas Oil and Gas Co.	1930	3,506	--	--

Well	Distance from Washington	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
212	4½ miles southwest	C. L. Sommers	--	--	7½	30	1.5
213	do.	do.	--	1941	80±	2½	--
214	do.	do.	--	Old	30	18	--
215	3½ miles southwest	Jahnke and Zschappel	Mid-Kansas Oil and Gas Co.	1930	3,513	10	--
216	do.	Mt. Zion School	A. D. Hafer	1940	130	4	--
217	4¾ miles northwest	Washington County	--	--	--	5½	.0
218	4½ miles northwest	St. Mathew Church	--	Old	19	42	2.5
219	3¾ miles northwest	Gus Fiedler	Walter E. Rinn	1935	135	4	--
220	3 miles northwest	Bertie Moore	Piltmore Oil Co.	1929	3,004	10	--
221	2¾ miles northwest	Mt. Fall School	--	Old	40	50	--
222	1 mile north	Moore Bros.	--	1890?	245	3	1.5
223	do.	do.	--	1936	340	4	2.0
224	In Washington	Washington State Park	Joe Pomykal	1935	412	6	.0

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
203	--	--	C,W	D,S	
204	3.74	Nov. 10, 1942	Flows	S	Measured flow 9.1 gallons a minute 2 feet above ground.
205	12.26	do.	C,E	D,S	
206	--	--	C,W	D,S	
207	--	--	--	--	Oil test. See log.
208	--	--	C,H	P	Dug well. Concrete curbing to bottom.
209	+	Nov. 10, 1942	Flows	D	Seismograph test hole. Small flow at ground level.
210	d/90	--	C,W	D,S	Cased to bottom.
211	--	--	--	--	Oil test. See log.

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
212	2.50	Nov. 19, 1942	Flows	D,S	Dug well. Concrete curbing to bottom. Estimated flow of $\frac{1}{4}$ gallon a minute at ground level.
213	--	--	None	N	Seismograph test hole. Cased to 70 feet. Sand reported from 70 to 80 feet.
214	--	--	C,W	D,S	Dug well. Galvanized iron curbing to bottom.
215	--	--	--	--	Oil test. See log.
216	--	--	C,H	P	
217	+	Sept.14, 1942	Flows	D	Seismograph test hole. Estimated flow of 2 gallons a minute at ground level.
218	14.83	Oct. 20, 1942	B	P	Dug well. Rock curbing to 5 feet.
219	--	--	C,W	D,S	
220	--	--	--	--	Oil test. See log.
221	--	--	C,H	P	Dug well. Concrete and tile curbing to bottom.
222	+	July 1, 1942	Flows	D,S	Cased to bottom. Measured flow 1 gallon a minute 1.6 feet above ground. Temperature 72° F.
223	+ 8.6	Sept.12, 1942	Flows	D,S, Ind	Originally drilled and cased to 440 feet, perforated from 420 to 440 feet. Did not flow and yielded very little by pumping. Casing was then raised to 340 feet and well flowed. Measured flow 35 gallons a minute 2.0 feet above ground. Temp. 73½° F.
224	+	July 1, 1942	Flows T,E, 3	P	Casing perforated from 390 to 412 feet. Reported flow 30 gallons a minute when drilled. Temperature 76° F.

Records of wells and springs in Washington County--Continued

Well	Distance from Washington	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
225	In Washington	Washington State Park	--	--	310	4	1.5
226	do.	F. W. Wellman	Ed Hafer	1925	82	6	1.0
227	½ mile south	W. F. Borgstedte	--	1920?	30+	3	--
228	½ mile southwest	Mrs. Lizzie Sadler	Ed Hafer	1928	112	6	--
229	1½ miles southwest	Major Williams	--	Old	40	24	.5
230	3¾ miles southwest	C. W. Boehne	G. C. Booth	1909	125	6	1.0
231	4 miles southwest	do.	--	1940	705	6	3.5
232	do.	do.	John A. Deering	1940	6,540	--	--
233	5½ miles southwest	Goodwill School	--	Old	28	36	2.5
234	5½ miles south	Theodore Borgstedte	E. Gajeske	1939	65	6	0
235	6 miles southeast	Brown's College	--	1940	46	36	3.0
236	4¼ miles southeast	Joe Baldridge	--	Old	124	6	1.0
237	4½ miles southeast	do.	--	1920?	500+	3	3.0
238	2½ miles south	H. C. Buck	G. C. Booth	1918?	160	6	0
239	2¾ miles southeast	do.	--	1940	700+	4	--
240	do.	do.	John A. Deering	1941	7,031	--	--
241	3¼ miles southeast	Henry Wehmeyer	--	1890?	43	6	1.5
242	do.	do.	--	1900	35	6	1.5
243	4½ miles southeast	do.	--	1933	85	6	.0
244	do.	do.	--	1933	700	4	3.0
245	do.	do.	John A. Deering	1935	5,590	10¾	--

a/ Plus (+) indicates water level is above ground.

b/ C, cylinder; B, bucket and rope; T, turbine; J, jet; A, air lift; H, hand; G, gasoline; E, electric; W, windmill. Number indicates horsepower.

Well	Water level: Below measuring point (ft.) a/	Water level: Date of measurement	Method of lift b/	Use of water c/	Remarks
225	13.31	July 1, 1942	None	N	
226	d/50	Jan. 1927	C,W	D,S	Cased to bottom. Casing perforated and wire wrapped at bottom. Temperature 71° F.
227	--	--	C,W	D,S	Temperature 72½° F
228	--	--	C,H	D,S	
229	34.19	July 1, 1942	B	D,S	Dug well. Concrete curbing to bottom.
230	93.51	Oct. 23, 1942	C,G	D,S	
231	86.58	do.	None	N	Cased to bottom. Supplied water for drilling oil test.
232	--	--	--	--	Oil test.
233	22.87	Oct. 22, 1942	B	P	Dug well. Wood curbing to bottom.
234	d/53	1939	C,H,E, 1	D,S	Cased to bottom with 19 feet perforated at the bottom.
235	46.5	Oct. 22, 1942	B	P	Dug well. Wood curbing to bottom.
236	195.94	do.	C,W	D,S	
237	+	do.	Flows	S,P	Measured flow 1.6 gallons a minute 2.8 feet above ground. Temperature 76° F.
238	d/66	--	C,G	Ind	Temperature 71° F.
239	--	--	--	--	Supplied water for drilling oil test.
240	--	--	--	--	Oil test.
241	35.84	Oct. 22, 1942	B	D,S	Cased to bottom.
242	32.15	do.	C,W	D,S	Do.
243	28.92	do.	None	N	Supplied water for drilling oil test.
244	+	do.	Flows	D,S	Cased to bottom, screen from 680 to 700 feet. Estimated flow of ¼ gallon a minute 3 feet above ground.
245	--	--	--	--	Oil test. Reported strong flow of water at 300 feet. See log.

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

d/ Water level reported by driller or owner.

Table of Drillers' Logs, Washington County, Texas

	Thickness (feet)	Depth (feet)
Well 4, partial log		
J. H. Simon, 7 miles north of Burton.		
Sand and shale	16	16
Lignite	10	26
Gray sand	34	60
Lignite	81	141
Hard blue shale	24	165
Black lignite	15	180
Good gray and blue water sand	36	216
Green shale	92	308
Sand	3	311
Gray sand	9	320
Hard sand	1	321
Sand	29	350
Blue shale	40	390
Broken sand and shale	30	429
Sticky shale	16	436
Hard blue shale	38	474
Tough gumbo	20	494
Black lignite	4	498
Hard shale	27	525
Gray water sand, sticky in places	15	540
Gumbo	10	550
Shale	38	588
Sand, streaks of shale	19	607
Sand	3	610
Brown sticky shale	41	651
Hard blue shale	19	670
Blue and gray sandy shale	38	708
Sticky shale	22	730
Sandy shale	7	737
Sticky shale	18	755
Gumbo	17	772
Sticky shale	33	805
Tough gumbo	22	827
Sand	4	831
Sand and shale	22	853
Hard sand	2	855
Gray sand	32	887
Hard sand	4	891
Blue sand	3	894
Sticky brown shale	10	904
Blue, gray and brown shale and sand	8	912
Sticky shale	8	920
Gumbo	40	960
Sand	3	963
Gray sand	27	990
Sticky shale	33	1023
Gumbo	26	1049
Sticky shale	14	1063
Sandy shale	29	1092
Water sand	103	1195
Sticky shale	29	1224
Gumbo	6	1230
Sand	2	1232
Sand and streaks of shale	24	1256
Sticky shale	19	1275
Sandy shale	62	1337
Hard sand	1	1338
Sand and blue shale	24	1362
Blue gumbo	15	1377
Sand and shale	16	1393
Gumbo	9	1402
Sand and shale	29	1431
TOTAL DEPTH		2260

Well 7

Gulf, Colorado and Santa Fe Ry. 10 miles northeast of Burton.

Surface material	8	8
Sand	29	37
Clay	9	46
Sand	134	180
Sandy shale	26	206
Sand	128	334
Blue gumbo, shale and sand	26	360
Coarse-grained brown sand	18	378
Sand and shale	12	390
Hard sand	12	402
Blue gumbo, blue shale, sand, sticky shale and lime	216	618
Green sand	4	622
Sand	12	634
Shale	2	636
Blue sand	2	638
Gray sand and shale	19	657
Brown sand	8	665
Broken pyrites of iron	2	667
Sand	13	680
Shale and sand	40	720
Blue sand	6	726
Sticky shale and shale	32	758
Shale sand	9	767
Sticky and sandy shale	113	880
Sand	4	884
Shale, lime, shells, sticky and sandy shale	117	1001
Sand	17	1018
Shale, gumbo, sandy and sticky shale	216	1234
Blue sand	6	1240

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 7--Continued		
Shale, lime, sticky and sandy shale	240	1480
White and black sand	35	1515
Lime, shale, sandy and sticky shale	137	1652
Water sand (flowed)	11	1663
Sand, shale and sticky shale	30	1693
Sand	7	1700
Shale, shells, sticky shale	42	1742
Gray sand	11	1753
Shale, gumbo, sticky shale, sand and lime	217	1970
Sand	12	1982
Sticky shale, lime, sand and shale	224	2206
Well 14		
F. W. Mueller. 4½ miles northeast of Burton.		
Soil	20	20
Sand and gravel	80	100
Hard packsand	150	250
Rock	2	252
Sand and gravel	56	308
Blue shale	92	400
Sand, shale	100	500
Sand	16	516
Shale and lignite	219	735
Sandy shale and lignite	65	800
Gummy shale	20	820
Shale and boulders	155	975
Sand rock	10	985
Green sandy shale	7	992
Gummy shale	118	1110
Shale and boulders	150	1260
Gummy shale	40	1300
Shale and boulders	142	1442
Sandy green shale	58	1500
Hard lime	1	1501
Green sand	29	1530
Gummy shale and lignite	170	1700
Shale and lignite	100	1800
Gummy shale	25	1825
Shale, lignite and boulders	103	1928
Water sand	14	1942
Gummy shale and boulders	108	2050
Hard rock	25	2075
Gummy shale and boulders	267	2342
Sandy shale	48	2390
Hard sand	6	2396
Gummy shale	24	2420
Shale and boulders	246	2666
Well 17, partial log		
A. Witschorke Est. 2 miles northwest of Burton.		
Sandy lime	63	63
Broken sandy lime	28	91
Sand	272	363
Yellow shale	47	410
Green shale (streaked with sand)	78	488
Sandy shale	102	590
Shale and lignite	35	625
Shale	120	745
Sandy shale and streaks of hard sand	85	830
Gumbo	40	870
Shale and lignite	110	980
Hard shale and gumbo	95	1075
Sandy shale	150	1225
Gummy shale	82	1307
Gumbo and streaks of sandy shale	200	1507
Gummy shale	107	1614
Sand	71	1685
Gummy shale	74	1759
Rock	12	1771
Sand	9	1780
Gumbo	10	1790
Sand	20	1810
Sand and streaks of gumbo	30	1840
Gummy shale and streaks of sand	285	2125
TOTAL DEPTH		4050
Well 23, partial log		
Mrs. Ed Kieke. 3½ miles west of Burton.		
Surface material	6	6
Clay	12	18
Water sand	24	42
Sand rock	2	44
Sand	8	52
Rock	2	54
Rock	5	59
Sand	25	84
Sand rock	6	90
Sand	34	124
Sand rock	4	128
Sand	42	170

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 23, partial log--Continued		
Green shale	50	220
Hard green sand	10	230
Sandy shale	57	287
Water sand	33	320
Sandy shale	30	350
Brown sand	10	360
"Fuller's earth"	30	390
Sand	41	431
Green shale	15	446
Rock	4	450
Lignite	10	460
Sand	7	467
Rock	19	486
Bituminous shale	10	496
Blue gumbo	39	535
Bituminous shale	11	546
Rock	3	549
Sand	24	573
Sand rock	2	575
Sand	13	588
Sand rock	6	594
Bituminous shale	10	604
Shale	31	635
Rock	2	637
Green sand	10	647
Sandy shale	24	671
Bituminous shale	9	680
Sandy shale	5	685
Hard sand	2	687
Sandy shale	3	690
Bituminous shale	5	695
Sandy shale	5	700
Shale	5	705
Bituminous shale	5	710
Sandy shale	10	720
Bituminous shale	4	724
Sandy shale	4	728
Hard sand	4	732
Bituminous shale	1	733
Sandy shale	2	735
Sand	8	743
Rock	2	745
Bituminous shale	10	755
Green sand	15	770
Gumbo	5	775
Bituminous shale	3	778
Gumbo	4	782
Bituminous shale	2	784
Gumbo	14	798
Sand	5	803
Sand rock	7	810
Sandy shale	18	828
Gumbo	7	835
Shale	10	845
Bituminous shale	5	850
Sandy shale	10	860
Bituminous shale	5	865
Water sand	10	875
Sandy shale	37	912
Dark sand	6	918
Sandy shale	7	925
Sand	5	930
Shale	15	945
Gumbo	10	955
Bituminous shale	4	959
Gumbo	6	965
Hard sand	3	968
Sandy shale	10	978
Bituminous shale	5	983
Gray shale	5	988
Water sand	10	998
Hard sand	2	1000
Bituminous shale	4	1004
Shale	11	1015
Sand	10	1025
Gumbo	5	1030
Gumbo, sand and shale	6	1036
Sandy shale	4	1040
Green gumbo	10	1050
Sand	8	1058
Sand rock	1	1059
Bituminous shale	1	1060
Sand	10	1070
Gumbo	30	1100
Sand	8	1108
Sand and bituminous shale	22	1130
Gumbo	4	1134
Sand	6	1140
Shale	12	1152
Bituminous shale	4	1156
Sand	2	1160
Shale	5	1165
Shale	9	1174
Shale	6	1180
Sand	6	1186
Bituminous shale	4	1190
Sand, shale	26	1216
Gumbo	9	1225
Sand	13	1238
Shale	15	1253
Shale	7	1260
TOTAL DEPTH		8025

Table of Drillers' Logs, Washington County---Continued

	Thickness (feet)	Depth (feet)
Well 39, partial log		
E. G. Weinert. 5½ miles southeast of Burton.		
Surface clay	105	105
Sandy clay and clay	76	181
Hard sand	17	198
Rock	12	210
Sand and lime	90	300
Shale, sand and lime	206	506
Shale, sand and gravel	189	695
Hard water sand	12	707
Shale	72	779
Sand, shale	220	999
Sticky shale	10	1009
Sand	49	1058
Hard sandy shale	55	1113
Sandy shale and gravel	177	1290
Sand, water	34	1324
Sandy shale and lime	43	1367
Shale	60	1427
Sand	2	1429
Lignite and shale	72	1501
Sand and water	14	1515
Shale and lignite	139	1654
Sand and shale	3	1657
Shale	5	1662
Sticky shale	15	1677
Shale and sticky streaks	27	1704
Broken shale	64	1768
Sticky shale	32	1800
Shale	109	1909
Sand	101	2010
Shale	30	2040
Sand and streaks of shale	56	2096
Sticky shale	10	2106
Sand	19	2125
TOTAL DEPTH		3774
Well 46, partial log		
August Makowsky. 3½ miles south of Burton.		
Shale	20	20
Soft lime	59	79
Shale	264	343
Lime and streaks of shale	257	600
Shale and streaks of sand	95	695
Sand	30	725
Shale, lime	125	850
Sand, shells	20	870
Shale, lime	25	895
Hard sandy lime	4	899
Shale, shells	16	915
Lime, soft and hard layers	17	932
Shale, lime	32	964
Hard shells, shale	11	975
Sandy shale, shells	190	1165
Shale and lime	130	1295
Shale, lignite	5	1300
Sand	10	1310
Shale, lignite	190	1500
Sand	20	1520
Shale, shells	190	1710
Sand	25	1735
TOTAL DEPTH		5509
Well 58, partial log		
Seidel Bros. 8 miles south of Burton.		
Surface soil	5	5
Clay	17	22
Water sand	18	40
Yellow clay	35	75
Shale	24	99
Lime rock	2	101
Shale and lime	63	164
Sticky shale	58	222
Water sand (flowed 2-inch stream)	41	263
Shale, lime, boulders and sticky shale	242	505
Sandy shale	65	570
Sticky shale, lime rock, shale and sandy shale	285	855
White shale	47	902
Blue shale, sticky shale and lime	368	1270
Lignite and sand	12	1282
TOTAL DEPTH		3017
Well 61, partial log		
F. I. Wendt. 6 miles west of Independence.		
Surface material	67	67
Lime	3	70
Shale	6	76
Sandy lime rock	2	78
Hard shale, lime	82	160
Water sand	5	165
Green sandy shale	55	220
Sticky shale, lime	50	270
Sandy shale	27	297
Sand rock	6	303
Hard sand, shale	7	310
Sand	25	335
Sand, shale	8	343

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Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 61, partial log--Continued		
Tough hard shale, lime	164	507
Rock	2	509
Brown shale	21	530
Brown-black shale	200	730
Hard shale, lime	3	733
Shale and sand	14	747
Sticky shale	1	748
Sand	10	758
Hard sandy shale	43	801
Hard shale with sticky streaks	59	860
Water sand	11	871
Sandy shale	13	884
Hard sticky shale	30	914
Sand, sticky shale	34	948
Sand, shale	7	955
Sandy shale	43	998
Sticky shale	21	1019
Water sand	6	1386
Water sand	42	1602
TOTAL DEPTH		2585
Well 69, partial log		
Sun Oil Co. 3½ miles west of Independence.		
Surface material	25	25
Sand	35	60
Clay	75	135
Shale	6	141
Blue shale	38	179
Compact shale	154	333
Hard sandy shale	39	372
Green shale	60	432
Sandy shale	26	458
Gray-green shale	52	510
Green sand	34	544
Gray-green shale	22	566
Sandy shale	22	588
Water sand	64	652
Sandy shale	88	740
Water sand	21	761
Sandy shale	41	802
Brown shale	22	824
Red-brown shale	22	846
Sand and brown shale	36	882
Sandy shale	21	903
Dark shale	21	924
Sand and shale	20	944
Sand	21	965
Sand and sandy shale	17	982
Sand rock	1	983
Sand	47	1030
Sandy shale	47	1077
Sandy shale and lignite streaks	22	1099
TOTAL DEPTH		2710
Well 71		
Sun Oil Co. 4 miles west of Independence.		
Sand and clay	65	65
Hard shale	35	100
Sand and shale	39	139
Shale	101	240
Sandy shale	60	300
Sand	70	370
Shale	16	386
Good water sand	16	402
Sand and shale	20	422
Rock	1	423
Sand and shale	77	500
Sand	22	522
Sand and shale	115	637
Lime	1	638
Good water sand	37	675
Sand and shale	100	775
Sand	25	800
Sand and shale	85	885
Hard gummy shale	14	899
Rock	1	900
Sand and shale	32	932
Lignite	39	971
Good water sand	18	989
Sand and shale	33	1022
Hard gummy shale	9	1031
Lime	1	1032
Sand and shale	108	1140
Gummy shale	10	1150
Sand	30	1180
Gummy shale	7	1187
Sandy shale	34	1221
Lime	1	1222
Sandy shale	36	1258
Hard gummy shale	16	1274
Sand and shale	27	1301
Sand	9	1310
Hard sand	19	1329
Sand and shale	6	1335
Sandy lime	1	1336
Sand and shale	23	1359

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 73		
Sun Oil Co. 4 miles west of Independence.		
Surface material	5	5
Clay	9	14
Sand	26	40
Lime and boulders	2	42
Rock	2	44
Hard sand	16	60
Boulders	4	64
Blue shale	12	76
Lime rock	2	78
Shale	10	88
Blue shale	13	101
Shale	44	145
Sand rock	4	149
Packsand	22	171
Sand rock	6	177
Hard sandy shale	3	180
Lime rock	2	182
Blue shale	18	200
Sandstone	5	205
Blue shale	5	210
Hard sand rock	11	221
Shale and boulders	29	250
Sandy shale	25	275
Lime rock	3	278
Shale and boulders	12	290
Sandy shale and boulders	224	514
Blue shale	76	590
Water sand	20	610
Sandy shale	145	755
Brown shale	210	965
Sandy shale	23	988
Lime rock	2	990
Brown sandy shale and boulders	140	1130
Water sand	4	1134
Sandy shale	48	1182
Sticky shale	53	1235
Lime	2	1237
Broken sand and shale	31	1268
Sticky shale	72	1340
Boulders	14	1354
Oil sand	17	1371
Well 81, partial log		
Wm. Hoxie. 1½ miles northeast of Independence.		
Surface soil	5	5
Hard sand	5	10
Shale	20	30
Sticky shale	20	50
Sandy shale	25	75

	Thickness (feet)	Depth (feet)
Well 81, partial log--Continued		
Sticky shale	10	85
Sandy shale	45	130
Sticky shale	30	160
Green sandy shale	190	350
Water sand	125	475
Sticky shale	50	525
Water sand	50	575
Sticky shale	25	600
Sandy shale	75	675
Sticky shale	10	685
Green sandy shale	40	725
Sticky shale	100	825
Hard shale	249	1074
Shale	14	1088
Sand	12	1100
Sticky shale	102	1202
Sandy shale and streaks of lime	126	1328
Sand and shale	28	1356
Shale and lime	41	1397
Shale and lime	36	1433
Hard lime	3	1436
Shale and lime	15	1451
Hard shale	9	1460
Sandy shale	12	1472
Water	2	1474
Sticky shale	6	1480
Sandy shale	15	1495
Water sand	17	1512
TOTAL DEPTH		3142
Well 87, partial log		
Mrs. C. F. Schwartz. 5 miles northeast of Independence.		
Surface soil	10	10
Chalky clay	45	55
Water sand	10	65
Blue clay	40	105
Hard water sand	15	120
Blue clay	20	140
Water sand	10	150
Sandy lime	45	195
Water sand	15	210
Blue shale	38	248
Blue and gray shale	92	340
Blue and red shale	40	380
Blue and brown shale	40	420
Hard sandy lime	2	422
Blue sandy shale	78	500
Blue gummy shale	20	520
Red shale	40	560
Blue gummy shale	35	595

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Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 87, partial log--Continued		
Lime and shells	35	630
Gummy shale	74	704
Green gummy shale	76	780
Sand	2	782
Shale	3	785
Hard sand	15	800
Sandy shale	65	865
Brown shale and lignite	2	867
Gumbo	23	890
Gummy shale	33	923
Fine lime	1	924
Hard brown shale and lignite	2	926
Dark sand	12	938
Gray gumbo	2	940
Gumbo	5	945
Hard sand and lignite	4	949
Sand and streaks of lignite	5	954
Sand and layers of lignite	11	965
Sand	3	968
Hard sand, shale, lignite	13	981
Layers of sand and shale	19	1000
Gummy shale	20	1020
Gray shale	15	1035
Shale	10	1045
Layers of sand and shale	10	1055
Hard sand	2	1057
Hard sand and shale	1	1058
Gray sand	3	1061
Layers of sand and shale	14	1075
TOTAL DEPTH		3920

Well 88, partial log

Minnie Gaskamp, 6 miles east of Independence.

Clay	19	19
White clay	3	22
Clay and boulders	43	65
White clay	197	262
Hard sand	10	272
Rock	4	276
Clay	119	395
Sand and boulders	47	442
Clay and gravel	58	500
Shale and sand	90	590
Sandy shale	90	680
Lime and shale	43	723
Shale and lime shells	27	750
Green shale	220	970
Sandy shale	230	1200
Sticky shale	8	1208
Shale and lime	12	1220
Sticky shale	137	1357
TOTAL DEPTH		3514

Well 91, partial log

W. Boenker, $4\frac{3}{4}$ miles east of Independence.

Surface material	25	25
Hard streaky shale	35	60
Yellow sticky clay	2	62
Blue shale	24	86
Rock	2	88
Shale	11	99
Rock	2	101
Shale	13	114
Rock	22	136
Sticky shale	44	180
Blue shale	21	201
Blue shale and boulders	217	418
Soft shale	5	423
Hard sticky shale	6	429
Shale	51	480
Sand rock	24	504
Sandy shale	52	556
Rock	6	562
Shale	33	595
Shale and boulders	29	624
Hard rock	1	625
Shale and boulders	12	637
Hard rock	1	638
Shale and boulders	76	714
Hard rock	4	718
Shale and boulders	25	743
Hard gray shale	53	796
Hard shale	10	806
Gumbo	6	812
Hard gray and blue shale	18	830
Rock	1	831
Hard shale	15	846
Rock	2	848
Hard shale	39	887
Shale and boulders	4	891
Hard shale	16	907
Grey shale	12	919
Gumbo	2	921
Shale and layers of rock	84	1005
Shale and boulders	30	1035
Hard shale and streaks of rock	37	1072
Hard sand	9	1081
Water sand	5	1086

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 91, partial log--Continued		
Shale, boulders and streaks of lignite	37	1123
TOTAL DEPTH		1770
Well 118		
T. S. Estes. 1½ miles northwest of Brenham.		
Coarse-grained water sand	24	24
Hard sand	16	40
Sand	60	100
Sticky shale	30	130
Hard sand	20	150
Sand	50	200
Hard sand	60	260
White shale	15	275
Hard sand	160	435
Sand and boulders	85	520
Sticky shale	100	620
Sandy shale	70	690
Hard shale	120	810
Sticky shale	24	834
Sandy shale	126	960
Sticky shale	20	980
Sandy shale	12	992
Sticky shale	183	1175
Sandy shale	30	1205
Sticky shale	45	1250
Sand, lime, shells	51	1301
Gummy shale	99	1400
Hard sandy shale	20	1420
Gummy shale	258	1678
Hard sandy shale	10	1688
Gumbo	122	1810
Gumbo and streaks of lignite	35	1845
Hard shale, lime shells	20	1865
Gumbo	76	1941
Sand and lime	13	1954
Gumbo	53	2007
Well 131		
City of Brenham No. 5. In Brenham.		
Surface soil	11	11
Sand	10	21
Sandy clay and boulders	92	113
Yellow clay	30	143
Hard sand	11	154
Sandy clay	27	181
Hard sand	15	196
Hard sandy clay	40	236
Sandy clay	79	315
Sandy lime	26	341

	Thickness (feet)	Depth (feet)
Well 131--Continued		
Clay	17	358
Hard lime	18	376
Lime	5	381
Brown and gray shale	105	486
Sand	15	501
Shale	53	554
Sand	12	566
Shale	93	659
Broken sand, shale and lime	40	699
Shale	30	729
Shale and lime	89	818
Sand and shale	15	833
Shale	63	896
Sticky shale	30	926
Shale	290	1216
Sand	10	1226
Hard green shale	34	1260
Hard shale	40	1300
Sand	6	1306
Tough shale	68	1374
Hard shale	65	1439
Sand and shale	15	1454
Sand	39	1493
Hard shale	117	1610
Shale	66	1676
Sandy shale	20	1696
Shale	299	1995
Black shale	115	2110
Lignite and shale	82	2192
Well 132		
City of Brenham No. 6. In Brenham.		
Black soil	15	15
Sand and lime	12	27
Lime rock	16	43
Lime and clay	15	58
Coarse-grained sand	5	63
Tough clay	19	82
Coarse-grained sand	26	108
Lime rock	4	112
Coarse-grained sand	16	128
Tough clay	57	185
Sandy clay, water	15	200
Well 135		
City of Brenham No. 9. In Brenham.		
Not given	773	773
Shale and lime	52	825
Sand	12	837
Shale	389	1226

(Continued on next page)

Table of Drillers' Logs, Washington County -- Continued

	Thickness (feet)	Depth (feet)
Well 135--Continued		
Sand	10	1236
Gumbo	14	1250
Shale and sand	58	1308
Tough shale	57	1365
Sand and shale	15	1380
Tough gumbo	8	1388
Good sand	15	1403
Tough gumbo	34	1437
Gumbo	17	1454
Sand and shale	50	1504
Screen at 1216-1234, 1257-1303, 1355-1396, and 1452-1500.5 feet.		
Well 143, partial log		
Fred Weiss. 3¾ miles southwest of Brenham.		
Clay	14	14
Sand	32	46
White clay	52	98
Green sand and clay	164	262
Sand, gravel	8	270
Sand	23	293
Sticky clay	29	322
Clay, gravel	7	329
Sticky clay	21	350
Clay, shale	8	358
White sand	6	364
Lime, shale	30	394
Sand, shale	12	406
Lime rock	3	409
Lime	11	420
Sand, shale	13	433
Lime	21	454
Sand, lime	26	480
Shale, sand	69	549
Shale, lime shells	4	553
Sandy shale	77	630
Sand, lime	19	649
Lime, shale	41	690
Lime, green sand	55	745
Lime, blue shale	67	812
Sand, black lime	18	830
Sand, shale	16	846
Sticky white shale	39	885
Blue sand	23	908
Sandy shale	43	951
Sticky shale	23	974
Green sand	71	1045
Sticky shale	53	1098
Sand, green shale	20	1118
Sticky shale	8	1126
Sandy shale	26	1152
Shale, black sand	21	1173
Green sand	28	1201
Well 143, partial log--Continued		
White sticky shale	17	1218
Lime, shale	19	1237
White sticky shale	7	1244
Sandy shale	10	1254
Sticky shale	8	1262
White sandy shale	12	1274
Green sandy shale	13	1287
Sticky shale	54	1341
Glassy sand	20	1361
Sandy shale	61	1422
Lime, sand	5	1427
Sandy shale	3	1430
Lime, shale	3	1433
Sand, shale	2	1435
Lime	13	1448
Sand, shale	12	1460
Sticky shale	15	1475
Lime, shale	17	1492
Sandy shale	7	1499
Sticky shale	13	1512
Sandy shale	6	1518
Sand, lime	5	1523
Sticky gumbo	41	1564
Lime, shale	2	1566
Sticky shale	2	1568
Brown sand	2	1570
Sticky shale	8	1578
Lime, shale	4	1582
Sticky shale	20	1602
Sand, shale	8	1610
Sandy shale	5	1615
Sticky shale	45	1660
Sandy shale	27	1687
Sticky shale	7	1694
Sandy green shale	6	1700
Sticky shale	55	1755
Sandy shale	4	1759
Sticky shale	4	1763
Sandy shale	48	1811
Sticky shale	7	1818
Sandy shale	20	1838
Sticky shale	20	1858
Powdered shale	5	1863
Coarse-grained sandy blue shale	7	1870
Shale	13	1883
Green sand, shale	6	1889
Sandy shale	11	1900
Lime, shale	28	1928
Shale, sand	2	1930
Sticky shale, lignite	70	2000
Shale, lignite	17	2017
Blue sand	6	2023
TOTAL DEPTH		3364

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 147, partial log		
M. Kamas. 7½ miles southwest of Brenham.		
Clay and sand	30	30
Shale, lime and shells	60	90
Sand	30	120
Shale, shells	48	168
Hard shale	140	308
Shale	127	435
Shale, streaks of sand	90	525
Shale	62	587
Hard sand	5	592
Shale	18	610
Sand, shells and lime	85	695
Sand	25	720
Shale, shells	120	840
Sandy shale	210	1050
Shale and shells	65	1115
Shale, streaks of sand	35	1150
Shale, streaks of hard lime	192	1342
Shale, streaks of sand	78	1420
Shale and shells	180	1600
Shale, lime and shells	30	1630
Shale and shells	278	1908
Sand and shells	42	1950
Shale, lime and shells	115	2065
Hard shale and shells	275	2340
Sand	17	2357
Shale and shells	15	2372
Hard sand	7	2379
Soft sand	14	2393
Shale, sandy streaks	79	2472
Sand and shale	88	2560
Shale and shells	165	2725
Sand and sandy shale	102	2827
TOTAL DEPTH		5039
Well 151		
Mrs. Fannie Pomykal No. 2 7½ miles southwest of Brenham.		
Black dirt and clay	30	30
Water sand and boulders	25	55
Shale	86	141
Rock	1	142
Shale	33	175
Soft rock	15	190
Rock	1	191
Sticky shale	20	211
Rock	1	212
Gumbo	3	215
Hard rock	3	218
Sandy shale	2	220
Sand, oil and water	6	226

	Thickness (feet)	Depth (feet)
Well 153		
John Konieczny No. 1. 7½ miles southwest of Brenham.		
Clay	36	36
Sand	6	42
Clay	6	48
Clay and streaks of sand	44	92
Clay	76	168
Hard sand	20	188
Shale	53	241
Sand	35	276
Shale	10	286
Hard sand	1	287
Shale and lime	31	318
Shale	18	336
Shale and lime	57	393
Hard sand and lime	35	428
Shale and lime	80	508
Sand	14	522
Shale and lime	269	791
Sand, shale and lime	30	821
Hard shale	40	861
Hard shale and lime	20	881
Sand	4	885
Lignite	2	887
Sand and shale	54	941
Sand	35	976
Shale, lime and hard sand	108	1084
Slick shale	31	1115
Sand	44	1159
Hard shale	125	1284
Hard sandy shale	96	1380
Sand, shale and lime	22	1402
Hard sand and streaks of shale	110	1512
Sticky shale	32	1544
Hard sandy shale	60	1604
Sand, shale and lime	56	1660
Sticky shale, tough	10	1670
Sand	19	1689
Shale	6	1695
Sand	3	1698
Sandy shale	8	1706
Sand	5	1711
Sandy shale	3	1714
Shale	4	1718
Gray sand, water	25	1743
Shale	11	1754
Sand, shale and lime	19	1773
Sand, pyrites, shale	12	1785
Sand	7	1792
Shale	2	1794

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 153--Continued		
Gray sand	6	1800
Sandy shale	3	1803
Sand and lime	15	1818
Sand	8	1826
Shale	6	1832
Sandy shale	17	1849
Sand	7	1856
Rock	26	1882
Sand	14	1896
Rock	14	1910
Sand	2	1912
Rock	2	1914
Coarse-grained sand	23	1937
Sand and shale	44	1981
Sand, shale, lime and sandy shale	184	2165
Well 154		
F. H. Schuerenberg No. 1. $7\frac{1}{2}$ miles southwest of Brenham.		
Surface material	10	10
Sandy white clay	11	21
Water sand	16	37
Hard sandy lime	15	52
Sandy shale	29	81
Hard packsand	23	104
Chalk and shale	9	113
Rock	1	114
Shale	3	117
Rock	2	119
Shale	29	148
Hard rock	1	149
Shale and boulders	10	159
Shale	15	174
Blue sand rock	1	175
Blue gumbo	6	181
Lime rock	6	187
Water sand	6	193
Shale and boulders	8	201
Hard sand rock	1	202
Water sand	2	204
Blue shale	43	247
Gumbo	12	259
Sand rock	12	271
Shale	8	279
Sand rock	2	281
Shale and boulders	63	344
Hard rock	1	345
Lime rock	5	350
Hard sandy lime	30	380
Shale	20	400
Shale and lime	27	427
Hard lime	4	431

	Thickness (feet)	Depth (feet)
Well 154--Continued		
Shale, hard lime	88	519
Hard sandy shale	25	544
Shale and boulders	54	598
Shale	22	620
Hard shale, lime	11	631
Hard sandy gray shale	42	673
Gumbo	8	681
Shale	25	706
Gumbo	11	717
Shale	17	734
Sand	7	741
Shale and boulders	60	801
Hard shale, lime	39	840
Gumbo	6	846
Hard shale, lignite	24	870
Hard rock, lignite	2	872
Sand	15	887
Shale	13	900
Lime rock	2	902
Hard sandy shale	30	932
Gumbo	51	983
Sandy shale	12	995
Hard gumbo	10	1005
Brown shale	13	1018
Hard gumbo	19	1037
Lime rock	2	1039
Hard gumbo	3	1042
Hard gumbo and lime	18	1060
Hard shale and lime	35	1095
Hard gumbo and lime	17	1112
Rock	6	1118
Gumbo	7	1125
Shale	4	1129
Hard gumbo	2	1131
Sand	9	1140
Hard gumbo	26	1166
Rock and sand	4	1170
Gumbo	10	1180
Sand rock	2	1182
Hard shale	16	1198
Hard gumbo	12	1210
Hard lime rock	2	1212
Shale and boulders	4	1216
Hard lime rock	4	1220
Hard gumbo	3	1223
Hard lime rock	2	1225
Hard gumbo	6	1231
Rock, lime and pyrites	12	1243
Slate	3	1246
Hard sand, pyrites	6	1252
Hard lime and sand	3	1255
Hard lime	1	1256
Hard gumbo	4	1260
Lime rock	4	1264

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 154--Continued		
Hard gumbo	55	1209
Lime and pyrites	2	1301
Blue gumbo	17	1318
Lime and pyrites	1	1319
Gumbo	4	1323
Lime and pyrites	1	1324
Gumbo	6	1330
Lime and pyrites	1	1331
Hard gumbo	17	1348
Shale and boulders	16	1364
Hard brown gumbo	10	1374
Lime rock	52	1426
Well 155, partial log		
A. S. Kramer No. 1. 7 miles southwest of Brenham.		
Surface soil	4	4
Clay	36	40
Sand, boulders	20	60
Sand	15	75
Gumbo	18	93
Rock	14	107
Gumbo	11	118
Rock	4	122
Gumbo	8	130
Water sand	15	145
Shale, sand	5	150
Sand, boulders	5	155
Rock and shale	23	178
Sandy gumbo	4	182
Water sand	18	200
Hard sand	10	210
Rock	15	225
Gumbo	6	231
Sand, shale	4	235
Rock	15	250
Hard sand	10	260
Gumbo	2	262
Hard sand	29	291
Hard sand, shale, gumbo	47	338
Hard sand	24	362
Water sand	14	376
Sand, shale	5	381
Hard sand	12	393
Hard sand, streaks of lime	65	458
Sand, shale	7	465
Hard sand	14	479
Gumbo	28	507
Shale, sand	25	532
Hard sand	7	539
Hard shale, boulders	10	549
Hard sand	3	552

	Thickness (feet)	Depth (feet)
Well 155, partial log--Continued		
Hard shale, gumbo, lime	36	588
Shale, sand, lime	16	604
Gumbo	5	609
Sand rock	6	615
Gumbo, boulders	47	662
Sandy shale	15	677
Rock	3	680
Gumbo	15	695
TOTAL DEPTH		4001
Well 172		
Ammons Est. 4 miles southwest of Chapel Hill.		
Surface sand	102	102
Water sand	98	200
Shale, shells	470	670
Shale	298	968
Sandy shale	32	1000
Sticky shale	80	1080
Sticky shale, shells	705	1785
Shale, shells	150	1935
Sand	12	1947
Sandy shale, lime, shells	171	2118
Sticky shale	90	2208
Shale, shells	92	2300
Sticky shale	91	2391
Shale	17	2408
Sticky shale	105	2513
Sandy shale	112	2625
Sticky shale	110	2735
Sandy shale	10	2745
Sticky shale	195	2940
Sandy shale	4	2944
Sand	7	2951
Lime, shells	2	2953
Sandy shale	30	2983
Sticky shale	82	3065
Sandy shale	71	3136
Sticky shale	72	3208
Sandy shale	45	3253
Sticky shale	55	3308
Sandy shale	2	3310
Sticky shale	40	3350
Sandy shale	25	3375
Sticky shale	25	3400
Sandy shale, shells	109	3509
Sandy shale	35	3544
Sand	12	3556
Sticky shale	22	3578
Shale	22	3600
Shale, gravel	40	3640
Sticky shale	50	3690

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 174, partial log		
Giddings and Giddings. 3½ miles southwest of Chapel Hill.		
Surface sand, clay	2	2
Red clay	4	6
White clay	8	14
Sand rock	1	15
Gray water sand	7	22
Yellow clay	33	55
Sand rock	2	57
Water sand	8	65
Gray limy dobe	44	109
Water sand	22	131
Yellow clay and gray sand and lime	24	155
Gummy clay	25	180
Lime, sandstone (flow of water)	25	205
Yellow sandy clay	35	240
Water sand	8	248
Sticky gray clay	32	280
Lime, flow of water	6	286
Lime, sand, gravel, clay	26	312
Sticky clay	41	353
Water sand	34	387
Sticky clay, shale, lime	18	405
Sand and streaks of lime	6	411
Lime, sticky clay, sand	29	440
Sandy shale (water)	8	448
Sticky shale, lime	27	475
Sand, thin streaks of lime (water)	10	485
Gummy shale	31	516
Sandy shale	46	562
Limy shale	22	584
Sandy shale, gray lime	62	646
Gummy shale, lime (flow of water)	69	715
Gummy shale, lime	3	718
Sandy shale	21	739
Lime, shells	42	781
Gummy shale	48	829
Water sand	10	839
Shale, lime	35	874
Gummy shale, lime	15	889
Sand, lots of water	8	897
Gummy shale	69	966
Shale	18	984
Lime	12	996
Sticky shale, lime	26	1022
Lime, shale	43	1065
Sticky shale	75	1140
Shale	20	1160
Sticky shale	33	1193
Gumbo	23	1216
Sand, water	2	1218
Limy shale	65	1283
Lime	10	1293
Loose shale	5	1298
Gummy lime, shale	7	1305
Sand, water	11	1316
Limy shale	27	1343
Lime	45	1388
Shale	5	1393
Lime	25	1418
Gumbo	52	1470
Lime	42	1512
Gumbo	45	1557
Gummy shale, lime	16	1573
Sand, water	7	1580
Gumbo with streaks of lime	45	1625
Gumbo	28	1653
Sand, water flowed	10	1663
Lime	7	1670
TOTAL DEPTH		3043
Well 182, partial log		
Lockhart Est. No. 1. 2 miles southeast of Chapel Hill.		
Surface material	50	50
Sand and clay	330	380
Sandy shale, lime	232	612
Caliche	223	835
Sand and gravel	15	850
Shale and caliche	130	980
Sand and shale	30	1010
Shale and hard lime	40	1050
Shale	55	1105
Shale and sand	55	1160
Shale	528	1212
Shale and sand	48	1260
Shale and boulders	45	1305
Shale	280	1585
Hard sand	20	1605
Sand and shale	465	2070
Sticky shale	95	2165
Sandy shale and lime	145	2310
Sand	25	2335
Shale and lime	23	2358
Shale	162	2520
Shale and sand	169	2689
Shale	28	2717
Sticky shale	13	2730
Hard shale and lime	25	2755
Shale	155	2910
Hard lime	6	2916

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 182, partial log--Continued		
Sand	5	2921
Sandy shale	49	2970
Sticky shale	116	3086
Sand and shale	7	3093
Water sand	10	3103
Sand	12	3115
Hard shale and lime	23	3138
TOTAL DEPTH		7508

Well 207, partial log

W. H. Hughes. 4 miles north of Chapel Hill.

Surface soil, sand	15	15
Sand, sand rock	155	170
Yellow clay	130	300
Sand rock	2	302
Sticky yellow clay	98	400
Sand rock	2	402
Gummy shale	38	440
Sand rock	1	441
Gummy shale	29	470
Pink and yellow shale	30	500
Gray gumbo	16	516
Sand rock	3	519
Gummy shale	131	650
Gumbo, yellow shale	50	700
Blue shale	40	740
Water sand	15	755
Blue shale	15	770
Sand rock, sand	5	775
Gumbo	25	800
Sandy shale	5	805
Blue shale, gumbo	45	850
Sandy shale	10	860
Gummy shale	40	900
Water sand	18	918
Gummy shale	82	1000
Shale, boulders	50	1050
Gray gumbo	20	1070
Gummy shale, gumbo	90	1160
Sand	5	1165
Shale, boulders	85	1250
Sandy lime	20	1270
Shale, boulders	60	1330
Gumbo	20	1350
Shale, boulders	40	1390
Hard lime	4	1394
Shale, boulders	26	1420
Sandy shale	80	1500
Shale, gumbo	240	1740
Water sand	20	1760
Shale, boulders	90	1850
Sandy lime	15	1865
Shale, gumbo	71	1936
Sandy lime	39	1975
Broken lime	25	2000
Gumbo	20	2020
TOTAL DEPTH		3612

Well 211, partial log

John Sommers. 7½ miles north of Chapel Hill.

Surface clay	6	6
Clay	22	28
Sand, gravel	89	117
Sand	313	430
Sand, clay	140	570
Hard sand rock	23	593
Sand	57	650
Sandy shale	250	900
Sticky shale	60	960
Shale	65	1025
Green shale	173	1198
Sticky green shale	12	1210
Sticky shale	110	1320
Gummy shale	25	1345
Gumbo	40	1385
Gummy shale	36	1421
Rock	4	1425
Shale	20	1445
Hard sand	6	1451
Shale, lime	33	1484
Gumbo	6	1490
Lime, shells	3	1493
Gumbo	127	1620
Gummy shale	13	1633
Sandy shale	107	1740
Gumbo	65	1805
Gumbo, shale	71	1876
Sand	14	1890
Gumbo	118	2008
Hard sand	6	2014
Gumbo	114	2128
Lime, shells	1	2129
Gummy shale	41	2170
Gumbo	35	2205
Gummy shale	45	2250
Sand, streaks of shale	13	2263
Gumbo	37	2300
Sand, shale	5	2305
Gumbo	23	2328
Shale, boulders	90	2418
Sand rock	5	2423
TOTAL DEPTH		3506

Table of Drillers' Logs, Washington County--Continued

Well 215, partial log

Jahnke and Zschappel. 3½ miles southwest of Washington.

	Thickness (feet)	Depth (feet)
Surface sand	6	6
Clay	12	18
Water sand	37	55
Clay	6	61
Water sand	31	92
Clay	17	109
Sand	21	130
Sand and boulders	21	151
Sand and clay streaks	20	171
Sandy clay	50	221
Broken lime, shale	139	360
Water sand	40	400
Sand	10	410
Gray and pink clay	20	430
Hard sand	30	460
Sand and clay in layers	45	505
Green shale	35	540
Green sand	10	550
Sticky green shale	115	665
Lime and shale	60	725
Gummy shale	75	800
Sandy shale	50	850
Sand and shale in layers	10	860
Gummy green shale	100	960
Sand and shale in layers	30	990
Gummy green shale	60	1050
Hard lime	40	1090
Gummy shale	45	1135
Gummy green shale	40	1175
Green and brown shale in layers	20	1195
Gummy blue shale, sandy streaks	39	1234
Gummy blue shale	40	1274
Sandy black shale	26	1300
Gummy shale	90	1390
Gummy green shale	100	1490
Green and gray shale	70	1560
Green sand and shale in layers	105	1665
Water sand	25	1690
Sand and shale in layers	40	1730
Green and gray shale	70	1800
Gummy shale	40	1840
Green and gray shale	10	1850
Water sand	20	1870
Dark gray sandy shale	105	1975
Gray sandy shale	105	2080
Gray sandy shale	90	2170
TOTAL DEPTH		3513

Well 220, partial log

Bertie Moore. 3 miles northwest of Washington.

	Thickness (feet)	Depth (feet)
Not given	62	62
Hard sand	23	85
Sandy shale	65	150
Hard sand	15	165
Sandy shale	45	210
Sand	51	261
Sandy shale	39	300
Hard sand	25	325
Sandy shale	108	433
Water sand	22	455
Sand rock	10	465
Sand and boulders	105	570
Gummy shale	17	587
Sandy shale	100	687
Hard sand	13	700
Sticky shale	35	735
Sandy shale	52	787
Gummy shale	38	825
Sand and shale	39	864
Sandy shale	20	884
Hard sand	16	900
Sandy lime	17	917
Hard sand, lime rock	6	923
Sand and shale	22	945
Water sand	17	962
Sand, shale	10	972
Water sand	23	995
Broken sand, shale and water sand	61	1056
Sandy shale	4	1060
Hard sandy lime rock	13	1073
Sand, shale	7	1080
Hard lime rock	7	1087
Sticky shale	4	1091
Gummy shale	19	1110
Sandy shale	25	1135
Hard sand	25	1160
Sandy shale	15	1175
Gumbo and shale	117	1292
Sand	2	1294
Gumbo and shale	202	1496
Gummy shale and boulders	44	1540
Lime rock	3	1543
Water sand	27	1570
Shale and boulders	13	1583
Sand	3	1586
Sandy shale	10	1596
Lignite	4	1600
Gumbo and shale	145	1745

(Continued on next page)

Table of Drillers' Logs, Washington County--Continued

	Thickness (feet)	Depth (feet)
Well 220, partial log--Continued		
Gumbo	10	1755
Sandy shale	20	1775
Lignite	2	1777
Water sand	8	1785
Gummy shale	35	1820
Lignite, water sand	42	1862
Gumbo	2	1864
Gray sand, brown shale	2	1866
Water sand, gumbo and shale	10	1876
Gumbo and shale	59	1935
Water sand	5	1940
Sandy and gummy shale	231	2171
Lignite, water sand	2	2173
Lime rock and shale	16	2189
Sand	6	2195
Shale	51	2246
Water sand	9	2255
Lime rock, shale, gumbo	145	2400
Water sand	6	2406
TOTAL DEPTH		3004
Well 245, partial log		
Henry Wehmeyer. 4½ miles southeast of Washington.		
Surface sand and clay	20	20
Sand, gravel	40	60
Clay	15	75
Sand, shale, boulders	595	670
Shale, lime	120	790
Shale	302	1092
Shale, lime	404	1496
Shale, sand	81	1577
Water sand	20	1597
Shale, sand, lime	490	2087
Water sand	36	2123
Sand, shale	106	2229
Shale	72	2301
Sand, shale, lignite	32	2333
Sand	30	2363
Shale	6	2369
Sand, shale, lignite	562	2931
Firm sand	3	2934
Lignite	5	2939
Sand, shale, lime	470	3409
Shale, shells	67	3476
Sand, shale	225	3701
Sand, shale, lignite	166	3867
Sand	65	3932
Shale, sand	264	4196
TOTAL DEPTH		5590

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

Analyzed at the University of Texas under the direction of W. W. Hastings, Chemist, Department of the Interior Geological Survey, and Dr. F. P. Schoch, Director of the Bureau of Industrial Chemistry. 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	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
1	A. H. Kuehn	125	Nov. 11, 1942	1,135	93	13	297	214	340	287	–	0	288
3	Fritz Eberhardt	101	do.	4,998	887	111	693	543	1,504	1,535	1.4	–	2,673
5	Malke Est.	45	do.	1,297	94	5.8	354	233	519	207	.2	0	259
a/ 6	Charlesville School	15	do.	66	4.8	1.0	19	24	11	18	.1	0	16
8	H. W. Wendt	180	Sept. 15, 1942	706	162	4.5	36	344	10	147	.4	.0	423
9	T. Pelkemeyer	94	Sept. 14, 1942	704	144	3.9	125	496	60	127	–	0	377
10	Fritz Roehling	54	do.	519	150	b/	32	320	18	54	–	108	375
11	T. O. Gindorf	150	Nov. 13, 1942	317	83	2.2	42	348	2	11	–	6.0	216
12	H. C. Winkelmann	260	do.	300	88	5.8	23	293	6	30	.4	1.0	244
15	George Small	35	Nov. 11, 1942	510	110	4.6	86	427	16	75	–	8.0	293
16	Farmer's National Bank	160	July 17, 1942	315	85	6.3	32	342	3	14	.3	6.0	239
18	A. Witschorke Est.	38	Nov. 12, 1942	364	93	2.2	47	336	29	25	–	3.0	241
a/ 19	A. G. Loewe	114	do.	1,228	127	24	264	110	466	292	.2	1.0	415
20	G. Bresler Est.	105	do.	1,038	181	11	152	128	458	173	0	0	497
21	F. Graeber	71	do.	798	137	34	110	329	90	324	.7	30	481
22	Mrs. Ed Kieke	70	do.	387	36	14	104	372	4	46	–	0	149
24	Albert Hilscher	70	do.	958	230	13	113	378	61	354	–	1.0	628
25	Paul Kessler	28	do.	1,475	524	7.0	–	305	172	622	.1	–	1,339
a/ 26	John D. Dixon	248	Nov. 17, 1942	341	99	3.4	32	336	5	37	–	0	262
a/ 27	R. A. Fuchs	126	Nov. 20, 1942	369	96	5.8	42	354	17	34	.6	0	264
28	do.	58	do.	379	69	2.2	75	305	17	39	–	27	192
29	John Bethke	51	do.	497	132	4.6	48	366	11	68	1.2	52	348
30	-- Brazier	55	July 23, 1942	–	–	–	–	329	26	49	–	5.0	–
31	A. G. Boehnemann	145	do.	886	139	11	150	359	63	253	.1	.0	392
32	Charles F. Kramer	117	do.	–	–	–	–	293	11	27	–	0	–

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 45.
b/ Less than 2 parts per million.
c/ Analyzed by State Health Department.

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

Results are in parts per million

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
33	Robert Kramer	170	July 23, 1942	-	-	-	-	336	26	37	.8	0	-
34	August Wensel	200	July 22, 1942	-	-	-	-	329	17	35	.2	3.0	-
35	Harold Wendler	18	July 23, 1942	-	-	-	-	360	78	416	0	0	-
a/36	Charles Hodde	161	do.	416	81	5.0	60	349	10	39	.1	.0	222
37	R. Wendler	191	do.	415	95	6.3	59	342	12	70	.3	0	264
a/38	E. G. Weinert	192	do.	401	83	4.6	54	345	14	32	.6	.0	226
40	do.	200	do.	-	-	-	-	268	9	62	-	165	-
a/41	W. L. Thomas	150±	July 17, 1942	408	103	4.5	28	342	12	29	.5	.0	276
42	Texas Highway Department	80±	do.	-	-	-	-	281	10	120	-	0	-
43	C. O. Shawe	260	July 23, 1942	-	-	-	-	366	27	106	0	0	-
44	F. Eckert	40	July 21, 1942	-	-	-	-	220	92	181	-	318	-
45	A. H. Makowsky	186	July 20, 1942	-	-	-	-	226	24	44	-	6.0	-
48	Mrs. Henry Kraemer	80±	do.	-	-	-	-	311	126	1,045	-	-	-
49	Mrs. Helen Neumann	210	do.	-	-	-	-	305	33	63	.2	3.0	-
50	Fritz Steenken	36	do.	677	146	3.9	76	336	18	61	-	207	382
a/51	Mrs. Ernest Menn	165	do.	572	100	7.0	88	368	18	106	.1	.0	278
52	Hugo Krause	180	do.	511	102	7.6	69	364	22	80	.1	.0	286
54	Seidel Bros.	151	do.	-	-	-	-	305	21	63	-	270	-
55	O. Heins	71	do.	645	94	11	111	293	52	68	0	165	282
a/56	Emil Drew	32	July 21, 1942	380	105	6.3	33	343	17	32	.4	15	239
58	F. Pomykal	140	July 16, 1942	-	-	-	-	317	4	86	-	0	-
59	Wesley School	100±	July 21, 1942	-	-	-	-	299	4	15	.2	22	-
60	Ed Bormann	44	do.	-	-	-	-	220	18	65	.3	39	-
62	C. E. Dannheim	75	July 2, 1942	-	-	-	-	305	52	78	-	94	-
a/63	B. P. Sayles	Spring	do.	456	64	3.9	109	232	17	144	.5	3.0	177
64	C. Hafer	135	do.	-	-	-	-	250	30	59	-	40	-
65	Mound School	70±	do.	-	-	-	-	244	10	16	.2	2.0	-
66	Otto Janner	24	do.	596	158	2.7	52	421	33	42	-	101	407

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on pag. 45.
b/ Less than 2 parts per million.
c/ Analyzed by State Health Department.

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

Results are in part per million

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
37	Sun Oil Co.	123	July 2, 1942	705	46	2.4	208	362	85	136	.2	.0	125
74	do.	160	Nov. 13, 1942	2,036	20	4.6	800	731	2	825	.3	-	63
77	E. F. Clay	27	Nov. 16, 1942	839	227	3.4	46	323	90	118	.1	195	582
a/78	do.	66	do.	408	109	3.4	26	311	6	30	-	81	312
79	C. F. Toalson	57	do.	439	129	3.4	32	268	32	40	.1	120	337
80	Louis Grimm	200±	Sept.14, 1942	357	120	b/	21	350	10	34	-	0	300
82	C. F. Toalson	134	do.	173	42	2.7	25	176	6	15	-	0	117
83	William Engel	37	Nov. 16, 1942	935	172	4.6	186	438	23	295	-	14	448
a/84	F. C. Sommers	320	Sept.14, 1942	444	82	3.5	55	350	14	26	.2	0	219
85	O. C. Gindorf	375	do.	359	35	2.4	54	332	30	25	-	0	22?
90	O. L. Sommers	250	Nov. 19, 1942	335	86	5.3	61	354	3	55	.1	0	239
92	W. C. Schwarze	85±	Sept.14, 1942	1,480	396	26	97	200	203	660	-	-	1,096
93	Herman Jeghorst	86	Oct. 21, 1942	-	-	-	-	366	5	34	2	0	-
96	Wm. Pohlmeyer	65	do.	1,431	298	23	133	445	125	448	.9	134	339
a/97	Martin H. Sommers	222	do.	369	97	11	32	336	25	38	.8	.5	287
98	do.	222	do.	365	93	3.3	32	323	29	39	-	0	280
99	do.	222	do.	-	-	-	-	311	24	40	-	0	-
a/100	Henry Jellman	404	July 1, 1942	382	97	4.5	37	350	4.6	34	.3	.2	260
101	Arnold Lammert	100±	Oct. 21, 1942	336	97	4.5	39	371	3.4	26	.4	.5	261
102	Wm. Quebe	57	Sept.14, 1942	514	110	1.5	56	240	18	30	-	180	231
103	L. C. Jeske	218	July 2, 1942	430	86	5.5	61	312	20	66	.3	.0	237
104	Henry Loesch	82	July 24, 1942	-	-	-	-	348	12	25	.2	1.0	-
105	F. S. Bryan	37	do.	-	-	-	-	220	85	730	0	-	-
107	do.	83	do.	430	110	4.1	15	310	4.9	21	.2	43	292
a/108	Leo Arndt	80	July 31, 1942	345	103	5.1	28	366	7	21	.4	0	278
109	do.	59	do.	-	-	-	-	343	8	20	.2	0	-
110	do.	69	do.	400	103	3.4	28	363	8.9	26	.2	.0	284
111	A. D. Spinn	22	Nov. 13, 1942	262	90	5.6	5.1	299	3	4.0	-	7.0	243
112	Henry W. Hodde	90±	July 31, 1942	363	98	3.6	25	320	11	23	.2	.0	260
113	do.	130	do.	-	-	-	-	293	14	40	-	0	-
114	do.	50	do.	304	110	1.5	7.6	329	13	10	-	0	281

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 45.
b/ Less than 2 parts per million.
c/ Analyzed by State Health Department.

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

Results are in parts per million

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
115	J. F. Presley	123	July 24, 1942	413	100	4.3	40	347	19	35	.2	.0	267
116	do.	70±	Sept.11, 1942	367	73	6.3	65	344	20	34	-	0	209
117	August Neumann	168	July 30, 1942	-	-	-	-	250	12	41	-	2.0	-
119	Albert Fricke	130	Nov. 20, 1942	1,159	202	7.1	228	354	90	458	0	0	534
120	William Luedemann	34	July 22, 1942	772	224	7.5	44	397	22	187	-	92	590
121	Charles Hodde	76	July 21, 1942	-	-	-	-	342	24	61	-	66	-
122	Brenham Packing Co.	48	July 24, 1942	403	135	5.1	18	421	7	24	.2	12	358
123	Prince Dover	52	Nov. 17, 1942	276	79	3.4	22	275	4	6.0	-	27	212
124	Blue Bell Creamery	130	June 24, 1942	333	91	3.3	17	263	6.3	26	.2	17	240
125	Brcham Cotton Oil Mill Inc.	200±	do.	450	124	3.3	16	354	9.6	26	.1	25	323
126	Texas Public Utilites Corp.	785	June 20, 1940	453	78	3.8	55	326	21	28	-	.1	211
a/126	do.	785	June 23, 1942	471	84	3.8	55	343	21	26	.2	.2	225
126	do.	785	Nov. 11, 1942	475	84	2.9	49	326	22	26	.2	0	222
a/131	City of Brenham No. 5	1,515	June 23, 1942	425	33	1.1	113	358	13	18	.3	.0	87
a/132 c/	City of Brenham No. 6	200	Feb. 23, 1939	447	129	5	23	366	12	46	-	18	343
132	do.	200	June 23, 1942	473	133	3.5	25	361	20	42	.2	31	346
133	City of Brenham	Spring	do.	519	136	2.7	21	316	31	34	.1	69	350
134	City of Brenham No. 8	193	do.	446	128	3.4	19	360	3	49	.3	3.0	334
136	Louise Stone	700+	July 17, 1942	-	-	-	-	299	7	34	.3	0	-
a/137	George Stulken	600±	Nov. 10, 1942	407	94	4.7	35	327	11	35	.2	.2	254
138	Henry Grimm	31	July 21, 1942	-	-	-	-	293	3	24	-	41	-
140	Albert Kramer	102	July 16, 1942	-	-	-	-	323	13	69	-	20	-

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 45.
b/ Less than 2 parts per million.
c/ Analyzed by State Health Department.

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

Results are in parts per million.

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
141	E. W. Sommerfeld	75	July 15, 1942	-	-	-	-	250	6	16	-	19	-
142	Fred Weiss	41	do.	-	-	-	-	366	30	170	-	3.0	-
144	Mrs. E. R. Hacker	63	July 21, 1942	-	-	-	-	409	7	34	-	0	-
145	William Draehm	94	do.	442	116	10	40	262	14	133	.2	0	331
146	Dr. W. F. Hasskarl	394	June 24, 1942	-	-	-	-	250	17	38	.8	0	-
148	C. Brinkmeyer	250	July 16, 1942	-	-	-	-	342	26	37	-	0	-
149	Joe Pomykal	140	June 24, 1942	425	64	8.8	85	287	89	37	0	0	195
150	Fred A. Boecker No. 3	300	do.	-	-	-	-	262	13	35	.3	0	-
152	Pomykal Est.	125	July 16, 1942	-	-	-	-	342	37	59	.2	0	-
155	A. S. Kramer No.1	155	July 15, 1942	-	-	-	-	275	2	40	-	1.0	-
156	A. S. Kramer	103	do.	-	-	-	-	311	15	23	-	.5	-
157	Herman Lehmann	Spring	do.	-	-	-	-	373	8	57	-	64	-
158	do.	225	do.	-	-	-	-	275	37	36	-	0	-
160	L. R. Lehrmann	40	July 16, 1942	-	-	-	-	268	14	24	-	39	-
161	A. F. Winkelmann	80	do.	-	-	-	-	256	14	112	-	72	-
162	J. L. Zientek	100	July 13, 1942	-	-	-	-	268	6	31	-	39	-
164	William Bosse	17	July 3, 1942	233	66	1.5	21	280	17	7.0	-	12	171
165	Fred Koester	120	do.	-	-	-	-	268	55	16	-	7.0	-
166	Dr. W. A. Knolle	92	do.	-	-	-	-	232	3	-	-	6.0	-
167	F. W. Nordt	40	June 30, 1942	-	-	-	-	262	12	35	-	58	-
169	E. Y. Shaufler	160	do.	-	-	-	-	238	4	17	-	23	-
170	Willim Bilski	95	do.	288	32	3.9	27	299	9	19	-	0	222
a/171	A. W. Kelling	143	do.	333	86	2.7	46	348	4	27	-	1.0	227
173	Dr. B. Rogers	100	do.	-	-	-	-	232	89	430	.1	1.0	-
175	Mrs. Stella Krolczyk	175±	July 14, 1942	-	-	-	-	275	4	24	-	1.0	-
176	Pauline Wiesner Est.	75	June 20, 1942	536	63	7.5	125	293	18	123	-	50	200

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

Results are in parts per million.

Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
177	Eddie Chadwick	18	July 14, 1942	-	-	-	-	256	59	23	-	.5	-
178	do.	175	June 30, 1942	-	-	-	-	244	22	131	.2	0	-
179	Mrs. Mary Twardowski	38	July 14, 1942	-	-	-	-	354	41	410	1.5	42	-
180	do.	40	do.	-	-	-	-	458	100	500	-	0	-
183	Lockhart Est.	100	do.	-	-	-	-	451	89	132	1.7	47	-
184	Lula Cummings	Spring	do.	-	-	-	-	153	14	18	.2	12	-
185	Armstrong School	130	July 13, 1942	-	-	-	-	232	2	57	.4	0	-
a/ 186	C. Janowski	129	do.	626	114	1.5	127	305	33	200	-	0	291
187	Bruno Derkowski	30	do.	198	18	3.9	53	140	9	26	-	19	62
188	Abbot Hill	85	July 14, 1942	-	-	-	-	293	12	21	-	30	-
189	E. J. Tucker	110±	do.	-	-	-	-	220	25	13	-	22	-
190	Albert Kitowski	140±	do.	-	-	-	-	299	9	51	-	0	-
191	Texas Highway Department	1,674	July 13, 1942	377	10	1.3	139	306	.7	55	1.6	.0	30
192	Steve Springer	37	do.	368	87	5.1	48	268	8	69	-	19	238
193	Pete Brzymialkiewicz	91	July 14, 1942	-	-	-	-	287	7	47	-	0	-
194	Lockhart Est.	135+	July 13, 1942	-	-	-	-	256	7	92	-	7.0	-
a/ 195	Routt and Schaer	135±	Nov. 17, 1942	343	14	4.6	126	342	4	31	-	0	53
197	Abe Sampson	211	do.	347	104	4.6	28	342	3	33	.1	1.0	278
198	do.	190	do.	289	62	4.6	50	311	2	17	.1	0	173
a/ 200	Pulawski School	21	do.	233	66	5.8	19	256	4	11	.2	1.0	189
201	Abe Sampson	190±	do.	365	96	5.8	43	372	2	35	-	0	264
202	William Krolchek	31	do.	422	99	3.4	57	348	9	42	-	41	262
203	San Antonio Loan and Trust Co.	65	Nov. 10, 1942	336	36	4.1	27	220	5	35	-	71	233
a/ 204	Farmers National Bank	-	do.	365	57	12	75	334	12	20	.2	0	192
205	Robert Schaer	21	do.	793	118	7.1	184	500	32	132	-	29	324
208	Union Grove School	27	do.	331	115	3.4	29	348	6	45	.4	11	302

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 45.
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Partial analyses of water from wells and springs in Washington County--Continued

Results are in parts per million.

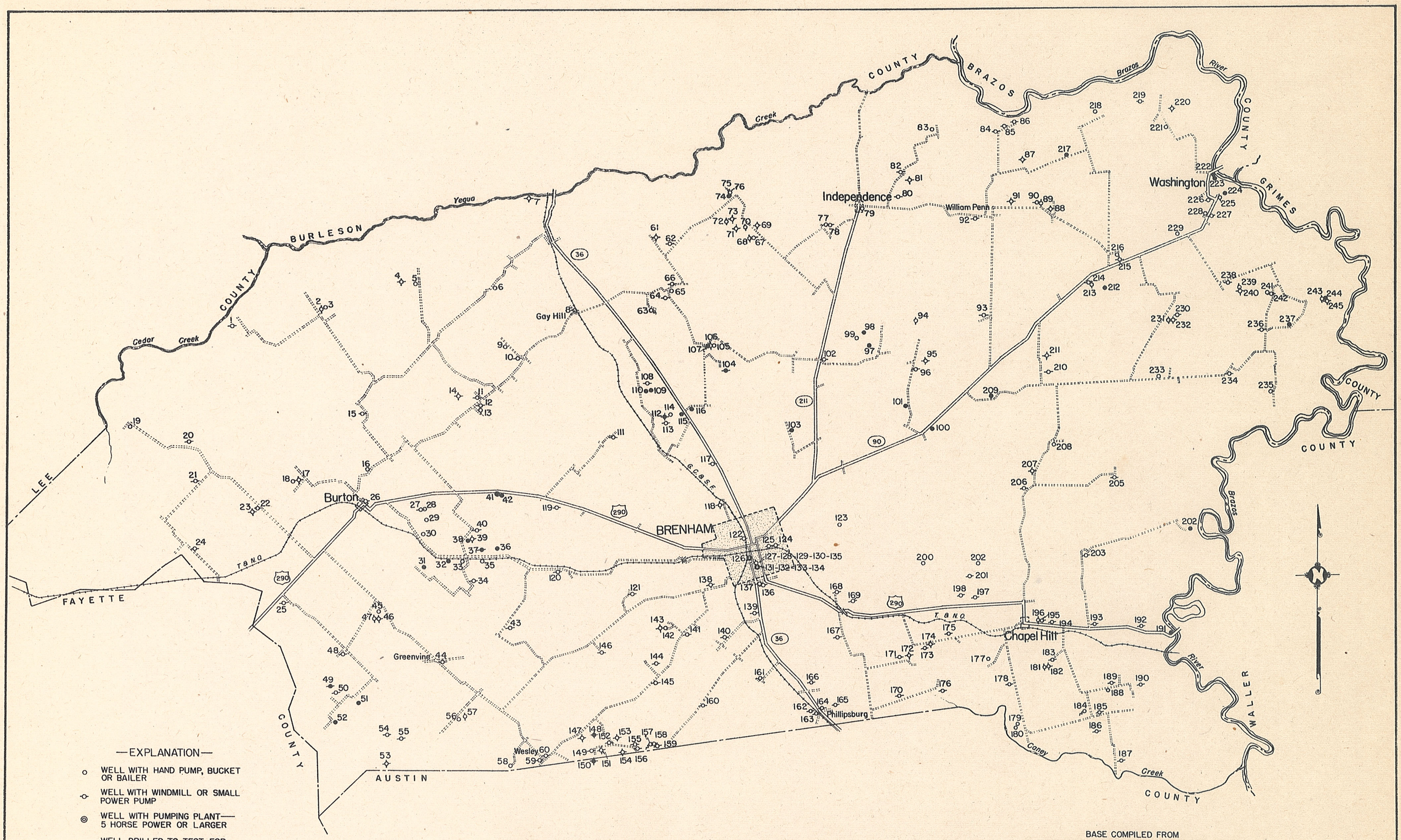
Well No.	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
209	Washington County	-	Nov. 10, 1942	260	79	2.2	23	293	3	9.0	-	0	206
210	John Sommers	135+	Oct. 20, 1942	231	39	2.2	20	305	2	12	-	6.0	231
212	O. L. Sommers	7½	Nov. 19, 1942	157	51	3.4	1.6	146	2	3.0	-	24	142
214	do.	30	do.	516	120	7.1	59	384	23	36	-	32	329
216	Mt. Zion School	130	Oct. 20, 1942	235	35	3.4	23	237	3	23	-	7.0	207
217	Washington County	-	Sept. 14, 1942	429	113	4.9	45	370	14	45	-	25	303
218	St. Mathew Church	19	Oct. 20, 1942	303	91	3.4	21	275	3	29	-	16	242
219	Gus Fi ld r	135	do.	266	30	5.3	13	293	3	10	.2	0	224
221	Mt. Fall School	40	do.	719	256	5.3	4.6	336	3	276	.2	8.0	664
222	Moore Bros.	245	July 1, 1942	338	102	1.5	53	366	26	34	0	1.0	261
223	do.	340	do.	459	70	4.5	33	364	25	42	.2	0	193
a/224	Washington State Park	412	do.	497	43	3.2	125	392	22	34	.2	0	120
226	F. W. Wellman	32	do.	543	120	1.5	38	415	21	72	-	41	306
227	W. F. Borgstedte	90+	do.	334	90	1.5	41	329	3	29	-	2.0	231
228	Mrs. Lizzie Sadler	112	do.	324	106	3.9	16	342	7	16	-	3.0	282
229	Major Williams	40	do.	379	90	1.5	55	366	9	10	-	33	231
230	C. W. Boehne	125	Oct. 23, 1942	442	99	3.4	63	214	13	136	.2	17	262
233	Goodwill School	23	Oct. 22, 1942	342	96	7.1	30	317	4	43	.3	1.0	269
234	Theodore Borgstedte	65	do.	361	104	5.3	29	354	3	30	-	15	284
235	Brown's College	46	do.	564	146	13	52	336	11	169	.1	8.0	413
236	Joe Baldridge	124	do.	357	63	4.6	63	293	3	59	-	5.0	188
237	do.	500+	do.	443	10	5.3	169	415	3	51	.5	0	49
238	H. C. Buck	160	Oct. 23, 1942	271	71	3.4	34	293	3	15	-	1.0	192
a/241	Henry Wehmeyer	43	Oct. 22, 1942	769	120	7.1	163	237	25	231	-	32	329
242	do.	35	do.	717	146	3.3	106	231	17	279	.3	72	400
244	do.	700	do.	333	24	7.1	126	299	3	79	1.4	0	89

a/ Analyses of water from selected wells and springs are given in milligram equivalents per liter on page 45.
b/ Less than 2 parts per million.
c/ Analyzed by State Health Department.

Chemical Analyses--Continued

Results are in milligram equivalents per liter

Well	Owner	Depth of well (ft.)	Date of collection	Calcium (Ca)	Magnesium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicarbonate (HCO_3)	Sulfate (SO_4)	Chloride (Cl)	Fluoride (F)	Nitrate (NO_3)	Total hardness as $CaCO_3$ (calc.)
6	Charlesville School	15	Nov. 11, 1942	0.24	0.08	0.83	0.40	0.23	0.51	0.01	0	0.32
9	H. W. Wendt	180	Sept. 15, 1942	8.09	.39	1.56	5.64	.21	4.15	.02	.0	8.46
19	A. G. Loewe	114	Nov. 12, 1942	6.34	1.96	11.47	1.80	9.70	3.24	.01	.02	8.30
26	John D. Dixon	247	Nov. 17, 1942	4.96	.28	1.40	5.50	.10	1.04	-	0	5.24
27	R. A. Fuchs	126	Nov. 20, 1942	4.80	.48	1.84	5.80	.35	.96	.03	0	5.28
36	Charles Hodde	161	July 23, 1942	4.04	.41	2.59	5.72	.21	1.10	.01	.00	4.45
38	E. G. Weinert	192	do.	4.14	.38	2.36	5.66	.29	.90	.03	.00	4.52
41	W. L. Thomas	150±	July 17, 1942	5.14	.37	1.20	5.61	.25	.82	.03	.00	5.51
51	Mrs. Ernest Menn	165	July 20, 1942	4.99	.53	3.83	6.03	.37	2.99	.01	.00	5.57
56	Emil Drew	32	July 21, 1942	5.26	.52	1.43	5.70	.35	.90	.02	.24	5.78
63	B. P. Sayles	Spring	July 2, 1942	3.22	.32	4.75	3.80	.35	4.06	.03	.05	3.54
78	E. F. Clay	66	Nov. 16, 1942	5.96	.28	1.14	5.10	.12	.85	-	1.31	6.24
84	F. C. Sommers	320	Sept. 14, 1942	4.09	.29	2.39	5.74	.29	.73	.01	.00	4.38
97	Martin H. Sommers	222	Oct. 21, 1942	4.86	.88	1.40	5.50	.52	1.07	.04	.01	5.74
100	Henry Wellmann	434	July 1, 1942	4.84	.37	1.61	5.74	.10	.96	.02	.00	5.21
108	Leo Arndt	80	July 31, 1942	5.14	.42	1.20	6.00	.15	.59	.02	0	5.56
126	Texas Public Utilities Corp.	785	June 23, 1942	4.19	.31	2.38	5.70	.44	.73	.01	.00	4.50
131	City of Brenham No. 5	1,515	do.	1.65	.09	4.93	5.87	.27	.51	.00	.02	1.74
132	City of Brenham No. 6	200	do.	6.64	.29	1.10	5.92	.42	1.18	.01	.50	6.93
137	George Stulken	600±	Nov. 10, 1942	4.69	.39	1.51	5.36	.23	.99	.01	.00	5.03
171	A. W. Kelling	148	June 30, 1942	4.32	.22	2.02	5.70	.08	.76	-	.02	4.54
186	C. Janowski	129	July 13, 1942	5.70	.12	5.51	5.00	.69	5.64	-	0	5.32
195	Routt and Schaer	135±	Nov. 17, 1942	.68	.38	5.49	5.60	.03	.87	-	0	1.06
200	Pulawski School	21	do.	3.30	.48	.84	4.20	.08	.31	.01	.02	3.78
204	Farmers National Bank	-	Nov. 10, 1942	2.86	.98	3.28	6.30	.25	.56	.01	0	3.34
224	Washington State Park	412	July 1, 1942	2.15	.26	5.45	6.43	.46	.96	.01	.00	2.41
241	Henry Wehmeyer	43	Oct. 22, 1942	6.00	.58	7.09	4.70	.52	7.93	-	.52	6.58



—EXPLANATION—

- WELL WITH HAND PUMP, BUCKET OR BAILER
- WELL WITH WINDMILL OR SMALL POWER PUMP
- WELL WITH PUMPING PLANT— 5 HORSE POWER OR LARGER
- WELL DRILLED TO TEST FOR OIL OR GAS
- UNUSED WELL
- FLOWING WELL
- SPRING
- (290) U.S. HIGHWAY
- (36) STATE HIGHWAY

MAP OF WASHINGTON COUNTY, TEXAS

SHOWING WATER WELLS AND SPRINGS

Scale
0 1 2 3 4 5 Miles

BASE COMPILED FROM
HIGHWAY PLANNING SURVEY COUNTY ROAD MAP
AND FIELD NOTES

TEXAS BOARD OF
WATER ENGINEERS
IN COOPERATION WITH
U. S. GEOLOGICAL SURVEY