

TEXAS BOARD OF WATER ENGINEERS

C. S. Clark, Chairman

A. H. Dunlap, Member

J. W. Pritchett, Member



GRIMES COUNTY, TEXAS

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

MARCH 1943

GRIMES COUNTY, TEXAS

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

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ILLUSTRATION

Map of Grimes County, showing water wells and springs

GRIMES COUNTY, TEXAS

Introduction

By

G. H. Cromack

This publication contains records of 212 wells and 6 springs, drillers' logs of 22 wells, summary descriptions of electric logs of 5 wells, and results of chemical analyses of water from 168 wells and 6 springs in Grimes County, Texas.

It also includes a map showing the location of the wells listed, each being given a number on the map corresponding to the number assigned to it in the records. The field data were obtained by the writer in November and December 1942 and January 1943, 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 30 to 36. For the convenience of those who prefer a different form of expression the analyses of 25 samples are given in milligram equivalents per liter on page 37.

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 quality and chemical character of water yielded by these wells and springs.

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 Grimes County, Texas
All wells are drilled unless otherwise stated in remarks

Well	Distance from Iola	Owner	Driller	Date	Depth com- plete- ted (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
1	4 $\frac{1}{2}$ miles northwest	J. P. Yeager No. 1	Hunt oil Co.	1942	5,345	--	--
2	4 $\frac{1}{4}$ miles northwest	W. H. Knott	D. E. Vernon	1941	166	4 $3\frac{1}{2}$	0
3	3 $\frac{1}{4}$ miles northwest	G. B. Post	do.	1940	223	3	0
4	4 $\frac{1}{4}$ miles north	Magnolia Pipe Line Co.	do.	1940	160	4 $2\frac{1}{2}$	--
5	4 $\frac{1}{4}$ miles northeast	G. N. McWhorter		old	64	6	2.0
6	2 $\frac{1}{4}$ miles northeast	A. P. Isbell	--Blackstock	1922	251	3	1.0
7	1 $\frac{3}{4}$ miles northeast	J. J. Darby	J. E. Cook	1940	195	4	--
8	1 $\frac{1}{4}$ miles north	B. E. Maxwell Est.	-- Blackstock	1922	250 ⁺	3	0
9	1 $\frac{3}{4}$ miles northwest	A. L. Wilson	D. E. Vernon	1919	268	3, 2	0
10	In Iola	Sun Utility Co.	do.	1928	260	6	3.0
11	do.	do.	do.	1925	402	5-5/8, 4	2.0
12	do.	A. O. Grant	-- Blackstock	1914	260	3	--
13	$\frac{3}{4}$ miles southwest	W. A. Boney	A. L. Taylor	1938	155	--	--
14	1 $\frac{3}{4}$ miles southwest	W. A. Boney No. 1	Production Service Co.	1942	5,315	--	--
15	6 $\frac{1}{2}$ miles southwest	J. C. Chaney No. 1	Fred F. Harris	1936	3,019	4-	--
16	9 miles southwest	M. C. Peters	J. E. Cook	1941	450	3	0.5
17	8 $\frac{1}{2}$ miles southwest	do.	do.	1941	471	3	1.3
18	8 miles southwest	J. W. Rice	Bud Williams	1927	82	6	2.0
19	6 $\frac{1}{2}$ miles southwest	M. C. Peters	--	Old	198	4	0
20	2 $\frac{1}{2}$ miles southeast	John Snooks	D. E. Vernon	1920	306	3	0

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

b/ Pump or lift: T, turbine; A, air lift; C, cylinder; B, rope and bucket.

Power: E, electric; G, gasoline engine; O, oil engine; S, stream engine; W, windmill; H, hand. Number indicates horsepower.

c/ P, public supply; D, domestic; S, stock; Ind. industrial; Irr. irrigation; RR, railroad; Sw, swimming pool; N, not used.

Wells and springs are shown in a table of analyses on pages 50 to 52.

Chemical analyses of water from some of these

Water Level	Below	Date of	Method	Use	Remarks	Well
	measuring	measured	of	water	(ft.)	measured
1	--	--	--	Oil test. Electrical Log d/ shows sand or sandy zones at 310-370 and 570-600 feet; thin bedded shales or clays and sand at 850-1, 150 feet and zones at 1,270-1, 300 feet.	1940 Oct. 17, G,W S Casting: 146 feet sand at 1,270-1, 300 feet.	2 e/ 40
2	e/ 40	1941	G,E, D,S	Casting: 213 feet of 4-inch. Screen: $\frac{3}{8}$ -inch from 150 to 166 feet. 213 to 223 feet.	1940 Oct. 17, G,W S Casting: 146 feet sand at 1,270-1, 300 feet.	3 e/ 30
3	e/ 30	1940	G,E, D,S	Casting: 213 feet of 3-inch. Screen: $\frac{3}{8}$ -inch from 146 to 166 feet.	1941 Oct. 17, G,W S Casting: 146 feet sand at 1,270-1, 300 feet.	2 e/ 40
4	--	--	G,E, D,S	Casting: 150 feet of 4-inch. Screen: $\frac{3}{8}$ -inch from 150 to 166 feet. 213 to 223 feet.	1943 Jan. 10, B,H D,S Casting: 150 feet of 4-inch. Screen: $\frac{3}{8}$ -inch from 150 to 166 feet. Located in Madison County near Grimes County line. Grained sand.	5 58.69 Jan. 10,
5	58.69	Jan. 10,	B,H D,S	Water reported in fine-line. Located in Madison County near Grimes County line. Grained sand.	1943 Jan. 10, B,H D,S Casting: 150 feet of 4-inch. Screen: $\frac{3}{8}$ -inch from 150 to 166 feet. Located in Madison County near Grimes County line. Grained sand.	4
6	95.28 Jan. 15,	G,H	N	Not used for several years.	1943 Jan. 15, G,H D,S Casting: 220 feet of 3-inch; 38 feet of 2-inch. Screen from 258 to 268 feet. Originally drilled to 228 feet. Reworked sand depended in 1942.	10 104.31 Dec. 11, A,O, P
7	--	--	G,W D,S		1942 Jan. 15, G,H D,S Casting: 250 feet of 6-inch. No screen. This well and well 11 supply town of Tola.	11 103.79 do. A,O, P
8	e/ 100	1922	G,H D,S		1942 Jan. 15, G,H D,S Casting: 300 feet of 5-5/8-inch; 102 feet of 4-inch. Screens from 300 to 390 to 402 feet at 370-570 feet and sand at 1,150-1, 300 feet.	12 --
9	e/ 80	Apr.	G,W D,S		Oil test. Electrical Log d/ shows a sandy zone at 370-570 feet and sand at 1,150-1, 300 feet.	14 --
10	104.31 Dec. 11, A,O, P	Casting: 250 feet of 6-inch. No screen. This well and well 11 supply town of Tola.	1942 Jan. 15, G,H D,S Casting: 300 feet of 5-5/8-inch; 102 feet of 4-inch. Screens from 300 to 390 to 402 feet at 370-570 feet and sand at 1,150-1, 300 feet.	15 --		
11	103.79 do. A,O, P	Casting: 300 feet of 5-5/8-inch; 102 feet of 4-inch. Screens from 300 to 390 to 402 feet at 370-570 feet and sand at 1,150-1, 300 feet.	1942 Jan. 15, G,H D,S Casting: 300 feet of 5-5/8-inch. Well 11 starts at 500 feet.	16 + 6.85 Dec. 14, FFlows S		
12	--	--	G,W D,S		Oil test. Electrical Log d/ starts at 500 feet.	17 + 20.25 do. FFlows S
13	--	--	G,W D,S		Oil test. Electrical Log d/ shows a sandy zone at 370-570 feet and sand at 1,150-1, 300 feet.	18 62.96 Dec. 12, B,H D,S
14	--	--	--		Oil test. Electrical Log d/ shows a sandy zone at 370-570 feet and sand at 1,150-1, 300 feet.	19 e/ 80 Dec. 14, G,W D,S
15	--	--	--		Oil test. Electrical Log d/ starts at 500 feet.	20 e/ 70 1920 Note N Casting: 300 feet of 3-inch. No screen. Gas- ute 5 feet above ground. Well yields small amount of gas. Temperature 69 $^{\circ}$ F.
16	+ 6.85 Dec. 14, FFlows S	Casting: 300 feet of 5-5/8-inch. Well 11 yields small amount of gas. Temperature 72 $^{\circ}$ F.	1942 Jan. 14, G,W D,S			
17	+ 20.25 do. FFlows S	Screen from 410 to 450 feet. Measured flow 2 gallons a minute 5 feet above ground. Well yields small amount of gas. Temperature 72 $^{\circ}$ F.	1942 Jan. 14, G,W D,S			
18	62.96 Dec. 12, B,H D,S	Screen from 410 to 450 feet. Measured flow 2 gallons a minute 5 feet above ground. Well yields small amount of gas. Temperature 72 $^{\circ}$ F.	1942 Jan. 14, G,W D,S			
19	e/ 80 Dec. 14, G,W D,S	Screen from 410 to 450 feet. Measured flow 2 gallons a minute 5 feet above ground. Well yields small amount of gas. Temperature 69 $^{\circ}$ F.	1942 Jan. 14, G,W D,S			
20	e/ 70 1920 Note N Casting: 300 feet of 3-inch. No screen. Gas-	Alexander Denessen, 1914.				

Number under which well is listed in U. S. Geological Survey Water-Supply Paper 235.

Water level reported by owner or driller.

In files of State Board of Water Engineers at Austin, Texas.

Records of wells and springs in Grimes County--Continued

Well	Distance from Bedias	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
21	2 $\frac{1}{4}$ miles northwest	G. G. Wooderson	J. E. Cook	1940	225	4	--
22	3 miles northwest	W. S. Brown	D. E. Vernon	1925	125	6	1.0
23	4 $\frac{1}{2}$ miles north	G. A. Bishop	do.	1939	163	4, 2	0
24	3 $\frac{3}{4}$ miles northeast	Raymond Bracewell	--	Old	92	12	0.2
25	5 $\frac{3}{4}$ miles northeast	E. F. Bracewell	--	Old	19	30	2.5
26	do.	W. W. Crowson	D. E. Vernon	1938	357	4, 2	0
27	1/2 mile southeast	W. H. Myers	do.	1936	391	4, 2	0
28	In Bedias	Sun Utility Co.	Layne-Texas Co.	1934	505	6- 5/8, 4 $\frac{1}{2}$	0
29	5 $\frac{1}{4}$ miles southwest	V. H. Blair	--	Old	19	30	2.5
30	5 $\frac{1}{2}$ miles southeast	Mrs. F. M. Davis	--	Old	48	42	2.5
31	5 miles southeast	Thomas Shields	--	Old	18	36	2.5

Well	Distance from Shire	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
32	6 $\frac{1}{4}$ miles northeast	Geo. Clark	--	1900	44	30	2.5
33	5 $\frac{1}{2}$ miles northeast	C. W. Thomas	--	1880	21	30	1.7
34	4 $\frac{1}{4}$ miles northeast	J. R. Spell	D. E. Vernon	1933	228	4	0
35	2 $\frac{1}{2}$ miles northeast	Guy E. Foster	--	Old	63	36	3.5
36	3 $\frac{1}{4}$ miles northeast	Atlantic Pipe Line Co.	D. E. Vernon	1928	160	4	--
37	4 $\frac{1}{4}$ miles north	A. E. McGilberry	--	Old	25	48	2.0
38	3 $\frac{1}{2}$ miles north	L. Dodd No. 1	Jordan Drilling Co.	1940	3,769	--	--
39	2 miles northwest	E. H. Boulttinghouse	--	1938	56	30	3.0
40	3 $\frac{1}{2}$ miles northwest	Mrs. Lois Hall	--	Old	15	36	2.0
41	4 $\frac{1}{4}$ miles northwest	R. D. Hale	--	1940	70	6	0
42	5 miles northwest	Trinity and Brazos Valley Ry.	Layne-Bowler Co.	1906	109	8- 5/8	0
43	6 $\frac{1}{4}$ miles northwest	H. H. Polk	--	1940	26	6	1.5

Well	Water level		Method of lift <u>b/</u>	Use of water <u>c/</u>	Remarks
	Below measuring point (ft.) <u>a/</u>	Date of measure- ment			
21	--	--	C,W	D,S	
22	25.78	Jan. 10, 1943	B,H	S	
23	e/ 50	1939	C,G, $\frac{3}{4}$	D,S	Casing: 130 feet of 4-inch; 10 feet of 2-inch. Screen from 153 to 163 feet.
24	51.43	Jan. 10, 1943	C,H	D,S	
25	14.98	do.	C,H	D,S	Dug.
26	e/ 70	1938	C,W	D,S	Casing: 200 feet of 4-inch; 145 feet of 2-inch. Screen from 345 to 357 feet.
27	e/ 80	Apr. 1942	C,G, $1\frac{3}{4}$	D,S	Casing: 181 feet of 4-inch. Screen from 381 to 391 feet. Original depth 341 feet. Deepened in
28	e/ 56	July 31, 1942	C,E, 5	P	Casing: 223 feet of 6-5/8-inch; 272 feet 1942. of 4 $\frac{1}{2}$ -inch. Screens from 458 to 468 and 471 to 492 feet. Supplies town of Bedias. See log.
29	18.15	Jan. 10, 1943	B,H	D,S	Dug.
30	25.71	Dec. 17, 1942	B,H	D,S	Do.
31	15.69	Jan. 10, 1943	B,H	D,S	Do.

Well	Water level		Method of lift <u>b/</u>	Use of water <u>c/</u>	Remarks
	Below measuring point (ft.) <u>a/</u>	Date of measure- ment			
32	44.14	Dec. 17, 1942	B,H	D,S	Dug.
33	6.21	do.	B,H	D,S	Do.
34	e/ 60	1933	C,W	D,S	
35	46.37	Dec. 17, 1942	C,W	D,S	Dug.
36	--	--	C,G, 2	D,S	Screen from 140 to 160 feet. Supplies camp.
37	19.79	Dec. 17, 1942	B,H	D,S	Dug.
38	--	--	--	--	Oil test. Electrical log d/ starting at 228 feet shows several thin sands between 228 and 700 feet.
39	46.50	Dec. 17, 1942	B,H	D,S	Dug.
40	12.79	Dec. 15, 1942	B,H	D,S	Do.
41	e/ 45	1940	C,H	S	Bored
42	e/ 60	1906	None	N	Formerly supplied 100 gallons a minute to loco- motive boilers. Deussen No. 388 f/. Caved and
43	22.12	Dec. 15, 1942	B,H	D,S	abandoned.

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Records of wells and springs in Grimes County--Continued

Well	Distance from Shiro	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
44	7 $\frac{1}{2}$ miles northwest	Sinclair Pipe Line Co.	--	1922	404	8, 6	0
45	5 $\frac{1}{2}$ miles northwest	E. B. Crawford	--	1923	20	30	2.5
46	3 $\frac{1}{2}$ miles west	G. C. Wilson	D. E. Vernon	1940	160	3	0
47	2 miles southwest	Mrs. Fannie Fuqua	--	Old	39	48	3.0
48	In Shiro	Shiro Gin Co.	-- Ledwell	1913	325	6	0
49	do.	Sun Utility Co.	--	1912	320	4	2.3
50	1 $\frac{1}{4}$ miles east	A. Carrington Est.	--	1890	23	48	2.5
51	3 $\frac{1}{2}$ miles east	W. F. Lucas	--	1924	32	24	1.5
52	5 miles southeast	J. M. Hurry	--	1911	65	8	2.5
53	3 $\frac{1}{2}$ miles southeast	Bridgous O'Neil	--	1921	22	6	1.5
54	1 $\frac{3}{4}$ miles south	W. L. Statham	--	1910	30	30	2.0
55	3 $\frac{1}{2}$ miles southwest	Walter Nowak	--	Old	43	30	3.0
56	4 $\frac{1}{2}$ miles southwest	Jesse Floyd	Felix Ryan	1941	265	3	0
57	6 $\frac{1}{2}$ miles southwest	County School District	--	1937	40	30	3.0
58	6 $\frac{3}{4}$ miles southwest	Joe Walton	--	1930	40	30	2.5
59	7 miles southwest	Fred W. Mueller	Felix Ryan	1941	288	3	--
60	5 miles southwest	W. S. McIntyre Jr.	--	Old	63	36	4.0
61	6 miles southwest	Fritz Horn	--	1900	35	30	2.5
62	4 $\frac{3}{4}$ miles south	A. D. Kennard Est.	--	1938	36	30	2.5
63	4 $\frac{1}{2}$ miles southeast	W. S. Brown, Jr.	--	Old	41	30	3.0
64	5 $\frac{3}{4}$ miles southeast	T. J. Heynie	Seismograph Crew	1939	192	4	0
65	do.	S. B. McKinney	--	1922	450+	4	0
66	6 miles southeast	Magnolia Pipe Line Co.	--	1939	160	4	2.0
67	do.	T. H. Lee	Tom Kesler	1922	180	3	1.4
68	7 $\frac{1}{4}$ miles southeast	O. A. Hamilton	--	--	65	8	2.5
69	7 $\frac{1}{2}$ miles southeast	do.	James H. Woodard	1934	350	6	--
70	do.	do.	do.	1934	3,524	--	--

Well	Water level	Date of measuring point (ft.) a/	Method of lift b/	Use of water c/	Remarks
	Below measuring point (ft.) a/				
44	e/ 80	1939	C,E, 3	D,S, Ind	Casing: 374 feet of 8-inch. Screen: 6-inch from 374 to 404 feet. Supplies camp and pump station.
45	15.29	Dec. 15, 1942	B,H	D,S	Dug.
46	e/ 80	1940	C,G,-	E,S, Irr	Casing: 130 feet of 3-inch; 20 feet of 2-inch. Screen from 150 to 160 feet. Supplies nursery.
47	22.72	Dec. 17, 1942	B,H	D,S	Dug.
48	e/ 20	1913	C,G, 3	Ind	Supplies gin in season.
49	35.47	Dec. 5, 1942	A,O, 15	P	Supplies town of Shiro. Temperature $72\frac{1}{2}$ F.
50	17.64	Dec. 16, 1942	B,H	D,S	Dug.
51	27.21	do.	B,H	D,S	Do.
52	61.53	do.	B,H	D,S	Bored.
53	20.66	do.	B,H	D,S	Do.
54	19.27	Dec. 17, 1942	B,H	D,S	Dug.
55	16.64	Dec. 15, 1942	B,H	D,S	Do.
56	e/ 60	1941	C,W	S	
57	39.79	Dec. 11, 1942	B,H	P	Dug. Supplies school.
58	39.55	do.	B,H	D,S	Dug.
59	--	--	C,E, $\frac{1}{4}$	D,S	Supplies dairy.
60	42.72	Dec. 15, 1942	B,H	D,S	Dug.
61	18.51	Dec. 4, 1942	B,H	D,S	Do.
62	35.19	Dec. 15, 1942	B,H	D,S	Do.
63	35.99	Dec. 16, 1942	B,H	D,S	Do.
64	e/ 50	1939	C,E, 1/3	D,S	Screen from 172 to 192 feet.
65	e/ 18	1941	C,E, $\frac{3}{4}$	D,Ind	Screen from 400 to 450 feet. Formerly supplied gin. Temperature 72° F.
66	7.66	Dec. 16, 1942	A,-	D,Ind	Screen from 140 to 160 feet. Yield reported 35 gallons a minute. Supplies pump station and camp.
67	47.23	do.	None	N	Not used since 1938.
68	50.98	Dec. 4, 1942	B,H	D,S	Bored.
69	--	--	None	N	Formerly supplied drilling rig. Casing obstructed at 40 feet.
70	--	--	--	--	Oil test. See log.

Records of wells and springs in Grimes County - Continued

Well	Distance from Shiro	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
71	7½ miles south	G. B. Kennard	--	1936	34	30	3.0
72	6½ miles south	T. J. Haynie	--	Old	47	36	2.5
73	3 miles northeast	Fritz Miller, Sr.	--	1907	17	30	3.0
74	8½ miles southwest	Henry Pistler	--	1928	18	36	0
75	do.	Louis Becker	--	1840	39	42	2.5
<hr/>							
Well	Distance from Carlos	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
76	6½ miles southeast	Lillian B. Roan	--	Old	32	48	3.0
77	5½ miles southeast	Sam Busa Est.	--	1910	34	36	3.0
78	4½ miles southeast	County Road	Seismograph Crew	1941	60	4	3.0
79	3 miles southeast	J. L. Allen	--	Old	23	36	2.0
80	2½ miles southeast	Mrs. J. T. Kolbachinski	--	1941	9	36	1.0
81	2½ miles southeast	Groer Brothers	Harris and Holt	1938	2,769	8	1.0
82	2½ miles east	do.	Carlos Syndicate	1939	2,825	--	--
83	4½ miles northeast	Mrs. J. E. Henderson Est.	--	--	Spring	--	--
84	1½ miles north	J. W. Garvin	--	1890	40	36	2.5
85	4½ miles northeast	S. C. Hicks	--	1900	27	30	3.0
86	5½ miles northwest	E. F. Trant	E. F. Trant	1918	112	8	0.5
87	4 miles northwest	R. O. Blount	-- Jarvis	1840	20	72	3.0
88	4½ miles northwest	R. L. Lavender	N. M. Biglow	1906	1,042	8	1.7
89	3½ miles northwest	Kemp and Gorbett	Layne-Bowler Co.	1904	760	--	--
90	5½ miles west	W. C. Gillon	--	--	--	4	--
91	5 miles west	do.	--	--	36	6	3.0
92	4½ miles west	do.	Humble Oil Co.	1932?	450±	4	1.5
93	3½ miles west	Mineral Springs Mining and Development Co.	--- Gilliam	1890	1,000	--	0
94	3½ miles west	do.	--	--	Spring	--	--

Well	Water Level	Date of	Method	Use	Remarks
measuring	measuring	of	of	water	
71	33.08 Dec. 4,	B,H	D,S	Dug.	
72	28.53 do.	C,W	D,S	Do.	
73	12.04 Dec. 3,	B,H	D,S	Do.	
74	e/ 15 1942	C,H	D	Do.	
75	27.56 Dec. 11,	B,H	D,S	Do.	
76	15.03 Dec. 9,	B,H	D,S	Dug.	
77	31.51 do.	B,H	D,S	Do.	
78	+ 3.09 do.	Flows	D,S	Gassing: 14 feet of 4-inch. Measured flow 17 gallons a minute 3 feet above ground. Temperature turbo 69 $\frac{1}{2}$ F.	
79	9.86 Dec. 12,	B,H	D,S	Dug.	
80	5.38 Dec. 9,	B,H	D,S	Do.	
81	+ do.	Flows	S	Converted oil test. Estimated flow 2 gallons a minute. Electrolytic Log d/ shows sandy zone at oil test. 280 to 350 feet. Temperature 70 $\frac{1}{2}$ F.	
82	-- --	--	--	Oil test.	
83	+ Dec. 11,	Flows	S	Estimated flow 30-40 gallons a minute from con- crete box. Deussen No. 393 F/. Known as Kellum Springs.	
84	20.48 Dec. 9,	B,H	D,S	Dug.	
85	19.02 Dec. 14,	B,H	D,S	Do.	
86	33.98 Dec. 12,	None	N	Not used since 1925. Water reported to be highly mineralized for domestic use.	
87	13.24 Dec. 14,	B,H	D,S	Dug. Sulphur water reported in nearby area.	
88	12.06 Dec. 12,	C,H	N	Casing obstructed at 35 feet. Deussen No. 290 F/ done well at 50 feet.	
89	-- --	--	None	N	Deussen No. 289 F/.
90	-- --	--	C,W	S	
91	26.65 Dec. 12,	B,H	D,S	Bored.	
92	+ 7.06 do.	Flows	S	Measured flow 2 $\frac{1}{2}$ gallons a minute at level 4 $\frac{1}{2}$ feet above ground. Formerly supplied by	
93	+ 8 1906	--	--	--	Deussen No. 378 F/. Caved and abandoned. Rig.
94	+ Dec. 9,	Flows	D,S	Measured flow 2 $\frac{1}{2}$ gallons a minute. Known as Lamb Spring. Temperature 69 $\frac{1}{2}$ F.	

Records of wells and springs in Grimes County--Continued

Well	Distance from Carlos	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
95	2 $\frac{3}{4}$ miles west	J. W. Campbell Est.	Tom Little	1905	760	--	--
96	5 miles southwest	J. A. Moody	D. E. Vernon	1939	162	4	0
97	4 $\frac{1}{4}$ miles south	J. L. Allen	--	--	Spring	--	--
98	4 $\frac{3}{4}$ miles south	W. E. Moody	D. E. Vernon	1940	167	4, 2	1.6
99	do.	do.	Seismograph crew	1941	170	4	0
Well	Distance from Navasota	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
100	6 $\frac{3}{4}$ miles northwest	J. A. Moody	--	1903	76	4	0
101	7 miles north	County Road	Seismograph crew	1939	60	3	0
102	7 miles northeast	W. H. Fuqua	--	1892	38	36	2.0
103	7 $\frac{3}{4}$ miles northeast	Geo. Boehn	--	--	40	30	1.0
104	9 $\frac{1}{4}$ miles northeast	Billie Becker	Billie Becker	1935	109	4	0
105	9 miles northeast	Sun Utility Co.	--	1911	700+	8, 4	2.5
106	do.	C. W. Becker	Camp and Rodenhamer	1913	611	4	2.8
107	8 $\frac{1}{2}$ miles northeast	St. Stanislaus Catholic Church	--	1911	95	30	0.7
108	6 miles northeast	B. F. Heil	--	--	26	42	3.0
109	5 $\frac{1}{4}$ miles north	W. H. Fuqua	Seismograph crew	1939	76	3	0
110	4 $\frac{1}{2}$ miles north	Peters and Crittenden	--	--	19	30	2.0
111	4 $\frac{1}{4}$ miles northeast	G. E. Rodes	--	--	19	36	0.5
112	6 miles northeast	Mallard and Hixson	Walter Smith	1940	168	4, 2 $\frac{1}{2}$	0
113	do.	Costromer Franklin	Costromer Franklin	1941	16	36	3.0
114	5 miles northeast	Tom Walkoviak	Walter Smith	1940	120	4	0
115	2 $\frac{3}{4}$ miles northeast	Miss Georgie Swanson	D. E. Vernon	1940	172	3, 2	--
116	2 $\frac{1}{2}$ miles northeast	G. C. Scott	do.	1940	300	3, 2	0
117	2 miles northeast	Ira M. Floyd	D. E. Vernon	1939	247	4, 2	0
118	1 mile north	W. S. McIntyre, Jr.	do.	1939	200	4, 2	0

Well	Water level Below measuring point (ft.) a/	Date of measurement	Method of lift b/	Use of water c/	Remarks
95	--	--	--	--	Oil test. Deussen No. 391 f/. Caved and abandoned.
96	e/ 60	July 10, 1939	C,W	D,S	Casing: 152 feet. Screen from 142 to 162 feet.
97	+	Dec. 8, 1942	Flows	S	Estimated combined flow from 8 openings 30 to 40 gallons a minute. Deussen No. 392 f/. Known as Piedmont Springs. Supplied large hotel and bath house during Civil War.
98	19.79	do.	None	N	Casing: 127 feet of 4-inch; 30 feet of 2-inch. Screen from 157 to 167 feet.
99	e/ 18	1941	C,W	D,S	Screen from 152 to 170 feet.

Well	Water level Below measuring point (ft.) a/	Date of measurement	Method of lift b/	Use of water c/	Remarks
100	24.35	Dec. 8, 1942	None	N	Caved at 25 feet.
101	+	do.	Flows	N	Measured flow $2\frac{1}{2}$ gallons a minute. Temperature 70° F.
102	32.43	do.	C,S	D,S	Dug.
103	35.45	do.	B,H	D,S	Do.
104	e/ 60	Sept. 1942	C,G, $2\frac{1}{2}$	D,S	Screen from 105 to 109 feet. Driller reports total thickness of sand not penetrated.
105	90.24	Dec. 4, 1942	A,0, 15	P	Casing: 269 feet of 8-inch; 4-inch from 269 to bottom. Four-inch screens from 269 to 289 feet and 20 feet on bottom. The 4-inch casing is obstructed by a hammer near top of 4-inch and present yield presumably is from upper sand. Supplies town of Anderson. Temperature 72° F.
106	80.11	Dec. 11, 1942	A,S	D,Ind	Screen from 593 to 611 feet. Water sand reported from 600 to 611 feet. Supplies cotton gin in season.
107	83.15	Dec. 4, 1942	C,E, $\frac{3}{4}$	D,S	Dug.
108	21.43	Dec. 8, 1942	B,H	D,S	Do.
109	12.73	do.	None	N	
110	15.64	do.	B,H	D,S	Dug.
111	16.37	do.	C,W	D,S	Do.
112	e/ 60	1940	C,H	D,S	Casing: 160 feet of 4-inch. Two and one-half inch screen from 160 to 168 feet.
113	13.82	Nov. 28, 1942	B,H	D,S	Dug.
114	e/ 50	1940	C,H	D,S	Casing: 96 feet of 4-inch. Screen from 96 to 120 feet.
115	--	--	C,E, $\frac{1}{4}$	D,S	Casing: 153 feet of 3-inch; 9 feet of 2-inch. Screen: 2-inch from 162 to 172 feet.
116	e/ 90	1940	C,E, 1	D,S	Casing: 150 feet of 3-inch; 150 feet of 2-inch. Screens from 210 to 220 feet and 290 to 300 feet.
117	e/ 90	1939	C,W	D,S	Casing: 198 feet of 4-inch; 49 feet of 2-inch. Screen from 230 to 247 feet.
118	e/ 60	1939	C,E,	D,S	Casing: 190 feet of 4-inch. Screen: 2-inch from 190 to 200 feet.

Records of wells and springs in Grimes County--Continued

Well	Distance from Navasota	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
119	1 $\frac{1}{4}$ miles northeast	Mrs. Fnnie F. Templeman	Allen Bodenhamer	1897	850	6	2.0
120	do.	C. C. Camp Est.	do.	1922	825	4	--
121	2 $\frac{1}{2}$ miles northeast	R. F. Foster	do.	1910	613	6	0
122	do.	do.	D. E. Vernon	1938	131	6	0
123	do.	do.	do.	1939	125	4	0
124	4 $\frac{3}{4}$ miles east	J. P. Michie Est.	--	1922	16	30	1.8
125	6 miles east	Richard Michell	--	1934	22	24	1.5
126	7 $\frac{1}{4}$ miles east	Mrs. W. E. Binford	--	--	Spring	--	--
127	8 $\frac{1}{4}$ miles southeast	J. M. Quinn	Walter Smith	1939	270	4	0
128	do.	do.	Geo. Crook	1938	204	4	--
129	6 $\frac{1}{4}$ miles southeast	J. M. McGinty	--	1914	26	24	1.0
130	3 miles southeast	Chas. Rotello	--	1934	33	30	2.0
131	1 mile southeast	Missouri Pacific R.R.	McMasters and Pomeroy	1926	334	--	--
132	In Navasota	do.	do.	1924	1,386	--	0
133	do.	Gulf States Utilities Co. No. 7	--	--	276	8	1.0
134	do.	Gulf States Utilities Co. No. 8	McMasters and Pomeroy	1925	304	12, 10	0
135	do.	Gulf States Utilities Co., No. 10	Layne-Texes Co.	1938	350	20, 10 $\frac{5}{4}$, 8- 5/8	0
136	do.	Gulf States Utilities Co. No. 6	--	1918	211	8	0
137	do.	Gulf States Utilities Co. test hole	Layne-Texas Co.	1928	684	6	--
138	do.	City of Navasota	do.	1936	194	8, 6	0.8
139	do.	do.	--	Old	830	--	0
140	3 $\frac{3}{4}$ mile west	L. R. Marrs	--	1937	352	5	1.0

Water level Well Below measuring mea- surement point (ft.) ^{a/}	Date of Dete of method lift <u>b/</u> <u>c/</u>	Use of water	Remarks
119 28.18 Nov. 23, 1942	C, W N	Deussen No. 381 <u>f/</u> .	
120 -- --	C, W D, S		
121 e/115 1920 C, E, 1 D, S			
122 e/ 80 1938 C, E, 1 D	Casing: 111 feet of 6-inch. Screen from 111 to 131 feet. Supplies Navasota airport.		
123 e/ 70 1939 C, W S	Casing: 105 feet of 4-inch. Screen from 105 to 125 feet.		
124 3.82 Nov. 28, 1942	B, H D, S	Dug.	
125 20.55 do. B, H D, S	Do.		
126 + do. Flows D, S	Estimated flow 4 gallons a minute.		
127 e/ 70 1939 C, H D, S	Supplies Navasota fishing lodge		
128 -- -- C, H D, S	Casing: 194 feet of 4-inch. Screen from 194 to 204 feet.		
129 20.93 Dec. 2, 1942	C, H D, S	Dug.	
130 31.25 Nov. 26, 1942	C, W D, S	Do.	
131 -- -- T, E RR	See log.		
132 e/+ 1924 --	--	Drilled to supply railroad. Flow of water reported hot and salty. Plugged and abandoned.	
133 47.49 Nov. 30, 1942	None N	Not used since 1931.	
134 e/ 45 Jan. 27, 1927 A, E, 25 P	Casing: 184 feet of 12-inch; 304 feet of 10-inch to surface. Screens from 188 to 208, 218 to 238 and 273 to 283 feet. Measured yield 320 gallons a minute. This well and wells 135 and 136 supply city of Navasota. Temperature 74° F.		
135 e/ 67 July 28, 1938 A, E, 25 P	Casing: 174 feet of 20-inch; 233 feet of 10½-inch to surface; 111 feet of 8-inch. Screens from 175 to 255 and 266 to 276 feet. Underreamed to 30-inch diameter from 174 to 288 feet and gravel-walled. Temperature 74° F. See log.		
136 e/ 43 1939 A, E, 25 P	Flowed from sand at 1,800 feet when drilled. Water reported unsatisfactory. Hole plugged back end casing shot at 211 feet. Temperature 73° F. See log.		
137 -- -- --	Water test. Plugged and abandoned. See log.		
138 26.66 Nov. 24, 1942 T, E, 25 Sw	Casing: 132 feet of 8-inch. Six-inch screen from 132 to 192 feet. Reported yield 100 gal-lons a minute. See log.		
139 e/ 0 1906 -- --	Formerly supplied part of Nevasota. Deussen No. 377 f/. Temperature reported 80° F. Casing pulled and hole shen-doned. See log.		
140 e/ 7 1927 C, W D, S	Send reported from 335 to 552 feet. Formerly supplied hoop factory.		
17.00 Nov. 23, 1942			

Records of wells and springs in Grimes County--Continued

Well	Distance from Navasota	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
141	2 $\frac{3}{4}$ miles west	James Cavanaugh, Jr.	--	Old	520	4	0
142	3 miles southwest	Moore Brothers	Tom Felder	1922	165	6	0
143	3 $\frac{1}{2}$ miles southwest	do.	Rouse Exploration Drilling Co.	1942	240	3	2.5
144	2 miles southwest	S. D. Maret	do.	1942	400	2 $\frac{1}{2}$	0
145	1 $\frac{1}{2}$ miles south	Royal Lott	Parsons and Smith	1936?	3,500	--	--
146	do.	do.	D. E. Vernon	1941	495	4 $\frac{1}{2}$	3.0
147	2 $\frac{1}{2}$ miles southeast	Howard Weaver	-- Pitrie	1936	484	2 $\frac{1}{2}$	0.8
148	2 $\frac{3}{4}$ miles southeast	Humble Pipe Line Co.	do.	1938	395	5	--
149	do.	do.	Allen Bodenhamer	1921	480	6	4.3
150	5 $\frac{1}{2}$ miles southeast	Gulf, Colorado and Santa Fe R.R.	Layne-Texas Co.	1930	235	8	0
151	8 $\frac{1}{4}$ miles southeast	County Road	--	--	Spring	--	--
152	8 $\frac{1}{2}$ miles southeast	Mrs. V. A. Campbell	--	1917	50	36	2.0
153	do.	G. C. Stoneham	C. C. Camp	1914	540	4	0
154	8 $\frac{1}{4}$ miles southeast	G. C. Stoneham No. 1	Cranfill Reynolds Co.	1930	3,400	--	--
155	7 miles southeast	Herman and Louis Hemann	--	--	28	42	3.0
156	5 $\frac{3}{4}$ miles southeast	J. T. Barry	H. L. Edwards Drilling Co.	1940	640	4	0
157	4 $\frac{3}{4}$ miles southeast	E. W. Harris	--	Old	38	36	3.0
158	3 $\frac{1}{4}$ miles southwest	S. D. Maret	Rouse Exploration Drilling Co.	1942	305	3	1.4
159	3 $\frac{3}{4}$ miles southwest	D. W. Howell	--	1890?	321	4	0
160	5 $\frac{1}{4}$ miles southwest	S. D. Maret	--	Old	400+	5	5.0
161	4 $\frac{1}{4}$ miles southwest	Gerald Fahey	--	Old	400+	4	3.0
162	4 $\frac{1}{2}$ miles south	T. B. Terrell	--	1940	500	4	12.0
163	4 $\frac{3}{4}$ miles south	Tom Rotello	John Felder	--	430	8, 4	5.5
164	5 $\frac{1}{2}$ miles south	R. G. Gofner	--	Old	520	4	2.0
165	6 miles south	do.	Deering and Noble	1931	4,559	--	--

Well	Water level		Method of lift b/	Use of water c/		Remarks
	Below measuring point (ft.)	Date of measurement a/				
141	e/+	1906	C,W	S		Deussen No. 384 f/.
142	e/ 20	1922	C,W,E $\frac{3}{4}$	D,S		
143	+ 0.69	Nov. 18, 1942	Flows	S	Measured flow 4 gallons a minute. Original depth 446 feet. Casing shot and well finished	
144	+ 0.71	do.	Flows	S	Mea- at 240 feet. Temperature 72° F. See log. sured flow $\frac{1}{2}$ gallon a minute. Temperature 71 $\frac{1}{2}$ ° F.	
145	--	--	--	--	Oil test. Flow of water reported from sand at 410 to 450 feet. Plugged and aban-	
146	+	Nov. 25, 1942	Flows	D,S	Measured flow $1\frac{1}{2}$ gallons a minute 3 feet above ground. Flow reported 18 feet above ground in 1906 from nearby abandoned well 225 feet deep. Described by Deussen (No. 369 f/).	doned.
147	11.34	Nov. 24, 1942	C,E, $\frac{1}{4}$	D,S		
148	--	--	C,E, 3	Ind	Drilled to 710 feet, plugged back to 395 feet.	
149	24.91	Nov. 24, 1942	A,O,-	D,S	Supplies camp.	
150	e/ 22.5	1930	A,O, 20	D,RR	Casing: 235 feet of 8-inch. Screens from 39 to 59, 93 to 135, and 151 to 170 feet. Drilled to	
151	+	Nov. 26, 1942	Flows	N	59, 93 to 135, and 151 to 170 feet. Drilled to 406 feet, plugged back to 235 feet. See log. Estimated flow 2-3 gallons a minute.	
152	36.05	do.	C,W	D,S	Dug.	
153	e/200	1914	C,G 4	D,S	Screen from 528 to 540 feet.	
154	--	--	--	--	Oil test. See log.	
155	27.40	Nov. 11, 1942	C,W	D,S	Dug.	
156	e/ 40	1940	--	--	Formerly supplied drilling rig. Casing pulled and hole abandoned.	
157	37.79	Dec. 1, 1942	B,H	D,S	Dug.	
158	+ 3.20	Nov. 18, 1942	Flows	S	Measured flow 12 gallons a minute. Drilled depth 800 feet. Water from sand at 290 to 305	
159	+	do.	Flows	D,S	Estimated flow 20 feet. Temperature 73° F. gallons a minute. Formerly supplied gin.	
160	+	do.	Flows	D,S	Mea- Deussen No. 375 f/. Temperature 72 $\frac{1}{2}$ ° F. sured flow 4 gallons a minute 5 feet above ground. Deussen No. 383 f/. Temperature 73° F.	
161	+	Nov. 25, 1942	Flows	S	Measured flow 5 gallons a minute 3 feet above ground. Deussen No. 368 f/. Temperature 74 $\frac{1}{2}$ ° F.	
162	+	do.	Flows	D,S	Screens from 408 to 420 and 488 to 500 feet. Estimated flow 10 gallons a minute 12 feet above	
163	+	do.	Flows	D,S	Estimated flow 6 gallons a minute 5 $\frac{1}{2}$ feet above ground. feet above ground. Water sand reported from	
164	+	do.	Flows	D,S	Measured flow 10 gallons a minute 2 feet above ground. Deussen No. 384 f/.	415 to 430 feet,
165	--	--	--	--	Oil test. See log.	

Records of wells and springs in Grimes County--Continued

Well	Distance from Navasota	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
166	6 $\frac{1}{2}$ miles southeast	J. W. Bush	--	1927	51	36	0
167	do.	Joe Batts, Sr.	--	Old	1,100+	6	0
168	7 miles southeast	W. P. Cochran	--	1941	25	24	2.7
169	9 $\frac{1}{2}$ miles southeast	Dr. A. D. McAlpin	--	1910	106	36	0
170	10 $\frac{1}{2}$ miles southeast	J. N. Baylor	--	Old	36	24	2.5
171	8 $\frac{1}{2}$ miles southeast	Will Schroeder	Cranfill-Reynolds Co.	1930	4,590	--	--
172	9 $\frac{1}{4}$ miles southeast	Harris Brothers	--	Old	28	24	2.5
173	8 $\frac{1}{4}$ miles southeast	J. L. Mason	--	1932	15	8	3.0
174	8 $\frac{1}{2}$ miles south	Royal Lott	--	1895?	780	4	7.0
175	do.	do.	--	1895?	500	4	4.0
176	10 $\frac{3}{4}$ miles south	H. H. King	H. H. King	1942	167	4, $\frac{1}{2}$	0
177	do.	do.	do.	1942	177	2	0
178	10 miles southeast	Tony Franklin	--	1942	45	8	2.5
179	9 $\frac{3}{4}$ miles southeast	W. J. Lyles	--	1929	23	30	3.0
180	9 $\frac{1}{2}$ miles southeast	C. S. Hutchison	M. Purty	1941	116	4	0
181	11 miles southeast	S. F. Abercrombie	--	1937	29	30	2.0

Well	Distance from Plantersville	Owner	Driller	Date com- pleted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
182	6 miles southwest	E. L. Dyer Est.	-- Imhoff	1939	86	6	0
183	do.	Unknown	Seismograph Crew	--	435	4	--
184	3 miles northwest	T. B. Stoneham	--	Old	22	36	1.0
185	2 $\frac{3}{4}$ miles northwest	Missouri Pacific R.R.	--	1922?	1,220+	8, 4	--
186	3 $\frac{3}{4}$ miles northwest	Dr. W. W. Greenwood	Geo. Crook	1939	204	4	--
187	5 $\frac{1}{4}$ miles northwest	S. L. Stoneham	--	Old	48	30	2.5
188	6 miles northwest	C. C. Stoneham	--	Old	11	24	3.0

Water Level	Date of	Method	Use	Remarks
166	1941	C,E,	D,S	Water reported in hard red sand from 44 to 51 feet.
167	1920	None	N	Casing obstructed at top.
168	Dec. 1,	C,W	D,S	Due.
169	1910	B,H	D,S	Water reported in sand from 105 to 106 feet beneath rock stratum.
170	Dec. 1,	C,W	D,S	Due.
171	--	--	--	Oil test. Known as J. N. Raylor No. 1. See Log.
172	Dec. 1,	B,H	D,S	Due.
173	Nov. 24,	B,H	D,S	Bored.
174	+ do.	Floors	D,S	Estimated flow 10 gallons a minute 7 feet above ground. Dusseen No. 386 f/.
175	+ do.	Floors	D,S	Measured flow 2 gallons a minute 4 feet above ground. Dusseen No. 387 f/.
176	July 40	C,W	D,S	Casing: 90 feet of 4-inch; 67 feet of 2½-inch. Screen from 157 to 167 feet. Drilled to 275 feet and plugged back. Clay reported from 167 feet to 275 feet.
177	52 do.	C,W	S	Casing: 167 feet of 2-inch. Screen from 167 to 177 feet. Clay reported from 167 feet and plugged back. To 275 feet.
178	Nov. 24	B,H	D,S	Screen from 167 to 177 feet. Sanded from 167 to 275 feet.
179	Dec. 1,	B,H	D,S	Due.
180	51	C,E,	D,S	Sand reported from 104 to 116 feet. Drawdown reported 20 feet after pumping 1 gallon a minute for 24 hours.
181	Nov. 24	B,H	S	Due.
182	22	B,H	S	Due.
183	--	--	--	Test hole. Supplies swampy sand camp. 86 feet. Supplies swampy sand camp. See Log.
184	Nov. 27	C,E,	D,S	Due.
185	--	--	--	Casing caved sand dry at 105 feet. Drilled to supply rail road. Reported to have been about 100 feet deep because water formed in boillers.
186	--	C,G,	D,S	Due.
187	Nov. 28	B,H	D,S	Due.
188	Dec. 2	B,H	D,S	Due.
189	1942	1942	1942	1942

Records of wells and springs in Grimes County--Continued

Well	Distance from Plantersville	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Height of measuring point above ground (ft.)
189	8 $\frac{1}{4}$ miles northwest	Mrs. Katie Kimick	--	1910	24	30	2.5
190	10 $\frac{3}{4}$ miles northwest	Paul Kaspar	--	1936	20	36	3.0
191	do.	Joe Hetmaniak	Carlton Drilling Co.	1940	450	4	0
192	10 miles north	R. L. Kelly No. 1	Cle-Tex Oil Co.	--	3,830	--	--
193	11 miles northeast	W. T. Walker	Layne-Bowler Co.	1906	150	10	--
194	8 $\frac{1}{2}$ miles north	S. B. Barrett Est.	--	1902	21	36	2.5
195	8 $\frac{3}{4}$ miles north	Pete Pasket	--	1912	60	24	2.5
196	9 $\frac{1}{2}$ miles northwest	S. C. McClosky	Sam Miles	1938	139	4	0
197	9 $\frac{1}{4}$ miles northwest	do.	do.	1932	130	4, 3	0
198	8 miles northwest	County School District	--	--	9	30	3.0
199	6 $\frac{1}{2}$ miles northwest	C. Metz	D. E. Vernon	1941	230	3, 2	0
200	6 $\frac{1}{2}$ miles north	Franz Reinhardt	--	1929	14	36	4.5
201	5 $\frac{1}{4}$ miles northwest	S. J. Floyd	--	1912	49	30	1.0
202	4 $\frac{1}{2}$ miles north	Wm. Burrell	--	Old	17	42	1.5
203	3 $\frac{1}{4}$ miles northwest	Walter Greenwood	D. E. Vernon	1925	230	4	0
204	2 $\frac{1}{2}$ miles north	St. Marys Catholic Church	do.	1934	204	4	0
205	2 $\frac{1}{4}$ miles north	Walter Greenwood	Geo. Crook	1939	200	4	0
206	4 miles northeast	John Rosilier	--	1927	54	24	3.0
207	2 $\frac{1}{2}$ miles northeast	Jacob Bachmeyer	--	1924	30	30	2.5
208	3 miles east	Mrs. Catherine Gabriel	--	1942	33	24	3.5
209	2 miles southeast	Searcy Smith	--	Old	33	30	3.0
210	3/4 mile east	Frank Phillips Est.	D. E. Vernon	1928	151	4	--
211	1/2 mile east	J. A. Neely	--	--	25	30	2.0
212	1 $\frac{1}{4}$ miles northwest	State Highway Department	--	--	Spring	--	--
213	3 $\frac{1}{4}$ miles southwest	Unknown	Seismograph crew	--	525	4	--
214	2 $\frac{3}{4}$ miles southwest	W. M. Gayle No. 1	Temple Hargrove et al.	1942	8,727	--	--

Well	Water level		Method of lift	Use of water		Remarks
	Below measuring point (ft.)	Date of measure- ment <u>a/</u>				
189	21.08	Dec. 3, 1942	B,H	D,S	Dug.	
190	17.68	do.	B,H	D,S	Do.	
191	e/ 82	1940	--	--	Formerly supplied drilling rig. Caved and abandoned.	
192	--	--	--	--	Oil test. See log.	
193	--	--	None	N	Formerly supplied saw mill and camp. Deussen No. 395 f/. Not used since 1914.	
194	13.40	Dec. 3, 1942	B,H	D,S	Dug.	
195	48.44	do.	B,H	D,S	Do.	
196	e/ 80	1938	C,G, 3	Ind	Screen from 123 to 139 feet. Sand reported from 119 to 139 feet. Supplies saw mill.	
197	e/ 80	1932	C,G, 3	Ind	Casing: 124 feet of 4-inch. Screen: 3-inch from 124 to 130 feet. Supplies cotton gin.	
198	6.77	Dec. 2, 1942	B,H	D,S	Dug.	
199	e/ 60	1941	C,G, 1½	D,S	Casing: 146 feet of 3-inch; 64 feet of 2-inch. Screen from 210 to 230 feet.	
200	15.05	Dec. 2, 1941	B,H	D,S	Dug.	
201	44.83	do.	B,H	D,S	Do.	
202	17.78	do.	B,H	D,S	Do.	
203	e/ 70	1925	C,W	D,S	Screen from 210 to 230 feet.	
204	e/ 60	1934	C,G, 2	D,S	Screen from 184 to 204 feet.	
205	e/ 75	Nov. 1942	C,E, 1	I,S	Screen from 194 to 200 feet.	
206	52.41	Dec. 2, 1942	B,H	D,S	Dug.	
207	26.27	Nov. 27, 1942	B,H	D,S	Do.	
208	27.84	do.	B,H	D,S	Do.	
209	29.18	do.	B,H	D,S	Do.	
210	--	--	C,W	D,S	Water reported under thin layer of rock.	
211	16.56	Nov. 27, 1942	C,G, 2½	D,S	Dug.	
212	+	do.	Flows	S	Estimated flow 20 gallons a minute.	
213	--	--	--	--	Test hole. Caved and abandoned. See log.	
214	--	--	--	--	Oil test. See log.	

Records of wells and springs in Grimes County--Continued

Well	Distance from Plantersville	Owner	Driller	Date com- ple- ted	Depth of well (ft.)	Diam- eter of well (in.)	Height of measuring point above ground (ft.)
215	2 $\frac{3}{4}$ miles south	P. B. Bookman Est.	Cullen and West	1930	3,452	10	--
216	do.	Geo. Largent	Seismograph crew	1939	130	3	--
217	4 $\frac{1}{2}$ miles southeast	R. L. McGraw	--	1939	35	36	1.0
218	5 miles southeast	Unknown	Seismograph crew	--	625	4	--

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

b/ Pump or lift: T, turbine; A, air lift; C, cylinder; B, rope and bucket.
Power: E, electric; G, gasoline engine; O, oil engine; S, steam engine; W, windmill; H, hand. Number indicates horsepower.

c/ P, public supply; D, domestic; S, stock; Ind, industrial; Irr, irrigation; RR, railroad; Sw, swimming pool; N, not used.

Well	Water level		Method of lift	Use of water	Remarks
	Below measuring point (ft.)	Date of measure- ment			
215	--	--	--	--	Oil test See log.
216	--	--	C,H	D,S	
217	29.27	Nov. 27, 1942	C,H	D,S	Dug.
218	--	--	--	--	Test hole. Caved and abandoned. See log.

d/ In files of State Board of Water Engineers at Austin, Texas.

e/ Water level reported by owner or driller.

f/ Number under which well is listed in U. S. Geol. Survey Water-Supply Paper 335, Alexander Deussen, 1914.

Table of drillers' logs, Grimes County, Texas

	Thickness (feet)	Depth (feet)
<u>Well 15, partial log</u>		
J. C. Chaney No. 1, 6 $\frac{1}{4}$ miles southwest of Iola. Fred F. Harris, driller.		
Gray sand and clay	99	99
Shale	16	115
Lignite	1	116
Shale and sand	86	202
Shale	44	246
Sand	8	254
Shale	51	305
Lignite	14	319
Rock	1	320
Shale	70	390
Sand	11	401
Shale	31	432
Lignite	6	438
Sand and shale	62	500
Water sand	11	511
Shale and some shells	641	1152
Sandy shale	4	1156
Packed sand	50	1206
Sandy shale	90	1296
Mostly shale	356	1652
Sandy shale	120	1772
Shale and lime	713	2485
TOTAL DEPTH		3019

Well 28

Sum Utility Co., in Bedias. Layne-Texas Co., driller.		
Clay	35	35
Shale	28	63
Shale and sand	37	100
Sand	8	108
Sandy shale	32	140
Sand	12	152
Hard clay	10	162
Hard clay and sand	10	172
Hard shale	66	238
Sandy shale	12	250
Hard shale	12	262
Hard shale and sand	41	303
Shale	18	321
Soft shale	14	335
Hard shale	5	340
Hard sand	19	359
Hard shale	45	404
Gumbo	13	417
Sandy shale	22	439
Sand	17	456

	Thickness (feet)	Depth (feet)
<u>Well 28--Continued</u>		
Shale	4	460
Sand	39	499
Shale	6	505

Well 70, partial log

O. A. Hamilton No. 1, 7 $\frac{1}{2}$ miles southeast of Shiro. James H. Woodard, driller.		
Surface sand and clay	116	116
Tough coarse sand	2	118
Sand and gravel	232	350
Shale	260	610
Sandy shale	20	630
Shale	150	780
Sandy shale	45	825
Shale	110	935
Sandy shale	45	980
Shale	62	1042
Sand	28	1070
Shale	142	1212
Shale and sand	11	1223
Shale	107	1330
Sandy shale	70	1400
Tough sand	5	1405
Sand and shale	113	1518
Shale	88	1606
Sandy shale	19	1625
Shale	27	1625
Sandy shale	66	1718
Shale and sandy shale	177	1895
Sandy shale	20	1915
Sticky shale	25	1940
Streaks of sand and shale	20	1960
Shale	140	2100
Sandy shale	65	2165
Sticky shale	60	2225
TOTAL DEPTH		3524

Well 82, partial log

Greer Brothers No. 1, 2 $\frac{3}{4}$ miles east of Carlos. Carlos Syndicate, driller.		
Surface sand	10	10
Sandy clay	31	41
Sandy shale and lignite	146	187
Water, sand	39	226
Sandy shale	54	280
Sand	84	364
Sandy shale	277	641
Shale and boulders	732	1373

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 82, partial log--Continued</u>					
Light brown and gray shale	117	1490			
Sand and shale	206	1696			
Hard shale and boulders	191	1887			
Rock	2	1889			
Hard shale	191	2080			
Hard shale streaks, sand and lime	187	2267			
Sand and shale streaks	226	2493			
Shale	15	2508			
TOTAL DEPTH		2825			
<u>Well 88 a/</u>					
R. L. Lavender, $4\frac{1}{4}$ miles northwest of Carlos. N. M. Biglow, driller.					
Yegua formation:					
Clay and sand	22	22			
Soapstone	21	43			
Sandy clay	17	60			
"Limestone" and some gas	4	64			
Soapstone, sand, gas	67	131			
Hard blue gumbo, gas and oil signs	11	142			
Hard gray gumbo, gas and oil signs	38	180			
Hard gray gumbo and some lignite	45	225			
"Limestone," hard	3	228			
Black clay	31	259			
Gumbo, hard	22	281			
Very hard rock	$2\frac{1}{2}$	$283\frac{1}{2}$			
Brown clay with paraffin, oil, and strong black sulphur water	$3\frac{1}{2}$	287			
Hard limestone	22	309			
Hard drab gumbo	11	320			
Drab clay, shale	6	326			
Hard drab gumbo	30	356			
Hard sandstone	4	360			
Hard gumbo	15	375			
Hard rock	1	376			
Hard blue shale	44	420			
Hard dark-blue gumbo	16	436			
Soft sand rock	15	451			
Hard drab gumbo	8	459			
Hard "limestone"	10	469			
Soft "limestone"	35	504			
Hard "limestone"	38	542			
Hard blue shale	11	553			
Hard "limestone"	2	555			
Hard drab shale	15	570			
<u>Well 88 a/--Continued</u>					
Hard "limestone"	3	573			
Hard drab shale, and oil signs, and some gas	19	592			
Hard limestone	$1\frac{1}{2}$	$593\frac{1}{2}$			
Hard drab shale	$77\frac{1}{2}$	671			
Hard "limestone"	22	693			
Lignite with paraffin, oil signs, and gas	1	694			
Hard "limestone"	10	704			
Hard drab gumbo	7	711			
Hard "limestone"	10	721			
Softer rock	15	736			
Cook Mountain formation:					
Drab gumbo	7	743			
Hard rock	12	755			
Soft rock	34	789			
Hard "lime" rock	35	824			
Softer "lime" rock	28	852			
Hard shale and gumbo, oil signs, and gas	42	894			
Soft "limestone"	37	931			
Hard "limestone"	3	934			
Softer "limestone"	15	949			
Hard rock	4	953			
Hard shale	36	989			
Hard rock	26	1015			
Dark-drab gumbo with small shells, considerable gas at times	27	1042			
a/ Number under which log is listed in U. S. Geological Survey Water-Supply Paper 335, Alexander Deussen, 1914.					
<u>Well 93 a/, partial log</u>					
Mineral Springs Mining and Developing Co., $3\frac{1}{2}$ miles west of Carlos. -- Gilliam, driller.					
Yegua formation:					
Oily black muck	6	6			
"Soapstone"	4	10			
Lignite	2	12			
Shale and "soapstone"	20	32			
Lignite	$2\frac{1}{2}$	$34\frac{1}{2}$			
Potter's clay	2	$36\frac{1}{2}$			
"Soapstone"	2	$38\frac{1}{2}$			
Lignite	2	$40\frac{1}{2}$			
Soapstone or shale	1	$41\frac{1}{2}$			
Lignite	7	$48\frac{1}{2}$			

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 93 a/, partial log--Continued</u>		

Rock (probably sandstone), very hard	$\frac{1}{2}$	49
Brown, "umber"-appearing earth; struck slight flow to surface of mineral water	3	52
"Rich" lignite	10	62
White sand	2	64
Very hard rock	$\frac{1}{2}$	64 $\frac{1}{2}$
Blue sandstone	15	79 $\frac{1}{2}$
White clay	44	123 $\frac{1}{2}$
Lignite	2	125 $\frac{1}{2}$
Blue sand-rock	17	142 $\frac{1}{2}$
Clay	8	150 $\frac{1}{2}$
Hard sandstone	3	153 $\frac{1}{2}$
Clay	12	165 $\frac{1}{2}$
Rock	3	168 $\frac{1}{2}$
"Hardpan" (rock)	8	176 $\frac{1}{2}$
Sandstone	3	179 $\frac{1}{2}$
Clay	8	187 $\frac{1}{2}$
Rock	4	191 $\frac{1}{2}$
Clay	3	194 $\frac{1}{2}$
Rock	3	197 $\frac{1}{2}$
Clay	9	206 $\frac{1}{2}$
"Muck"	19	225 $\frac{1}{2}$
Gray sand-rock	2	227 $\frac{1}{2}$
Clay	20	247 $\frac{1}{2}$
Sand rock	4	251 $\frac{1}{2}$
Soft sand rock	26	277 $\frac{1}{2}$
White clay	20	297 $\frac{1}{2}$
Sand rock	4	301 $\frac{1}{2}$
"Coal", having same appearance as cannel coal	6	307 $\frac{1}{2}$
Black "muck" or shale	15	322 $\frac{1}{2}$
"Soapstone"	16	338 $\frac{1}{2}$
Black clay	13	351 $\frac{1}{2}$
Soapstone	10	361 $\frac{1}{2}$
"Coal"	2	363 $\frac{1}{2}$
Sand rock	2	365 $\frac{1}{2}$
"Coal" (lignite)	4	369 $\frac{1}{2}$
Rock	$\frac{4}{3}$	374
Sand and soft rock	6	380
"Coal" (lignite)	4	384
Rock	10	394
Blue clay	18	412
Rock	4	416
Blue clay	20	436
Sand rock	1	437
Black clay	15	452
"Coal" (lignite)	6	458

	Thickness (feet)	Depth (feet)
<u>Well 93 a/, partial log--Continued</u>		

Sand rock	8	466
Blue clay	18	484
Sand rock	4	488
"Some white hard substance"	20	508
"Hard pan" and clay	100	608
Record missing	148	756
White marble	$\frac{1}{2}$	756 $\frac{1}{2}$
Coal	7	763 $\frac{1}{2}$
Porous rock	16	779 $\frac{1}{2}$
TOTAL DEPTH		1000

a/ Number under which log is listed in U. S. Geological Survey Water-Supply Paper 335, Alexander Deussen, 1914.

Well 135

Gulf States Utilities Co. No. 10, in Navasota. Layne-Texas Co., driller.		
Black soil	4	4
Yellow clay	125	129
Hard sand	6	135
Hard sandy shale	18	153
Soft shale	19	172
Hard sand	4	176
Sand and gravel	25	201
Shale	4	205
Pack sand and hard blue shale	44	249
Hard shale, layers of sand	21	270
Hard shale	9	279
Hard shale and layers of sand	13	292
Hard shale	20	312
Hard sandy shale	10	322
Hard shale	28	350

Well 137

Gulf States Utilities Co., test hole, in Navasota. Layne-Texas Co., driller.		
Soil and clay	21	21
Yellow sand	15	36
Clay	17	53
Hard shale	52	105
Tough clay	49	154
Hard rock	1	155
Tough clay	11	166
Hard medium coarse-grained sand	38	204
Hard shale	34	238
Brittle shale	41	279
Hard shale	92	371

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 137--Continued</u>		
Brittle shale	85	456
Hard shale	32	488
Soft shale	32	520
Hard shale	20	540
Soft shale	14	554
Hard shale	96	650
Medium coarse-grained sand	16	666
Rock	2	668
Sand with layers of shale	12	680
Hard shale	4	684

Well 138

City of Navasota, in Navasota. Layne-Texas Co., driller.		
Soil and clay	15	15
Hard sandy lime	30	45
Hard shale and gravel	9	54
Rock	7	61
Hard shale	28	89
Sand with shale breaks	21	110
Hard shale	29	139
Coarse-grained sand	30	169
Hard sand	4	173
Hard shale	21	194

Well 139 a/, partial log

City of Navasota, in Navasota.		
Black soil	6	6
Fleming clay and Catahoula sandstone:		
Joint clay	10	16
Sandstone	16	32
Potter's clay	9	41
Quicksand	80	121
Sandstone	10	131
Sand	8	139
Gravel	12	151
Gravel and clay	14	165
Sandstone	10	175
Clay	15	190
Sandstone and sand	120	310
TOTAL DEPTH		830

a/ Number under which log is listed in U. S. Geological Survey Water-Supply Paper 335, Alexander Deussen, 1914.

	Thickness (feet)	Depth (feet)
<u>Well 143</u>		
Moore Brothers, 3½ miles southwest of Navasota. Rouse Exploration Drilling Co., driller.		
Hard sand	2	2
Clay	12	14
Sand and gravel	31	45
Clay	95	140
Gravel and rock	6	146
Green shale	14	160
Gravel	8	168
Sandy green shale	16	184
Coarse-grained sand	56	240
Gravel	8	248
Green shale and limestone	34	282
Sand	8	290
Green shale	14	304
Sand	12	316
Green shale	23	339
Sand	1	340
Limestone	5	345
Sand	40	385
Shale	20	405
Sand	18	425
Shale	2	425
Sand	13	438
Sand and shale streaks	8	446

Well 144

S. D. Marett, 2 miles southwest of Navasota. Rouse Exploration Drilling Co., driller.		
Surface sand	2	2
Clay	10	12
Sand	22	34
Gravel	6	40
Sand and gravel	4	44
Clay	16	60
Clay with a little gravel	20	80
Sticky blue and gray shale	44	124
Shale with sandy streaks	10	134
Sticky blue and green shale	58	192
Sandy shale	22	214
Lime rock	5	219
Sand	1	220
Streaks of sand and shale	13	233
Sand	13	246
Hard sand with streaks of sand rock and shale	14	260

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 144--Continued</u>		
Hard sand with streaks of shale	12	272
Sand	6	278
Rock	$\frac{1}{2}$	278 $\frac{1}{2}$
Sandy shale	11 $\frac{1}{2}$	290
Sticky shale	10	300
Green sandy shale	20	320
Sandy shale with streaks of sand rock	20	340
Sticky green shale	20	360
Hard shale	40	400

Well 150

Gulf, Colorado and Santa Fe R. R.,		
5 $\frac{1}{2}$ miles southeast of Navasota.		
Layne-Texas Co., driller.		
Soil	3	3
Clay	10	13
Sand	15	28
Clay and sand	14	42
Sand	22	64
Sandy clay	35	99
Sand	45	144
Clay	12	156
Rock	1	157
Sand	17	174
Clay	5	179
Sand	4	183
Clay	11	194
Hard shale	19	213
Blue sandy shale	12	225
Rock	1	226
Sandy shale	31	257
Shale	43	300
Gumbo	12	312
Shale	26	338
Hard shale	25	363
Sand rock	12	375
Gumbo	31	406

Well 154, partial log

G. C. Stoneham No. 1, 8 $\frac{1}{4}$ miles south-east of Navasota. Cranfill-Reynolds Co., driller.		
Clay	284	284
Ribs of sand	6	290
Blue and yellow clay	10	300
Soft sand	9	309
Ribs of sand	6	315

	Thickness (feet)	Depth (feet)
<u>Well 154, partial log--Continued</u>		
Sand	28	343
Sand rock	10	353
Sand and boulders	78	431
Sand	13	444
Gumbo, shale and sand	31	475
Green sand	9	484
Soft sand	6	490
Hard sand	22	512
Ribs of sand and shale	9	521
Shale	28	549
Sticky shale	151	700
Sand rock	10	710
Hard rock	5	715
Lime ribs	3	718
Sticky shale	30	748
Sand and boulders	102	850
Gumbo and lime	187	1037
Sand, water	8	1045
Sand and lime	35	1080
Gumbo and sandy lime	30	1110
Gumbo	10	1120
Sandy shale	5	1125
Shale and ribs of sand	21	1146
Shale and hard lime	44	1190
Gumbo and lime	16	1206
Green sand	14	1220
Gumbo and shale	500	1720
Shale and sand	15	1735
Shale, gumbo and lime	117	1852
Sand	5	1857
Gumbo, lime	126	1983
Sandy lime and shale	20	2003
Sand	7	2010
Shale, gumbo	119	2129
Sand, water	46	2175
Gumbo and shale	132	2307
Sand and water	39	2346
TOTAL DEPTH		3400

Well 165

R. G. Gofner (R. B. Templemen No. 1), 6 miles south of Navasota. Deering and Noble, driller.

Clay	20	20
Sand and gravel	69	89
Shale	40	129
Gravel	11	140
Shale	12	152
Sand	9	161

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 165, partial log--Continued</u>					
Shale	42	203	Sandy shale	17	1173
Sand	10	213	Gumbo	15	1188
Shale	264	477	Green sand	16	1204
Sand and gravel	14	491	Limey gumbo and shale	76	1280
Hard shale and gravel	22	513	Sand, water	16	1296
Sand, water	4	517	Gumbo and sticky shale	20	1316
Shale and gumbo	29	546	Sand	9	1325
Shale	49	595	Gumbo	42	1367
Green sand	17	612	Sand	15	1382
Sticky shale	37	649	Gumbo	90	1472
Sand and gravel	18	667	Sand	23	1495
Gumbo and shale	147	814	Gumbo and sticky shale	20	1515
Sandy shale	20	834	Sand	6	1521
Shale	224	1058	Gumbo and shale	109	1630
Sandy shale	27	1085	Sand, cored	5	1635
Shale	22	1107	Sandy shale	11	1646
Sandy shale	9	1116	Gumbo and lime	14	1660
Gumbo	15	1131	Sandy shale	13	1673
Gray sand	13	1144	Tough gumbo	9	1682
Blue shale and sticky sand	19	1163	Sand	8	1690
Gumbo	13	1176	Gumbo	50	1740
TOTAL DEPTH		4559	Sand	6	1746
<u>Well 171, partial log</u>					
Will Schroeder (J. N. Baylor No. 1), 8½ miles southeast of Navasota. Cranfill-Reynolds Co., driller.			Gumbo	10	1756
Clay and sand	41	41	Sandy lime	6	1762
Clay	40	81	Gumbo and lime	40	1802
Sand rock	2	83	Green sand	12	1814
Gumbo	92	175	Gumbo and shale	176	1996
Sand	15	190	Sand	1	1997
Shale	180	370	Gumbo and sand	29	2026
Sand and boulders	70	440	Hard sandy shale	12	2038
Sandy shale and gumbo	92	532	Sand	4	2042
Sand rock	29	561	Gumbo and shale	48	2090
Sandy gumbo	6	567	Sandy shale and lime	5	2095
Gumbo	72	639	Gumbo and lime	4	2099
Hard sand	18	657	Gumbo	13	2112
Green sandy shale	111	768	Sand	29	2132
Rock	2	770	Sticky shale and lime	13	2145
Green sand	44	814	Sand	19	2155
Green sandy shale	81	895	Gumbo	35	2190
Sticky shale and gumbo	105	1000	Sand	16	2206
Sand, water	38	1038	Sticky shale	51	2257
Sticky shale	27	1065	Sand	5	2262
Green sand, water	25	1090	Gumbo	17	2279
Gumbo and lime	14	1104	Sandy shale	12	2291
Sand	5	1109	Gumbo	7	2298
Gumbo, lime and shale	47	1156	Sand	5	2303
			Sandy shale	5	2308
			Gumbo and lime	12	2320
			Sticky shale	50	2370
			Sand	48	2418

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)
<u>Well 171, partial log--Continued</u>		
Sticky shale and gumbo	28	2446
Sand	2	2448
Gumbo	15	2463
Sandy shale and lime	16	2479
Sand	5	2484
Sandy shale and gumbo	29	2513
Sand	11	2524
Sticky shale	84	2608
Gumbo	16	2624
Sand	1	2625
Shale	6	2631
Sticky shale and gumbo	355	2986
Sand, water	52	3038
TOTAL DEPTH		4590

Well 183

Owner unknown, 6 miles southwest of Plantersville. Seismograph Crew, driller.	
Fine to coarse-grained sand, few clay breaks	20
Soft sandy clay	28
Sand, few clay breaks	32
Soft sandy non-calcareous clay. Some lignite	20
Soft calcareous clay, some lime	259
Sand with some clay breaks	57
Calcareous clay, some lignite	27
Fine-grained sand, some lime	6
Calcareous clay	16

Well 192, partial log

R. L. Kelley No. 1, 10 miles north of Plantersville. Cle-Tex Oil Co., driller.	
Sand	40
Sand and gravel	10
Sand	150
Sand and shale	120
Tough gumbo and shale	460
Sand and boulders	40
Gumbo	90
White sand	25
Gumbo	115
Gumbo, shale and sand	205
Tough gumbo and shale	235
Sand and shale	40

	Thickness (feet)	Depth (feet)
<u>Well 192, partial log--Continued</u>		
Black shale and gumbo	175	1705
Sandy rock	4	1709
Gumbo	61	1770
Sandy rock	5	1775
Hard sand	10	1785
Gumbo	35	1820
Sand	40	1860
Shale and sand	311	2171
Gumbo	192	2363
Sand	7	2370
Gumbo and tough shale	104	2474
TOTAL DEPTH		3830

Well 213

Owner unknown, $3\frac{1}{2}$ miles southwest of Plantersville. Seismograph Crew, driller.

Soft sandy clay	12	12
Silty sand	23	35
Soft sandy non-calcareous clay	10	45
Soft calcareous clay	27	72
Silty sand, some lime	37	109
Soft calcareous clay	181	290
Silty to fine-grained sand, some lime	53	343
Calcareous clay, some lime and lignite	31	374
Sand with few lime and clay breaks	70	444
Calcareous clay	32	476
Silty sand, some lime	39	515
Calcareous clay	10	525

Well 214, partial log

W. M. Gayle No. 1, $2\frac{3}{4}$ miles southwest of Plantersville. Temple Hargrove et al, driller.

Surface clay and sand	51	51
Clay and gravel	50	101
Sand	24	125
Clay and gravel	81	206
Broken shale, gravel and sand	180	386
Sand and gravel	16	402
Shale streaks and gravel	60	462
Shale and lime	32	494
Shale and gravel	31	525
Shale	31	556
Shale, streaks of lime	29	585
Lime and shale	29	614

(Continued on next page)

Table of drillers' logs, Grimes County--Continued

	Thickness (feet)	Depth (feet)		Thickness (feet)	Depth (feet)
<u>Well 214, partial log--Continued</u>					<u>Well 215, partial log--Continued</u>
Shale and gravel	86	700	Sand and shale	5	879
Sand and gravel	72	772	Coarse-grained sand	16	895
Sand and marl	23	792	Slick hard shale	32	927
Shale and lime streaks	22	817	Gumbo	59	986
Shale and gravel	30	847	Hard sand	4	990
Shale and lime	30	877	Hard green sand	3	993
Shale streaks and sand	30	907	Tough gumbo and lime	10	1003
Shale	31	938	Soft sand	4	1007
Sand and shale with streaks of sand	32	970	Shale and lime	3	1010
Shale with streaks of lime	128	1098	Gumbo and lime	61	1071
Sandy shale	42	1140	Sand	4	1075
Shale and lime	330	1470	Tough gumbo and lime	67	1142
Shale with sand streaks	115	1585	Gumbo, shale and lime	15	1157
Hard shale	25	1610	Sand	15	1172
Hard shale and sandy streaks	127	1737	Gumbo and lime	11	1183
Streaky shale and lime	298	2035	<u>TOTAL DEPTH</u>		<u>3452</u>
Shale and sandy streaks	25	2060			
Shale and boulders	320	2380			
Sandy shale	50	2430			
Shale	84	2514			
<u>TOTAL DEPTH</u>		<u>8727</u>			
<u>Well 215, partial log</u>					<u>Well 218</u>
D. B. Bookman Estate No. 1, $2\frac{3}{4}$ miles south of Plantersville. Cullen and West, driller.			Unknown, 5 miles southeast of Plantersville. Seismograph crew, driller.		
Clay	18	18	Fine-grained sand	18	18
Yellow sand	61	79	Sandy non-calcareous clay	39	57
Gumbo	4	83	Fine-grained sand	13	70
Yellow gumbo	37	120	Calcareous clay contain- ing lime	265	335
Sand and streaks of gumbo	10	130	Silt, fine-grained sand, some lime	32	367
Sand and gravel	18	148	Calcareous clay, contain- ing lime	40	407
Soft white gumbo	14	162	Sand, some lime	21	428
Sand	12	174	Calcareous clay, contain- ing lime	10	438
Gumbo	10	184	Sand, some lime and clay breaks	34	472
Sand and boulders	113	297	Calcareous clay contain- ing lime	21	493
Gumbo and boulders	72	369	Silty sand, some lime	12	505
Sand and boulders	29	398	Calcareous clay contain- ing lime	100	605
Shale and boulders	62	460	Silty sand, some lime	20	625
Gumbo	104	564			
Gumbo with sandy streaks	26	590			
Blue shale	28	618			
Loose sand and boulders	22	640			
Gumbo and sand	19	659			
Tough gumbo	72	731			
Blue and pink gumbo	48	779			
Gumbo	61	840			
Sand	13	853			
Gumbo	21	874			

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

Analyzed at the University of Texas under the direction of W. W. Hastings, Chemist, U. S. Department of the Interior Geological Survey, and Dr. E. P. Schoch, Director of the Bureau of Industrial Chemistry. Results are in parts per million. Well number correspond to number in table of well records.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chloride (Cl)	Fluor- ide (F)	Ni- trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
a/ 3	G. B. Post	223	Nov. 20, 1942	373	23	3.4	296	262	251	170	0.2	0	73
4	Magnolia Pipe Line Co.	160	do.	372	56	5.8	270	165	90	369	0.3	0	164
5	G. N. McWhorter	64	Jan. 10, 1943	269	28	5.6	66	92	36	38	-	0	93
7	J. J. Darby	195	do.	423	28	4.4	129	201	68	94	0.4	0	88
8	B. F. Maxwell Est.	250+	Jan. 15, 1943	426	26	3.2	137	171	36	140	0.2	0	77
9	A. L. Wilson	268	--	785	23	2.0	268	237	222	129	0	0	66
10	Sun Utility Co.	260	Dec. 11, 1942	768	28	5.8	256	207	136	240	0.1	0	94
a/ 11	do.	402	do.	304	43	12	226	177	113	251	0.1	1.2	170
16	M. C. Peters	450	Dec. 14, 1942	-	-	-	-	561	215	660	-	-	-
17	do.	471	do.	-	-	-	-	720	2	243	1.5	0	-
18	J. W. Rice	82	Dec. 12, 1942	652	8.0	5.8	253	317	29	200	-	0	44
19	M. C. Peters	193	Dec. 14, 1942	-	-	-	-	372	1,038	500	6.0	-	-
a/ 21	G. G. Wooderson	225	Jan. 10, 1943	3,051	219	18	856	293	859	955	0.2	-	621
22	W. S. Brown	125	do.	1,533	179	38	331	146	233	680	0.1	-	603
23	G. A. Bishop	163	do.	2,354	75	1.9	785	458	702	565	0.2	0	196
24	Raymond Bracewell	92	do.	4,214	422	37	977	378	967	1,575	0	-	1,414
25	E. F. Bracewell	19	do.	239	36	6.3	23	31	7	47	-	101	119
a/ 26	W. W. Crowson	357	do.	357	8.0	4.4	233	354	125	85	.5	0	38
27	W. H. Myers	391	Jan. 9, 1943	1,892	176	21	453	268	738	372	0	0	528
a/ 28	Sun Utility Co.	505	do.	1,067	55	11	313	256	286	240	0.0	4.0	182
29	V. H. Blair	19	Jan. 10, 1943	272	29	10	59	177	29	37	-	21	116
30	Mrs. F. M. Davis	43	Dec. 17, 1942	137	18	3.2	22	18	11	29	-	45	57
31	Thomas Shields	18	Jan. 10, 1943	3,087	263	54	806	207	451	1,410	.6	-	378
32	Geo. Clark	44	Dec. 17, 1942	166	20	3.2	37	79	29	27	-	11	62
33	C. W. Thomas	21	Dec. 17, 1942	136	9.2	10	29	110	13	15	-	6.0	66
34	J. R. Spell	228	do.	-	-	-	-	122	93	119	-	0	-
35	Guy E. Foster	63	do.	-	-	-	-	226	10	47	-	2.0	-
36	Atlantic Pipe Line Co.	160	do.	405	56	5.8	81	79	107	116	.2	0	164

a/ Analyses of water from selected wells and spring are given in milligram equivalents per liter on page 37.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
37 A. E. Gilberry		25	Dec. 17, 1942	283	30	3.2	63	18	115	62	-	1.0	87
a/ 39 E. H. Boultonghouse		56	do.	398	56	4.4	78	55	122	110	.3	0	158
40 Mrs. Lois Hall		15	Dec. 15, 1942	294	70	13	19	98	11	117	-	18	228
41 R. D. Hale		70	do.	-	-	-	-	73	530	425	-	0	-
43 H. H. Polk		26	do.	223	7.6	3.2	74	43	29	87	-	6.0	32
a/ 44 Sinclair Pipe Line Co.		404	do.	913	19	2.2	313	238	294	164	0	4.0	56
45 E. B. Crawford		20	do.	885	64	23	238	43	64	475	-	0	254
46 G. C. Wilson		160	do.	428	192	5.8	47	159	64	131	-	0	279
47 Mrs. Fannie Fuqua		39	Dec. 17, 1942	-	-	-	-	250	25	83	-	66	-
a/ 48 Shiro Gin Co.		325	Dec. 4, 1942	613	78	4.6	158	299	17	208	0.1	0	213
49 Sun Utility Co.		320	Dec. 5, 1942	673	90	5.5	135	265	62	184	0.2	0.0	247
50 A. Carrington Est.		23	Dec. 16, 1942	853	145	25	138	153	29	423	-	18	465
51 W. F. Lucas		32	do.	49	11	1.9	4.8	31	5	11	0.4	0	36
52 J. M. Hurry		65	do.	-	-	-	-	329	29	360	-	12	-
54 W. L. Statham		30	Dec. 17, 1942	-	-	-	-	37	11	159	-	10	-
55 Walter Nowak		43	Dec. 15, 1942	1,315	143	14	285	458	107	181	-	360	413
56 Jesse Floyd		265	Dec. 11, 1942	-	-	-	-	293	43	178	-	0	-
a/ 57 Public School District		40	do.	2,410	378	79	358	110	591	950	0.1	-	1,268
58 Joe Walton		40	do.	-	-	-	-	177	32	107	-	7.0	-
59 Fred W. Mueller		288	Dec. 4, 1942	515	99	3.4	97	336	43	108	-	0	262
60 W. S. McIntyre		63	Dec. 15, 1942	683	36	5.8	184	55	143	146	-	141	114
61 Fritz Horn		35	Dec. 4, 1942	310	72	4.6	42	275	13	27	-	16	198
62 A. D. Kennard Est.		36	Dec. 15, 1942	380	44	5.6	95	189	22	108	-	12	133
63 W. S. Brown, Jr.		41	Dec. 16, 1942	-	-	-	-	323	25	790	-	-	-
64 T. J. Haynie		192	do.	297	51	8.0	52	171	29	73	-	0	160
a/ 65 S. B. McKinney		450+	do.	462	77	1.9	100	299	54	82	0.2	0	201
66 Magnolia Pipe Line Co.		160	do.	-	-	-	-	268	16	59	-	0	-

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

Partial analyses of water from wells and springs in Grimes County—Continued

Results are in parts per million.

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar- bonate (HCO ₃)	Sulf- ate (SO ₄)	Chlo- ride (Cl)	Fluor- ide (F)	Ni- trate (NO ₃)	Total hardness (as CaCO ₃) (calc.)	
68	O. A. Hamilton	65	Dec. 4, 1942	631	72	4.6	175	397	18	156	—	0	198	
71	G. B. Kennard	34	do.	606	96	7.1	137	445	16	131	—	0	269	
72	T. J. Haynie	47	do.	—	—	—	—	384	32	1,070	—	—	—	
73	Fritz Miller, Sr.	17	Dec. 3, 1942	—	—	—	—	702	340	1,505	—	—	—	
74	Henry Pistler	18	Dec. 4, 1942	—	—	—	—	244	16	13	—	12	—	
75	Louis Becker	39	Dec. 11, 1942	746	169	9.5	103	323	29	381	—	18	461	
76	Lillie B. Roan	32	Dec. 9, 1942	777	70	7.1	176	384	19	239	—	17	204	
77	Sam Busa Est.	34	do.	98	7.2	3.4	26	98	151	145	—	180	32	
78	County Road	60	do.	443	72	13	70	43	11	29	—	47	233	
79	J. L. Allen	23	Dec. 12, 1942	—	—	—	—	105	—	—	—	—	—	
80	Mrs. J. T. Kolbachinski	—	—	—	—	—	—	—	—	—	—	—	—	
81	Greer Brothers	2,769	Dec. 9, 1942	113	9.2	1.9	31	67	17	13	0	8.0	31	
83	Mrs. J. F. Henderson	2,769	do.	984	84	4.6	256	159	369	192	0	0	228	
a/	84 J. W. Garvin	40	Dec. 9, 1942	527	45	1.9	140	92	179	116	—	0	121	
a/	85 S. C. Hicks	27	Dec. 14, 1942	546	61	12	94	122	64	56	—	199	202	
87	R. O. Blount	20	do.	223	40	7.1	35	153	293	161	155	—	179	
90	W. C. Gillen	—	Dec. 12, 1942	3,155	66	—	1,180	512	12	1,650	29	29	1	
91	do.	36	do.	182	6.8	4.6	49	43	19	18	66	183	26	
92	do.	450+	do.	—	—	—	—	366	2	3,170	—	—	—	
94	Mineral Springs	—	—	—	—	—	—	—	—	—	—	—	—	
Land and														
	Development Co.	Spring	Dec. 9, 1942	942	15	2.2	327	195	304	197	—	1.0	46	
a/	96 J. G. Moody	162	Dec. 8, 1942	268	15	2.2	91	201	17	43	0.4	0	46	
a/	97 J. L. Allen	Spring	do.	1,353	233	27	213	305	340	390	—	0	691	
a/	99 W. E. Moody	170	do.	312	31	3.4	91	238	13	57	—	0	92	
101	County Road	60	do.	925	154	5.8	184	226	107	363	—	0	409	
102	W. H. Fuqua	38	do.	—	—	—	—	311	16	299	—	16	—	
103	Geo. Boehn	40	do.	786	120	14	16	403	43	245	—	0	359	
104	Billie Becker	109	Dec. 3, 1942	683	124	8.3	131	348	20	229	—	0	345	
105	Sun Utility Co.	700+	Jan. 7, 1943	549	63	5.0	121	254	25	135	0.1	1.5	178	
106	C. W. Becker	611	Dec. 4, 1942	434	7.2	3.4	132	220	32	151	0.4	0	32	
a/	107 St. Stanislaus	Catholic Church	95	do.	166	51	3.4	7.1	153	6	12	0.2	11	142
108	B. F. Heil	26	Dec. 8, 1942	1,742	403	18	154	336	172	485	—	345	1,081	
110	Peters and	Crittenden	19	do.	—	—	—	—	573	197	263	—	21	—
111	G. E. Rodes	19	do.	—	—	—	—	415	11	73	—	22	—	

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium {Na + K} calc.	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calc.) ³
112	Mallard and Hixson	168	Dec. 4, 1942	440	77	9.5	85	336	13	90	-	0	231
113	Castromer Franklin	16	Nov. 28, 1942	-	-	-	-	415	27	115	-	0	-
114	Tom Walkoviak	120	Dec. 4, 1942	398	111	1.0	44	329	18	62	-	0	231
115	Miss Georgie Swanson	172	Dec. 7, 1942	450	22	8.3	153	427	16	40	-	0.5	90
116	G. C. Scott	300	do.	431	23	3.4	152	409	15	37	-	0	72
117	Ira M. Floyd	247	do.	453	18	5.8	162	409	18	46	-	2.5	69
118	W. S. McIntyre, Jr.	200	do.	517	16	4.6	194	471	13	57	-	1.0	58
120	C. C. Camp Est.	825	Nov. 23, 1942	1,558	27	3.4	610	909	2	463	0.5	0	82
a/121	R. F. Foster	613	Dec. 11, 1942	336	82	5.6	46	354	9	19	0.1	0.5	228
a/122	do.	131	Dec. 4, 1942	395	72	8.3	90	360	7	40	0.4	0	165
123	do.	125	Dec. 11, 1942	-	-	-	-	348	8	78	-	23	-
124	J. P. Michie Est.	16	Nov. 28, 1942	60	2.8	2.2	19	55	3	6.0	-	0	16
125	Richard Michell	22	do.	107	6.8	1.0	36	98	5	9.0	-	1.0	21
126	Mrs. W. E. Binford	Spring	do.	147	15	3.4	35	55	9	46	-	12	52
127	J. M. Quinn	270	Dec. 5, 1942	262	71	3.4	30	262	2	28	-	0	192
a/128	do.	204	do.	297	96	4.6	16	317	2	22	0.2	0	258
129	John McGinty	26	Dec. 2, 1942	414	35	3.4	111	140	22	107	-	67	102
130	Chas. Rotello	33	Nov. 26, 1942	373	34	4.4	99	49	50	160	-	2.0	103
a/131	Missouri Pacific R. R.	334	Sept. 12, 1942	634	30	4.0	213	542	2	85	0.2	0.0	92
134	Gulf States Util- ity Co. No. 8	304	do.	613	21	3.0	220	518	2	82	0.3	0	65
135	Gulf States Util- ity Co. No. 10	350	do.	671	23	3.4	238	556	2	93	0.3	0	72
136	Gulf States Util- ity Co. No. 6	211	do.	593	19	3.5	214	502	5.9	77	0.4	0.0	62
140	L. R. Marrs	352	Nov. 23, 1942	924	35	2.2	351	830	4	124	-	0	96

^{a/} Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
141	James Cavanaugh, Jr.	520	Nov. 25, 1942	739	25	3.4	282	689	2	87	0.2	0	77
142	Moore Brothers	165	Oct. 17, 1942	525	11	2.2	208	476	2	67	0.5	0	36
143	do.	240	Nov. 18, 1942	519	21	1.0	197	488	2	58	-	0	56
144	S. D. Maret	400	do.	673	31	2.2	247	586	13	91	0.4	0	86
146	Royal Lott	495	Nov. 25, 1942	-	-	-	-	525	2	81	-	0	-
147	Howard Weaver	484	Nov. 24, 1942	648	17	3.4	252	598	2	80	-	0	57
148	Humble Pipe Line Co.	395	do.	663	20	5.8	251	598	2	90	-	0	74
149	do.	480	do.	628	40	5.8	214	561	2	90	0.4	0	124
a/150	Gulf, Colorado and Santa Fe R. R.	235	Nov. 26, 1942	405	80	4.6	72	250	9	111	0.1	5.0	218
151	County Road Spring		do.	81	7.2	1.9	21	43	13	15	0.6	1.0	26
152	Mrs. V. A. Campbell	50	do.	229	42	13	20	110	25	42	-	33	158
153	G. C. Stoneham	540	do.	367	35	3.4	109	275	14	70	0.6	0	102
a/155	Herman and Louis Hemann	28	do.	435	90	4.6	71	336	5	56	1.7	42	243
157	E. W. Harris	38	Dec. 1, 1942	315	93	2.2	30	342	3	12	-	7.0	241
158	S. D. Maret	305	Oct. 20, 1942	554	26	3.0	192	486	0.6	66	0.7	0	77
159	D. W. Howell	321	Oct. 15, 1942	515	11	2.2	204	482	2	58	0.4	0	36
160	S. D. Maret	400+	Nov. 18, 1942	423	20	5.8	150	433	7	27	-	0	74
161	Gerald Fahey	400+	Nov. 25, 1942	-	-	-	-	500	2	72	-	0	-
162	T. B. Terrell	500	do.	570	17	3.4	218	512	3	77	-	0	57
163	Tom Rotello	430	do.	534	17	1.9	205	482	2	71	-	0	51
164	R. G. Gofner	520	do.	560	22	4.6	207	512	3	71	-	0	73
166	J. W. Bush	51	Nov. 24, 1942	518	104	8.3	97	561	3	29	-	1.0	295
168	W. P. Cochran	25	Dec. 1, 1942	203	57	12	5.8	226	11	5.0	-	1.0	192
a/169	Dr. A. D. McAlpin	106	do.	434	53	12	106	415	29	30	0.3	0	182
170	J. N. Baylor	36	do.	-	-	-	-	354	36	259	-	11	-
172	Harris Brothers	28	do.	-	-	-	-	476	20	1,130	-	-	-
173	J. L. Mason	15	Nov. 24, 1942	-	-	-	-	438	21	258	-	0	-

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
174	Royal Lott	780	Nov. 24, 1942	-	-	-	-	464	5	68	-	0	-
175	do.	500	do.	533	42	5.8	171	470	2	81	-	0	129
176	H. H. King	167	Jan. 14, 1943	469	101	8.0	131	305	8	71	-	0	285
a/177	do.	177	do.	368	62	20	57	323	11	59	0.2	0	237
178	Tony Franklin	45	Nov. 24, 1942	-	-	-	-	360	14	379	-	6.0	-
179	W. J. Lyles	23	Dec. 1, 1942	520	128	5.8	66	323	12	149	-	0	344
180	C. S. Hutchison	116	Nov. 24, 1942	-	-	-	-	343	8	60	-	0	-
181	S. F. Abercrombie	29	Nov. 24, 1942	2,858	545	48	463	531	111	1,430	0.1	-	1,560
a/182	E. L. Dyer Est.	86	Dec. 1, 1942	81	24	4.6	0.2	49	3	25	-	0	78
184	T. B. Stoneham	22	Nov. 27, 1942	239	24	5.8	60	116	11	72	-	9.0	84
186	Dr. W. W. Greenwood	204	do.	-	-	-	-	372	7	30	-	2.0	-
187	S. L. Stoneham	48	Nov. 28, 1942	545	143	2.2	43	342	17	40	-	132	366
188	C. C. Stoneham	11	Dec. 2, 1942	418	50	3.3	104	220	10	138	-	0	160
189	Mrs. Katie Kimick	24	Dec. 3, 1942	2,254	403	41	381	317	143	1,130	-	-	1,175
190	Paul Kasper	20	do.	-	-	-	-	305	29	87	-	282	-
191	Joe Hetmaniak	450	do.	-	-	-	-	354	4	24	-	0	-
194	S. B. Barnett Est.	21	do.	379	48	8.3	87	171	15	128	0.3	8.2	155
195	Pete Pasket	60	do.	-	-	-	-	397	9	149	-	0	-
196	S. C. McClosky	139	Dec. 2, 1942	359	94	4.6	45	378	5	24	0.4	0	253
198	County School District	9	do.	423	72	7.1	80	226	50	103	0.2	0	209
a/199	C. Metz	230	do.	445	98	4.6	72	366	27	63	0.5	0	263
200	Franz Reinhardt	14	do.	306	60	8.3	44	92	6	140	-	3.0	135
201	S. J. Floyd	49	do.	677	70	13	179	366	43	190	1.6	0	228
202	Wm. Burrell	17	do.	342	22	3.2	106	92	29	136	0.4	0	67
203	Walter Greenwood	230	Nov. 27, 1942	-	-	-	-	226	12	65	-	0	-
204	St. Marys Catholic Church	204	Dec. 2, 1942	380	96	5.8	48	360	3	50	0.1	0	264

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

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

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Cal-cium (Ca)	Magne-sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar-bonate (HCO ₃)	Sul-fate (SO ₄)	Chlo-ride (Cl)	Fluor-ide (F)	Ni-trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
205	Walter Greenwood	200	Nov. 27, 1942	443	106	4.6	64	372	7	78	-	0	283
a/206	John Rosilier	54	Dec. 2, 1942	430	101	9.5	56	415	14	38	-	7.0	291
207	Jacob Bachmeyer	30	Nov. 27, 1942	-	-	-	-	275	9	23	-	46	-
208	Mrs. Catherine Gabriel	33	do.	-	-	-	-	403	7	148	-	54	-
209	Searcy Smith	33	do.	213	19	2.2	51	92	3	23	-	70	56
a/210	Frank Phillips Est.	151	Dec. 2, 1942	471	99	11	69	360	43	72	0.3	0	292
211	J. A. Neely Est.	25	Nov. 27, 1942	434	43	5.8	110	171	23	145	0.4	18	144
212	State Hwy. Dept. Spring	do.	do.	74	2.8	2.2	22	43	10	9.0	-	7.0	16
216	Geo. C. Largent	130	do.	664	150	13	88	329	11	240	-	0	428
217	R. L. McGraw	35	do.	201	16	5.8	55	98	3	70	-	3.0	64

a/ Analyses of water from selected wells and a spring are given in milligram equivalents per liter on page 37.

Chemical Analyses--Continued

Results are in milligram equivalents per liter.

Well	Owner	Depth of well (ft.)	Date of collection	Cal- cium (Ca)	Magne- sium (Mg)	Sodium and Potassium (Na + K) (calc.)	Bicar- bonate (HCO ₃)	Sul- fate (SO ₄)	Chlo- ride (Cl)	Fluor- ide (F)	Ni- trate (NO ₃)	Total hardness as CaCO ₃ (calc.)
3	G. B. Post	223	Nov. 20, 1942	1.16	0.28	12.88	4.30	5.22	4.79	0.01	0	1.44
11	Sun Utility Co.	402	Dec. 11, 1942	2.40	.99	9.84	2.90	2.35	7.08	.01	.02	3.39
21	G. G. Wooderson	225	Jan. 10, 1943	10.96	1.96	37.22	4.80	17.90	26.93	.01	-	12.42
26	W. W. Crowson	357	do.	.40	0.36	10.08	5.80	2.61	2.40	.03	0	.76
28	Sun Utility Co.	505	Jan. 9, 1943	2.75	.90	12.72	4.20	5.95	6.77	.00	.06	4.16
39	E. H. Boultinghouse	56	Dec. 17, 1943	2.80	.36	3.40	.90	2.54	3.10	.02	0	3.16
44	Sinclair Pipe Line Co.	404	Dec. 15, 1942	.94	.18	13.59	3.90	6.12	4.63	4.0	.06	1.12
43	Shiro Gin Co.	325	Dec. 4, 1942	3.88	0.38	6.87	4.90	.35	5.87	.01	0	4.26
57	Public School District	40	Dec. 11, 1943	18.90	6.46	15.55	1.80	12.31	26.79	.01	-	25.36
65	S. B. McKinney	450+	Dec. 16, 1942	3.86	0.16	4.33	4.90	1.12	2.31	.01	0	4.02
34	J. W. Garvin	40	Dec. 9, 1942	3.06	.98	4.09	2.00	1.34	1.58	-	3.21	4.04
97	J. L. Allen	Spring	Dec. 8, 1942	11.64	2.18	9.27	5.00	7.09	11.00	0	0	13.82
107	St. Stanislaus Catholic Church	95	Dec. 4, 1942	2.56	0.28	.31	2.50	.12	.34	.18	.01	2.84
121	R. F. Foster	613	Dec. 11, 1942	4.10	.46	1.99	5.80	.19	.54	.01	.01	4.56
122	do.	131	Dec. 4, 1942	3.62	0.68	3.90	5.90	.15	1.13	.02	0	3.30
128	J. M. Quinn	204	Dec. 5, 1942	4.78	.38	.71	5.20	.04	.62	.01	0	5.16
131	Missouri Pacific R.R.	344	Sept. 12, 1942	1.50	0.33	9.50	3.88	0.04	2.40	0.01	0.0	1.83
150	Gulf, Colorado and Santa Fe R.R.	235	Nov. 26, 1942	3.98	.38	3.15	4.10	.19	3.13	.01	.08	4.36
155	Herman and Louis Heman	28	do.	4.48	.38	3.09	5.50	.10	1.58	.09	.63	4.86
169	Dr. A. D. McAlpin	106	Dec. 1, 1942	2.66	.98	4.63	6.80	.60	.85	.02	0	3.64
177	H. H. King	177	Jan. 14, 1942	3.03	1.66	2.46	5.30	.23	1.66	.01	0	4.74
132	E. L. Dyer Est.	86	Dec. 1, 1942	1.18	.38	.01	.30	.06	.71	-	0	1.56
199	C. Metz	230	Dec. 2, 1942	4.38	.38	3.11	6.00	.60	1.78	.03	0	5.26
206	John Rosilier	54	do.	5.04	.78	2.45	6.80	.29	1.07	-	.11	5.32
210	Frank Phillips Est.	151	do.	4.96	.88	3.01	5.90	.89	2.03	.02	0	5.84

• SPRINGS

• FLOWING WELL

• UNUSED WELL

• OIL OR GAS

• WELL DRILLED TO TEST FOR

• 5 HORSE POWER OR LARGER

• WELL WITH PUMPING PLANT

• POWER PLANT

• WELL WITH SMALL

• WELL WITH HAND PUMP, SUGARET

— EXPLANATION —

MAP OF GRIMES COUNTY, TEXAS
SHOWING WATER WELLS AND SPRINGS

U.S. GEOLOGICAL SURVEY
TEXAS BOARD OF
WATER ENGINEERS
IN COOPERATION WITH
HIGHWAY PLANNING SURVEY COUNTY ROAD MAP
BASE COPIED FROM
AND FIELD NOTES

SCALE 0 1 2 3 4 MILES

