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TEXAS BOARD OF WATER ENGINEERS

E. V. Spence, Chairman
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GROUND-WATER RESOURCES

OF

BEXAR COUNTY, TEXAS

PREPARED IN COOPERATION WITH THE UNITED STATES
DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY
MAY 1947

TEXAS BOARD OF WATER ENGINEERS

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By

Penn Livingston

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GROUND-WATER RESOURCES OF BEXAR COUNTY, TEXAS

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INTRODUCTION

An investigation of the ground-water resources of Bexar County was made in 1932-33 by the Geological Survey, U. S. Department of the Interior, in cooperation with the Texas Board of Water Engineers. The field work consisted of mapping the geology, visiting wells, collecting well information and water samples, and measuring the yield of the springs and some of the wells. A report 1/ was published in 1936 giving a summary of the results of the inves-

1/ Livingston, Penn, Sayre, A. N., and White, W. N., Water resources of the Edwards limestone in the San Antonio area, Texas: U. S. Geol. Survey Water-Supply Paper 773-B, 1936.

tigation with special reference to the occurrence and development of ground water in the Edwards limestone, but not including detailed records of wells, well logs, and analyses of the water from springs and wells. These records, together with well information collected during the summer of 1946, have been combined in the tables accompanying this report. (See pls.1 and 2).

Other reports

The geology and artesian-water supplies of the San Antonio area were discussed by Hill and Vaughan 2/ in 1898. A list of about 60 wells in Bexar County

2/ Hill, R. T., and Vaughan, T. W., Geology of the Edwards Plateau and Rio Grande Plain adjacent to Austin and San Antonio, Texas: U. S. Geol. Survey 18th Ann. Rept., pt. 2, pp. 193-322, 1898.

was given by Taylor 3/ in 1907. In 1927 Meinzer 4/ described the San Antonio

3/ Taylor, T. U., Underground waters of the Coastal Plain of Texas: U. S. Geol. Survey Water-Supply Paper 190, pp. 55-56, 1907.

4/ Meinzer, O. E., Large springs in the United States: U. S. Geol. Survey Water-Supply Paper 557, pp. 27-39, 1927.

and San Pedro Springs in his report on the large springs in the United States. Muir 5/ wrote a paper on the geology of the artesian water supply, and Potter 6/

5/ Muir, A. H., The geology of the artesian water supply of the San Antonio area, St. Louis, 1911.

6/ Potter, Alexander, A report upon and an appraisement of the water supply system of the city of San Antonio, Texas, San Antonio, 1912.

discussed the development of water from wells in and around San Antonio. The geology and ground-water conditions in a part of the area have been briefly described by Stephenson 7/. The geology and ground-water resources of the

7/ Stephenson, L. W., The camps around San Antonio, printed on the reverse side of the topographic map of the San Antonio quadrangle, edition of 1919.

San Antonio district are described by Sellards 8/. Information regarding the

8/ Sellards, E. H., The geology and mineral resources of Bexar County: Texas Univ. Bull. 1932, 1919.

geology and ground waters of the San Antonio district is given by Deussen 9/,

9/ Deussen, Alexander, Geology of the Coastal Plain of Texas west of the Brazos River: U. S. Geol. Survey Prof. Paper 126, 1924.

and a few of his well records heretofore unpublished have been included in this report.

Acknowledgments

The hydrologic information given in this report was collected with the assistance of A. N. Sayre, S. F. Turner, James Cumley, E. H. Coble, J. R. Coble, T. W. Bridges, and Jack Barnes. Most of the information regarding the geology of the area was obtained from Sayre, who mapped the geology of Uvalde, Medina, and Bexar Counties during the period 1929 to 1933. The altitudes of measuring points at the wells were determined by E. H. and J. R. Coble. The water analyses were made by employees of the Quality of Water Division, U. S. Geological Survey. The project was under the administrative direction of O. E. Mainer (retired) and A. N. Sayre, geologists in charge of the Division of Ground Water of the Geological Survey, and W. N. White, district engineer in charge of ground-water investigations in Texas.

Rainfall

Rainfall records obtained by the United States Weather Bureau at San Antonio; at Rio Medina in Medina County, about 23 miles west of San Antonio; and at Boerne in Kendall County, about 30 miles north of San Antonio, are shown in the following tables.

Precipitation at San Antonio, Bexar County, Texas, from 1871 to 1946
(Records furnished by the U. S. Weather Bureau)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1871	1.38	.60	1.10	.76	3.44	.18	0	.95	5.81	6.65	1.92	0	22.79
72	.40	1.56	1.14	.70	4.58	8.30	1.84	1.62	.05	2.49	2.80	3.61	29.09
73	.50	.62	2.43	.58	4.34	9.37	2.56	1.89	5.94	3.86	1.56	.37	34.02
74	.44	1.27	3.64	.55	1.32	2.26	2.74	1.02	11.71	.52	9.16	6.92	41.55
1875	.19	3.21	.69	3.09	.48	.30	1.54	3.11	2.19	.50	4.62	2.03	21.95
76	1.19	1.20	2.61	.69	2.78	2.59	1.93	.15	-	-	-	.78	13.92
77	.37	1.64	1.01	2.47	.56	3.59	2.87	.56	2.67	5.61	1.67	7.27	30.29
78	1.70	2.32	.94	2.25	6.71	4.53	6.09	3.93	3.98	.56	4.68	1.91	39.60
79	.98	1.07	.28	5.71	.61	2.32	.12	4.07	5.91	1.26	0	.47	22.80
1880	3.48	4.01	2.42	3.94	3.09	2.26	6.30	8.67	2.93	2.35	2.06	.40	41.91
81	.58	1.24	1.06	3.24	4.70	T	1.37	.95	5.86	4.19	2.07	1.51	26.78
82	1.91	2.18	4.24	.92	6.79	.11	2.92	3.84	8.95	2.71	1.12	.70	36.39
83	.37	.33	5.30	1.54	.29	-	-	-	-	-	-	-	7.83
1885	3.00	T	3.87	5.12	7.92	.86	6.56	.95	1.51	.65	.70	1.78	32.92
86	.75	3.15	2.39	2.23	2.61	3.52	1.41	4.79	4.12	.62	.33	.30	26.22
87	.21	.70	.51	.60	2.61	2.21	.70	3.63	1.77	2.17	2.44	2.58	20.13
88	1.61	2.56	2.13	7.72	4.25	4.00	.79	7.76	1.93	.82	4.58	2.40	40.55
89	5.11	3.46	3.74	2.91	.55	4.79	4.04	3.19	5.47	.97	4.46	.27	38.96
1890	1.87	2.92	.98	5.22	2.39	4.16	.88	1.44	5.41	1.92	1.02	1.58	29.79
91	5.63	1.38	1.18	4.57	2.36	2.16	.85	1.06	3.60	.60	.92	5.73	30.04
92	1.51	.71	1.75	.16	.89	3.83	.05	9.09	1.09	1.48	1.09	4.16	25.81
93	.11	1.11	2.14	2.18	3.36	1.90	.96	.92	.10	.08	4.62	.76	18.24
94	1.42	.52	.80	2.65	1.71	3.09	.60	8.55	1.48	.89	T	.04	21.75
1895	1.24	3.97	2.24	.29	6.66	2.09	1.07	1.90	1.25	1.43	3.38	.55	26.07
96	2.90	2.36	.66	2.73	2.74	.61	2.69	2.96	8.87	6.04	.79	.74	34.09
97	1.55	.15	1.65	1.84	3.13	2.19	.28	.40	1.61	1.35	.43	1.34	15.92
98	.46	1.16	1.47	1.46	1.06	7.06	2.24	3.35	1.32	.03	1.34	1.54	22.49
99	.38	.31	T	2.60	2.22	4.32	2.85	0	.57	1.31	1.70	3.39	19.65
1900	5.42	.34	4.35	9.11	4.47	.78	2.24	4.05	.97	2.94	1.82	.70	37.19
01	.41	.71	.54	.59	2.47	1.86	3.79	.96	4.20	.12	.64	.15	16.44
02	.70	.55	.12	2.31	3.14	.02	3.85	0	5.52	2.54	3.53	2.51	24.79
03	2.39	7.88	1.29	1.74	1.95	4.75	7.52	.20	2.96	1.61	T	.82	33.11
04	.30	.64	.16	3.25	5.93	1.73	3.50	1.97	7.74	2.86	.24	1.06	29.38
1905	.88	1.62	2.74	6.08	4.11	6.01	2.82	.51	1.80	1.83	2.63	1.56	32.59
06	.29	1.07	1.29	3.94	.86	.62	4.34	2.25	1.74	1.09	1.33	1.60	20.42
07	.80	.78	1.88	3.77	4.64	.18	2.68	.80	1.11	3.54	6.79	.80	27.77
08	1.01	2.42	1.31	2.87	6.07	.30	.66	4.27	3.92	1.47	2.61	1.61	28.52
09	.10	.71	.88	.82	1.77	1.65	3.27	1.70	.56	1.55	.53	1.38	14.92
1910	.88	.78	.42	3.31	1.56	.55	1.37	.37	.56	3.35	1.38	1.69	16.22
11	.02	1.66	2.72	3.41	2.01	.30	1.03	.48	.12	3.57	2.01	1.35	18.68
12	.28	5.12	1.86	1.78	1.49	3.22	1.27	.29	1.47	2.74	1.45	2.76	23.73
13	.90	1.91	1.36	1.32	2.88	2.90	.03	1.29	7.21	8.86	4.55	4.47	37.68
14	.09	1.38	.83	5.26	5.59	.01	.02	7.80	2.24	5.78	3.24	1.43	33.67
1915	.53	1.81	1.20	11.64	1.89	.03	.92	3.90	2.39	1.11	.29	1.57	27.28
16	2.25	.01	.79	1.85	3.85	.49	4.53	5.07	3.78	2.57	2.14	.33	27.66
17	.95	.49	.16	.28	3.30	.02	2.19	.10	1.39	.48	.75	T	10.11
18	.10	1.10	1.45	5.14	2.80	3.35	1.68	2.61	1.49	4.05	2.53	3.61	29.91
19	3.78	1.56	1.39	3.60	3.06	7.01	7.88	2.14	7.61	8.66	1.56	2.05	50.30
1920	3.36	.27	.83	1.09	2.42	2.83	.39	2.26	.15	2.85	2.95	.16	19.56
21	1.40	.23	5.91	2.78	2.01	4.59	.48	.45	8.27	1.02	1.16	.23	28.53
22	1.23	1.26	3.29	5.46	3.46	3.92	.10	.27	.97	3.55	.98	.10	24.59
23	.46	5.47	3.07	3.24	1.33	.79	2.54	2.94	2.98	1.39	4.21	4.29	32.71
24	.97	3.02	1.29	3.36	4.71	4.66	.05	T	2.52	.52	.24	2.31	23.65

Precipitation at San Antonio, Bexar County, Texas, from 1871 to 1946-continued

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	.36	.09	.24	.18	2.85	.48	1.24	1.72	2.87	2.23	1.44	1.29	14.99
26	3.42	.08	4.77	7.06	3.33	3.57	1.37	.31	.43	1.82	1.99	2.24	30.39
27	.65	1.96	2.02	2.05	2.04	7.91	.49	.15	1.52	1.44	.03	2.49	22.75
28	.65	2.85	2.34	1.70	3.90	3.29	1.03	1.21	6.30	1.69	2.29	2.95	30.20
29	2.21	.16	3.12	2.37	7.73	2.19	2.58	.01	2.02	1.60	3.17	2.08	29.24
30	1.25	.94	1.76	2.20	.89	4.03	1.99	.41	1.74	4.01	2.69	.88	22.79
1931	5.86	2.68	2.06	2.28	1.36	3.10	3.09	.30	.01	.75	.72	2.79	25.00
1932	3.30	1.86	1.05	2.61	2.10	1.94	5.52	6.71	8.77	.60	.10	1.01	35.57
33	.66	1.92	.54	1.30	2.23	1.74	1.98	2.78	3.18	.27	.65	.39	17.64
34	4.88	.43	2.05	4.56	1.65	.18	3.83	.88	1.95	.19	2.88	4.17	27.65
1935	.31	1.87	2.31	3.52	14.07	8.41	1.61	.98	5.61	1.94	.44	1.86	42.93
36	.43	.40	2.66	2.77	6.13	6.43	2.68	2.73	4.07	1.89	2.17	1.75	34.11
37	.96	.13	2.10	.84	7.68	2.19	1.82	.14	.04	3.09	.86	6.22	26.07
38	3.35	.33	3.82	6.06	3.88	.65	.91	.44	1.82	.13	.63	1.24	23.26
39	2.08	.95	.65	.78	3.22	.10	2.12	5.08	1.90	.07	.99	.89	18.83
1940	.64	1.86	.94	2.50	4.19	7.47	.64	1.22	1.42	4.66	2.40	2.85	30.79
41	2.14	1.86	2.95	4.56	2.50	2.03	.62	.23	4.88	3.13	.47	.97	26.34
42	.13	2.01	.29	3.48	2.19	1.95	8.19	1.88	7.67	9.56	.47	.64	38.46
43	.73	.09	1.58	1.48	2.56	1.91	3.72	.78	4.34	.17	1.95	1.20	20.51
44	3.49	1.68	3.72	.94	6.76	1.64	T	4.32	1.30	1.52	3.66	4.16	33.19
1945	2.97	3.90	2.73	2.91	1.24	5.31	1.19	1.19	3.00	3.49	1.35	1.18	30.46
46	3.64	2.24	1.75	5.54	3.47	2.92	0.20	4.03	15.78	1.31	1.86	2.43	45.17
Normal	1.53	1.58	1.85	2.91	3.31	2.76	2.19	2.23	3.43	2.28	1.95	1.86	27.88

Precipitation at Rio Medina, Medina County, Texas, from 1922 to 1946
(Records furnished by the U. S. Weather Bureau)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1922	-	-	-	-	-	-	-	-	1.40	3.80	.07	0	5.27
23	0	5.84	2.91	2.46	.35	.23	3.60	2.16	4.38	2.24	3.19	3.85	31.21
24	.87	2.60	2.67	6.09	4.10	4.43	.04	1.70	.25	.31	0	1.27	24.33
1925	.05	0	0	.90	2.05	0	.97	2.58	2.86	2.37	3.14	1.36	16.28
26	2.68	0	2.94	8.40	0	2.68	1.52	0	0	1.38	1.84	2.12	23.56
27	1.77	2.94	2.10	1.04	3.20	6.98	1.20	0	1.83	1.08	0	2.52	24.66
28	.34	2.49	2.04	1.23	4.49	1.87	1.63	1.32	3.12	1.41	.48	1.23	21.65
29	.48	.43	2.16	.94	8.47	1.94	4.77	.23	.70	1.60	1.59	1.20	24.51
1930	.43	0	2.53	2.35	4.17	3.20	2.38	0	0	8.88	.74	.50	25.18
1931	3.31	3.41	5.95	3.95	1.54	2.20	3.12	1.30	0	1.22	.72	3.76	30.48
32	2.46	2.43	0	2.72	2.64	.57	6.77	6.05	7.84	0	0	1.05	32.53
33	1.65	2.87	0	.74	2.40	4.00	1.75	3.71	1.10	.02	0	.70	18.94
34	5.20	.83	1.39	3.21	1.40	1.70	-	0	.82	0	1.27	3.57	19.39
1935	.50	2.30	2.18	1.41	13.91	7.86	2.61	0	11.41	1.51	0	2.58	46.27
36	.44	.44	1.72	.95	4.93	11.59	2.56	1.32	2.13	2.33	1.99	1.14	31.54
37	1.12	0	2.74	.45	1.66	4.40	2.66	.61	1.64	2.91	.73	4.19	23.11
38	3.30	1.20	2.38	4.37	2.82	1.93	.72	.20	2.25	.47	.38	1.28	21.30
39	1.81	.56	.35	.85	1.01	.59	3.71	1.81	1.53	.50	2.27	1.06	16.05
1940	.51	1.94	.85	1.30	4.17	7.35	1.53	.40	1.22	5.12	1.72	3.89	30.00
41	.92	7.72	4.79	4.63	2.85	3.39	2.07	.32	4.56	1.03	.42	.47	33.17
42	0	.91	0	7.88	2.30	1.13	7.51	3.13	6.07	3.18	.34	.73	33.18
43	.25	0	1.11	2.18	4.75	4.04	1.65	.50	1.28	.39	2.05	1.02	19.22
44	3.12	1.60	1.80	.76	4.66	1.54	2.20	8.14	.98	1.29	3.34	3.55	32.98
1945	3.17	1.56	1.34	1.90	1.81	1.75	1.50	0.60	5.11	1.78	0.00	1.34	21.86
46	2.67	1.51	0.66	2.75	2.82	3.38	1.37	8.87	6.83	2.58	1.64	2.03	37.11
Normal	1.54	1.82	1.86	2.64	3.44	3.28	2.51	1.87	2.77	1.90	1.12	1.86	26.61

Precipitation at Boerne, Kendall County, Texas, from 1892 to 1946
(Records furnished by the U. S. Weather Bureau)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1892	2.03	0.54	1.08	1.03	3.86	2.15	0.43	4.44	0.17	4.23	2.16	4.86	26.96
93	0.21	0.98	2.10	1.89	2.79	1.34	0.91	1.05	0.23	0.60	3.84	1.02	16.96
94	1.68	1.16	1.10	7.78	6.05	2.17	0.13	6.87	1.97	2.72	0.07	0.23	31.93
1895	1.48	4.02	2.09	0.51	6.30	4.76	0.16	1.22	4.30	1.55	4.75	0.81	31.95
96	4.41	2.82	0.83	2.95	0.98	0.37	6.71	0.62	5.59	4.86	0.31	2.41	32.86
97	1.56	0.10	4.06	3.26	1.45	2.15	1.82	4.03	3.29	2.33	0.12	2.29	26.46
98	1.25	1.24	1.92	3.88	2.71	6.71	1.66	1.70	2.10	3.32	2.16	2.77	31.42
99	0.42	0.45	0.03	1.77	3.10	4.96	3.29	0.39	2.97	8.96	2.59	4.91	33.84
1900	5.31	0.25	3.36	12.36	7.71	1.08	8.40	2.46	1.99	4.62	1.35	1.30	50.19
01	0.47	1.08	1.20	1.15	3.74	1.86	6.04	1.18	3.06	0.74	0.75	0.33	21.60
02	0.97	1.02	1.97	2.32	5.94	0.39	2.77	0.06	2.84	2.78	9.00	3.65	33.71
03	3.35	8.70	2.21	2.03	2.05	6.15	9.50	0.58	1.62	1.59	T	0.75	38.53
04	0.12	1.33	0.88	4.26	8.28	1.84	1.99	4.16	8.83	2.50	0.55	1.67	36.41
1905	1.00	1.50	3.30	9.30	0.17	4.10	1.30	1.60	3.80	2.10	4.50	1.80	34.47
06	0.40	0.90	0.45	2.40	1.20	1.05	7.00	1.95	5.60	1.00	1.20	3.00	26.15
07	0.20	1.00	1.40	2.40	7.75	0.20	1.50	0.60	1.70	7.95	10.40	1.50	36.60
08	0.40	2.10	2.00	2.40	7.60	0.00	5.50	5.90	1.00	0.45	2.35	0.83	30.53
09	0.00	0.30	1.57	2.10	3.89	1.05	6.90	0.88	1.94	1.42	2.95	2.76	25.76
1910	0.05	0.68	3.70	3.38	1.91	0.61	0.84	T	1.43	3.11	1.34	4.41	21.46
11	0.58	2.17	5.45	4.72	1.36	0.13	1.70	1.05	0.40	1.97	2.95	2.95	25.43
12	0.34	3.55	3.53	2.73	1.15	3.41	0.92	0.86	1.73	3.47	3.84	2.18	27.71
13	1.21	1.80	0.90	1.94	3.85	6.05	0.33	0.53	5.64	16.37	8.03	5.82	52.47
14	0.05	1.73	1.32	6.57	15.65	0.50	0.84	10.00	1.56	2.52	3.80	2.24	46.78
1915	1.68	2.90	1.69	9.94	1.30	0.16	1.61	5.20	5.34	1.18	0.67	2.04	33.71
16	4.35	0.04	0.23	6.76	7.54	0.54	3.62	2.63	5.44	4.39	0.87	0.25	36.66
17	1.05	1.30	0.28	1.14	6.85	3.65	0.58	0.13	3.05	0.95	0.79	0.05	19.82
18	0.28	1.65	0.93	3.72	1.28	2.56	0.12	1.27	4.01	3.47	4.72	6.57	30.58
19	4.14	2.85	1.73	3.84	4.16	5.74	6.27	7.06	13.90	10.49	1.08	1.21	62.47
1920	2.72	0.74	0.94	1.31	2.44	3.89	1.53	2.99	2.63	3.54	5.04	0.22	27.99
21	2.16	0.87	3.35	4.81	2.35	3.87	1.02	0.90	9.69	1.02	1.39	1.38	32.81
22	1.42	1.54	3.18	7.59	3.22	3.15	0.28	0.41	1.66	2.24	1.41	0.13	26.23
23	0.56	5.35	3.28	4.89	1.61	1.48	3.23	1.92	9.97	7.18	4.02	4.74	48.23
24	1.64	3.61	2.91	3.86	9.82	4.10	0.00	0.10	4.06	0.79	0.24	1.66	32.79
1925	0.42	0.12	T	1.51	2.35	1.02	0.59	2.10	3.17	6.00	2.66	1.07	21.01
26	2.85	0.11	6.04	8.11	4.17	2.96	2.85	0.89	0.27	4.13	3.10	3.08	38.56
27	1.54	4.60	2.72	3.48	2.72	5.58	3.17	0.15	0.86	1.75	0.10	3.23	29.90
28	0.64	3.90	0.68	1.70	1.01	2.64	4.07	1.64	5.73	1.07	2.06	2.61	27.75
29	1.58	0.62	1.34	2.42	8.04	1.28	6.83	0.64	2.02	2.86	3.17	3.26	34.06
1930	1.54	1.22	2.51	1.95	5.20	4.27	1.22	0.94	2.01	9.85	2.34	1.40	34.45
1931	6.44	5.53	2.69	7.09	1.62	1.79	3.81	1.60	0.17	-	-	3.78	34.52
32	4.38	3.84	3.14	3.01	1.94	1.22	5.62	4.49	5.19	0.00	0.47	3.35	36.65
33	4.13	2.51	0.85	1.32	3.75	1.20	2.37	0.83	2.52	0.13	0.48	0.49	20.58
34	6.01	2.33	2.54	2.73	1.74	0.55	5.17	0.38	0.91	0.14	0.99	3.29	26.78
1935	0.42	3.04	0.77	2.45	12.59	8.59	6.80	0.57	10.40	2.14	1.35	3.81	52.93
36	0.70	0.65	1.74	0.97	11.17	9.27	2.80	2.44	11.43	2.97	1.77	1.68	47.59
37	1.98	0.15	2.92	1.60	5.94	5.50	3.24	1.49	0.10	2.89	1.54	5.46	32.81
38	4.96	1.61	2.07	4.52	2.59	1.33	1.84	0.22	3.97	0.16	0.48	1.29	24.14
39	3.54	0.86	0.65	1.46	2.58	0.58	6.55	3.05	0.48	3.16	2.33	0.96	26.20
1940	0.68	3.69	1.59	2.24	3.45	3.90	0.79	1.19	1.17	4.71	3.67	5.21	32.29
41	1.81	5.88	4.71	5.76	4.51	3.03	1.61	0.55	5.00	7.02	0.85	0.87	41.60
42	0.41	1.17	0.66	3.53	3.79	1.27	2.62	3.91	4.78	5.65	1.58	1.75	31.12
43	0.86	0.07	1.71	1.27	4.26	3.57	5.16	0.95	4.76	0.39	1.59	2.64	26.33
44	3.67	3.75	3.70	1.08	8.56	1.88	0.87	7.56	2.25	1.37	3.91	4.38	42.98
1945	3.55	2.94	1.98	1.10	1.00	2.65	4.22	2.85	5.01	3.94	1.30	2.96	33.50
46	3.02	2.35	1.93	3.94	3.65	3.14	2.40	6.62	9.45	4.22	2.29	2.61	45.62
Normal	1.85	2.02	2.03	3.53	4.30	2.72	2.97	2.16	3.73	3.35	2.36	2.44	33.46

During the period for which simultaneous records are available (1923 to 1946), the average annual rainfall was 28.45 inches at San Antonio, 26.70 inches at Rio Medina, and 34.47 inches at Boerne.

The San Antonio area has been subjected to several damaging floods caused by excessively high rainfall. Two such floods have occurred during the last 25 years, one in September 1921 and the other in September and October 1946. The flood of 1921 10/ was caused by heavy rainfall on the watershed of the San

10/ Ellsworth, C. E., The floods in central Texas in September, 1921: U. S. Geol. Survey Water-Supply Paper 488, p. 12, 1923.

Antonio River, where as much as 17 inches of rain fell on part of the area in 24 hours. During a 1-day storm that preceded the flood in 1946, as much as 16 inches of rain fell over an area of 110 square miles southeast of San Antonio 11/.

11/ Breeding, S. D., Flood of September and October 1946 in San Antonio River basin in the vicinity of San Antonio, Texas: Texas Board of Water Engineers, mimeographed report, p. 1, Feb. 1947.

GEOLOGY AND ITS RELATION TO THE OCCURRENCE OF GROUND WATER

Below is a generalized geologic section of the formations that underlie Bexar County, with a statement regarding their water-bearing properties, after Livingston, Sayre, and White 12/.

12/ Op. cit. p. 67.

Generalized section of geologic formations in the San Antonio area, Texas

System	Series	Formation or group	Thickness (feet)	Water-bearing properties
Quaternary	Recent	Stream and terrace gravel.	--	Water-bearing in places in stream valleys.
	Pleistocene	Terrace gravel including Leona formation.	0- 90	Yields potable water for stock and domestic wells in some places.
Tertiary(?)	Pliocene (?)	Uvalde gravel.	0- 20	Is not known to yield water to wells.
Tertiary	Eocene	Mount Selman formation.	?	--
		Carrizo sand.	200	Yields water of good quality to wells.
		Wilcox group, undivided	650±	Yields water to stock and domestic wells, usually rather highly mineralized.
	Paleocene	Midway group, undivided	650±	--

(Continued on next page)

Generalized section of the geologic formations in the San Antonio area --continued

System	Series		Formation or group	Thickness (feet)	Water-bearing properties
Cretaceous	Upper Cretaceous	Gulf series	Navarro group, undivided.	300±	Is not known to yield water to wells.
			Taylor marl.	300±	Is not known to yield water to wells.
			Anacacho limestone.	200±	Is not known to yield water to wells.
			Austin chalk.	130±	Yields potable to highly mineralized water in varying quantities to domestic, stock, and irrigation wells.
			Eagle Ford shale.	30	Does not yield water to wells.
	Lower Cretaceous	Comanche series	Buda limestone.	60	Is not known to yield water to wells.
			Grayson shale (Del Rio clay).	60	Does not yield water.
			Georgetown limestone.	40±	Is not commonly water-bearing but yields water to some wells.
			Edwards limestone.	500±	Chief water-bearing formation in the area. Is the source of the large springs and yields water to many pumped and flowing wells.
			Comanche Peak limestone.	40	Does not yield water.
			Walnut clay.	20	Does not yield water.
			Glen Rose limestone.	1,000-1,200	Yields more or less highly mineralized water to domestic and stock wells on the Edwards Plateau.
			Pearsall formation (Travis Peak formation on the outcrop)	450±	Yields only small supplies where it has been reached by wells.
Pre-Cretaceous rocks.			Undifferentiated schists. 1/	--	Probably would not yield water. Rocks lie too deep for practicable water well drilling.

1/ Does not crop out in this area.

GEOLOGIC FORMATIONS AND THEIR WATER-BEARING PROPERTIES

The Travis Peak formation (Trinity group) the surface equivalent of the Pearsall does not crop out in Bexar County. (See geologic map, fig. 1.) It has been penetrated by a few water wells in the county but according to reports the yield of the wells, was small. It is believed that the Pearsall formation is not an important potential source of water in this area.

The Glen Rose limestone, also in the Trinity group, crops out in the northernmost part of Bexar County and is the oldest formation exposed in the area. It is about 1,000 to 1,200 feet thick and consists of massive chalky limestone alternating with beds of marly limestone. Along Cibolo Creek the limestone contains caverns and solution channels that take in large quantities of water from Cibolo Creek and the closely adjacent drainage area; these passages are believed to be interconnected for considerable distances and to provide excellent facilities for the storage and movement of ground water. In general, however, in Bexar County the limestone is not cavernous and the openings in it consist of small joints and fissures of limited lateral extent. This is indicated by the fact that the altitudes of the water levels in the Glen Rose wells usually differ greatly, even in wells that are a short distance apart. South of the Balcones escarpment the Glen Rose limestone is covered by younger formations and is not used as a source of ground water.

The Walnut clay, the lowest formation of the Fredericksburg group, is essentially non water bearing.

The Edwards limestone is the main water-bearing formation in Bexar County. For the purpose of this report the Edwards limestone, the overlying Georgetown limestone, which yields some water to wells, and the underlying Comanche Peak limestone, which is not water bearing, are grouped together and referred to as the "Edwards" limestone. On the geologic map of Bexar County (fig. 1), however, the Edwards limestone is shown with the Fredericksburg group and the Georgetown limestone with the Washita group, the other formations of the latter group being the Grayson shale and Buda limestone. The rocks of the Fredericksburg group, consisting mostly of Edwards limestone, crop out in the northern part of the county in a belt of irregular width south of the outcrop of the Glen Rose limestone. The occurrence of ground water in the Edwards is discussed at considerable length later in this report.

The Grayson shale (Del Rio clay) in Bexar County differs in thickness from place to place but averages about 50 feet. It is essentially a dense clay and does not yield water to wells. It crops out in a band of irregular width south of the Edwards outcrop.

The Buda limestone and the overlying Eagle Ford shale ordinarily do not yield water to wells but a few stock wells north of San Antonio draw a small amount of water from the former. In general, where not disturbed by faulting, the rocks of the two formations crop out in narrow bands parallel to and south of the Grayson shale.

The Austin chalk is a massive chalky limestone about 130 feet thick, and crops out in the central part of the county in several irregularly shaped and more or less isolated areas. In places the limestone yields enough water to wells for domestic use and stock, but some of the wells provide adequate supplies of water during wet years and fail during long dry periods. In a few areas where the limestone has been broken by faulting it yields water quite freely to wells, for example, in the vicinity of the Republic Cement Mills on the

Missouri-Kansas-Texas Railroad 5 miles northeast of San Antonio; along Cibolo Creek near Selma; in the southern part of San Antonio near the Mission pumping plant; and in the irrigated area southwest of San Antonio. Highly mineralized water with and without gas and oil has been reported in the Austin chalk in some areas. Several improperly cased wells in the "Edwards" limestone yield water of poor quality as a result of contamination by leakage from the overlying Austin chalk. One area where this occurs is along the Austin Highway between Alamo Heights and the Booker Road. For example, well F-80 in "Edwards" limestone, owned by C. N. Farrell, yielded a very hard water until it was recased during the summer of 1946, when the water was found to be considerably softer. The change in the quality of the water can be seen by reference to the table of water analyses (p. 227). The sample collected on July 12 was from a water tank that was filled before the well was repaired. The sample collected on July 17 was taken directly from the pump after the well had been recased. In San Antonio the well in Roosevelt Park (well 156), which yields water impregnated with hydrogen sulfide, probably derives its water or a part of it, from the Austin chalk.

The outcrops of the Taylor marl and Anacacho limestone cover large areas in the central part of the county. They are not known to yield water to wells in Bexar County.

The Navarro group consisting of the Corsicana marl and the Escondido formation which is laterally replaced by the Kemp clay in part of the area; and the Midway group, consisting of the Kincaid formation and Wills Point formation, crop out in large areas in the southeastern part of the county. The rocks of both groups consist predominantly of clay and are essentially non water bearing.

The rocks of the Wilcox group overlie those of the Midway group and appear at the surface in the southern part of the county in a broad belt which is broken in places by down-faulted Midway rocks. The Wilcox contains thinly laminated sands which in some places yield sufficient water to wells for domestic use and stock. One Wilcox well (N-28) of large yield was found during the investigation in 1946. The well is 165 feet deep, is used for irrigation, and is reported to yield 400 gallons a minute.

About 60 square miles in the southernmost part of the county is underlain by the Carrizo sand. No wells of large yield were found in that area, but in the southern part of the outcrop where nearly the full thickness of the sand is present wells of fairly high yield probably could be obtained.

Gravels in Quaternary deposits in the southwestern part of San Antonio and in a strip along the south side of Medina River, from the Medina County line east to Macdona, yield adequate supplies of water of good quality to wells for domestic use and stock.

GEOLOGIC STRUCTURE

The following statement with reference to the geologic structure is quoted from Water-Supply Paper 773-B, pages 71 and 72:

In the northern part of the county, on the Edwards Plateau, the rocks are relatively flat and free from faulting. In the central part of the county, in the Balcones fault zone, they dip Gulfward at comparatively steep angles and are extensively faulted. The Balcones escarpment in its present form is almost if not entirely an erosional escarpment situated mainly along a discontinuous fault that brings resistant Edwards limestone on the north side against less resistant younger formations on the south side. In a few places it follows the contours of hills capped by the Buda limestone, overlying the easily eroded Del Rio clay, and where the Buda is faulted into position opposite the Edwards there is no trace of an escarpment at the fault. The fault most generally followed by the escarpment passes just north of New Braunfels, in Comal County, where it has a throw of about 500 feet. This fault extends with gradually decreasing throw to Bracken, near Cibolo Creek, where it divides into several minor faults, and the escarpment becomes lower. For a distance of several miles west of Cibolo Creek there are several minor escarpments, and it is difficult to determine which should be regarded as the Balcones escarpment. From Cibolo Creek several faults converge toward the west and join to form a large fault with a throw of about 600 feet 1 mile south of Helotes, but at this point the trace of the fault lies about a quarter of a mile north of the escarpment. Near the west side of Bexar County this fault is divided into two faults, the large of which leaves the escarpment and extends toward Quihi, in Medina County, where it has a throw of nearly 1,000 feet. The other follows the escarpment into central Medina County, where its displacement becomes very small. There are numerous other faults, some of them with displacements of 500 feet or more, and most of them have a trace that extends a little south of west, but as in most places the formations on both sides of the fault are of nearly equal resistance to erosion, only a few of them are reflected by the topography..., In most of the faults the downthrow is on the south side, but south of San Antonio.... there is a large fault and in some places several faults on which the downthrow is on the north.

In general the formations dip toward the south and are either monoclinal or only slightly folded, but in western Bexar County there is a broad anticline that plunges to the southwest.

GROUND-WATER RESERVOIR IN THE "EDWARDS" LIMESTONE

The pages that follow are devoted to the artesian reservoir in the "Edwards" limestone (see paragraph 4, page 9), the source of springs that are among the largest and best known in the southwestern part of the United States, and the source of the greater part of the well-water supply in a belt that ranges a few miles to 20 miles or more in width extending southwest and west from Austin through San Marcos, New Braunfels, San Antonio, Uvalde, Brackettville, and Del Rio. Most of the belt is in the Balcones fault zone.

Recharge to reservoir

Most of the artesian water in the "Edwards" limestone in Bexar County is derived from rainfall and storm-water runoff that enters the formation at the outcrops north, northwest, and northeast of San Antonio, and from water moving eastward in the artesian reservoir from Medina County. In the northeastern part of the county near Cibolo Creek some water may enter the reservoir from the Glen Rose limestone along lines of faulting.

The following is quoted from Water-Supply Paper 773-B, pages 75 to 79:

> In the outcrop area of the Edwards limestone along the Balcones escarpment the beds usually dip to the south or southeast at an angle materially greater than the slope of the surface. Therefore, in traveling in these directions the beds become progressively lower, first occupying only the tops of the hills, then the slopes as well as the hilltops, then dropping down to the level of the valleys, and finally disappearing beneath the rocks of younger formations. This structural arrangement predominates but is disturbed by faulting in many places. The arrangement is ideal for the intake of water by the permeable beds of the limestone. The streams cross the outcrop area nearly at right angles to the strike, and most of them flow for miles on the Edwards limestone. In these stretches the water level in the Edwards reservoir is below the level of the streams, and the streams lose heavily into the reservoir. Ground-water recharge is also provided from rainfall on the outcrop by direct penetration and by seepage from innumerable small drainage channels that ordinarily carry water only during and for brief periods after exceptionally heavy rains. Some recharge may occur from permeable beds in the Glen Rose in localities where the Edwards is faulted down against such beds.
>
> The United States Geological Survey and the State Board of Water Engineers have maintained gaging stations for many years on practically all the larger streams that cross the outcrop. On several of them stations have been operated both above and below the outcrop, and series of current-meter measurements have been made between the stations to determine the extent of losses or gains in different parts of the intervening reaches. Such measurements have been made on the Guadalupe River, which crosses the outcrop area 35 to 40 miles northeast of San Antonio; on the Medina River, which crosses it about 30 miles northwest of the city; and on the Frio and Nueces Rivers, which cross it respectively about 75 and 90 miles west of the city. The records obtained on the Medina River are considered the most significant, because, as pointed out in the section on artesian pressure gradients and movement of ground water, the ground water contributed to the Edwards reservoir by this stream undoubtedly reaches the San Antonio area. The records of most of these measurements have been published in water-supply papers of the Geological Survey.

Since 1922 three gaging stations have been maintained on the Medina River in the vicinity of the Medina Reservoir, the dam of which is about 30 miles northwest of San Antonio. The upper station, usually called the "Pipe Creek station", is a short distance upstream from the upper end of the reservoir and is above the main outcrop of the Edwards.. The other two are about 4 miles below the reservoir dam, within a few hundred feet of the lower boundary of the Edwards outcrop. One of these lower stations is on the Medina Irrigation Canal; the other on the river on the diversion dam at the canal intake. During 1930 an intermediate gaging station was maintained about 2,000 feet below the reservoir, near Mico post office.

The gaging records show that in the 11 years from 1923 to 1933 about 422,000 acre-feet, or an average of about 38,500 acre-feet a year, was lost from the river and reservoir between the Pipe Creek station and the canal intake. The loss was due in part to evaporation, chiefly from the reservoir, but the evaporation was at least partly balanced by storm-water inflow from the tributary drainage area between Pipe Creek and the canal intake, comprising about 190 square miles. Most of the loss was caused by seepage into the Edwards limestone.

The best information available on losses from the Medina River on a part of the Edwards outcrop is contained in the records for 1930. During that year about 16,000 acre-feet was lost from the $3\frac{1}{2}$-mile stretch of the river below the reservoir, between the Mico station and the diversion dam, all of which is on Edwards limestone. A few hundred acre-feet of the loss consisted of evaporation from the surface of the river and diversion reservoir and transpiration by vegetation along the river, but nearly all of the loss was due to seepage into the Edwards. The volume of water carried by the river in this stretch in 1930 was slightly below the 11-year average, and the loss by seepage was therefore probably somewhat less than the average.

In the absence of accurate data on evaporation from the Medina Reservoir and the inflow between the Pipe Creek and lower gaging stations, the losses from the river into the Edwards limestone during the 11-year period mentioned of course cannot be closely computed. It is believed, however, that they amounted to an average of at least 30,000 acre-feet a year, the equivalent of a continuous discharge of about 27,000,000 gallons a day. This is more water than is used for public supply by the water department of San Antonio.

A seepage investigation on July 9, 1931, disclosed that the entire discharge of Hondo Creek, amounting to 13.9 second-feet, sank on the Edwards outcrop about 50 miles northwest of San Antonio.

It was shown by measurements in June 1925 that the entire flow of the Frio River, amounting to about 40 second-feet, and the entire flow of its principal tributary, the Dry Frio, amounting to about 10 second-feet, disappeared on the Edwards outcrop. Gaging stations were operated simultaneously on the Frio River from October 1923 to September 1927 at Concan, just above the outcrop of the Edwards, and at Frio Town, about 40 miles below the outcrop. From studies of the records obtained at these points it is estimated that during the 4 years the average annual losses from the river into the Edwards limestone were from 40,000 to 50,000 acre-feet.

An extensive program of stream gaging has been carried out along the Nueces River on the Edwards outcrop and above and below the outcrop. The results of these measurements are discussed at considerable length in another paper, 9/ in which the conclusion is reached that during 6 years, from October 1927 to September 1933, the losses from the river into the Edwards reservoir amounted to an average of at least 36,000 acre-feet a year, and perhaps considerably more.

On the basis of these figures it appears probable that the combined annual losses into the Edwards from the Medina, Frio, Dry Frio, Nueces, and Sabinal Rivers and Hondo Creek may average as much as 150,000 acre-feet, the equivalent of a continuous flow of about 134,000,000 gallons a day. Moreover, several smaller streams furnish supplies which in the aggregate probably amount to thousands of acre-feet a year.

The regimen of the streams of the Edwards Plateau has an important effect on the performance of the underground reservoir in the fault zone. The streams are fed in large part from the underground water system of the plateau, and this ground-water inflow is nearly uniform for long periods. After heavy rains the ground-water discharge usually increases greatly and may be sustained at relatively high but slowly declining stages for a long time. In some dry years, such as 1925, the discharge of the streams of the plateau consists almost entirely of ground water. The rainfall in 1925 was exceedingly low, among the lowest on record at San Antonio and Uvalde. Nevertheless, the combined ground-water discharge of the Medina, Nueces, and Frio Rivers in that year amounted to about 70,000 acre-feet, most of which was derived from the Edwards reservoir of the plateau and entered the lower part of the Edwards reservoir in the Balcones fault zone.

9/ Sayre, A. N., Geology and ground-water resources of Uvalde and Medina Counties, Tex.: U. S. Geol. Survey Water-Supply Paper 678, 1936.

During heavy rains and for a few days afterward the streams carry large quantities of storm water. This water, both in the larger streams and in innumerable small drainage channels, also contributes heavily to the fault-zone reservoir. The approximate amount of storm-water recharge from some of the larger streams is indicated by the stream-gaging records, but comparatively little is known regarding the recharge from the small streams and by direct penetration of rainfall. The records of artesian pressure and spring discharge at San Antonio give considerable information as to the time and relative magnitude of the total recharge during and after heavy rains. The artesian pressure in the vicinity of San Antonio rises almost immediately during exceptionally heavy general rains. At such times large quantities of water sink into the reservoir at the outcrop and produce a quick rise in the water table, the effect of which is communicated promptly by transmission of pressure many miles down the dip. The discharge of the San Antonio Springs also increases quickly when the rainfall is heavy, provided the pressure in the artesian reservoir at the beginning of the storm is sufficient to raise the water to or nearly to the level of the outlet of the springs. If the pressure is low before the storm it may be increased considerably and still fail to reach a point that will cause the springs to flow.

The records show that since 1913 there have been only a few periods of pronounced rise in the artesian pressure and spring discharge but that after these periods both the artesian pressure and the spring discharge were maintained at relatively high stages for months or even years. The periods of high recharge indicated by the rises are as follows: 1913, October to December; 1914, April and May; 1915, April and May; 1919, February, July to October; 1921, March and September; 1922, April; 1923, November and December; 1924, March to May; 1926, April and May; 1930 and 1931, October to February; 1932, July to September; 1935, April, May, and June.

It is apparent from a study of the records that the amount of the ground-water recharge is affected by the intensity of the rains and their distribution in time as well as by the amount of the rainfall. Intense general rains in which 3 to 8 inches falls in 2 or 3 days or a succession of moderately heavy rains in rapid sequence are almost certain to cause heavy recharge. Rains that are widely distributed in time and slow rains continuing over many days apparently provide very little recharge. Rains in winter contribute more to the ground water than rains of similar magnitude in summer. There is also a rather definite relation between the amount of storm run-off in the streams that cross the outcrop and the amount of ground-water recharge.

Although exceptionally heavy recharge on the outcrop during heavy rains is accompanied or followed by a rise in the artesian pressures at San Antonio, the recharge from the relatively uniform ground-water flow of the streams supplied by the underground reservoirs of the Edwards Plateau may not have an apparent effect on the pressure. This recharge is going on constantly, though in varying amounts.

Stream-gaging records during 1946 and the early part of 1947 have shown that Cibolo Creek loses large quantities of water to the Glen Rose limestone as well as the "Edwards" limestone in the stretch starting a few miles below Boerne in Kendall County and extending downstream nearly to Bracken in Comal County.

George 13/ believes that some water eventually passes from the Glen Rose limestone into the Edwards limestone reservoir in northeastern Bexar County and western Comal County.

Discharge from reservoir in Bexar County

The water discharged from the San Antonio and San Pedro Springs and from most of the deep wells of Bexar County comes from a common reservoir in fissures and solution channels in the "Edwards" limestone.

Discharge from San Antonio and San Pedro Spring.- The springs occur along faults that permit water in the limestone under artesian pressure to escape into cracks and channels in the overlying rocks and thence to flow to the surface. The San Antonio Springs are in the northern part of San Antonio near the north end of Brackenridge Park. The San Antonio River starts at San Antonio Springs and flows southward through Brackenridge Park and the business section to join Medina River about 10 miles south of the city.

13/ George, W. O., Geology and ground-water resources of Comal County, Texas: Manuscript report prepared in cooperation between U. S. Geol. Survey and Texas State Board of Water Engineers; in course of publication in mimeograph form.

The table below, based on the discharge of San Antonio River at the Alamo Street Station, gives the estimated combined discharge of the springs and inflow from artesian wells above the station from 1911 to 1929, 1933 and 1934, and 1939 to 1946.

Estimated monthly ground-water discharge into San Antonio River at San Antonio, Texas, 1915 to 1946, in acre-feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1915	-	5,720	6,520	9,700	10,700	8,330	10,500	13,600	8,090	7,130	6,070	5,780	98,000+
1916	5,700	4,890	4,630	5,600	5,750	5,130	4,880	5,220	4,970	5,090	4,820	4,980	61,660
1917	4,850	4,330	3,760	2,020	2,270	1,540	1,510	1,500	1,400	1,470	1,380	1,460	27,490
1918	1,440	1,270	1,290	1,370	1,390	810	880	800	830	660	540	550	11,910
1919	1,230	2,060	1,880	2,390	2,710	2,720	5,260	5,510	6,830	13,000	13,600	12,600	69,790
1920	15,000	12,400	12,500	10,800	10,200	9,400	8,790	8,220	7,320	7,270	6,840	6,820	115,560
1921	6,700	5,460	7,800	6,940	6,050	5,700	5,210	4,250	7,500	6,620	5,850	4,940	73,020
1922	4,610	3,530	3,830	6,010	6,070	6,600	5,430	4,730	4,040	3,650	4,260	4,480	57,240
1923	3,450	3,670	4,020	4,690	4,100	3,250	2,900	1,940	2,960	3,260	4,350	8,000	46,590
1924	8,100	7,600	9,300	9,900	11,100	11,700	10,200	8,110	7,230	7,020	5,580	5,540	101,880
1925	5,090	4,020	4,070	3,150	3,080	2,120	1,620	2,200	1,650	1,800	1,940	1,850	32,590
1926	2,100	1,850	2,340	4,260	7,800	5,430	4,040	2,840	2,200	2,150	2,110	2,250	39,370
1927	1,960	1,830	2,240	1,780	1,700	2,470	1,830	1,520	1,320	1,540	1,340	1,240	20,770
1928	1,310	990	1,210	1,160	1,500	1,030	940	1,000	960	1,000	850	760	12,710
1929	870	500	600	910	890	1,270	1,340	1,150	1,450	1,800	(*)	-	**14,000
1930	-	-	-	-	-	-	-	-	-	-	-	-	-
1931	-	-	-	-	-	-	-	-	-	-	-	-	-
1932	-	-	-	-	-	-	-	-	-	-	4,570	4,700	-
1933	4,340	3,610	4,530	4,380	3,780	3,050	2,290	2,500	2,870	2,820	2,360	2,480	39,010
1934	2,800	3,170	4,580	4,220	2,560	1,190	1,270	1,730	1,070	1,090	990	** 930	25,700
1939	-	-	2,490	1,750	1,330	1,190	1,020	1,520	1,480	1,130	1,020	970	-
1940	1,060	1,150	1,000	990	1,180	1,080	1,100	890	900	1,100	960	1,220	12,630
1941	1,600	3,100	4,350	5,800	8,830	7,640	6,200	4,250	4,800	6,250	6,300	6,150	65,270
1942	5,620	4,500	4,500	4,900	4,970	4,830	4,060	2,000	5,400	9,330	9,930	8,370	68,410
1943	7,520	5,660	5,870	4,800	3,400	2,800	3,000	2,060	1,830	1,800	1,630	1,700	42,070
1944	1,700	1,630	4,200	4,360	5,060	6,250	2,800	1,400	2,430	2,400	2,400	3,880	38,510
1945	6,550	8,370	8,730	8,920	7,500	4,600	3,300	2,080	1,700	3,200	2,640	2,770	60,360
1946	2,800	2,350	3,000	2,430	3,450	3,100	1,700	1,500	3,400	8,500	7,360	7,580	46,160

* Gaging station discontinued.

** Estimated.

The maximum flow was about 230 second-feet for about 3 weeks during November 1919 14/. At least a dozen large artesian wells flow directly or indirectly into the San Antonio basins and this sustains the stream when the San Antonio Springs are dry or the discharge is small. When the San Antonio Springs are dry the artesian wells discharging into the river upstream from the South Alamo Street bridge supply an average of about 12 to 15 second-feet. The flow from the wells decreases as the artesian pressure declines. From the record of artesian pressure shown by measurements of water levels in wells it is concluded that the San Antonio Springs had no flow during 1911, 1912, most of 1913, the latter part of 1918, 1923, 1925, 1926, and 1927, most of 1928, 1929, and 1930, and the latter part of 1940.

The San Pedro Springs are in the north-central part of the city about 1¾ miles northwest of the county court house. The water flows south in San Pedro Creek and discharges into San Antonio River near the south city limits. The table below gives the estimated ground-water discharge into San Pedro Creek during the periods 1917-29 and 1933-34, at a gaging station first operated on Commerce Street and later moved to Arsenal Street.

Estimated monthly ground-water discharge into San Pedro Creek at gaging stations on Commerce and Arsenal Streets, San Antonio, Texas 1917-29, and 1933-34 in acre feet

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
1917	820	660	330	270	290	290	190	170	150	180	200	180	3,730
1918	230	250	270	180	250	230	210	180	180	180	220	110	2,490
1919	260	320	320	380	450	510	570	790	590	1,050	1,000	900	7,140
1920	730	790	810	860	830	660	600	600	510	680	700	560	8,330
1921	540	500	540	490	500	480	480	400	280	600	460	490	5,760
1922	480	490	450	520	610	600	570	510	460	460	500	470	6,120
1923	470	420	340	450	430	310	410	340	400	420	440	420	4,850
1924	524	480	700	920	1,260	1,000	700	670	590	360	510	460	8,174
1925	460	420	410	420	400	360	360	390	490	420	400	390	4,920
1926	430	420	470	580	880	630	570	460	480	420	400	370	6,110
1927	340	320	400	390	450	480	380	330	280	320	290	350	4,330
1928	310	300	280	270	320	360	270	170	170	200	170	200	3,020
1929	280	200	250	240	260	220	300	260	220	210	230	*230	2,900
1933	450	420	480	560	560	300	380	320	310	330	400	380	4,890
1934	460	420	440	360	390	300	310	320	250	280	270	*270	4,070

* Estimated.

The greatest average discharge of the springs recorded during a month was about 18 second-feet in November 1919 15/. Undoubtedly there was some inflow from artesian wells along the creek between the springs and the gaging station on Commerce Street where the flow of San Pedro Creek was recorded during the early part of the period of record. According to current-meter measurements the pick-up from that source was 4.3 second-feet on November 9, 1932, and 2.1 second-feet on October 24, 1933.

Discharge from wells.- Artesian wells in Bexar County are used for all public supplies, including those of the city of San Antonio and United States Army posts, for industrial purposes, for supply of office buildings, for the irrigation of truck and feed crops, for ranches, and small domestic supplies.

14/ Surface water supply of the United States, 1919-20, part VIII, Western Gulf of Mexico: U. S. Geol. Survey Water-Supply Paper 508, p. 84, 1922.

15/ Op. cit., (Water-Supply Paper 508) p. 89.

Most of the San Antonio city wells are grouped at three main pumping plants, one in Brackenridge Park, another in the rear of the water department office on Market Street, and the third, called the Mission Plant, in the southern part of the city. In addition, several individual city wells have been drilled by the city in different areas including a few that are used to supply swimming pools. The amount of water delivered by the water department from 1925 to 1946 is shown in the following table:

Average quantities of water delivered by the city of San Antonio
(million gallons a day)

Year	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Annual
1925	-	-	-	-	-	31.6	31.2	29.5	24.7	22.0	20.8	20.4	-
1926	19.7	23.7	19.2	20.7	20.8	25.8	24.1	29.1	28.6	23.6	22.3	20.4	23.2
1927	20.9	22.1	19.3	25.2	26.4	25.7	27.7	34.3	28.7	22.8	24.4	19.5	24.8
1928	20.0	19.5	18.0	22.6	21.0	24.2	28.2	30.8	23.7	21.5	19.0	18.7	22.3
1929	18.2	20.8	17.4	21.1	22.8	27.3	22.1	30.8	26.8	20.9	18.3	17.2	22.0
1930	19.9	20.6	16.2	21.8	19.9	25.9	27.4	32.0	27.9	19.3	19.0	17.2	22.3
1931	17.7	18.9	16.3	19.5	21.5	28.1	24.2	28.2	31.9	25.4	21.9	16.6	22.5
1932	16.9	18.9	18.2	24.2	20.0	26.4	23.8	25.9	21.1	17.9	18.6	16.3	20.7
1933	16.7	19.8	16.7	21.8	25.1	26.9	30.2	23.3	22.7	19.6	19.2	18.1	21.7
1934	17.0	19.0	16.9	20.2	21.5	33.5	31.6	24.9	25.2	21.9	20.3	16.9	22.4
1935	18.0	19.7	18.0	20.0	18.0	20.4	26.3	25.9	22.8	19.1	18.4	16.7	20.3
1936	17.8	19.7	18.4	23.3	19.2	26.7	21.1	29.0	22.2	19.2	19.6	18.2	21.2
1937	19.2	22.0	17.6	23.0	28.2	27.6	16.8	33.0	31.2	24.2	21.1	18.1	23.5
1938	18.9	21.6	18.8	20.9	20.9	30.1	32.0	32.4	27.0	25.4	22.4	20.3	24.2
1939	19.4	22.7	21.1	30.1	31.1	33.0	34.4	29.0	30.4	28.9	25.7	22.5	28.1
1940	24.0	24.0	24.1	27.6	26.7	28.3	28.3	38.0	21.4	24.8	23.0	21.0	26.7
1941	21.9	22.7	20.7	24.8	24.4	27.6	33.5	38.7	32.1	23.9	24.5	21.7	26.4
1942	23.8	25.4	24.0	26.9	26.0	35.5	32.2	38.4	21.4	27.1	28.5	25.9	28.8
1943	27.8	32.3	27.0	34.3	37.4	35.2	38.8	44.7	33.2	29.0	29.9	26.3	33.0
1944	27.6	28.4	25.5	32.2	30.3	37.9	44.9	49.2	36.7	33.7	33.1	29.2	34.1
1945	30.3	32.9	29.3	34.5	38.1	45.3	45.9	46.5	46.7	33.9	36.3	31.9	37.6
1946	32.3	36.0	32.1	40.3	33.3	40.1	50.0	55.4	40.4	36.0	38.4	35.3	39.1

New building in the residential sections in the outskirts of San Antonio has increased the demand for water for suburban supply since the 1934 estimate was made. During the war large extensions to military establishments were made and the demand for water increased from 1942 through 1945, but fell off in 1946. It is estimated that those public supplies, including the city supply, required 50 million gallons a day during 1946.

A large part of the flow of the wells belonging to industrial plants and downtown office buildings is discharged into San Antonio River or San Pedro Creek. The discharge from such wells into San Antonio River upstream from South Alamo Street is included in the record of the flow of the river at that point. The amount of water used by industries and office buildings but not discharged into the river upstream from Alamo Street is estimated as 10 million gallons a day.

Of special interest is an artesian well (no. 164), drilled for the San Antonio Public Service Company in 1941 at the steam power plant a short distance south of Roosevelt Park. When it was measured on June 16, 1941, the well had a natural flow of 23.9 million gallons a day. It is believed that this is the largest discharge of any flowing well in the United States. The water is used at the power plant for cooling purposes for short periods during the summer, but most of the time the well is shut in.

It is estimated that approximately 6,500 acres was irrigated from wells in Bexar County in 1946 as compared with 4,500 in 1934, an increase of 44 percent. Several new irrigation wells were drilled during the intervening period. On the other hand, a few of the old wells are no longer in use. Expressed as a daily average throughout the year, the wells supplied about 22 million gallons a day for irrigation in 1946. The duty of water was relatively low, about 3.7 acre-feet per acre, owing to the practice of some of the irrigators to permit their wells to flow when they are not used for irrigation, and to the production of more than one crop each year on some of the land.

The average yield of ranch and small town wells is small and the total amount of water withdrawn in Bexar County by such wells is only a small part of the total discharge from the "Edwards" limestone reservoir. It is estimated that the total yield of all such wells in the county was 2 million gallons a day in 1946, as compared with 1.5 million gallons a day in 1934.

The flow from artesian wells into Salado Creek, discussed on page 89 of Water-Supply Paper 773-B is believed to have been at least 15 million gallons a day in 1946, or about the same as it was in 1934.

During the investigation in 1933-34, numerous wells were found south of San Antonio that flowed continuously but served little useful purpose. Some of these wells yielded fresh water and others sulfur water. Some emptied into the Medina River and others, including oil tests yielding sulfur water, discharged into the nearest surface drainage. Since 1933 several additional well have been drilled and their total yield amounted to about 10 million gallons a day in 1946 as compared with 7 million gallons a day in 1934.

Total discharge from springs and wells in 1934 and 1946.- The yield of San Antonio and San Pedro Springs, and all wells in Bexar County drawing from the "Edwards" limestone, is estimated to have averaged 155 million gallons a day in 1946 as compared with 97 million gallons a day in 1934. The figures are given in detail in the following table:

Estimated average discharge from San Antonio and San Pedro Springs and from all wells drawing from the "Edwards" limestone in Bexar County in 1934 and 1946

	(Million gallons a day) 1934	1946
Springs:		
San Antonio (including waste from industrial and office-building wells upstream from Alamo Street)	19	42
San Pedro (including waste from industrial wells upstream from Arsenal Street)	4	4
Sub-total	23	46
Wells:		
Public supplies (City of San Antonio, suburbs, and U. S. Army posts)	28	50
Industrial supplies and office buildings (exclusive of waste discharged into San Antonio River or San Pedro Creek above Alamo and Arsenal Streets, respectively)	5.5	10
Irrigation	18	22
Ranch and small town supplies	1.5	2
Salado Creek wells	14	15
Miscellaneous wells (water mostly wasted)	7	10
Sub-total	74	109
Total	97	155

Fluctuations in artesian pressure in "Edwards" reservoir

The San Antonio Water Department has kept a record of the artesian pressure at the Brackenridge pumping plant since 1911 by daily observation of the water level in an observation well. In connection with the present investigation by the Texas State Board of Water Engineers and Federal Geological Survey, a continuous recording gage has been maintained since November 11, 1932, on an unused well (no. 26) belonging to the Beverly Lodges, just north of Fort Sam Houston. Periodic measurements by means of a steel tape have been made since 1932 in 10 or more widely spaced observation wells in Bexar County and eastern Medina County. A study of the data shows that the fluctuations in artesian pressures throughout the area are in close agreement most of the time, and that the records obtained from the wells at Brackenridge Park and Beverly Lodges give an accurate picture of the major fluctuation features. The water levels recorded in these two wells are shown graphically in figure 2, and the brief discussion that follows relates mostly to them.

The rise and fall of the artesian pressure vary with the rate of recharge on the outcrop of the "Edwards" limestone, and the rate of recharge in turn varies with the distribution of the rainfall in time as well as with the amount and intensity. During periods of below-normal rainfall the water levels gradually decline. Heavy rains, however, may recharge the reservoir rapidly, and the water levels many miles down the dip to the south of the outcrop may recover in a few weeks all they have lost in a year or more; for example, the water level in the Beverly Lodges well showed a decline of about 10 feet during 1945, remained about constant until the summer of 1946, and then declined an additional 7 feet. From 3:30 a.m. until 1:00 p.m. on September 15, 1946, a total of 4.71 inches of rain fall at San Antonio. The water level began to rise at 9:30 a.m., and had a net rise of 4.1 feet in 3 days. Ten days later, during a 48-hour period beginning at 4:00 p.m. on September 25, 9.7 inches of rain fell, and the water level rose 5 feet in 24 hours and 6½ feet in 3 days. Thus as a result of these two heavy rains the water level recovered as much as it had declined during the preceding 17 months. Records at Brackenridge Park show several abrupt rises from low water levels; for example, 26 feet during October and November 1913, and 15 feet during April to June 1935. Pronounced rises during longer periods were as follows: 22 feet from August 1923 to June 1924; 24 feet from July 1930 to March 1931; 20 feet during the winter and spring of 1940-41. The lowest water level during the 35-year period was about 651 feet above sea level in the summer of 1913 and the highest was 689 feet in October 1919 and in July 1921.

In addition to the fluctuations of the water level that are the result of recharge due to rainfall and of the discharge of the springs and wells over long periods of time, there is a daily rise and fall of the water level. The daily variation, amounting to about a foot in summer and 0.3 foot in winter is caused by pumping from wells in the San Antonio area. Regular weekly fluctuations also occur. The water level usually rises with the week-end decline in the rate of pumping and falls gradually during the week.

QUALITY OF GROUND WATER IN BEXAR COUNTY

In the northern part of the county, near Cibolo Creek, wells in the Glen Rose limestone yield water of good chemical quality, but a few miles south of the creek some of the wells yield water of unsatisfactory quality owing mainly to a high sulfate content. (See analyses of water from wells E-1, E-18, and E-22.)

Still farther south, where the Glen Rose is covered by younger formations, it is not used as a source of water but probably the water is highly mineralized.

The water in the "Edwards" limestone underlying San Antonio and north, northwest, and west of the city is a calcium bicarbonate water, the average bicarbonate content being about 270 parts per million as HCO_3. The average hardness as $CaCO_3$ is about 235 parts per million. Generally the water contains less than 30 parts per million of sulfate, 20 parts per million of chloride, and 10 parts per million of sodium.

In extreme southeastern San Antonio and in most places in the southern part of the county the "Edwards" limestone generally yields highly mineralized hydrogen sulfide water to wells. The water is not uniformly bad but nearly everywhere a hydrogen sulfide odor is noticeable. The water from wells 175, I-108, J-49, N-13, and O-50 is of this type. In this area the chloride in many well waters may be as high as 2,000 parts per million and the total solids as much as 5,000 parts.

Potable water is found in many places in the outcrop of the Austin chalk through the central part of the county. However, in some places the Austin chalk yields water with a hydrogen sulfide odor, and it is the source of contamination of "Edwards" wells that are not properly cased through the Austin chalk.

In the southern and southeastern parts of the county, south of San Antonio, the surface is underlain by the Taylor marl, the Navarro, Midway, and Wilcox groups, and the Carrizo sand. With the exception of the area underlain by the Carrizo sand, very little ground water is found and the water is of poor quality. The water from wells in the Carrizo is of excellent quality. Water of good chemical quality is also found in shallow gravels along the Medina River (see analyses of water from wells M-1 to M-10).

SUMMARY

Below is a brief summary of some of the outstanding facts disclosed by the ground-water investigations in Bexar County during the period 1932-33, 1946, and the intervening period.

The springs and artesian wells have their source in a common reservoir in the "Edwards" limestone. This reservoir is fed by seepage from streams and by direct penetration of rainfall on the outcrop of the limestone along the Balcones escarpment, which crosses the northern parts of Bexar and Medina Counties and extends a long distance farther to the north, east, and west.

The additional data obtained in Bexar County and adjoining counties since 1934 largely substantiate the conclusions given on pages 105-7 of Water-Supply Paper 773-B. However, a recent intensive investigation of the ground-water resources of Comal County by George 16/ has shown that the quantity of ground water that moves out of Bexar County toward the northeast and eventually appears in the Comal Springs in Comal County is much greater than was formerly supposed.

The records show that the average combined discharge from the San Antonio and San Pedro Springs, and from all wells drawing from the "Edwards" limestone in Bexar County, was 155 million gallons a day in 1946, compared with 97 million gallons a day in 1934. In 1946 the wells provided about 60 million gallons a

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16/ Op. cit., p. 72.

day for public and industrial supply, as compared with about 33 million gallons a day in 1934. Approximately 6,500 acres was irrigated from wells in the "Edwards" limestone in 1946 as compared with 4,500 in 1934. It is roughly estimated that the combined discharge of the springs and wells averaged about 133 million gallons a day from 1934 to 1946, as compared with 107 million gallons a day from 1915 to 1935. Nevertheless the artesian pressure in the "Edwards" reservoir was about as high in the fall of 1946 as it was at any time between 1914 and 1946, except during brief periods in 1915, 1919-20, and 1921. On the average it was materially higher from 1934 to 1946 than it was from 1923 to 1934. This may have been due to the fact that from 1934 to 1946 the average rainfall was about 2.6 inches above the 74-year average. It is concluded that the underground-water resources of the San Antonio area are very large, and thus far they have not been overdrawn despite the increase in the combined discharge of the springs and wells in recent years.

Records of wells in Bexar County, Texas

All wells are drilled unless otherwise noted in the remarks column

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
1	4⅛ miles northwest	Lewis Maverick	A. Schwartz	1908	923	--	--
2	do.	do.	do.	--	650±	8	--
3	3 miles north	Mrs.R.E.McIlvaine	--	1898	340	5	--
4	do.	do.	Lorenz Bros.	1910	540	6-5/8	--
5	4 miles north	Davis Heights	--	--	--	--	--
6	3 miles north	Mrs. -- Mattke	--	--	--	6	--
7	do.	G. Potchernick	--	--	456	5	--
8	do.	G. Potchernick No.1	J. R. Johnson	1938	276	--	--
9	do.	Don Danvers	do.	1939	209	8	"Edwards" limestone
10	4 miles north	Texas Military Institute	--	--	400±	--	--
11	do.	Alamo Heights	--	--	490	--	--
12	do.	do.	--	--	455	--	--
13	do.	do.	--	--	180	--	--
14	do.	do.	--	--	350±	6	--
15	4½ miles northeast	Woodmen of the World Hospital	Amos Lorenz	--	500±	--	"Edwards" limestone
16	do.	do.	do.	--	300±	--	--
17	do.	do.	do.	--	250±	--	--
18	do.	do.	-- Johnson	1932	750±	10	"Edwards" limestone
19	4⅛ miles north	Dr. D. T. Atkinson	Amos Lorenz	--	245	8	--
20	do.	do.	do.	--	--	--	--
21	do.	City of San Antonio	--	1945	650	12⅜	"Edwards" limestone
22	4 miles northeast	Jack Brosseau	J. R. Johnson	1938	664	8,6¼	do.

a/ Land surface datum approximately at land surface. Water levels shown to nearest foot are reported, those to tenths and hundredths were measured.

b/ Pump and power: C, cylinder; T, deep-well turbine; Cf, centrifugal; J jet (small capacity); A, air lift; B, bucket; G, gasoline or diesel; W, windmill; E, electric; S, steam; H, hand. Number indicates horsepower.

Chemical analyses of water from most of these wells and springs are shown in the table of analyses

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
1	--	-147.00	Oct. 27, 1934	C,W,G,	D,S	Cased to 220 feet.
2	--	-145.75	do.	C,W,G	D,S	
3	--	- 74.1	Oct. 30, 1934	C,W	D,S	
4	--	- 41.53	do.	None	N	
5	761.46	d/	--	C,G	P	U. S. Geological Survey observation well 21.
6	773.89	d/	--	C,W	D	U. S. Geological Survey observation well 31.
7	--	--	--	C,G	D	
8	--	-135	1946	C,E, 5	P	Water from 260 to 276 feet. Reported yield 200 gallons a minute.
9	--	-133	1939	T,E, 10	D	Cased to 206 feet. See log. Water from 206 to 209 feet. Supplies swimming pool. See log.
10	--	--	--	C,E, 10	P	
11	--	--	--	T,E, 60	P	Reported yield, 450 gallons a minute.
12	--	--	--	T,E, 40	P	Reported yield, 300 gallons a minute.
13	--	--	--	None	N	Abandoned.
14	--	-135.85	Aug. 9, 1933	None	N	Do.
15	--	--	--	C,E	D,S, Irr	
16	--	--	--	C,G	D,S, Irr	
17	--	--	--	C,G	D,S, Irr	
18	--	--	--	T,-	D,S, Irr	
19	803.24	d/	--	None	N	U. S. Geological Survey observation well 35.
20	--	--	--	C,E, 25	D,S, Irr	Reported yield, 60 gallons a minute.
21	--	-130	1945	--	P	Cased to 368 feet. See log.
22	--	-119	1938	T,E, 5	D	Casing; 182 feet of 8-inch, 472 feet of 6¼-inch. See log.

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

d/ See table of water levels in observation wells

e/ Grayson shale formerly known as Del Rio clay is usually called "big mud" by drillers in their well logs.

Records of wells in Bexar County — Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
23	4 miles northeast	C. G. Hamil	J. R. Johnson	1939	760	8	"Edwards" limestone
24	do.	W. B. Osborn	do.	1940	704	8,7	do.
25	3¼ miles northeast	Incarnate Word College	H. H. Dretz	1912	390	8	--
26	4¼ miles northeast	Ed Steves and Sons (Beverly Lodges)	Dingman Drilling Co.	1929	756	12⅜	"Edwards" limestone
27	3 miles northeast	City of San Antonio	Judson Bros.	Old	--	10	do.
28	3 miles northeast	do.	--	--	702	--	do.
29	2¾ miles northeast	do.	Judson Bros.	--	758	8	do.
30	2⅛ miles northeast	do.	do.	--	--	8	do.
31	2¼ miles north	Saint Anthony College	--	Old	375±	6	--
32	do.	Saint Anthony Apostolic School	J. R. Johnson	1940	382	8	"Edwards" limestone
33	2 miles north	City of San Antonio	--	1942	851	20, 16	do.
34	3 miles northwest	R. R. McAnelly	--	Old	380±	6	--
35	2¾ miles northwest	Del Weffing	--	Old	400	6	"Edwards" limestone
36	2⅛ miles northwest	City of San Antonio	J.P.Beckendorfer	--	703±	10	do.
37	4 miles northwest	do.	J. R. Johnson	1946	994	18	do.
38	4¾ miles northwest	O. O. Bachtel	Max Gerfers	1945	524	5⅛	do.
39	4 miles northwest	Protestant Orphan Home	A. E. Goforth	--	450±	6	--
40	3⅛ miles northwest	Westmoorland College	--	--	850±	5	--
41	4⅛ miles west	Luther Thomas	--	--	--	6	--
42	4¾ miles west	E. Weilbacher	— Brendel	--	592	6	--
43	4 miles west	Lakeview Addition	--	--	--	--	"Edwards" limestone
44	4⅛ miles west	do.	--	1910	1,000	8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
23	--	-142	1946	T,E, 7½	D	Cased to 628 feet. See log.
24	--	-131	1940	T,E, 20	D	Casing: 193 feet of 8-inch; 431 feet of 7-inch. See log.
25	--	--	--	T,E, 15	P	Cased to 250 feet. Yield 300 gallons a minute.
26	722.56	d/	--	None	N	Water stage recorder installed November 11, 1932 is still in operation. U. S. Geological Survey observation well 436. See log.
27	--	--	--	None	N	
28	678.40	- 3.33 - 9.60 - 11.72	Nov. 10, 1932 June 22, 1934 Oct. 12, 1934	Flows, A	--	Under Hilderbrand Avenue bridge. Pumped with air when flow is insufficient for zoo. See log.
29	--	--	--	Flows, Cf,E	P	Supplies swimming pool; pumped when flow is insufficient. Tem-
30	--	--	--	Flows	N	Water is wasted perature, 76° F. into the river. Temperature, 77°F.
31	--	--	--	None	N	Abandoned.
32	--	-107	1940	T,G, 15	P	Cased to 269 feet. Supplies swimming pool. See log.
33	--	- 20	1942	E	P	See log.
34	--	- 18	1925	None	N	Reported one of earliest wells in San Antonio. Abandoned.
35	--	- 24.83	Aug. 23, 1933	C,W	Irr	
36	--	--	--	Cf,E	P	Supplies swimming pool.
37	--	- 26.15	June 19, 1946	T,E, 150	P	Cased to 514 feet. Well was drilled to 1,204 feet. See log.
38	--	-108	1945	E	D	Cased to 512 feet. Sulphur water from 434 to 436 feet. See log.
39	--	--	--	C,E, 5	P	Well penetrates Grayson shale. Yield 65 gallons a minute.
40	715.94	d/	--	None	N	U. S. Geological Survey observation well 22.
41	--	- 53.26	Aug. 29, 1933	None	N	
42	--	--	--	C,W	D,S	
43	--	--	--	T,E, 20	D,Irr	Top of "Edwards" limestone 672 feet.
44	710.26	d/	--	T,E, 20	D,Irr	U. S. Geological Survey observation well 20. Yield 600+ gallons a minute on August 25, 1933; drawdown 3.6 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
45	4¾ miles west	National Bank of Commerce	-- Rohmer	--	1,080±	--	--
46	5½ miles west	Richard Dulnig	Fred Burkett Co.	1946	965	6	"Edwards" limestone
47	3¾ miles west	M. F. Grimm	--	--	34	60	--
48	do.	Pete Calle	--	Old	1,029	8	--
49	3⅝ miles west	Dr. Adolf Herff	--	1904	1,286	--	"Edwards" limestone
50	2¾ miles west	Lady of the Lake College	J. W. Judson	1906	1,380	12,10, 8	do.
51	3 miles west	Chas. Matyear	Alex Lorenz	1912	609	7-7/8	do.
52	2¾ miles west	--	--	--	--	--	--
53	do.	City of San Antonio	--	--	--	--	"Edwards" limestone
54	2⅝ miles west	San Antonio Board of Education	S. L. Sweeney	1893	300	10	Austin chalk
55	do.	do.	--	--	--	6	--
56	2⅝ miles northwest	Mrs. L. M. Hubble	L. M. Hubble	1900	600	4	"Edwards" limestone
57	2¼ miles northwest	Henry and Laurel Elmendorf	--	--	--	6	--
58	do.	Mrs. L. M. Hubble	L. M. Hubble	1893	498	5-5/8	"Edwards" limestone
59	do.	do.	do.	1893	270	6	Austin chalk
60	2 miles northwest	-- Maspero	do.	1913	--	6	--
61	do.	do.	--	--	700±	6	"Edwards" limestone
62	2⅝ miles west	City of San Antonio	J. R. Johnson	1946	1,212	20,16	do.
63	¾ mile west	Southern Ice and Cold Storage Co.	J.P.Benkendorfer	--	900±	10	do.
64	do.	do.	do.	--	911	10	do.
65	do.	International and Great Northern Ry.	--	1924	1,239	8	do.
66	1 mile northwest	Liberty Mills	Allen Burman	1916	875	8	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
45	--	--	--	--	P	
46	--	- 43.59	June 4, 1946	None	N	See log.
47	--	--	--	Cf,E	Irr	Dug. Irrigated about 1 acre in 1934.
48	--	--	--	T,E, 30	Irr	Irrigated about 85 acres in 1934; Yield about 600 gallons a minute,
49	--	- 11.05	Aug. 25, 1933	Cf,G	D,S	See log. October 1, 1934.
50	--	--	--	--	P	Casing: 267 feet of 12-inch; 538 feet of 10-inch; 265 feet of 8-
51	--	--	--	Flows	D,Irr	Estimated flow inch. See log.
52	676.10	d/	--	None	N	15 gallons a minute on August 25, U. S. Geological 1933, See log.
53	--	--	--	None	N	Survey observation well 25. Well Water flows flows at times. upward outside of casing and is wasted into creek. Estimated flow 50 gallons a minute on Sep-
54	--	--	--	None	N	tember 19, 1934.
55	--	--	--	None	N	
56	--	--	--	Flows	N	Flows into creek. Estimated yield 1 gallon a minute, July 14,
57	--	--	--	Flows	P	Estimated flow 5 gallons 1932.
58	663.43	d/	--	Flows	D	a minute, August 17, 1933. Wasted U. S. Geological into creek.
59	--	--	--	Flows	N	Survey observation well 23. See Well stops flowing in log.
60	--	--	--	Flows	N	dry years. Water flows into creek. Estimated
61	--	--	--	Flows, Cf,E	D,Irr	yield 15 gallons a minute on Estimated August 23, 1933. yield, 30 gallons a minute.
62	--	--	--	Flows T,E,60	P	Electrical log available. Cased to 954 feet. Pumping yield re-
63	--	--	--	None	Ind	ported 500 gallons a minute. See After serving as cooling log.
64	--	--	--	None	Ind	water in ice plant, water flows into public swimming pool. Tem- Combined flow perature, 78° F.
65	--	+ 18	1923	T,E, 25	P	of wells 63 and 64 was estimated as 850 gallons a minute in 1934. See log. See log.
66	--	+ 8.0	Aug. 1, 1933	C,E, 1½	D,Ind	Grayson shale from 650 to 700 feet.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date com-ple	Depth of well	Diam-eter of well (in.)	Water-bearing formation
67	1 mile northwest	R. Keilman	Allen Burman	1918	802	5-5/8	"Edwards" limestone
68	1¼ miles northwest	Mission Ice Co.	J.P. Benkendorfer	1911	758	6	do.
69	1¾ miles northeast	City of San Antonio Brackenridge Park Pumping Plant No. 1	Judson Bros.	--	750	8	do.
70	do.	City of San Antonio Brackenridge Park Pumping Plant No. 2	do.	--	780	8	do.
71	do.	City of San Antonio Brackenridge Park Pumping Plant No. 3	do.	--	--	8	do.
72	do.	City of San Antonio Brackenridge Park Pumping Plant No. 4	do.	1914	--	12	do.
73	do.	City of San Antonio Brackenridge Park Pumping Plant No. 5	do.	1914	--	12	do.
74	do.	City of San Antonio Brackenridge Park Pumping Plant No. 6	J.P. Benkendorfer	--	--	12	do.
75	do.	City of San Antonio Brackenridge Park Pumping Plant No. 7	do.	1924	--	12	do.
76	do.	City of San Antonio Brackenridge Park Pumping Plant No. 8	do.	1926	--	12	do.
77	do.	City of San Antonio Brackenridge Park Pumping Plant No. 9	Harris and Rohmer	--	--	12	do.
78	do.	City of San Antonio Brackenridge Park Pumping Plant No. 10	do.	--	--	12	do.
79	do.	City of San Antonio Brackenridge Park Pumping Plant No. 11	--	1933	760	15	do.
80	do.	U. S. Government	-- Judson	1903	729	10	do.
81	do.	do.	--	--	729	10	do.
82	1⅛ miles northeast	E. Y. White Laundry	Dingman Drilling Co.	1931	853	8	do.
83	do.	Dairyland Products Co.	--	--	800±	8	do.
84	do.	Pearl Brewery	--	--	--	--	do.
85	do.	do.	Judson Bros.	--	850±	8	do.
86	do.	do.	do.	--	850±	12	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
67	667.11	d/	--	Flows	D	Observation well 24. Estimated flow 10 gallons a minute, Aug.1, 1933.
68	--	--	--	Cf,E, 15	Ind	Estimated flow 400 gallons a minute, July 31, 1933. Grayson shale from 660 to 710 feet.
69	--	--	--	Flows	P	Water flows to pumps through header-pipe.
70	--	--	--	Flows	P	
71	--	--	--	Flows	P	
72	--	--	--	Flows	P	
73	--	--	--	Flows	P	
74	--	--	--	Flows	P	
75	--	--	--	Flows	P	
76	--	--	--	Flows T,-, 800	P	Reported yield 12 million gallons a day.
77	--	--	--	Flows	p	
78	--	--	--	Flows	P	
79	--	--	--	Flows	P	Top of "Edwards" limestone at 653 feet.
80	--	--	--	Flows	P	Temperature 78° F. See log.
81	--	--	--	Flows	P	
82	--	--	--	Cf,E	Ind	See log.
83	--	--	--	Cf,E, 15	Ind	
84	--	--	--	None	N	
85	--	--	--	Cf,S	Ind	
86	--	--	--	Cf,S	Ind	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
87	2 miles northeast	Southern Ice Co.	--	--	900	6	"Edwards" limestone
88	2½ miles east	Texas Vegetable Oil Co.	-- Fuller	1914	1,000±	6	do.
89	1½ miles northeast	Lone Star Ice Co.	J.P.Benkendorfer	1906	805	10	do.
90	do.	do.	do.	1907	728	10	do.
91	do.	do.	--	--	--	2	--
92	1 mile northeast	City of San Antonio	--	1910	1,020	10	"Edwards" limestone
93	do.	Southern Greyhound Lines	J.P.Benkendorfer	--	651	6	do.
94	do.	do.	--	--	800±	6	do.
95	do.	do.	--	--	800±	6	do.
96	do.	do.	--	--	--	6	--
97	do.	do.	--	--	--	4	"Edwards" limestone
98	--	City of San Antonio	J.R. Johnson	1946	696+	--	do.
99	do.	San Antonio Public Service Co.	S. Sweeney	1898	980	8	do.
100	do.	do.	do.	1898	1,140	8	do.
101	¾ mile northeast	Mistletoe Creameries Inc.	--	--	1,050	10,8	do.
102	do.	do.	--	--	1,150	10,8	do.
103	1 mile northeast	Sunset Wood and Coal Co.	--	1908	1,020	8	do.
104	1 mile east	Merchant's Ice and Cold Storage Co.	J.P.Benkendorfer	1909	865	6	do.
105	do.	do.	do.	1909	865	8	do.
106	do.	San Antonio Machine-Supply Co.	--	--	--	8	--
107	⅛ mile northeast	Moore Estate	J.P.Benkendorfer	1914	1,035	6	"Edwards" limestone
108	⅛ mile north	Orsaline Convent	--	--	720	--	do.
109	do.	Sears Roebuck and Co.	Dingman Drilling Co.	1936	1,100	13	--
110	¼ mile north	Milam Building	--	--	--	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
87	710.34	d/	--	C,E, 1½	Ind	U. S. Geological Survey observation well 34.
88	--	- 15.82	Aug. 7, 1933	A	Ind	
89	--	--	--	Cf,S	Ind	Grayson shale from 600 to 660 feet. Estimated yield 700 gallons a minute.
90	--	--	--	Cf,S	Ind	Do.
91	--	--	--	None	N	
92	--	--	--	None	N	Grayson shale from 600 to 655 feet. Estimated flow 40 gallons a minute August 4, 1933. Water flows into San Antonio River. Formerly Citizens Ice Company.
93	--	--	--	None	N	Abandoned. See log.
94	--	--	--	None	N	Abandoned.
95	--	--	--	None	N	Do.
96	--	--	--	None	N	Do.
97	--	--	--	None	N	Do.
98	--	--	--	None	N	Drilling when visited. Grayson shale from 598 to 655 feet.
99	--	--	--	T,E, 7½	Ind	Water is used for cooling at small transformer station. Electrical log available.
100	--	--	--	T,E, 7½	Ind	Grayson shale from 800 to 850 feet.
101	--	--	--	Cf,E	Ind	Reported yield 800 gallons a minute.
102	--	--	--	T,E, 20	Ind	
103	675.30	d/	--	None	N	Flows at times. U. S. Geological Survey observation well 32.
104	--	--	--	Cf,E, 20	Ind	Reported yield 450 gallons a minute.
105	--	--	--	Cf,E, 20	Ind	Do.
106	--	- 0.82	July 27, 1933	T,E, 15	Ind	
107	--	--	--	Cf,E, 5	P	
108	--	--	--	--	P	
109	--	--	--	--	P	Reported yield 700 gallons a minute.
110	--	--	--	None	N	Flows very little and is wasted into river.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
111	¼ mile north	Milam Building	--	--	--	--	--
112	do.	Mexican Restaurant	--	--	--	--	--
113	do.	Texas Theatre	Dingman Drilling Co.	1928	1,414	12	"Edwards" limestone
114	do.	Gunter Hotel	J.P.Benkendorfer	1909	1,018	6	do.
115	do.	St. Anthony Hotel	do.	1908	1,018	6	do.
116	do.	do.	do.	1909	831	8	do.
117	do.	do.	J. R Johnson	1941	805	13,10¾	do.
118	⅛ mile northeast	Moore Building	-- Davidson	1907	760	6	do.
119	do.	Gibbs Building	J.P.Benkendorfer	1908	860	6	do.
120	do.	U. S. Post Office	Burkett Bros.	1935	1,159	--	--
121	do.	Majestic Theatre	Dingman Drilling Co.	1929	778	12	"Edwards" limestone
122	do.	Nix Building	do.	1931	1,043	12	do.
123	do.	Texas Steam Laundry	J.P.Benkendorfer	1905	747	6	do.
124	⅛ mile east	Menger Hotel	-- Smith	--	1,160	--	do.
125	do.	Original Mexican Restaurant	--	--	712	8	do.
126	do.	Joske Bros. Co.	Dingman Drilling Co.	--	961	12	do.
127	do.	San Antonio Laundry	J.P.Benkendorfer	--	1,020	6	do.
128	¼ mile east	City of San Antonio, Market Street No. 1	Judson Bros.	1890	--	8	do.
129	do.	City of San Antonio, Market Street No.2	do.	1890	--	8	--
130	do.	City of San Antonio, Market Street No.3	do.	1890	--	8	"Edwards" limestone
131	do.	City of San Antonio, Market Street No.4	do.	1890	--	8	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
111	--	--	--	None	N	Small flow is wasted into river.
112	--	--	--	None	N	Old Collin's Manufacturing Company well. Grayson shale from 720 to 800 feet.
113	--	--	--	T,E, 20	P	Grayson shale from 636 to 685 feet. Used for theatre and office building. Reported yield 200 gallons a minute.
114	--	--	--	T,E, 20	P	Grayson shale from 675 to 725 feet. Reported yield 500 gallons a minute.
115	--	--	--	Cf,E, 20	P	Cased to 728 feet.
116	--	--	--	Cf,E, 20	P	Grayson shale from 675 to 725 feet.
117	--	+ 30	1941	Flows T,E	P	Casing: 200 feet of 13-inch; 489 feet of 10¾-inch. Reported flow 800 gallons a minute. See log.
118	655.66	d/	--	Cf,E	P	Grayson shale from 637 to 687 feet. U. S. Geological Survey observation well 33. Well in basement.
119	--	--	--	C,E	P	Grayson shale from 675 to 725 feet. Cased to 725 feet.
120	--	--	--	Cf,-	P	See log.
121	--	--	--	Flows Cf,E	P	Grayson shale from 631 to 692 feet. Measured yield; 1,390 gallons a minute July 28, 1933; 1,790 gallons a minute February 17, 1934; and 1,230 gallons a minute June 2, 1934.
122	--	--	--	--	P	See log.
123	--	--	--	Cf,E, 20	Ind	Do.
124	--	--	--	None	N	Flows upward outside of casing and is wasted.
125	--	--	--	None	N	Formerly owned by Scholz Sanitarium.
126	--	--	--	--	P	Cased to 759 feet. See log.
127	--	+ 14.1	July 27, 1933	Cf,E	Ind	Grayson shale from 775 to 825 feet.
128	--	--	--	Flows	P	Grayson shale from 608 to 654 feet.
129	--	--	--	Flows	P	
130	--	--	--	Flows	P	All wells at this pumping plant flow to header-pipe and water is pumped with booster pumps.
131	--	--	--	None	N	Well sealed and abandoned.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
132	¼ mile east	City of San Antonio, Market Street No.5	Judson Bros.	1894	880	12	"Edwards" limestone
133	do.	City of San Antonio, Market Street No.6	do.	1894	880	12	do.
134	do.	City of San Antonio, Market Street No. 7	do	1894	880	12	do.
135	do.	City of San Antonio, Market Street No.8	do.	1904	880	12	do.
136	do.	City of San Antonio, Market Street No.9	Judson and Davis	1908	--	12	do.
137	do.	City of San Antonio, Market Street No.10	do.	1908	--	12	do.
138	do.	City of San Antonio, Market Street No.11	do.	1908	--	12	do.
139	do.	City of San Antonio, Market Street No.12	J. P. Benkendorfer	1914	--	12	do.
140	do.	City of San Antonio, Market Street No.13	Dingman Drilling Co.	1928	912	12	do.
141	do.	City of San Antonio, Market Street No.14	Layne-Texas Co.	1930	900	15	do.
142	do.	San Antonio Gas and Electric Co.	T. H. Little	1912	1,000	10, 8	do.
143	¼ mile southeast	Smith Bros.	--	1908	812	10, 8	do.
144	St.Mary's & Commerce Sts.	Alamo National Bank	Dingman Drilling Co.	1929	968	10, 8,6	do.
145	Main and Dolorosa Sts.	Bexar County Court House	S. Sweeney	--	872	6	do.
146	½ mile northwest	--	--	--	1,312	--	do.
147	½ mile northwest	Santa Rosa Infirmary	--	--	1,250	6	do.
148	¼ mile south	U. S. Government (arsenal)	J.P.Benkendorfer	1918	836	8	do.
149	¾ mile southwest	City Ice Company	do.	1918	875	8	do.
150	¾ mile south	Mrs.Johanna Steves	do.	1912	758	12, 10	do.
151	do.	Pioneer Flour Mills	Dingman Drilling Co.	1929	1,652	12	do.
152	do.	do.	Wm. Davison	--	950	6	do.
153	1 mile south	Gugenheim-Goldsmith	J. R. Johnson	1939	884	10, 8	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
132	--	--	--	Flows	P	
133	--	--	--	Flows	P	
134	--	--	--	Flows	P	
135	--	--	--	Flows	P	
136	--	--	--	Flows	P	
137	--	--	--	Flows	P	
138	--	--	--	Flows	P	
139	--	--	--	Flows	P	
140	--	--	--	Flows	P	See log.
141	--	--	--	Flows	P	Top of "Edwards" limestone at 776 feet.
142	--	--	--	Flows	N	Grayson shale from 835 to 900 feet.
143	--	--	--	Cf,E, 10	P	Reported yield, 100 gallons a minute.
144	--	--	--	T,E, 7½	P	See log.
145	--	+ 32.8	July 28, 1933	Cf,E, 10	P	Grayson shale from 650 to 700 feet.
146	--	--	--	Flows	P	Supplies water to drinking fountain. Reported sulphur water, Known as Gas Company well.
147	--	--	--	Cf,E, 10	P	
148	--	+ 28.6	Nov. 27, 1933	Flows	P	Reported yield 1,050 gallons a minute in 1918. See log.
149	--	--	--	Flows	Ind	Casing: 449 feet of 12-inch; 275 feet of 10-inch. Some flow outside of casing. Reported yield, 300 gallons a minute in 1933.
150	--	--	--	Flows	D	See log.
151	632.06	+ 38.3	Aug. 14, 1933	Flows	Ind	Well cased to 747 feet. See log.
152	--	+ 37.6	do.	Flows	P	Grayson shale from 780 to 830 feet. Water contains considerable gas. Formerly Southern Ice Company well.
153	--	--	--	Flows Cf,E, 7½	Ind	Casing: 200 feet of 10-inch; 383 feet of 8-inch. Reported flow, 1,200 gallons a minute. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
154	¾ mile southeast	Southwest Dairy Products	--	1928	--	8	--
155	1½ miles southeast	Denver Ice Co.	J.P.Benkendorfer	--	1,350±	8	"Edwards" limestone
156	1½ miles south	City of San Antonio, Roosevelt Park	--	--	--	--	--
157	do.	Martin Linen and Supply Co.	Wm. Cravens	1941	1,425	--	--
158	1½ miles south	Lone Star Brewing Co.	Burkett Drilling Co.	1941	972	--	--
159	1½ miles south	S. A. and A. P. R.R.	Allen Burman Keystone Drilling Co.	1915	1,103	7½, 6½	"Edwards" limestone
160	do.	Dodson Show Co.	--	--	--	10	--
161	do.	San Antonio Public Service Co.	Burkett Bros.	--	1,434	14	"Edwards" limestone
162	do.	do.	-- Little	--	1,000±	10	do.
163	do.	do.	Burkett Bros.	--	998	12	do.
164	do.	do.	Layne-Texas Co.	1941	1,052	24	do.
165	1¾ miles south	Grayburg Oil Co.	Grayburg Oil Co.	1922	1,075	6-5/8	do.
166	2 miles south	Alamo Dressed Beef Co.	--	1911	1,220	8,6	do.
167	do.	City of San Antonio Mission Plant No. 1	J. P. Benkendorfer	1914	1,440	10	do.
168	do.	City of San Antonio Mission Plant No. 2	do.	1914	--	12	do.
169	do.	City of San Antonio Mission Plant No. 3	do.	1916	--	12	do.
170	do.	City of San Antonio Mission Plant No. 4	do.	1920	--	12	do.
171	do.	City of San Antonio Mission Plant No. 5	Dingman Drilling Co.	1927	1,252	12	do.
172	do.	City of San Antonio Mission Plant No. 6	do.	1929	--	12	do.
173	do.	City of San Antonio Mission Plant No. 7	do.	1929	1,841	12	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
154	--	--	--	Cf,E, 5	Ind	
155	--	--	--	T,E, 7⅛	Ind	Water contains sulphur, and is highly mineralized.
156	--	--	--	Flows	N	Flows sulphur water from above Grayson shale. Estimated yield 50 gallons a minute. Temperature 85° F.
157	--	--	--	None	N	Very little water in Edwards limestone to 1,030 feet. Acidized. Drilled into Glen Rose limestone. Abandoned and sealed.
158	--	--	--	--	Ind	Grayson shale from 895 to 954 feet. Estimated flow when drilled 2,000 gallons a minute.
159	627.05	d/	--	Flows	Irr	550 feet of 7⅛-inch casing at top and 70 feet of 6⅛-inch casing through Grayson shale. U. S. Geological Survey observation well 37. See log.
160	--	--	--	Flows	Irr	
161	--	--	--	Flows	Ind	Bottom of Grayson shale at 934 feet. Used for cooling.
162	--	--	--	Flows	Ind	Casing believed to be broken at about 550 feet. Used for cooling.
163	--	--	--	Flows	Ind	Used for cooling. See log.
164	--	+ 56	June 16, 1942	Flows	Ind	Used for cooling. Flow 16,800 gallons a minute, June 16, 1942, Temperature 82° F. See log.
165	616.40	+ 50.8 + 45.7	Aug. 3, 1933 Oct. 9, 1934	Flows	N	
166	--	--	--	C,S	Ind	Temperature 80° F.
167	598.18	+ 73 + 71.0	1914 Oct. 9, 1934	Flows	P	All wells at the plant flow into a collecting main from which the water is pumped into the city mains. Grayson shale from 1,287 to 1,328 feet. Reported flow of 3,000 gallons a minute from above the Grayson shale. See log.
168	--	--	--	Flows	P	
169	--	--	--	Flows	P	
170	--	--	--	Flows	P	
171	--	--	--	Flows	P	
172	--	--	--	Flows	P	
173	--	--	--	Flows	P	See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
174	2 miles south	City of San Antonio, Mission Plant No. 8	Draper and Dozier	--	1,400	--	"Edwards" limestone
175	3¼ miles south	City of San Antonio	--	1910	2,103	8	--
176	3 miles south	A. C. Oefinger	--	1941	30	60	--
177	2 miles southwest	Steves Irrigated Garden	J.P.Benkendorfer	1912	1,185	12	"Edwards" limestone
178	1⅛ miles southwest	Union Meat Company	do.	--	1,500	6	do.
179	do.	do.	Layne-Texas Co.	--	1,400	10	do.
180	do.	do.	J.P.Benkendorfer	--	1,250	10	do.
181	do.	Kothman Bros. Packing Co.	--	--	1,400	8	do.
182	1¼ miles southwest	Gebhardt Canning Co.	Max Gerfers	--	1,027	10	do.
183	do.	Mrs. H. Van Daele	Wm. Davison	1895	955	6, 4⅛	do.
184	do.	Auge Packing Co.	--	--	1,445	6	do.
185	1⅛ miles southwest	Apache Packing Co.	J.P.Benkendorfer	--	--	6	--
186	do.	S. M. Reyes and Sons	Wm. Craven and Sons	1945	948	7,5⅛	"Edwards" limestone
187	do.	Mrs. M. Stuernagel Packing Co.	do.	1945	851	6-5/8	do.
188	do.	Melton and Rheniner Packing Co.	J. R. Johnson	1946	1,126	8-5/8	do.
189	1¼ miles southwest	Apache Packing Co.	do.	1942	1,011	10, 8,7	do.
190	do.	do.	J.P.Benkendorfer	--	1,160	6-5/8	do.
191	2¾ miles west	Gus Persyn	--	1913	1,200±	8	do.
192	3½ miles southwest	Edgewood Irrigation Co.	--	--	--	12	--
193	do.	do.	--	--	--	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
174	--	--	--	Flows	P	See log.
175	621.57	d/	--	Flows	N	Cased to 1,200 feet. Yields some oil and gas. U. S. Geological Survey observation well 38.
176	--	--	--	-,E, $\frac{1}{2}$	P	Dug.
177	--	--	--	Flows	Irr	First water at 1,065 to 1,070 feet. Reported flow 1,600 gallons a minute in September 1934.
178	--	--	--	Flows	Ind	Mutual interference between wells 177, 178 and 179 is strong. Total flow about 500 gallons a minute. See log.
179	--	--	--	C,S	Ind	See log.
180	--	--	--	T,E, 25	Ind	Sulphur water at 491 feet. No fresh water below 1,250 feet.
181	--	--	--	Flows	Ind	See log. See log.
182	--	+ 44.9	Aug. 15, 1933	Cf,E, 5	Ind	Do.
183	--	--	--	Flows	Irr, Ind	Grayson shale from 750 to 800 feet. Flow of 200 gallons a minute of sulphur water reported from depth of 600 feet when drilled. Deepened in 1907.
184	--	--	--	Flows	Ind	
185	--	--	--	Cf,-	Ind	
186	--	--	--	Flows Cf,E, $7\frac{1}{2}$	Ind	Casing: 400 feet of 7-inch; 392 feet of $5\frac{1}{2}$-inch. Reported flow 250 gallons a minute after acidizing. See log.
187	--	--	--	Flows	Ind	Cased to 817 feet. Reported flow 2,000 gallons a minute. See log.
188	--	--	--	Flows	Ind	Cased to 866 feet. Reported flow, 750 gallons a minute. See log.
189	--	--	--	Flows	Ind	Casing: 36 feet of 10-inch; 211 feet of 8-inch; to surface 536 feet of 7-inch. Reported flow, 200 gallons a minute in 1942. See log.
190	--	--	--	Flows	Ind	Estimated flow, 60 gallons a minute in 1933.
191	--	--	--	T,E, 10	Irr	Used for irrigating about 25 acres of garden. Reported yield 615 gallons a minute in 1934.
192	--	--	--	T,E, 40	Irr	Irrigated about 10 acres in 1934; reported yield was 1,100 gallons a minute.
193	--	--	--	Cf,E	Irr	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
194	3½ miles west	David and Sam Anderson	Burkett Bros.	--	950	--	--
195	3½ miles southwest	A. H. Morton	--	--	--	--	--
196	2¾ miles southwest	T. W. Memefee	J.P.Benkendorfer	--	--	--	"Edwards" limestone
197	2½ miles southwest	William Urban	Burkett Bros.	--	870	--	do.
198	do.	Frank Brady	J.P.Benkendorfer	1908	1,165	8	do.
199	2¼ miles southwest	Rene Baeten Nursery	--	1908	840	6	do.
200	do.	William Reichert	--	1891	1,200	6	do.
201	do.	Lytle Realty Co.	Wm. Davison	1908	950	6	do.
202	1¾ miles southwest	J. A. Gallagher	do.	1898	950	4¼	do.
203	2 miles southwest	John Epp	--	1897	884	4¼	do.
204	2¼ miles southwest	N. H. White	Jacob Wolff	1903	915	6	do.
205	2½ miles southwest	Frank Brady	--	--	--	--	--
206	2¾ miles southwest	do.	--	--	--	--	--
207	2½ miles southwest	Collins Estate	--	1900	900	12, 10	"Edwards" limestone
208	do.	do.	--	--	700	12	Austin chalk
209	do.	San Fernando Water Co.	-- Jose	--	1,007	8	"Edwards" limestone
210	do.	Old San Fernando Subdivision	J.P.Benkendorfer	1910	1,465	8	do.
211	3¼ miles southwest	Charles Persyn	Jacob Wolff	1913	1,364	6	do.
212	do.	South San Antonio Water Co.	Black-Karsch	1911	1,417	8, 6-7/8	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
194	--	--	--	T,E, 10	Irr	Grayson shale from 900 to 950 feet. Irrigates about 45 acres. Reported yield 675 gallons a minute in 1934.
195	--	--	--	Cf,G	Irr	Irrigated about 25 acres in 1934. Reported yield 100 gallons a minute.
196	--	--	--	Cf,G	Irr	Said to have been drilled to 2,000 feet. Grayson shale from 925 to 975 feet. Reported yield 215 gallons a minute in 1934.
197	--	--	--	T,G	Irr	Bottom of Grayson shale at 810 feet. Used for irrigating 35 acres of garden. Reported yield 600 gallons a minute in 1934.
198	--	--	--	Flows	Irr	Grayson shale from 750 to 800 feet. Reported yield, 350 gallons a minute in 1934. Temperature 78° F.
199	--	--	--	Cf,E	Irr	Estimated flow, 300 gallons a minute in 1933.
200	--	--	--	Cf,E	Irr	Grayson shale from 890 to 940 feet. Irrigates 23 acres of garden. Estimated flow 100 gallons a minute in 1934.
201	--	--	--	Cf,E	P	Cased to 880 feet.
202	--	--	--	Flows	S	Cased to 900 feet.
203	--	--	--	Flows	Irr	
204	652.03	d/	--	Flows	N	Formerly owned by Collins Estate. Grayson shale from 840 to 890 feet. U. S. Geological Survey observation well 29.
205	--	--	--	Cf,E	Irr	Irrigated about 35 acres of garden in 1934, also used for swimming pool. Reported flow, 130 gallons a minute in 1934.
206	--	--	--	Flows	N	
207	--	--	--	Flows	Irr	Irrigated about 10 acres in 1934. Collins Garden. Grayson shale
208	--	--	--	Flows	Irr	Do. from 840 to 890 feet.
209	--	+ 21.5	Aug. 14, 1933	Cf,E, 40	P	Cased to 615 feet.
210	--	--	--	Flows	Irr,S	Grayson shale from 993 to 1,048 feet.
211	--	--	--	Cf,-	Irr,S	Irrigated 15 acres of garden in 1933. Grayson shale from 1,212 to 1,277 feet. Reported flow, 86 gallons a minute in 1934.
212	--	--	--	Cf,E, 20	P	Cased to 1,300 feet. Reported yield, 350 gallons a minute in 1933 with 10.4 feet drawdown.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
213	3 miles southwest	Palm Heights Water Co.	J.P.Benkendorfer	--	--	8	--
214	do.	do.	Jacob Wolff	--	--	--	--
215	3¼ miles southwest	W. D. Malone	--	--	--	8	--
216	3 miles southwest	A. H. Morton	--	--	--	8	"Edwards" limestone
217	3½ miles southwest	South San Antonio Water Co.	--	--	--	10	--
218	3½ miles southwest	Humble Oil Co.	Harris and Rohmer	--	--	12	--
219	4½ miles southwest	U. S. Government	J.P.Benkendorfer	1910	1,197	10, 8	"Edwards" limestone
220	4¼ miles southwest	do.	do.	1911	1,206	10, 8	do.
221	5 miles southwest	South San Antonio Industrial Co.	--	--	1,800±	--	--
222	4¾ miles southwest	South San Antonio Water Co.	Dingman Drilling Co.	--	1,328	12½, 8¼, 6-5/8	"Edwards" limestone
223	do.	San Jose Water Co.	Wiegand Bros.	1944	1,326	13-3/8	do.
A-1	23½ miles northwest	W. H. Payne	--	1933	322	6	Glen Rose limestone
A-2	25 miles northwest	A. A. Hughes	--	--	404	6	do.
A-3	24 miles northwest	C. F. Crow	Charlie Schwarz	--	--	--	do.
A-4	do.	do.	--	1921	450	--	do.
A-5	23 miles northwest	J. B. Smith	Max Gerfers	--	660	8	--
A-6	do.	do.	do.	--	480	7	Glen Rose limestone
A-7	do.	do.	--	--	225	6	do.
A-8	22½ miles northwest	Henry Karsch	--	--	65	6	do.
A-9	21 miles northwest	R. Beyer	--	--	266	6	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
213	654.68	d/	--	Cf,E, 15	P	
214	--	--	--	Flows	N	
215	--	--	--	Flows	Irr	Irrigated 6 acres of garden in 1934.
216	--	+ 8.3	Sept. 5, 1933	Flows	--	Irrigated about 35 acres in 1934. Grayson shale from 993 to 1,048 feet. Reported yield, 325 gallons a minute in 1934.
217	--	--	--	Cf,E, 25	P	
218	--	--	--	Flows	Irr	Irrigated about 12 acres in 1934. Reported flow, 270 gallons a minute in 1934.
219	--	--	--	Flows	--	Grayson shale from 995 to 1,053 feet. Cased to 1,053 feet.
220	--	--	--	Flows	--	Bottom of Grayson shale at 1,053 feet. Casing: 510 feet of 10-inch; 543 feet of 8-inch. Reported flow, 450 gallons a minute in 1934.
221	--	+ 10.8	Sept. 1, 1933	None	N	Yields a little oil and gas.
222	--	--	--	Cf,E, 40	P	Flow of 1,000 gallons a minute of cold sulphur water reported from the Austin chalk. See log.
223	660	--	--	Cf,E	P	Casing: 1,263 feet of 13-3/8-inch. Reported yield, 2,500 gallons a minute. Pump draws from 3 wells. Electrical log available. See log.
A-1	--	--	--	C,G	D,S	Yield 33 gallons a minute in 1933.
A-2	--	--	--	C,W	D,S	Yield about 5 gallons a minute.
A-3	--	-202	Jan. 1, 1933	C,G, --	--	
A-4	--	-230	do.	C,W	D,S	
A-5	--	--	--	C,G, --	D,S	Water level reported about 550 feet below land surface.
A-6	1538.86	-174.95 -175.34	Oct. 31, 1933 Oct. 11, 1934	None	N	
A-7	1538.88	-174.95 -175.30	Oct. 31, 1933 Oct. 11, 1934	C,-	N	
A-8	--	--	--	C,W	D,S	
A-9	--	--	--	C,W	D,S	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
B- 1	23½ miles northwest	R. Aue	-- Schwab	--	325	6	Glen Rose limestone
B- 2	23 miles northwest	O. A. Pfeiffer	--	--	300	8	do.
B- 3	do.	Ralph E. Fair	J. R. Johnson	1940	874	8	do.
B- 4	do.	do.	do.	1942	613	7	do.
B- 5	22½ miles north	G. G. Geyer	--	Old	300±	6	do.
B- 6	19 miles northwest	R. Aue	--	--	435	8	do.
B- 7	22½ miles north	U. S. Government	--	--	241	6	do.
B- 8	do.	do.	--	--	--	5	do.
B- 9	21½ miles north	do.	--	--	--	--	--
B-10	21 miles north	do.	--	1918	400	5	Glen Rose limestone
B-11	do.	do.	--	--	400	--	do.
B-12	do.	do.	Henry Schwab	--	506	6	do.
B-13	do.	do.	--	--	350	--	do.
B-14	do.	do.	--	--	370	--	do.
B-15	do.	do.	Henry Schwab	1918	370	6	do.
B-16	do.	do.	--	1918	370	--	do.
B-17	do.	do.	Henry Schwab	1918	506	6	do.
B-18	20½ miles northwest	do.	do.	--	640	8	--
B-19	do.	do.	do.	--	800	10, 6	--
B-20	do.	do.	--	--	590	10, 6	--
B-21	do.	do.	H. H. Dietz	--	601	10, 6	--
B-22	19½ miles north	do.	do.	1918	590	--	--
B-23	do.	do.	--	1918	2,500	15,10, 8,6	--
B-24	do.	do.	J. R. Johnson	1940	1,022	10, 8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
B- 1	--	--	--	C,G, —	D,S	
B- 2	1369.99	-264.71 -265.55	Oct. 30, 1933 Oct. 11, 1934	C,W	D,S	
B- 3	--	-269	July 14, 1946	C,E, 3	D,S	Plugged back to 353 feet. See log.
B- 4	--	--	--	None	N	Abandoned because of insufficient supply. See log.
B- 5	1330.23	-189.2 -190.08	Oct. 30, 1933 Oct. 11, 1934	C,G, --	N	Strong well 365 feet deep 6.2 mile west.
B- 6	1186.94	-224.85	Oct. 30, 1933	C,W	D,S	Quartz sand reported at 420 feet.
B- 7	--	-195	Apr. 1943	--	P	
B- 8	--	-124	Apr. 1943	C,G,W	P	Yield 10 gallons a minute.
B- 9	--	--	--	C,W	P	Yield 4 gallons a minute.
B-10	--	-285	1918	None	N	
B-11	--	-285	1918	C,-	P	
B-12	1167	-285 -261	1918 Nov. 28, 1933	C,-	P	Well was deepened after 1917.
B-13	--	-275	1918	C,-	P	
B-14	--	-275	1918	C,-	P	
B-15	--	-275	1918	None	N	
B-16	--	-275	1918	None	N	
B-17	--	-275	1918	None	N	
B-18	--	-390	1918	None	N	Reconditioned in 1942. Yield 50 gallons a minute with 28 feet of drawdown.
B-19		-390 -335	1918 1943	T,E, 15	P	
B-20	--	-390 -355	1918 1943	T,E, 15	P	
B-21	--	-390 -374	1918 1943	T,E, 15	P	Reconditioned in 1943. Yields 50 gallons a minute with 21 feet of drawdown.
B-22	--	-300	1918	None	N	
B-23	--	-300	1918	T,E, 15	P	Combined yield of wells B-26 and B-27, 100 gallons a minute in 1943. See log.
B-24	--	--	--	T,E, 10	N	Water from 163 to 492 feet, and 920 to 998 feet; capacity reported 37 gallons a minute. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
B-25	18½ miles north	U. S. Government	--	--	212	10	Glen Rose limestone
B-26	do.	do.	--	--	200	10	do.
B-27	do.	do.	--	--	172	10	do.
B-28	do.	do.	Henry Schwab	--	451	12, 8	do.
B-29	do.	do.	--	--	286	16, 12	do.
B-30	17¾ miles north	do.	--	--	--	--	do.
B-31	do.	do.	--	--	380	--	do.
B-32	17 miles north	do.	--	--	360	--	do.
B-33	do.	do.	--	--	365	--	do.
C- 1	17¾ miles north	A. Friesenhahn	--	--	300+	6	do.
C- 2	18 miles north	Oscar Powell	Geo. E. Brauchle	1933	450	8	do.
C- 3	19 miles north	Charles Kappelmann	--	--	262	6	do.
C- 4	22½ miles north	Otto Voges	--	--	185	--	do.
C- 5	22 miles north	Arthur Vogel	--	Old	250	6	do.
C- 6	do.	A. Toepperwein	--	--	490	6	do.
C- 7	20¾ miles north	Herman Uecher	-- Fey	1914	325	--	do.
C- 8	20½ miles north	L. Hartung	--	--	200	6	do.
C- 9	19½ miles north	E. C. Schope	--	--	410	--	do.
D- 1	8 miles northwest	Mrs. Kate Benke	A. E. Goforth	--	1,000	6	"Edwards" limestone
D- 2	8 miles north	C. H. Wehmeyer	do.	Old	400±	8	do.
D- 3	8⅝ miles north	N. Kallison	-- Dietz	1929	575	8	do.
D- 4	7 miles north	O. E. Stalte	A. E. Goforth	--	720	--	do.
D- 5	16 miles northwest	Alex Weidner	do.	--	570	6	do.
D- 6	15 miles west	Charles E. Hoffman	J. R. Johnson	1941	466	6	do.
D- 7	12⅝ miles northwest	Louis Tezel	A. E. Goforth	--	245	6	do.
D- 8	15⅝ miles northwest	Milton Steubing	do.	--	350+	8	Austin (?) chalk

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
B-25	---	-100	1918	None	N	
B-26	---	- 75 - 75	1918 1933	None	N	
B-27	---	- 96	1918	None	N	Drilled into cave at 130 feet.
B-28	---	- 90	1918	None	N	
B-29	---	-132	Apr. 1918	None	N	
B-30	---	-100	---	C,G	P	Capacity of pump 20 gallons a minute.
B-31	---	---	---	C,G	P	Capacity of pump 12 gallons a minute.
B-32	---	---	---	None	N	Well will supply a small cylinder pump.
B-33	---	---	---	None	N	Do.
C- 1	---	---	---	C,W	S	
C- 2	---	-300	1933	C,W	D,S	First water at 400 feet.
C- 3	---	-211.17	Oct. 5,1933	C,W	D,S	
C- 4	---	-164.54	July 23,1946	C,W	D,S	
C- 5	---	-168.47	Oct. 4,1933	C,W	D,S	
C- 6	---	---	---	C,W,G	D,S	Water at 160, 300 and 450 feet.
C- 7	---	---	---	C,W	D,S	Water level about 180 feet below surface in 1946.
C- 8	---	-179.45	Oct. 5,1933	C,W	D,S	
C- 9	---	-155.59	July 23,1946	C,W	D,S	
D- 1	1044.64	---	---	C,W	D,S	U. S. Geological Survey observation well 1. See log.
D- 2	---	---	---	C,W	D,S	Water has slight sulphur taste.
D- 3	---	---	---	C,W	D,S	Penetrates Grayson shale.
D- 4	956.14	-222 -230.22	Sept.20,1933 Aug. 24,1934	C,W	D,S	Grayson shale from 380 to 440 feet.
D- 5	936.81	-233.86 -242.72	Sept.22,1933 Oct. 12,1934	C,W	D,S	
D- 6	---	-215.8	June 17,1946	C,W	N	Sulphur water reported. See log.
D- 7	---	-201.65	Sept.21,1933	C,W	D,S	See log.
D- 8	925.33	-265.54	Sept.22,1933	C,W	D,S	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
D- 9	14 miles northwest	Frank Wiegand	Max Gerfers	1926	320	6	Austin (?) chalk
D-10	15½ miles northwest	Henry Bills	--	--	370	5½	"Edwards" limestone
D-11	17 miles northwest	B. A. Winter	George Brauchle	1934	425	6	Glen Rose limestone
D-12	14½ miles northwest	Ben Biering	A. E. Goforth	--	310	5	"Edwards" limestone
D-13	15 miles northwest	Theo Biering	--	--	344	8	do.
D-14	15½ miles northwest	do.	A. E. Goforth	--	350	4	do.
D-15	16 miles northwest	A. L. Fuller	--	--	450±	6	Glen Rose limestone
D-16	do.	R. W. Barham	Max Gerfers	--	216	6	do.
D-17	do.	Mrs. -- Monarch	--	--	350±	8	do.
D-18	19½ miles northwest	E. Menger	--	--	180	--	do.
D-19	do.	do.	--	--	63	--	do.
D-20	do.	do.	--	--	350	6	do.
D-21	17½ miles northwest	Scenic Loop Play Grounds	--	--	445±	8	do.
D-22	do.	do.	--	--	170	6	do.
D-23	19 miles northwest	Dr. Altamira Cambe	--	--	--	6	do.
E- 1	16½ miles north	U. S Government	J. R. Johnson	1940	--	10	Glen Rose limestone
E- 2	do.	do.	do.	1932	289	8	do.
E- 3	do.	do.	--	--	260	8	do.
E- 4	16 miles north	do.	--	--	291	8	do.
E- 5	15½ miles north	do.	--	--	600	10	do.
E- 6	do.	do.	--	--	300	--	do.
E- 7	do.	do.	--	--	515	8	do.
E- 8	15 miles north	do.	--	--	572	10	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
D- 9	958.41	-252.25 -259.25	Sept.25, 1933 Oct. 12, 1934	C,W	D,S	
D-10	1006.34	-278.26 -286.60	Sept.22, 1933 Oct. 12, 1934	C,W	D,S	Penetrates Grayson shale.
D-11	--	--	--	C,W	D,S	
D-12	968.04	d/	--	C,E, --	D,S	Yield 3 gallons a minute. No Grayson shale. U. S. Geological Survey observation well 3.
D-13	986.74	d/	--	C,W	S	U. S. Geological Survey observation well 4.
D-14	1015.63	-303.03	Nov. 8, 1934	C,W	D,S	
D-15	1042.81	d/	--	C,W	D,S	U. S. Geological Survey observation well 5.
D-16	1050.33	d/	--	C,W	D,S	First water at 205 feet. U. S. Geological Survey observation well 6.
D-17	--	-144.9 -158.20	Oct. 27, 1933 Apr. 18, 1934	C,W	D,S	
D-18	--	- 52.58	Oct. 26, 1933	C,E, --	S	
D-19	--	- 49	do.	C,E, ¼	D,S	
D-20	--	- 52.02	do.	None	N	Water reported unfit for stock.
D-21	--	--	--	C,W	P	Reported to have pumped 15 gallons a minute for 4 hours.
D-22	--	--	--	C,W	P	
D-23	1368.37	-129.83 -129.90	Oct. 27, 1933 Oct. 11, 1934	C,W	D,S	
E- 1	--	139	--	T.E, 40	P	Original depth 1,146 feet, plugged back to 445 feet. Pumping test, March 1942, 177 hours at 380 gallons a minute, drawdown 83 feet.
E- 2	--	50.32 59.2	Nov. 28, 1933 Apr. 28, 1943	None	N	Test: March 1942, 166 hours at 370 gallons a minute, drawdown 70 feet. See log. See log.
E- 3	--	86	Nov. 28, 1933	T,E, 30	P	Test: March 1942, 15½ hours at 350 gallons a minute with drawdown of 93 feet. See log.
E- 4	--	--	--	T,E, 15	P	Yield 1 to 2 gallons a minute per foot of drawdown. See log.
E- 5	--	--	--	None	N	Yield 1 gallon a minute per foot of drawdown when drilled.
E- 6	--	--	--	None	N	Abandoned because of insufficient water.
E- 7	--	75	--	None	N	Yield about 3 gallons a minute per foot of drawdown.
E- 8	--	--	--	None	N	Yield about half a gallon per foot of drawdown.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
E- 9	15 miles north	U. S. Government	--	--	300	--	Glen Rose limestone
E-10	do.	do.	J. R. Johnson	1940	1,173	10, 8	--
E-11	14½ miles north	do.	--	--	208	6	--
E-12	18½ miles northwest	S.A. & A.P. Ry.	Henry Schwab	1910	400	8	Glen Rose limestone
E-13	16½ miles northwest	H. Heuerman	--	--	130	6	do.
E-14	do.	Mrs. L. Heuerman	Henry Schwab	1933	600	--	do.
E-15	do.	M. L. Copenhaver	do.	1933	444	6	do.
E-16	16 miles northwest	Otto Gerlach	--	--	193	6	do.
E-17	15 miles northwest	Geo. Sauer	--	--	--	8	do.
E-18	14 miles northwest	Beckman Rock Quarry	--	1913	350	4	do.
E-19	13½ miles northwest	W. C. Ottmer	Gerfers Bros.	1934	330	8	"Edwards" limestone
E-20	do.	Mrs. W. D. Wood	R. Page	1945	314	5	--
E-21	13¼ miles northwest	A. G. Uhl	J. R. Johnson	1938	601	5	--
E-22	do.	Myrtle Rains	do.	1937	419	7	"Edwards" limestone
E-23	15 miles northwest	J. Muesser	--	--	--	--	Glen Rose limestone
E-24	do.	F. A. Talmadge	R. Page	1945	600	4½	do.
E-25	13 miles northwest	Ed Bacon	J.P.Benkendorfer	1918	1,910	14	Edwards, Glen Rose limestone
E-26	do.	do.	Henry Scharff	1908	320	5	"Edwards" limestone
E-27	do.	Stower's Ranch	--	--	800±	8	Edwards, Glen Rose(?) limestone
E-28	14¼ miles north	Wallace Rogers	J. R. Johnson	1938	450	5¼	Glen Rose(?) limestone
E-29	13¾ miles north	do.	do.	1934	620	--	do.
E-30	13 miles north	Stower's Ranch	--	--	800±	--	Edwards, Glen Rose(?) limestone
E-31	do.	do.	J. R. Johnson	1933	620	7	Glen Rose limestone
E-32	16½ miles north	W. Classen	--	--	415±	--	do.
E-33	13 miles north	Blanco School	--	--	400±	6	"Edwards" limestone

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
E- 9	--	--	--	None	N	Yield about one-third gallon per foot of drawdown.
E-10	--	163	Apr. 1940	T,E, 10	N	Plugged back to 1,173 feet. Yield 46 gallons a minute. See log.
E-11	1028.70	-192.15 185.72	Oct. 26, 1933 Oct. 11, 1934	C,G	P	
E-12	1126.17	44.54 45.16 44.08	Oct. 25, 1933 Dec. 22, 1933 Oct. 11, 1934	None	N	Some water at 50 and 300 feet.
E-13	--	33.0	Oct. 25, 1933	C,W	D,S	Water at 35, 65, 85, and 125 feet.
E-14	--	--	--	C,-	D,S	Very little water above 400 feet.
E-15	--	--	--	C,G	D,S	
E-16	1142.85	90.55 90.80	Sept.28, 1933 Oct. 11, 1934	C,W,G	D,S	
E-17	1089.60	165.0 161.03	Sept.28, 1933 Oct. 11, 1934	C,W	S	
E-18	1027.58	148.68	Oct. 25, 1933	C,G, 8	D,S	
E-19	--	-217.86	Oct. 26, 1934	C,-	D	First water at 225 feet.
E-20	--	--	--	C,E, 2	D	Reported a weak supply.
E-21	--	274	1938	C,-	D	
E-22	--	285	1937	C,E, 2	D	See log.
E-23	1078.24	-144.35 -147.9	Oct. 25, 1933 Oct. 12, 1934	C,G, 3½	D,S	
E-24	--	-245.35	July 26, 1946	C,-	N	See log.
E-25	--	--	--	None	N	Known as Government deep well. Water at 302, 600 and 1,100 feet.
E-26	1003.92	d/	--	C,G, 2½	D,S	U. S. Geological Survey observation well 2. See log.
E-27	--	--	--	C,G, 6	D,S	
E-28	--	-153	1938	C,W	S	See log.
E-29	--	-298	1934	C,G	S	Do.
E-30	--	-258.5	Nov. 8, 1934	C,W	S	
E-31	--	298	1933	C,W	S	See log.
E-32	--	--	--	C,G	D,S	Yields 12 gallons a minute for about an hour.
E-33	1017.09	-319 -321.71	Oct. 13, 1933 Oct. 12, 1934	C,-	N	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
E-34	13¼ miles north	Wallace Rogers	J. R. Johnson	1937	493	5½	"Edwards" limestone
E-35	10½ miles north	G. W. Extence	--	--	260±		.do.
E-36	12½ miles northwest	H. Moss	Max Gerfers	--	350	8	do.
E-37	do.	do.	do.	--	455	6	--
E-38	13 miles northwest	Gus Gerfers	do.	--	280±	6	"Edwards" limestone
E-39	14 miles northwest	Judge -- Wurzbach	--	--	400±	6	do.
E-40	13 miles northwest	Rob Biering	A. E. Goforth	--	338	--	do.
E-41	12½ miles northwest	Adolf Benke	--	--	285	5	do.
E-42	11 miles northwest	P. C. Montgomery	--	--	305	7	do.
E-43	do.	H. M. Linn	--	1904	416	6	do.
E-44	do.	R. F. Steubing	Gus Brendel	1927	200	6	do.
E-45	9½ miles northwest	George Calvert	--	--	--	5	do.
E-46	do.	Dr. -- Thompson	--	--	355±	--	do.
E-47	do.	W. F. Wagner	--	--	232	6	Austin chalk
E-48	9¼ miles northwest	T. A. Santleben	R. Page	1945	405	5	"Edwards" limestone
E-49	9½ miles northwest	J. H. Rogers	do.	1945	282	5	do.
E-50	10 miles northwest	G. D. Fillingame	J. R. Johnson	1937	306	6-5/8	do.
E-51	9½ miles northwest	Alice Smith	Alex Cravens	1944	258	7	--
E-52	do.	W. Winn	J. R. Johnson	1939	372	7	"Edwards" limestone
E-53	do.	Leona Bethea	do.	1939	304	8	do.
E-54	do.	Glen Chapin	R. Page	1945	368	5½	do.
E-55	8 miles northwest	W. W. Wolf	--	1910	455	6	do.
E-56	7½ miles northwest	J. F. Allen	William Cravens	--	537	5½	do.
E-57	8 miles northwest	Joe H. Frost	--	--	656	6-5/8	do.
E-58	8½ miles northwest	Richard Bluemel	--	--	406	6	do.
E-59	8 miles northwest	Jack Pitluk	Fred Burkett	1946	326	6	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
E-34	--	-350	1937	C,W	S	Reported deepened to 700-800 feet in 1938. See log.
E-35	863.44	-182.61 -187.1	Oct. 16, 1933 Oct. 11, 1934	C,G, --	D,S	
E-36	979.42	-275.46 -278.20	Oct. 25, 1933 Oct. 12, 1934	C,W	D,S	
E-37	--	--	--	C,W	D,S	
E-38	954.20	-244.06 -248.26	Sept.28, 1933 Oct. 11, 1934	C,G, --	D,S	
E-39	--	-321.21	Nov. 8, 1934	C,G, --	D,S	
E-40	--	--	--	C,W	D,S	
E-41	906.83	d/	--	C,W	D,S	U. S. Geological Survey observation well 8.
E-42	--	-273.5	Oct. 19, 1933	C,W	D,S	
E-43	--	--	--	C,W,G	D,S	
E-44	848.50	--	--	C,W	D,S	Penetrates Grayson shale.
E-45	875.57	d/	--	C,G, 2	D,S	U. S. Geological Survey observation well 7. Penetrates Grayson shale.
E-46	892.66	-190.65 -215.2	Sept.28, 1933 Oct. 11, 1934	C,W	S	
E-47	870.01	-138.17 -137.25	Sept.28, 1933 Oct. 10, 1934	C,W	D,S	
E-48	--	-200	1945	C,E, --	D	Cased to 376 feet. See log.
E-49	--	--	--	-,E, --	D	Cased to 240 feet. See log.
E-50	--	-251	1937	C,E, --	D	See log.
E-51	--	-232.08	June 19, 1946	None	N	Cased to 75 feet. Penetrates Grayson shale. Caved to 249 feet.
E-52	--	-235	1939	T,E, 7½	D	Cased to 122 feet. See log.
E-53	--	-244	1939	T,E, 5	D	Cased to 78 feet. See log.
E-54	--	-255	1945	C,E	N	See log.
E-55	1028.87	-348.80 -354.77	Sept.28, 1933 Oct. 12, 1934	C,W	D,S	
E-56	--	-320±	1946	C,E, 7½	D,S	Cased to 520 feet. Top of "Edwards" limestone at 517 feet.
E-57	--	--	--	C,E, --	D	
E-58	--	--	--	C,G, --	D,S	
E-59	--	-257	1946	None	N	Cased to 291 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
E-60	9 miles northwest	-- Blackburn	Homer Gulick	--	255	--	"Edwards" limestone
E-61	8 miles north	W. Keith Maxwell	J. R. Johnson	1940	323	7	do.
E-62	do.	L. R. Brown	R. Page	1945	300	5	do.
E-63	do.	W.E. Parrish	J. R. Johnson	1940	270	6	do.
E-64	do.	W.N. Johnson	do.	1946	292	5	do.
E-65	do.	C. T. Flewellen	do.	1943	257	5	do.
E-66	8½ miles north	A. F. Ford and H. L. Graham	R. Page	1945	441	5	do.
E-67	10 miles north	G. Walker	Mid-Tex Oil Co.	1935	2,135	16	--
E-68	9¼ miles north	do.	Jim Johnson	1938	300	6	"Edwards" limestone
E-69	9 miles north	-- Maltsberger	--	--	361	--	do.
E-70	8 miles north	Jud Harrison	--	--	328	6	do.
E-71	7⅔ miles north	Leslie Bowman	R. Page	1945	304	6	do.
E-72	7¼ miles north	-- Koch	J. R. Johnson	1938	210	5¼	do.
E-73	6¾ miles northwest	J. D. Wheeler	do.	1939	467	6	do.
E-74	6⅔ miles northwest	Alex Chitwood	do.	1943	436	5	do.
E-75	6¾ miles north	Frank Miller	Burkett Drilling Co.	1946	325+	5½	do.
E-76	6⅔ miles north	Miss Novella McCaleb	J. R. Johnson	1936	282	6	Austin chalk
E-77	do.	H. H. Weir	Max Gerfers	--	225+	6	do.
E-78	do.	Curtis Allen	Joe Brendle	1946	219	6	do.
E-79	7 miles north	T. O. Joyner	Gus Brendle	1946	325	7	do.
E-80	6⅔ miles north	E. W. Bickett	J. R. Johnson	1939	498	6	"Edwards" limestone
E-81	5¾ miles north	C. O. Hill	Fred Burkett	1940	390	8, 6	do.
E-82	5⅔ miles north	Wm. Lancaster	--	--	270	8	Austin chalk
E-83	do.	G. C Cain	--	--	285+	6	do.
E-84	do.	Olmos School-District No. 9	Lorenz Bros.	--	200+	7	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
E-60	894.14	-214.9 -220.1	Aug. 6, 1933 Oct. 11, 1934	C,-	D,S	See log.
E-61	--	-223	1940	C,E, 2	D	Cased to 293 feet. See log.
E-62	--	--	--	C,E, 2	D	Cased to 260 feet. See log.
E-63	--	-197	1940	C,E, 1	D	Cased to 249 feet. See log.
E-64	--	-250	1946	C,E, 1½	D,S	Cased to 253 feet. See log.
E-65	--	-190	1943	C,E, 3	D	Cased to 227 feet. See log.
E-66	--	-210	1945	C,E, 2	D	Cased to 366 feet. See log.
E-67	--	-146.70	July 24, 1946	None	N	Drilled as oil test. Plugged back to 700 feet. See log.
E-68	--	--	--	C,G, --	S	
E-69	--	--	--	C,G, --	D,S	Grayson shale from 230 to 280 feet.
E-70	933.51	-258.58 -264.58	Sept.29, 1933 Oct. 12, 1934	C,G, 6	D,S	Grayson shale from 245 to 300 feet.
E-71	--	--	--	T,E, 5	D	Cased to 217 feet. See log.
E-72	--	-160	1938	C,E, 1	D	Cased to 192 feet. See log.
E-73	--	-348	1939	C,W,E, 2	D	Cased to 439 feet. See log.
E-74	--	-150	1943	None	N	Cased to 416 feet. See log.
E-75	--	--	--	--	--	Drilling when visited on July 24, 1946. See log.
E-76	--	-100	1936	C,E, ¾	D	Reported a weak well. See log.
E-77	782.28	-107.1 -117.7	Oct. 16, 1933 Oct. 12, 1934	C,E, --	D,S	
E-78	--	-100+	July 26, 1946	None	N	
E-79	--	-186.67	June 20, 1946	C,E, 1½	D	Austin chalk from 305 to 325 feet.
E-80	--	-171.80	July 29, 1946	C,E, 3	D,S	Cased to 468 feet. See log.
E-81	--	- 97	1940	T,G, 8½	N	Drilled for irrigation well. See log.
E-82	--	-129.94	Oct. 27, 1934	C,W	D,S	
E-83	--	--	--	C,E, ¾	D,S	Water reported bad.
E-84	788.12	-113.55 -118.7	Oct. 16, 1933 Oct. 11, 1934	C,W	P	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
F- 1	17 miles north	R. Fredrick	--	--	495	--	Glen Rose limestone
F- 2	15 miles north	W. Classen	--	1897	310	--	do.
F- 3	do.	do.	--	1892	1,400±	--	--
F- 4	12¼ miles north	Fawcett Furniture Co.	-- Taylor	1946	--	8	"Edwards" limestone
F- 5	13½ miles north	W. Classen	--	--	500	--	do.
F- 6	do.	do.	--	1933	1,675	8	--
F- 7	12½ miles north	W. S. Marshall	J. R. Johnson	1939	330	5¼	--
F- 8	13½ miles north	Louis Yates	do.	1937	317	--	--
F- 9	14 miles north	I. G. Yates	--	--	365	--	"Edwards" limestone
F-10	13¼ miles north	-- Fisher	--	--	--	6	--
F-11	14 miles north	I. G. Yates	--	1929	300±	6	"Edwards" limestone
F-12	13 miles north	H. H. Classen	--	1930	276	5	do.
F-13	15 miles north	-- Klaus	-- Marquart	1933	303	8	do.
F-14	15½ miles north	T. Steubing	--	Old	509	6	do.
F-15	16½ miles north	do.	Max Gerfers	1943	427	6	--
F-16	do.	J.P. Classen	-- Taylor	1945	325	4½	--
F-17	17½ miles north	do.	--	--	--	6	Glen Rose limestone
F-18	17½ miles northeast	do.	--	--	435	6	do.
F-19	do.	do.	--	--	1,224	6	--
F-20	16½ miles northeast	do.	--	--	310	8	"Edwards" limestone
F-21	15¼ miles northeast	Hugo Borgfeld	-- Marquart	1928	283	4½	--
F-22	15 miles northeast	Col. -- Hastings	--	1930	354	--	--
F-23	14½ miles northeast	Bruno Schorn	-- Schmidt	1927	485	6	"Edwards" limestone
F-24	do.	K. Lijegren	--	--	350±	6	do.
F-25	14½ miles northeast	T. W. Weaver	J. R. Johnson	1941	270	7	Austin chalk

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks
F- 1	--	--	--	C,G	D,S	First water at 142 feet.
F- 2	--	--	--	C,G	S	Capacity of pump about 30 gallons a minute.
F- 3	--	-111.69	Oct. 13, 1933	C,G	S	In same building with well F-2.
F- 4	--	-208.82	July 23, 1946	C,-	S	
F- 5	--	--	--	C,-	D,S	First water at 358 feet.
F- 6	--	--	--	None	N	Oil test. Water at 340 and 800 feet.
F- 7	--	-253	1939	C,E, 1	D	See log.
F- 8	--	-160	1937	C,E, 5	D	Do.
F- 9	--	--	--	C,W	S	
F-10	--	-225.78	July 23, 1946	C,W	S	
F-11	948.22	--	--	C,G,W	D,S	U. S. Geological Survey observation well 9.
F-12	907.65	d/	--	C,G	D,S	Drilled into cave at 235 feet.
F-13	--	-255.39	Oct. 6, 1933	C,W	S	U. S. Geological Survey observation well 10.
F-14	1008.92	-312.01 -309.85	Oct. 6, 1933 Oct. 13, 1934	C,G	D,S	
F-15	--	-273.80	July 23, 1946	C,W	S	Cased to 30 feet.
F-16	--	--	--	C,-	S	
F-17	--	-300.24 -291.6	Oct. 6, 1933 Oct. 9, 1934	C,W	S	
F-18	--	-258.55 -258.35	Oct. 12, 1933 Oct. 8, 1934	None	N	
F-19	--	-287.5	Oct. 12, 1933	C,G, 10	D,S	Water 285 to 290 feet and at 1,100 feet.
F-20	867.40	d/	--	C,W, G,E	D,S	
F-21	--	-233	1946	C,W,G	D,S	Cased to 30 feet.
F-22	--	-182.84	July 23, 1946	C,G	D,S	Water reported bad.
F-23	--	-191.19	do.	C,W	D,S	Grayson shale from 400 to 450 feet. Casing: 40-feet of 6-inch at surface; 5-inch from 360 to 450 feet.
F-24	917.61	d/	--	C,W	D,S	
F-25	--	-222.36	July 30, 1946	C,W	D,S	Cased to 98 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
F-26	12 miles northeast	E. E. Wolle	R. Page	1946	490±	--	--
F-27	11¾ miles northeast	Perry Shankle	J. R. Johnson	1945	682	8-5/8, 7	"Edwards" limestone
F-28	10½ miles northeast	Henry Koch	--	1904	480	5	do.
F-29	do.	Albert Theis	--	1904	--	6	--
F-30	12½ miles north	John Eisenhauer	--	Old	239	6	"Edwards" limestone
F-31	10½ miles north	Oscar Pape	J. R. Johnson	1941	300	7	do.
F-32	9½ miles north	H. Dittlinger	--	Old	300±	6	do.
F-33	10 miles north	do.	--	Old	200+	6	Austin chalk
F-34	do.	do.	Lorenz Bros.	1930	341	5-3/16	"Edwards" limestone
F-35	10½ miles north	W. W. Smith	R. Page	1946	264	5	do.
F-36	11¼ miles north	J. A. Cambron	-- Taylor	1946	225	6	Austin chalk
F-37	10¾ miles north	Carl Wurzbach	J. R. Johnson	1941	330	6	"Edwards" limestone
F-38	10¼ miles north	Hill Country Estate	Wm. Cravens	--	318	8	do.
F-39	do.	Gerald Mellif	J. R. Johnson	1942	240	5¼	do.
F-40	9½ miles north	R. V. Smith	Geo.E.Brauchle	1933	415	6	do.
F-41	9 miles north	Bexar County School for Girls	--	--	367	--	do.
F-42	8¾ miles north	R. E. Turnage	J. R. Johnson	1941	240	5	do.
F-43	do.	W. C. Arnett	do.	1942	260	5¼	do.
F-44	do.	M. L. Thompson	R. Page	1945	245	5	do.
F-45	8½ miles north	Mrs. A. E. Wallenhaupt	J. R. Johnson	1936	190	6-5/8	do.
F-46	do.	C. J. Whall	do.	1942	200	5	do.
F-47	do.	J. H. DeKunder	--	--	220	--	Austin chalk
F-48	do.	M. J. McKoen	Lorenz Bros	1933	314	8,5-5/8	"Edwards" limestone
F-49	8 miles north	Army Air Port	J. R. Johnson	1942	402	10,8	do.
F-50	do.	R. J. Scott	do.	1941	333	6	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
F-26	--	-199.0	May 27, 1946	None	N	
F-27	--	-202	1945	T,--	D,S	Casing: 22 feet of 8-5/8-inch; 190 feet of 7-inch. See log.
F-28	--	--	--	C,W	D,S	
F-29	821.07	d/	--	None	N	U. S. Geological Survey observation well 14.
F-30	874.32	d/	--	C,W	D,S	U. S. Geological Survey observation well 11.
F-31	--	-289	1941	C,W	D,S	Cased to 283 feet. See log.
F-32	--	-109.10	July 19, 1932	C,W	S	
F-33	--	-154.70	do.	None	N	Reported sulphur water.
F-34	--	-164.5	do.	C,W	D,S	
F-35	--	-107.00	June 21, 1946	None	N	Cased to 218 feet. See log.
F-36	--	-203	1946	C,E, 1/3	D,S	
F-37	--	-188.95	July 30, 1946	C,E, 3	D	Cased to 133 feet. See log.
F-38	--	--	--	T,G, --	P	
F-39	--	-214	1942	C,E, 3	D	Cased to 75 feet. See log.
F-40	831.70	-157.12 -153.65	Sept.29, 1933 Oct. 10, 1934	C,-	D,S	Not enough water for drilling above 300 feet. Grayson shale from 300 to 360 feet. See log.
F-41	--	--	--	C,E, --	D,S	Joske Memorial Home.
F-42	--	-120	1946	C,E, 1	D,S	Cased to 233 feet. See log.
F-43	--	-124	1942	C,E, 1	D	Cased to 251 feet. See log.
F-44	--	--	--	C,E, 2	D	Cased to 216 feet. See log.
F-45	--	- 82	1936	C,E, 1½	D	See log.
F-46	--	- 82	1942	C,E, 1	D	Cased to 147 feet. See log.
F-47	768.99	- 93.65 - 95.95	Sept.29, 1933 Oct. 10, 1934	C,G, --	D,S	
F-48	770.99	- 95.62 - 96.70	Sept.29, 1933 Oct. 10, 1934	C,G, --	D,S	Top of "Edwards" limestone at 305 feet.
F-49	--	-104	June 6, 1946	T,E, 15	P	Casing: 112 feet of 10-inch; 250 feet of 8-inch. See log.
F-50	--	-150	1941	C,E, 2	D	Cased to 281 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
F-51	7 miles north	Louis Magers	J. R. Johnson	1941	502	6	"Edwards" limestone
F-52	7⅛ miles north	B. G. Rothwell	do.	1941	266	7	Austin chalk
F-53	do.	A. B. Phelps	do.	1945	--	--	--
F-54	do.	E. A. Scott	do.	1937	196	6-5/8	--
F-55	8 miles north	Hermann Rusch	--	1897	325	5	Edwards (?) limestone
F-56	7⅛ miles north	Ed Pape	--	--	220	5-3/16	Austin chalk
F-57	7 miles north	City Airport	J. R. Johnson	1941	461	10	"Edwards" limestone
F-58	do.	Ed Haag	--	--	--	8	--
F-59	5⅛ miles north	John Rence	--	--	190	5	Austin chalk
F-60	6 miles north	W. M. Schroeder	--	--	400	6	do.
F-61	do.	San Antonio Portland Cement Co.	--	--	299	5	do.
F-62	5⅛ miles north	Amos Lorenz	Amos Lorenz	1925	370	8⅛	"Edwards" limestone
F-63	6 miles north	F. Grote	do.	--	339	--	do.
F-64	do.	Earl Fuller	R. Page	1945	348	5	do.
F-65	7¼ miles northeast	L. L. LeRoy	do.	1946	359	5	do.
F-66	do.	Wallace Rogers	J. R. Johnson	1941	318	6	do.
F-67	7⅛ miles northeast	Arno Pope	-- Cravens	1944	176	7	--
F-68	7½ miles northeast	E. A. Wiegand	-- Leonard	1946	350	--	"Edwards" limestone
F-69	7⅜ miles northeast	Hal W. Hartline	J. R. Johnson	1942	284	5¼	do.
F-70	do.	R. A. Wagner	do.	1941	286	--	do.
F-71	9⅛ miles northeast	Elmer Schneider	R. Page	1946	315	5	do.
F-72	10 miles northeast	W. D. Engle	do.	1946	455	5	do.
F-73	do.	Elmer Hitzfelder	--	--	400+	6⅛	do.
F-74	do.	Col. J. E. McCord	J. R. Johnson	1941	457	7	do.
F-75	10½ miles northeast	Bird and Shankle	do.	1938	438	8	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
F-51	--	-198	- 1941	C,E, --	D	Cased to 480 feet. See log.
F-52	--	-137.76	May 7, 1941	C,W	D	Cased to 140 feet. See log.
F-53	--	--	--	C,E, 2	D	
F-54	--	-138.95	June 5, 1946	C,W	D	See log.
F-55	--	--	--	C,G, --	D,S	
F-56	--	--	--	C,W	D,S	
F-57	--	- 85	1941	T,E, 3.	P	Cased to 372 feet. See log.
F-58	782.31	d/	--	C,W	D,S	U. S. Geological Survey observation well 13.
F-59	--	--	--	C,W	D,S	
F-60	--	--	--	C,W	D,S	No water below 300 feet.
F-61	--	--	--	C,W	D,S	
F-62	820.66	d/	--	C,W	D,S	"Edwards" limestone from 300 to 370 feet. U. S. Geological Survey observation well 12.
F-63	828.82	--	--	C,W	D,S	See log.
F-64	--	--	--	C,E, 5	D	Cased to 300 feet. See log.
F-65	--	- 95	1946	J,E, --	D	Cased to 246 feet. Sulphur water reported at 115 feet. See log.
F-66	--	-125	1941	T,E, 20	P	Cased to 247 feet. See log.
F-67	--	- 75	1944	J,E, 3/4	D	Cased to 9 feet.
F-68	--	- 97.49	July 30, 1946	C,E, --	D,S	Grayson shale from 190 to 230 feet.
F-69	--	- 60	1942	J,E, 3/4	D	Cased to 257 feet. See log.
F-70	--	- 63	1941	J,E, 3/4	P	Supplies trailer camp. See log.
F-71	--	-140	1946	C,E, --	D	Cased to 244 feet. See log.
F-72	--	-130	1946	C,E, 2	S	Cased to 425 feet. Sulphur water reported at 120 feet. See log.
F-73	777.63	-118.34 -123.4	Oct. 2, 1933 Oct. 10, 1934	C,G, --	D,S	
F-74	--	-146.55	June 15, 1946	C,W	D	Cased to 437 feet. Reported yield, 45 gallons a minute. See log.
F-75	--	-139.95	June 20, 1946	T,G, --	S	See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
F-76	11½ miles northeast	Oscar Fischer	--	--	510	6	"Edwards" limestone
F-77	11¾ miles northeast	Edgar Harlos	-- Fey	1925	520	4½	--
F-78	13 miles northeast	H. H. Kraft	-- Bigsenschitts	1915	350	6	--
F-79	13½ miles northeast	E. P. McCall	--	--	364	--	--
F-80	13 miles northeast	C. N. Farrell	Burkett Drilling Co.	--	358	6	--
F-81	11½ miles northeast	-- Bleakley	J. R. Johnson	1939	509	7	"Edwards" limestone
F-82	11¼ miles northeast	-- Bleakley	do.	1939	417	5¼	do.
F-83	10 miles northeast	Henry Fey	--	--	600±	6	do.
F-84	9½ miles northeast	Adolph Eisenhauer	--	--	125	8	Austin chalk
F-85	8¾ miles northeast	Grandma Cookie Co.	J. R. Johnson	1940	442	5¼	"Edwards" limestone
F-86	8 miles northeast	Beitel Church	--	--	434	6	do.
F-87	do.	Texas State Highway Department	--	--	510	6	do.
F-88	7½ miles northeast	J. C. Keir	J. R. Johnson	1940	376	6	do.
F-89	6¾ miles northeast	Edgar Tobin	do.	1944	347	14,8-5/8	do.
F-90	7 miles northeast	do.	--	--	--	7-1/8	--
F-91	9½ miles northeast	Mrs. Bessie Cade	--	--	625±	6	"Edwards" limestone
G- 1	15¾ miles northeast	A. C. Gore	--	1890	180	5-5/8	--
G- 2	16½ miles northeast	Turner Gravel Co.	--	--	--	20	--
G- 3	15¾ miles northeast	Bruno Goss	--	1940	180	6	--
G- 4	14¾ miles northeast	Harry Ruebshan	--	--	480±	4½	--
G- 5	do.	Gustav Engelmann	Ray Oil Co.	1925	1,497	--	--
G- 6	14 miles northeast	Geo. Heuermann	--	--	500±	8	"Edwards" limestone
G- 7	12½ miles northeast	Simon and Borgfeld	--	1896	652±	6	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks
F-76	804.17	-135.65 -140.0	Oct. 3, 1933 Oct. 10, 1934	C,W	D,S	
F-77	--	-151.59	July 22, 1946	C,W	D,S	
F-78	--	-259.29	do.	C,W	S	Sulphur water reported. Unfit for drinking.
F-79	--	-157	1946	--	D	Sulphur water reported.
F-80	--	--	--	C,W	D,S	Recased in 1946. Quality of water improved. See analyses.
F-81	--	-255	1939	C,E, 5	D	Cased to 381 feet. See log.
F-82	--	-197	1939	None	N	Sulphur water reported. See log.
F-83	803.12	-134.39 -139.5	Oct. 3, 1933 Oct. 10, 1934	C,W	D,S	Reported to penetrate Grayson shale.
F-84	757.36	- 88.14 - 93.35	Oct. 3, 1933 Oct. 10, 1934	C,W	D,S	
F-85	--	- 78.77	June 6, 1946	T,E, 1¼	Ind	Cased to 366 feet. See log.
F-86	721.63	d/	--	C,W	P	U. S. Geological Survey observation well B-3.
F-87	--	- 37.24	Oct. 19, 1932	None	N	
F-88	--	-109	1940	C,E, 2¼	D	Cased to 333 feet. See log.
F-89	700	- 19.5	May 1944	T,E, 20	D,S, Irr	Casing: 65 feet of 14-inch; 204.5 feet of 8-5/8-inch. Reported yield, 2,000 gallons a minute.
F-90	--	- 35	July 29, 1946	T,E, 10	D,S, Irr	Reported yield, 1,000 gallons a minute. See log.
F-91	790.23	-122.85	Oct. 3, 1933	C,W	D,S	
G- 1	--	-150	1938	C,W,E	D,S	
G- 2	758.62	d/	--	T,-	D,S, Ind	Powered by steam engine.
G- 3	--	- 97.88	July 22, 1946	C,W	D,S	
G- 4	--	-151.38	do.	C,W	D,S	
G- 5	--	--	--	None	N	Oil test. Fresh water from 290 to 295, 340 to 360, and 578 to 590 feet. Sulphur water from 1,300 to 1,310 feet. See log.
G- 6	950.86	-284.90 -289.16	Oct. 12, 1933 Oct. 8, 1934	C,W	D,S	
G- 7	710.11	d/	--	C,W	Ind	Top of "Edwards" limestone at about 650 feet. U. S. Geological Survey observation well E B-4.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
G- 8	13 miles northeast	Frank Sonntag	--	1928	652	6	"Edwards" limestone
G- 9	13½ miles northeast	Otto Knuepper	--	--	599	8	--
G-10	15 miles northeast	Southern Pacific R.R.	--	1904	554	8	"Edwards" limestone
G-11	14¼ miles northeast	U. S. Government Well 1	J.P.Benkendorfer	1928	700	15, 12	do.
G-12	do.	U. S. Government Well 2	Dingman Drilling Co.	1929	563	12	do.
G-13	do.	U. S. Government Well 3	do.	1929	584	12	do.
G-14	do.	U. S. Government Well 4	do.	1929	584	--	do.
G-15	do.	U. S. Government Well 5	do.	1929	584	12½	do.
G-16	do.	U. S. Government Well 6	do.	1929	609	12½	do.
G-17	do.	U. S. Government Well 7	do.	1929	583	12½	do.
G-18	do.	U. S. Government Well 8	do.	1929	577	12½	do.
G-19	do.	U. S. Government Well 9	do.	1929	1,003	12½	do.
G-20	14½ miles northeast	U. S. Government Well 10	Wiegand Bros. Drilling Co.	1942	518	13-3/8	do.
H- 1	12½ miles west	G. A. Kuentz	A. E. Goforth	--	219	6	--
H- 2	16½ miles west	Fritz Gass	do.	--	600	--	--
H- 3	18 miles west	Martin Cavacos	do.	--	462	4¼	--
H- 4	do.	Alfred Wurzbach	--	--	400±	6	--
H- 5	16 miles west	C. T. Wurzbach	--	--	478	--	--
H- 6	15 miles west	August Bonger	--	--	435	--	"Edwards" limestone
H- 7	13½ miles west	H. Ellison	--	--	425	6	--
H- 8	11½ miles west	C. A. Pepper	Max Gerfers	1922	500	6	--
H- 9	do.	Henry Neal	A. E. Goforth	--	--	--	--
H-10	do.	C. A. Pepper	--	--	3,783	--	--

Well	Altitude of land surface	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
G- 8	659.29	+ 8.5 + 3.71	Feb. 6, 1934 Oct. 8, 1934	Flows	N	Sulphur water. Estimated flow 125 gallons a minute February 6, 1934.
G- 9	--	- 60	1942	C,W	D,S	
G-10	762.37	- 92.29 - 97.05	Oct. 3, 1933 Oct. 8, 1934	A,G, --	P	See log.
G-11	--	--	--	--	P	Do.
G-12	--	--	--	--	P	Do.
G-13	--	--	--	None	N	Not used because of small yield. See log.
G-14	--	--	--	None	N	Do.
G-15	--	--	--	None	N	Do.
G-16	--	--	--	None	N	Do.
G-17	--	-110	July 1929	--	P	Yield 360 gallons a minute with 90 feet of drawdown. See log.
G-18	--	--	--	--	P	See log.
G-19	--	--	--	--	P	Water of poor quality. See log.
G-20	--	- 82	1942	T,-	P	Yield 1,265 gallons a minute with no apparent drawdown. See log.
H- 1	848.52	d/	--	C,G, --	D,S	U. S. Geological Survey observation well 16.
H- 2	--	-297.7	--	C,W	--	See log.
H- 3	976.18	-289.50	Oct. 13, 1934	C,G, --	--	
H- 4	944.95	-241+	Sept.20, 1933	C,G, --	D,S	
H- 5	809.43	-125.21	Oct. 8, 1934	C,W	D,S	First water at about 404 feet, second water at bottom.
H- 6	--	-224	Sept.20, 1933	C,W	D,S	Cased at top and through Grayson shale only.
H- 7	852.83	-186.2 -176.18 -161.05	Aug. 23, 1933 Sept.20, 1933 Oct. 8, 1934	C,G, --	D,S	
H- 8	--	-270.1	Aug. 22, 1933	C,G, --	D,S	
H- 9	930.96	-243.32 -247.27 -250.67	Sept.20, 1933 Aug. 8, 1934 Oct. 8, 1934	C,W	S	
H-10	--	--	--	--	--	Oil test. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
H-11	11½ miles west	Henry Neal	--	--	496	6	--
H-12	12 miles west	A. J. Vogt	Alex Lorenz	--	786	6	--
H-13	13½ miles west	Fullers Earth Plant	do.	--	778	6	"Edwards" limestone
H-14	14½ miles west	J. V. Menard	J. E. Rohmer	--	1,100±	--	--
H-15	do.	J. E. Rohmer	do.	--	1,100	8	--
H-16	16½ miles west	Oscar Bippert	do.	--	830	8	--
H-17	17½ miles west	Robert Mechler	Burkett Bros.	--	918	6	--
H-18	16 miles west	Alta Vista Dairy	J. E. Rohmer	--	1,257±	10	--
H-19	do.	Straus-Medina Hereford Ranch	Wm. Craven and Sons	1943	1,300	8	"Edwards" limestone
H-20	15¾ miles west	do.	-- Edward	--	1,250±	8	--
H-21	15 miles west	Montgomery Ranch	J. E. Rohmer	--	1,301	8	--
H-22	14 miles west	-- Ponder	do.	--	1,327	10	--
H-23	12 miles west	C. Weilbacher	--	--	1,250	6	--
I- 1	10 miles west	John Grissom	A. E. Goforth	--	200±	6	--
I- 2	do.	O. P. Tezel	Geo. E. Brauchle	1946	235	7	"Edwards" limestone
I- 3	10¼ miles west	Tom Slick	J. R. Johnson	1940	408	6	do.
I- 4	10 miles west	do.	do.	1940	545	--	do.
I- 5	9¼ miles west	do.	do.	1940	745	10¾	do.
I- 6	9 miles west	do.	do.	1940	763	--	do.
I- 7	do.	Ira Neal	do.	--	529	6	do.
I- 8	8¼ miles west	Col. -- Tuttle	Wm. Cravens	1944	310	5	do.
I- 9	do.	D. G. Janssen	J. R. Johnson	1946	500	8	--
I-10	8¼ miles northwest	Mrs. S. F. Austin	do.	1943	461	7	"Edwards" limestone

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
H-11	886.85	-201.09 -204.98	Sept.21, 1933 Aug. 8, 1934	C,G, --	D,S	Cased at top and through Grayson shale only. See log.
H-12	764.97	d/	--	C,W	D,S	U. S. Geological Survey observation well 27.
H-13	788.15	d/	--	None	N	U. S. Geological Survey observation well 26. See log.
H-14	--	--	--	C,W, T,G	D,S, Irr	Top of "Edwards" limestone reported at 668 feet. Irrigated about 25
H-15	--	--	--	C,W, T,E,4	D,S, Irr	Top of "Edwards" limestone reported at 664 feet. Estimated flow 25 gallons a minute on September 15, 1933. Irrigated about 4 acres in 1934.
H-16	760.33	d/	--	C,W	D,S	U. S. Geological Survey observation well X B-2.
H-17	809.14	d/	--	C,W	D,S	Bottom of Grayson shale 816 feet. U. S. Geological Survey observation well 15.
H-18	--	--	--	C,W Cf,E	D,S, Irr	Pump operated when flow is insufficient.
H-19	--	--	--	Flows	Irr	Estimated flow, 100 gallons a minute on July 30, 1946. See log.
H-20	--	--	--	Flows	Irr	Flow, 1,000 to 1,500 gallons a minute on July 30, 1946.
H-21	--	+380	Sept.14, 1933	Flows	D,S, Irr	Estimated flow, 1,400 gallons a minute on September 14, 1933.
H-22	--	--	--	Flows	S	
H-23	--	--	--	Flows	S	
I- 1	803.65	-116.50 -123.97	Sept.21, 1933 Oct. 11, 1934	C,G, --	D,S	Penetrates Grayson shale.
I- 2	--	-123.10	June 17, 1946	C,-	D,S	Cased to 208 feet. Grayson shale from 145 to 200 feet.
I- 3	--	-109	1940	C,E, 3	D,S	See log.
I- 4	--	-106	1940	T,G, --	Irr	Do.
I- 5	--	-118.35	July 30, 1946	None	N	Drilled for irrigation. No pump installed when visited on July 30, 1946. See log.
I- 6	--	- 88	1940	T,E, 50	D,S, Irr	See log.
I- 7	--	-137.94	Sept.21, 1933	C,G, --	D,S	Grayson shale from 440 to 500 feet.
I- 8	--	- 93.31	June 17, 1946	C,W	S	"Edwards" limestone from 230 to 310 feet.
I- 9	--	- 96.80	do.	T,E, --	D	
I-10	--	-222	1943	T,E, 7½	D,S	Cased to 436 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I-11	8 miles northwest	Alfred Reininger	--	--	366	5	--
I-12	7½ miles northwest	Jack Hornberger	--	--	600±	10	--
I-13	7¼ miles northwest	Mid Seale	Gus Braendle	--	300+	6	--
I-14	7 miles northwest	H. S. George	R. Page	1945	500	5½	"Edwards" limestone
I-15	do.	Mid Seale	Gus Braendle	1946	375	7	--
I-16	6½ miles northwest	Maurice Chagnard	Wm. Cravens	1945	582	7	"Edwards" limestone
I-17	do.	Woodlawn Hills Addition	--	--	562	10, 8	--
I-18	do.	F. A. Fitch	--	--	--	6	--
I-19	6 miles northwest	Gugenheim-Goldsmith	J. R. Johnson	1941	553	6	"Edwards" limestone
I-20	do.	J. J. Stevens	--	--	350	6	--
I-21	5 miles northwest	F. M. Gillespie	--	--	610	6	--
I-22	do.	do.	--	--	250±	6	--
I-23	do.	do.	--	--	205±	6	--
I-24	do.	A. B. Spencer	--	--	205±	6	--
I-25	5½ miles north	Wm. Conrad	-- Cravens	--	346+	5½	"Edwards" limestone
I-26	5¼ miles north	Fred Dodgen	R. Page	1945	503	5	do.
I-27	5 miles north	Mrs. G. C. Schmeltzer	Max Gerfer	1945	424	6	do.
I-28	5 miles northwest	R. C. Freiling	do.	1945	400	7⅝, 5⅝	--
I-29	5 miles north	D. A. Patterson	Andres Santana	1913	227	6-5/8	--
I-30	do.	M. J. Schwager	Frank Strosser	1911	297	8	--
I-31	4½ miles north	Mrs. D. L. Horn	Louis Lorenz	1894	330	--	--
I-32	5 miles north	H. Rittiman Estate	--	1885	125	4	--
I-33	do.	Olive L. Landa	Alex Lorenz	--	385	4	"Edwards" limestone
I-34	4½ miles north	L. M. Bickett	J. R. Johnson	1936	344	6-5/8	Austin chalk
I-35	do.	-- Gorman	do.	1938	260	5¼	do.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
I-11	891.63	d/	--	C,W	D,S	U. S. Geological Survey observation well 18.
I-12	--	-211.90	July 21, 1932	C,E, 20	N	
I-13	--	-169.98	May 24, 1946	C,W	S	
I-14	--	--	--	C,E, --	D,S	Cased to 377 feet. See log.
I-15	--	-142.2	May 24, 1946	C,W	S	
I-16	--	--	--	T,E, 7½	D	Cased to 422 feet. "Edwards" limestone from 422 to 582 feet.
I-17	--	--	--	C,E, --	P	
I-18	880.83	d/	--	C,W	S	U. S Geological Survey observation well 17.
I-19	--	-280	1941	C,E, 3	D	See log.
I-20	909.33	-232.70 -238.15	Oct. 19, 1933 Oct. 12, 1934	C,G, --	D,S	
I-21	--	--	--	C,G, --	D,S	Cased to 20 feet.
I-22	--	--	--	C,W	D,S	
I-23	--	--	--	C,W	D,S	Cased to 20 feet.
I-24	--	--	--	C,W,G	D,S	
I-25	--	--	--	--	--	Drilling when visited. See log.
I-26	--	--	--	None	N	Cased to 388 feet. See log.
I-27	--	-130	1945	C,E, 2	D,S	
I-28	--	- 90	1945	C,E, --	D	
I-29	--	--	--	C,W	D,S	Cased to 25 feet.
I-30	--	--	--	C,W,G	D,S	Cased to 260 feet.
I-31	--	--	--	C,W	D,S	Cased to 40 feet. See log.
I-32	--	- 23.25	Oct. 30, 1934	None	N	
I-33	772.09	d/	--	C,W	D,S	U. S. Geological Survey observation well 19. See log.
I-34	--	- 88	1936	-,E	S	Cased to 110 feet. See log.
I-35	--	- 77	1938	C,E, --	D	Cased to 227 feet. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I-36	4½ miles north	O. L. Mingsley	--	--	244	6	--
I-37	4 miles north	Varner Corporation	--	--	290	5	--
I-38	do.	do.	--	--	340	5-3/16	--
I-39	6½ miles northwest	Woodlawn Hills Addition	J.P.Benkendorfer	--	1,100±	12	"Edwards" limestone
I-40	4½ miles northwest	St.Mary's College	-- Judson	1894	702	8	--
I-41	do.	do.	do.	1903	700±	8	--
I-42	5 miles west	August Weilbacher	Herman Mose	--	607	6	--
I-43	do.	Fite Bros.	-- Gulick	--	615	6	--
I-44	5½ miles west	W. J. Bradley	--	--	--	6	--
I-45	6¾ miles west	Jimmie Witt	-- Patterson	1946	490	5-5/8	"Edwards" limestone
I-46	7 miles west	H. A. Neal	--	--	476	6	--
I-47	7½ miles west	Jack Neal	--	1907	488	5±	--
I-48	8 miles west	Acme Gravel Co.	J. R. Johnson	1942	532	8, 7	"Edwards" limestone
I-49	8½ miles west	T. O. Schmidt	Frank Burkett	1931	685	4½	do.
I-50	8 miles west	do.	-- Goforth	1921	561	5	--
I-51	7¼ miles west	H. B. Zachry Gravel Co.	Pegg Bros.	--	1,160	--	--
I-52	7 miles west	J. A. McDavitt	Fred Burkett	1925	1,150	12½,10, 8	"Edwards" limestone
I-53	do.	Willie Faulks	Tom Little	1912	--	--	--
I-54	6¼ miles west	A. A. Weed	A. A. Weed	1945	580	6	Austin chalk
I-55	5¾ miles west	Van DeWalle and Sons	-- Seed	--	--	--	"Edwards" limestone
I-56	7 miles west	E. H. Powell	Fred Burkett	--	1,403	--	do.
I-57	8 miles west	Robert Boenig	do.	1921	888	6	--
I-58	9½ miles west	Arthur Skolaut	--	--	765	6	--
I-59	do.	Louis Magers	J. R. Johnson	1942	1,506	--	"Edwards" limestone

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
I-36	--	- 82.27	Oct. 29, 1932	C,W	D,S	
I-37	--	- 86.1	Nov. 1, 1934	None	N	
I-38	--	- 91.5	do.	None	N	
I-39	--	-230.59	Aug. 29, 1933	T,E, 40	P	Known as Waring well. Original depth 2,853 feet. See log.
I-40	--	--	--	C,G, --	N	See log.
I-41	--	--	--	T,E, 10	P	
I-42	--	--	--	C,W	D,S	Sulphur water reported at 300 feet.
I-43	--	--	--	C,W	D,S	
I-44	--	- 71.0	--	C,W,G	D,S	
I-45	--	- 90	1946	None	N	Cased to 460 feet. See log.
I-46	830.48	-147.93 -154.38 -157.83	Sept. 21, 1933 Aug. 8, 1934 Oct. 12, 1934	C,G, --	D,S	
I-47	--	--	--	C,E, --	D,S	See log.
I-48	--	- 40	1942	None	N	Do.
I-49	--	- 65	1931	C,W	D,S	Cased to 560 feet. See log.
I-50	--	--	--	None	N	
I-51	--	- 30	1946	T,E, 30	Ind	
I-52	--	--	--	T,E, --	D,S	See log.
I-53	--	--	--	T,- 100	D,S, Ind	Reported a dug well, 100 feet deep, and 6 feet in diameter.
I-54	--	- 53	1945	None	N	Diesel power.
I-55	--	--	--	--	--	Top of Grayson shale at 782 feet. Drilling when visited.
I-56	--	--	--	T,G, --	D,S	See log.
I-57	744.45	d/	--	C,W	D,S	Bottom of Grayson shale at about 870 feet. U. S. Geological Survey observation well 28.
I-58	806.50	-123.12 -130.59	Sept. 20, 1933 Oct. 11, 1934	C,W	D,S	Gray- son shale from 640 to 700 feet.
I-59	--	--	--	None	N	Reported a "dry hole". See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I-60	8 miles west	U. S. Government	Wiegand Bros.	1940	1,609	16	"Edwards" limestone
I-61	8¼ miles west	do.	Layne-Texas Co.	1942	1,911	10	do.
I-62	8 miles southwest	-- Fredricks	Burkett Drilling Co.	1939	1,480	5½	--
I-63	8½ miles southwest	Judge -- Kennon	--	--	2,600±	10	--
I-64	7½ miles southwest	Mrs. Anna Bennett	Burkett Bros.	1933	1,600±	6	--
I-65	6 miles southwest	U. S. Government Kelly Field	J.P.Benkendorfer	1912	1,182	12, 10	--
I-66	6½ miles west	do.	--	1924	1,677	--	"Edwards" limestone
I-67	7 miles west	Wm. Schultz	Fred Burkett	--	1,400	12½	do.
I-68	6⅝ miles west	Schoenfeld and Haring	Max Gerfers	--	1,474	6	--
I-69	6 miles west	do.	--	--	1,452	--	--
I-70	5½ miles west	Adolph Wagner et al.	--	--	1,555	--	--
I-71	do.	Blanks Estate	--	1911	1,483	12,8	--
I-72	do.	National Bank of Commerce	Fred Burkett	--	1,335	12	"Edwards" limestone
I-73	do.	Henry Van DeWalle	Dingman Drilling Co.	1933	1,212	--	--
I-74	do.	Thienpont and Decock	--	--	1,187	--	"Edwards" limestone
I-75	5 miles west	Wm.Schultz et al.	Fred Burkett	--	1,130	--	do.
I-76	5½ miles southwest	-- Persyn	--	1913	1,400±	--	--
I-77	5 miles southwest	Vander Poorten	J. R. Johnson	1943	1,042	9-5/8	"Edwards" limestone
I-78	do.	U. S. Government Kelly Field	--	--	1,030	13,8-5/8	--
I-79	4½ miles west	Homer Verstuyft	--	--	--	--	--
I-80	do.	D. Verstuyft	--	--	1,070	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) [a]	WATER LEVEL: Date of measurement	Method of lift [b]	Use of water [c]	Remarks [e]
I-60	--	--	--	T,E, --	P	Well was yielding about 900,000 gallons a day in July 1946. See log.
I-61	--	- 88	1942	T,E, --	P	Well was yielding about 1,000,000 gallons a day in July 1946. See log.
I-62	--	--	--	--	--	Reported deepened from 1,024 to 1,480 feet in 1939. See log.
I-63	--	- 0.26	Sept. 12, 1933	C,G, --	S	Reported deepened from 2,200 to 2,600 feet in 1932.
I-64	742.23	- 69 - 73.49	Sept. 21, 1933 Oct. 10, 1934	C,W	S	
I-65	--	--	--	None	N	Grayson shale from 990 to 1,045 feet. Casing: 728 feet of 12-inch; 10-inch from 700 to 1,045 feet.
I-66	677.82	- 4.0 - 4.60	Nov. 24, 1933 Aug. 6, 1934	T,E, 50	P	Well was reconditioned in 1943. See log.
I-67	--	--	--	T,E, 40	Irr	Yield, 1,230 gallons a minute on September 24, 1934. See log.
I-68	--	--	--	T,E, 30	Ind	Used for washing gravel.
I-69	693.74	- 18.09 - 23.77	Nov. 23, 1933 Oct. 11, 1934	None	N	Known as C. C. Clamp well. Grayson shale from 1,110 to 1,162 feet.
I-70	--	--	--	T,E, 20	P	Draws water from beds from 1,220 to 1,555 feet.
I-71	706.93	- 32.55 - 32.40 - 36.70	Nov. 22, 1933 Aug. 6, 1934 Oct. 11, 1934	T,G, 40	Irr	Casing: 932 feet of 12-inch; 296 feet of 8-inch. See log.
I-72	--	--	--	None	N	Yield about 1 gallon a minute. See log.
I-73	--	--	--	T,E, 20	Irr	Yield, 920 gallons a minute on October 12, 1934. Grayson shale from 1,055 to 1,105 feet. Irrigated about 100 acres in 1934.
I-74	--	--	--	T,E, 40	Irr	Yield, 675 gallons a minute on September 24, 1934. Irrigated about 110 acres in 1934. See log.
I-75	--	--	--	T,E, 25	Irr	Yield, 900 gallons a minute on September 24, 1934. Irrigated about 100 acres in 1934. See log.
I-76	--	--	--	T,E, 40	Irr	Yield, 780 gallons a minute on September 24, 1934. Temperature, 78° F.
I-77	--	- 12.15	June 5, 1946	T,E, 40	Irr	Cased to 968 feet. See log.
I-78	--	- 8.5	Aug. 1943	T,E, 100	P	Yield, 1,150 gallons a minute in 1943. Dry hole 1,200 feet deep reported 150 feet away.
I-79	--	--	--	None	N	Top of Edwards limestone at 1,030 feet. Abandoned as a dry hole.
I-80	--	--	--	T,E, 40	Irr	Yield, 1,030 gallons a minute on October 12, 1934. Draws water from beds 1,026 to 1,070 feet. Irrigated about 125 acres in 1934.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I- 81	4⅛ miles west	-- Zettler	--	--	34	--	--
I- 82	do.	T. T. Parker	Burkett Bros.	--	1,030±	8	--
I- 83	do.	Petrich Lumber Co.	--	1909	1,413	16,12 8	--
I- 84	4 miles west	T. T. Parker	--	--	800	48, 2	--
I- 85	do.	Ed Eckert	--	--	34	--	--
I- 86	do.	Caesar Verstuyft	--	--	--	--	--
I- 87	4 miles southwest	David and Sam Anderson	Burkett Bros.	--	1,040	--	--
I- 88	4½ miles west	-- Dennis	--	--	--	36	--
I- 89	4⅛ miles southwest	W. Grothues	--	--	1,480	10, 6	--
I- 90	do.	South San Antonio Water Co.	J.P.Benkendorfer	--	1,453	8	"Edwards" limestone
I- 91	4 miles southwest	Willie Kempin	--	--	--	--	--
I- 92	do.	Travis Oil Mills	--	--	1,200±	--	--
I- 93	4⅛ miles southwest	U. S. Government Camp Normoyle	Layne-Texas Co.	--	1,120	12	"Edwards" limestone
I- 94	do.	do.	--	--	1,200±	--	--
I- 95	do.	International and Great Northern Ry.	--	--	--	--	--
I- 96	5 miles southwest	U. S. Government Kelly Field	--	1906	1,400	10, 8	--
I- 97	5⅛ miles southwest	do.	Layne-Texas Co.	1910	1,590	10	"Edwards" limestone
I- 98	do.	International and Great Northern Ry.	-- Shops	--	1,160	--	do.
I- 99	6 miles southwest	U. S. Government Kelly Field	J.P.Benkendorfer	1912	1,483	12, 10	--
I-100	7 miles southwest	Humble Oil and Refining Co.	Jacob Wolff	--	--	8	--
I-101	8 miles southwest	United Gas System	--	--	1,650	6	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
I- 81	--	--	--	Cf,G,--	Irr	Dug. Irrigated about 10 acres in 1934. Gravel from 15 to 30 feet.
I- 82	--	--	--	T,E,20	Irr	Estimated yield in October 1934. 1,000 gallons a minute. Bottom of Grayson shale about 1,000 feet. Irrigated about 105 acres in 1934.
I- 83	--	--	--	T,E,15	D	Known as the Gates well. Grayson shale from 1,029 to 1,084 feet. 12-inch casing to 400 feet; 10-inch casing to 740 feet; 8-inch casing to 1,084 feet.
I- 84	--	- 14.45	Nov. 24, 1933	None	N	Well was dug 45 feet.
I- 85	--	- 17	do.	C,G,--	Irr	Dug. Gravel from 14 to 34 feet. Irrigated about 4 acres in 1934.
I- 86	--	--	--	T,--,--	Irr	Yield, 620 gallons a minute on October 12, 1934. Irrigated about
I- 87	--	--	--	T,--,--	Irr	Yield, 970 gallons a minute on September 28, 1934. Irrigated about 100 acres in 1934.
I- 88	--	--	--	Cf,G,--	Irr	Dug.
I- 89	--	--	--	T,E,15	Irr	Grayson shale from 995 to 1,045 feet. Irrigated about 40 acres in 1934. Estimated yield, 500 gallons a minute on September 24, 1934.
I- 90	--	--	--	None	N	Known as Hofheintz well. Clay reported in "Edwards" lime-stone. See log.
I- 91	672.37	+ 3.13	Sept. 1, 1933	Cf,E,16	Irr	Flow, 50 gallons a minute. Pumped 600 gallons a minute on September 19, 1934. Irrigated about 25 acres in 1934.
I- 92	--	--	--	Cf,E,--	Ind	
I- 93	--	+ 8	1919	Cf,E,--	P	Reported flow, 1,660 gallons a minute in 1919. See log.
I- 94	--	--	--	None	N	
I- 95	--	--	--	Cf,G,--	Irr	
I- 96	--	--	--	--	P	Casing: 700 feet of 10-inch; 340 feet of 8-inch. Grayson shale
I- 97	--	--	--	Cf,E,G	P	See log. from 980 to 1,040 feet.
I- 98	--	--	--	T,E,40	Ind	Do.
I- 99	--	--	--	Flows	N	Casing: 728 feet of 12-inch; 10-inch from 750 to 1,045 feet. Grayson shale from 990 to 1,045 feet.
I-100	--	+ 38.6	Sept. 5, 1933	Flows	D,Ind	Measuring point is about 100 feet northwest of well.
I-101	--	--	--	A,--	D,Ind	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I-102	8½ miles southwest	Judge -- Kennon	--	--	1,280	6¼	--
I-103	9 miles southwest	do.	--	--	--	6	--
I-104	do.	do.	--	--	--	6	--
I-105	8 miles southwest	-- Jackson	Pegg Bros.	1925	1,050	6	--
I-106	do.	D. Verstuyft	do.	--	--	10, 8	--
I-107	do.	Judge -- Kennon	--	--	--	6	--
I-108	7½ miles southwest	Charlie Persyn	Burkett Bros.	--	1,660	8	--
I-109	7 miles southwest	J. P. Wauters	do.	--	1,068	8	--
I-110	7½ miles southwest	do.	--	--	1,100±	8	--
I-111	do.	Mrs. -- Withman	--	--	--	6	--
I-112	7 miles southwest	D. Verstuyft	--	--	1,204±	8	--
I-113	do.	Grayburg Oil Co.	--	--	1,014±	--	--
I-114	6½ miles southwest	-- Verstuyft et al.	Burkett Bros.	1934	1,372	8	"Edwards" limestone
I-115	do.	Grayburg Oil Co.	F. L. Thompson	--	--	8	--
I-116	do.	F. Van DeWalle	--	1934	1,275	8	--
I-117	6 miles southwest	City of South San Antonio	--	--	--	10±	--
I-118	5½ miles southwest	Thurman Barrett	--	--	1,282	10	--
I-119	7 miles southwest	Charlie Persyn	Pegg Bros.	--	1,790	8	--
I-120	5½ miles south	San Jose Beach	--	--	1,885	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks
I-102	--	--	--	Flows	S	Estimated flow, 50 gallons a minute on September 12, 1933. Yields some oil. See log.
I-103	--	--	--	Flows	S	Estimated flow, 25 gallons a minute on September 12, 1933.
I-104	--	+ 25.4	Sept. 12, 1933	Flows	D,S	Estimated flow, 100 gallons a minute on September 12, 1933.
I-105	--	--	--	Flows	Irr	Irrigated about 25 acres in 1934.
I-106	--	--	--	Flows	Irr	Irrigated about 75 acres in 1934.
I-107	671.42	+ 3.5 + 1.8	Sept. 12, 1933 June 4, 1934	Flows	S	
I-108	632.10	+ 44.4 + 40 + 39.1	Sept. 6, 1933 Aug. 9, 1934 Oct. 9, 1934	T,E, --	Irr	Flow, 120 gallons a minute on August 31, 1934. Irrigated about 50 acres in 1934.
I-109	634.62	+ 41.5 + 37.6	Sept. 6, 1933 Aug. 9, 1934	Flows	Irr	Cased to 840 feet. Flow, 780 gallons a minute on October 16, 1934. Temperature 81° F.
I-110	637.37	+ 37.6	Sept. 6, 1933	Flows	Irr	Estimated flow, 500 gallons a minute on October 14, 1934. Irrigated about 50 acres in 1934.
I-111	611.01	+ 65.5 + 61.2 + 58.2	Sept. 5, 1933 June 4, 1934 Oct. 10, 1934	Flows	Irr	Irrigated about 5 acres in 1934.
I-112	640.82	+ 34.6 + 32 + 28.4	Sept. 6, 1933 Aug. 9, 1934 Oct. 14, 1934	Flows	Irr	Estimated flow, 800 gallons a minute on September 6, 1933. Irrigated about 100 acres in 1934.
I-113	643.10	+ 33.2	Sept. 6, 1933	Flows	Irr	Flow, 690 gallons a minute on October 11, 1934.
I-114	647.43	--	--	Flows	Irr	Cased to 1,300 feet. Flow, 715 gallons a minute on August 30, 1934. See log.
I-115	--	--	--	Flows	Irr	Bottom of Grayson shale at 1,260 feet. Irrigated about 100 acres in 1934.
I-116	--	--	--	Flows	Irr	Estimated flow, 1,400 gallons a minute in August 1934. Irrigated about 30 acres in 1934.
I-117	653.33	+ 23.0 + 15.4	Sept. 1, 1933 Oct. 14, 1934	Flows	Irr	Flow, 365 gallons a minute on October 4, 1934. Sulphur water with some oil and gas. Temperature 80° F.
I-118	--	--	--	Cf,G, --	Irr	Flow, 1,500 gallons a minute; pumped 4,500 gallons a minute in July 1946.
I-119	--	--	--	Flows	N	Estimated flow, 30 gallons a minute on September 6, 1933. Black sulphur water at 1,600 feet.
I-120	--	--	--	Flows	--	Water used for baths. Known as Terrell Hot Wells. Sulphur water. Reported temperature 106° F. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
I-121	6 miles south	San Jose Beach	-- Rohmer	--	2,190	--	--
I-122	9¾ miles west	Oscar Schievelbein	--	--	916	--	--
I-123	5½ miles southwest	U. S. Government Kelly Field	Wiegand Bros.	1941	1,632	16	"Edwards" limestone
I-124	5½ miles southwest	do.	--	1940	1,608	16	do.
J- 1	4¾ miles north	H. C. Wood	Gus Braendle	1946	300	7	Austin chalk
J- 2	5 miles north	San Antonio Portland Cement Co.	Frank Strosser	1908	580	6	--
J- 3	do.	do.	Amos Lorenz	Old	665	8	--
J- 4	do.	do.	Max Gerfers	1926	700±	9-5/8	"Edwards" limestone
J- 5	5½ miles north	do.	--	--	667	--	do.
J- 6	5½ miles northeast	Woodmen of the World Hospital	Amos Lorenz	--	300±	--	--
J- 7	5¾ miles northeast	Col. -- Chadwick	J. C. Crowder	1946	712	8, 7	"Edwards" limestone
J- 8	6 miles northeast	John Knott	do.	1946	--	--	--
J- 9	do.	James Johnson	do.	1946	--	--	--
J- 10	do.	Charlie Aronson	J. R. Johnson	1938	300	7	Austin chalk
J- 11	6½ miles northeast	do.	Cravens and Woodruff	1946	493	7	--
J- 12	6 miles northeast	Ed Ackerman	Max Gerfers	1944	460	7, 5½	"Edwards" limestone
J- 13	6¼ miles northeast	Col. -- Oldsmith	do.	1946	735	5½	do.
J- 14	7 miles northeast	A. G. Janszen	Burkett Drilling Co.	--	802	--	do.
J- 15	do.	J. S. Mills	-- Cravens	1944	576	7	--
J- 16	8¼ miles northeast	Don Danvers	Wm. Cravens	1944	640	10	--
J- 17	5½ miles northeast	U. S. Government Fort Sam Houston	J.P.Benkendorfer	1914	874	8, 6	--
J- 18	do.	do.	--	--	700±	12	--
J- 19	5 miles northeast	do.	--	--	635±	20	--
J- 20	do.	do.	--	--	635±	20	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
I-121	--	--	--	Flows	--	Water is used for baths. Known as Terrell Hot Wells. Sulphur water. Grayson shale from 1,380 to 1,425 feet. Reported temperature 106° F.
I-122	--	d/	--	C,W	D,S	U. S. Geological Survey observation well X B-1.
I-123	--	- 11	Apr. 1, 1941	T,E, 150	P	See log.
I-124	--	- 9	1940	Cf,E,G	P	Connected with well I-97.
J- 1	--	- 52.65	June 11, 1946	None	N	Cased to 60 feet. Austin chalk from 260 to 300 feet.
J- 2	--	--	--	C,W	D,S	Cased to 90 feet.
J- 3	--	--	--	A,E, --	Ind	
J- 4	--	--	--	A,E, --	Ind	
J- 5	--	--	--	--	--	See log.
J- 6	--	--	--	C,W	N	
J- 7	--	--	--	T,E, --	P	Grayson shale from 635 to 670 feet.
J- 8	--	- 59.20	June 15, 1946	--	D	Grayson shale from 581 to 621 feet. Well will supply tourist court.
J- 9	--	--	--	T,E, 5	D	Grayson shale from 545 to 600 feet.
J- 10	--	--	--	-,E --	D	Cased to 269 feet. See log.
J- 11	--	- 23.57	June 11, 1946	--	--	
J- 12	--	- 17	1944	C,W	--	Casing: 160 feet of 7-inch; 300 feet of 5½-inch. See log.
J- 13	--	- 9	1946	--	D,S	Cased to 464 feet. See log.
J- 14	--	--	--	None	N	Dry hole. See log.
J- 15	--	- 41.85	June 7, 1946	C,E, --	D,S	Cased to 500 feet. Sulphur water reported at 285 feet.
J- 16	--	--	--	C,E, --	D	Cased to 470 feet.
J- 17	--	--	--	None	N	Casing: 340 feet of 8-inch; 154 feet of 6-inch. See log.
J- 18	--	--	--	C,G,E, --	N	Maintained for standby service.
J- 19	--	--	--	C,-	--	Small amount pumped to Dodd Field; remainder wasted.
J- 20	--	--	--	C,-	--	Do.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
J-21	5 miles northeast	Salado Water Co.	Jacob Wolff	1912	702	12	--
J-22	3⅛ miles east	Emil Weilbacher	--	--	1,000	6	--
J-23	3¾ miles east	G. Berckmoes	Fred Burkett	1940	760	8	Austin chalk
J-24	4 miles east	Frank and Richard Aelovet	do.	1940	904	8, 6	"Edwards" limestone
J-25	do.	A. Van Hecke	do.	1940	975	5	do.
J-26	do.	A.G. Brackenridge	--	--	1,100±	10	--
J-27	do.	Alveit Bros.	Fred Burkett	--	620	6	--
J-28	do.	A.G. Brackenridge	--	1916	932	8	--
J-29	do.	do.	--	--	928	6	--
J-30	do.	do.	--	--	928	4	--
J-31	4⅛ miles east	do.	--	--	1,200±	8	--
J-32	5 miles east	A. A. Rothe	--	1922	660	6	--
J-33	5 miles northeast	E. Wauters	--	1927	1,008	8	--
J-34	do.	Jim Jardine	J.P.Benkendorfer	1926	739	8	--
J-35	5⅛ miles east	A. A. Rothe	Allen Burman	1922	970	6	--
J-36	6 miles northeast	Texas Refinery	Burkett Bros.	--	753	12	"Edwards" limestone
J-37	7 miles east	F. C. Ackerman	--	Old	560	6	--
J-38	do.	Fritz Eisenhauer	J. Crowder	--	1,100	8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) [a]	WATER LEVEL: Date of measurement	Method of lift [b]	Use of water [c]	Remarks [e]
J-21	--	--	--	Flows	S	Known as "Farmers Well". See table of discharge measurements in Water-Supply Paper 773-B.
J-22	--	--	--	C,E, 5	D,S	
J-23	--	--	--	Flows	Irr	Cased to 582 feet. Sulphur water from 475 to 560 feet. See log.
J-24	--	--	--	Flows	Irr	Reported flow, 1,000 gallons a minute. See log.
J-25	--	--	--	Flows	D,Irr	Cased to 560 feet. See log.
J-26	--	--	--	Flows	Irr	Estimated flow, 25 gallons a minute on August 10, 1933.
J-27	--	--	--	Flows	Irr	Estimated flow, 500 gallons a minute on September 14, 1934. First water at 590 feet. Slight sulphur odor. Irrigates about
J-28	646.16	+ 45 + 22.4	1916 Oct. 8, 1934	Flows	Irr	Esti- 60 acres of vegetables. mated flow, 1,200 gallons a minute on August 10, 1933. Depth to Grayson shale about 770 feet.
J-29	635.56	+ 11.6	Aug. 10, 1933	Flows	Irr	Flow, 570 gallons a minute on September 14, 1934.
J-30	--	--	--	Flows	Irr	Flow, 570 gallons a minute on September 14, 1934. Flow from wells J-29 and J-30 irrigates
J-31	--	--	--	Flows	N	Estimated about 235 acres. flow, 25 gallons a minute on August 10, 1933. Water flows upward outside of casing and is
J-32	--	--	--	Flows	D,S	Flow, 100 gallons a wasted. minute on November 13, 1932 Flow
J-33	--	--	--	Cf,E, --	D,Irr	Estimated flow, 700 is wasted. gallons a minute on May 16, 1934. Well is pumped when flow is insufficient. Irrigates about 60
J-34	--	--	--	Cf,G, 16	D,Irr	Flow, 300 gallons acres. a minute on September 14, 1934. Well is pumped when flow is insufficient to irrigate about 60
J-35	676.47	d/	--	C,W	D,S	Water level about 9 acres. feet below land surface in 1925. U. S. Geological Survey observa-
J-36	--	--	--	A,-, --	Ind	Grayson shale from tion well 36. 607 to 660 feet. See log.
J-37	--	- 18.85	Feb. 7, 1934	C,W	D,S	
J-38	683.89	- 26 - 11.67 - 16.72	1930 Feb. 7, 1934 Oct. 8, 1934	C,G, --	S	Top of Austin chalk at 540 feet. Water obtained at about 640 feet. Drilled 200 feet into "Edwards" limestone but found no water in it.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
J-39	7 miles east	C. Rittiman	J. Crowder	--	800±	8	--
J-40	8½ miles east	Edgar Ackerman	--	--	900±	8	--
J-41	9½ miles east	Ed Eisenhauer	--	1929	--	6	"Edwards" limestone
J-42	7½ miles east	Martindale Estate	--	--	--	6	do.
J-43	5½ miles east	-- Ackerman	--	1933	55	--	--
J-44	3½ miles east	Mrs. -- Barkmeyer	--	1898	990	6	--
J-45	4 miles east	D. Sullivan Farms	--	--	1,100	6	"Edwards" limestone
J-46	6 miles southeast	William Theis	--	1930	51	--	--
J-47	6½ miles southeast	Palfrey No. 1	Grayburg Oil Co.	1925	2,032	--	"Edwards" limestone
J-48	do.	Mrs. Francis Dullnig No. 2	W. H. Wallace	1930	1,575	--	do.
J-49	4½ miles southeast	State Hospital	--	--	2,100	6	--
J-50	4 miles south	Hot Wells Tourist Lodges	--	--	1,878	8	"Edwards" limestone
J-51	6½ miles southeast	J. A. Gembler No.1	Watson et al.	1930	1,568	10	--
J-52	do.	Mrs. Francis Dullnig	--	1892	2,215	8, 3	"Edwards" limestone
J-53	9 miles east	J. A. Winkler	--	--	43	36	--
J-54	9¼ miles east	C. C. Edwards	--	1890	54	28	--
J-55	8¼ miles southeast	J. A. Morris	--	--	--	24	--
K-1	13½ miles east	Eugene Reinzart	-- Schirmer	--	900±	--	--
K-2	14 miles east	Richard Schirmer	do.	--	854	4	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
J-39	--	--	--	C,W	D,S	Chloride 120 parts per million, hardness 440 parts per million by field tests.
J-40	741.64	- 69.25 - 74.75	Feb. 7, 1934 Oct. 8, 1934	C,W	D,S	Chloride 220 parts per million, hardness 560 parts per million by field tests.
J-41	686.99	- 25.11 - 29.30	Feb. 7, 1934 Oct. 8, 1934	C,-	N	Water reported bad but stock will drink it.
J-42	662.85	+ 11.55 + 6.08	Feb. 7, 1934 Oct. 8, 1934	Flows	S	Estimated flow, 5 gallons a minute on September 13, 1934. Yields some oil and gas. Chloride 340 parts per million, hardness 1,040 parts per million by field tests.
J-43	--	--	--	C,G, --	D,S	Dug.
J-44	--	--	--	Flows	N	Estimated flow, 25 gallons a minute on August 10, 1933. Sulphur
J-45	--	--	--	Flows	N	Oil test. Cased to 1,040 feet. Grayson shale from 975 to 1,040 feet. Estimated flow, 5 gallons a minute on August 10, 1933. water. Flow is wasted.
J-46	--	--	--	C,G, --	D,S	Dug. Chloride 140 parts per million, hardness 340 parts per million by field tests.
J-47	--	--	--	--	--	Oil test. Flowed sulphur water from "Edwards" limestone. See log.
J-48	--	--	--	--	--	Oil test. See log.
J-49	--	--	--	Flows	N	Sulphur water wasted. 6-inch casing set in top of Austin chalk.
J-50	--	--	--	Flows	--	Water used for baths. Estimated flow, 100 gallons a minute on August 3, 1933. Temperature 106° F. See log.
J-51	563.61	+ 73.4 + 70.3	Jan. 24, 1934 Oct. 8, 1934	Flows	N	Estimated flow, 50 gallons a minute on January 24, 1934. Oil test. Yields some oil and gas. See log.
J-52	643.16	- 4.82 - 7.41	Nov. 12, 1932 Oct. 8, 1934	None	N	Oil test. Flowed water until 1929.
J-53	--	--	--	C,W	D,S	Dug. Reported 40 feet of sand at surface. Chloride 380 parts per million, hardness 530 parts per million by field tests.
J-54	--	- 35.56	July 19, 1946	J,E, 1½	D,S	Dug.
J-55	--	- 24.50	do.	C,W	D,S	Do.
K- 1	668.41	- 6 - 20.57	1925 Oct. 8, 1934	C,W	S	Deepened from 715 to 900 feet in 1925. Sulphur water reported.
K- 2	589.58	+ 57.4 + 55.1	Feb. 6, 1934 Oct. 8, 1934	Flows	S	Top of "Edwards" limestone at 810 feet. Sulphur water. Estimated flow 100 gallons a minute. Chloride 2,000 parts per million, Hardness 3,000 parts per million by field tests.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
K- 3	16 miles east	R. Mikolajczyk	-- Mikolajczyk	1933	190	6	--
K- 4	18 miles east	E. V. Ploch	--	--	120	6	--
K- 5	do.	St.Hedwig Farmers' Gin	--	--	130	6	--
K- 6	19 miles east	Peter Kiolbassa	Amerado Petroleum Corp.	1932	2,130	--	"Edwards" limestone
K- 7	18½ miles east	Winkler No. 1	-- McClanahan, et. al.	--	2,184	--	do.
K- 8	18 miles east	Mary Strzekzyk No. 1	Transcontinental Oil Co.	--	2,524	--	--
K- 9	16½ miles east	Sudrock No. 1	W. L. McClanahan	--	2,008	--	--
K-10	15 miles east	Dan Kosub No. 1	Pennsylvania Oil Co.	1931	2,259	--	--
K-11	11 miles east	Albert Stephens No. 1	McElreath, Saggett and Wentz	1930	1,675	--	"Edwards" limestone
K-12	12½ miles east	Marshall Baker	--	--	30	36	--
K-13	13½ miles east	Charles Stuart	--	1918	28	24	--
K-14	11½ miles southeast	Burnett Estate	--	--	50	36	--
K-15	12½ miles southeast	Mrs. J. B. Cover No. 1	Storey and Stieren	1926	1,953	--	"Edwards" limestone
K-16	14¼ miles east	E. G. Besch	--	1939	118	--	--
K-17	13¾ miles east	J. T. Terrell	--	--	33	30	--
K-18	15½ miles east	Mrs. -- Fowler	--	--	74	36	--
K-19	15 miles southeast	F. W. Boldt	--	--	69	36	--
L- 1	20½ miles east	H. C. Weiters No.1	B. F. Thompson	1926	2,260	--	--
L- 2	21½ miles east	Koch No. 1	-- Davis, et. al.	--	2,034	--	--
L- 3	20 miles east	Gutz No. 1	Gulf Refining Co.	--	2,101	--	"Edwards" limestone
M- 1	19¼ miles west	Otto Bippert	--	--	45	--	--
M- 2	17½ miles west	F. V. Ford	--	--	43	48	--
M- 3	20¼ miles southwest	F. W. Grey	--	--	143	8	--
M- 4	20⅝ miles southwest	E. T. Williamson	--	--	18	36	--
M- 5	16½ miles southwest	H. F. Franger	--	--	35	48	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks d/
K- 3	--	--	--	None	N	Four other wells nearby about 190 feet deep, found no potable water.
K- 4	--	--	--	C,W	D,S	
K- 5	--	--	--	C,G	D	Chloride 280 parts per million, hardness 500 parts per million by
K- 6	540	--	--	--	N	Oil test. Sulphur field tests.
K- 7	497	--	--	--	N	water bailed from "Edwards" lime- Oil test, sul- stone. See log.
K- 8	--	--	--	--	N	phur water flowed from "Edwards" Oil test. limestone · See log.
K- 9	529	--	--	--	N	See log. Do.
K-10	--	--	--	--	--	Do.
K-11	623	--	--	--	--	Do.
K-12	--	--	--	C,W	D,S	Dug. Chloride 150 parts per mil-
K-13	--	- 22	1946	C,W	D,S	lion, hardness 300 parts per mil- Dug. lion by field tests.
K-14	--	--	--	B,H	D,S	Do.
K-15	548	--	--	--	N	Oil test. Sulphur water in "Ed- wards" limestone. See log.
K-16	--	-100.71	July 19, 1946	C,W	D,S	Water reported very hard.
K-17	--	- 19.65	do.	C,W	D,S	Dug. Water reported of good quality.
K-18	--	- 63.6	Feb. 2, 1934	B,H	D,S	Dug. Chloride 80 parts per mil-
K-19	--	--	--	C,W	D,S	lion, hardness 280 parts per mil- Dug. Water lion by field tests. from sand.
L- 1	609	--	--	--	--	Oil test. See log.
L- 2	544	--	--	--	--	Do.
L- 3	526	--	--	--	N	Oil test. Sulphur water from "Edwards" limestone. See log.
M- 1	--	- 35	1946	C,W	D,S	Dug. Draws water from Medina River gravel.
M- 2	--	- 31	1946	C,G	D,S	Dug. Draws water from 20 feet of gravel overlain by 20 feet of
M- 3	--	-116.53	July 9, 1946	C,W	D,S	Weak supply. clay.
M- 4	--	- 11	1946	B,H	D,S	Dug.
M- 5	--	- 30	--	C,W	D,S	Do.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
M- 6	14¼ miles southwest	W. Rohmer	--	--	55	8	--
M- 7	13½ miles southwest	Joe Jackel	--	--	45	48	--
M- 8	13 miles southwest	L. F. Ridder	--	--	--	8	--
M- 9	do.	do.	--	--	--	6	--
M-10	13¼ miles southwest	R. Magnus	--	--	48	48	--
M-11	13½ miles southwest	Mrs. C. H. Burkett	--	--	1,850	6	--
M-12	15 miles southwest	W. L. Unburn	W. L. Unburn	1934	1,915	8	--
M-13	do.	Pegg Bros.	Pegg Bros.	--	1,800±	6	"Edwards" limestone
M-14	do.	C. L. Cheek	--	1933	1,800±	6	--
M-15	17 miles southwest	Juan Bustamate	--	--	116	8	--
M-16	15¾ miles southwest	T. Casias	--	--	113	6	--
M-17	16½ miles southwest	Carl Clark	-- Oliver	1946	112	6	--
M-18	17¾ miles southwest	Bill Jimenez	--	--	32	48	--
M-19	18½ miles southwest	Eastwood No. 1	Ballard and Underwood	--	5,361	--	--
M-20	19 miles southwest	H. James	--	--	35	36	--
M-21	18 miles southwest	May No. 1	Penn-Tex Oil Co.	--	2,100	--	--
M-22	do.	B. Jonas	--	1946	72	48	--
M-23	18½ miles southwest	Oppenheimer No. 1	Dixie Oil Co.	--	2,026	--	--
M-24	19¼ miles southwest	Wm. Scott	--	--	59	8	--
M-25	19½ miles southwest	A. A. Koehler	--	--	60	4	--
M-26	do.	J. D. Edwards	--	--	97	6	--
N- 1	12 miles southwest	L. F. Ridder	--	--	--	6	--
N- 2	do.	Charlie Crook	--	--	--	--	--
N- 3	13 miles southwest	C. F. Krause	Public Service Co.	--	1,636	6	"Edwards" limestone

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
M- 6	--	--	--	C,W	D,S	
M- 7	--	- 30	1946	C,W	D,S	Dug.
M- 8	--	--	--	Flows	N	Estimated flow in 1933 2,000 gallons a minute wasted into Medina River.
M- 9	--	--	--	Flows	S	
M-10	--	--	--	J,E, 1/3	D,S	Dug.
M-11	611.95	+ 57.5 + 53.8	Sept. 8, 1933 Oct. 10, 1934	Flows	D,S, Irr	Grayson clay from 1,485 to 1,537 feet.
M-12	660.06	+ 12.0	Oct. 10, 1934	Flows	D,S, Irr	
M-13	648.27	+ 30 + 31 + 33	Sept. 8, 1933 Oct. 20, 1933 May 22, 1934	Flows	Irr	Oil test. Flow, 220 gallons per minute October 30, 1933, Irrigated about 30 acres in 1934. Top of Grayson clay at 1,692 feet.
M-14	590.12	d/	--	Flows	Irr	Oil test. U. S. Geological Survey observation well 30.
M-15	--	--	--	J,E, 1/3	S	
M-16	--	- 75	1946	C,W	S	
M-17	--	--	--	C,W	D,S	
M-18	--	- 27.1	July 9, 1946	C,H	D,S	Dug.
M-19	--	--	--	--	--	Oil test. See log.
M-20	--	- 26.07	July 10, 1946	C,W	S	Water reported unfit for stock.
M-21	618	--	--	--	--	Oil test. Top of "Edwards" limestone at 2,032 feet.
M-22	--	- 54.15	July 9, 1946	--	D,S	Dug. Penetrated 2 feet of brown coal.
M-23	--	--	--	--	--	Oil test. See log.
M-24	--	--	--	T,E, 1	P	
M-25	--	--	--	C,W	D,S	
M-26	--	--	--	C,W	D,S	Sand from 75 to 97 feet.
N- 1	621.62	+ 49.9 + 43.4	Sept.13, 1933 Oct. 10, 1934	T,G	D,S	Pump operated when flow is insufficient.
N- 2	616.93	+ 35.7 + 30.8	Sept. 8, 1933 Oct. 10, 1934	Flows	D,S, Irr	Estimated flow 75 gallons per minute on September 8, 1933.
N- 3	607.69	+ 59.1 + 58.1	Sept. 8, 1933 Oct. 10, 1934	Flows	D,S, Irr	See log.

Records of wells in Bexar County-- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
N- 4	12 miles southwest	O. R. Mitchell	J. R. Johnson	1946	1,909	14, 12	"Edwards" limestone
N- 5	10¾ miles southwest	do.	Pegg Bros.	--	1,771	8	"Edwards" limestone
N- 6	10½ miles southwest	C. Verstuyft	Fred Burkett	--	1,532	12	--
N- 7	7⅛ miles southwest	W. W. Schultz	-- Burkett	--	1,018	10, 8	--
N- 8	7 miles southwest	Thurman Barrett	Dingman Drilling Co.	--	--	4	--
N- 9	8⅛ miles south	Cassin-Dingman	do.	1933	1,506	6	--
N-10	8 miles south	W. Kelso	do.	1930	1,559	--	"Edwards" limestone
N-11	9 miles southwest	-- Althiem	Jacob Wolff	1911	1,825	6	do.
N-12	8⅛ miles southwest	J. W. Moore	--	--	--	4	--
N-13	9¼ miles southwest	O. R. Mitchell	J. R. Johnson	1944	1,767	6	"Edwards" limestone
N-14	10⅛ miles south	Sanders Estate	Jacob Wolff	1908	1,883	6	--
N-15	10½ miles southwest	-- Ray	-- Higdon	1924	100	--	--
N-16	do.	W. Tomasie	--	--	80	36	--
N-17	11¼ miles southwest	Sanders Estate	--	--	--	8	--
N-18	12 miles south	Mrs. C. Walsh	--	1920	150	8	--
N-19	11¾ miles southwest	Clinton Brown	--	--	2,355	6	--
N-20	12 miles southwest	G. E. Parker	--	--	70	48	--
N-21	12⅛ miles southwest	B. H. Edwards	-- Higdon	1944	65	6	--
N-22	do.	W. S. Willis	--	1870	50	60	--
N-23	10⅛ miles southwest	Otto Waechter	Pegg Bros.	1934	2,000±	8	
N-24	12 miles southwest	Pedro Vasquez	--	--	64	60	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
N- 4	--	--	--	Flows	Irr	Casing: 580 feet of 14-inch, 1,005 feet of 12-inch. Flow, 3,550 gallons a minute July 29, 1946. Temperature 80° F. See log.
N- 5	--	--	--	Flows	S,Irr	Cased to 1,530 feet. See log.
N- 6	--	--	--	Flows	D,Irr	See log.
N- 7	--	--	--	Cf,E, --	Irr	Irrigated 100 acres in 1934. See log.
N- 8	660.74	- 10.35 - 10.55	Sept. 5, 1933 Dec. 6, 1933	None	N	
N- 9	567.45	+ 79.7 + 78.7	Jan. 23, 1934 Oct. 9, 1934	Flows	N	Grayson shale from 1,365 to 1,422 feet. Well yields sulphur water.
N-10	601	--	--	--	--	Oil test. See Temperature 100°F. log.
N-11	--	--	--	Flows	Irr	Sulphur water. Grayson shale from 1,600 to 1,669 feet. Cased to 1,670 feet. Flow 75 gallons a minute August 31, 1934. Temperature 109° F, September 6, 1933; temperature 106° F, July 1,
N-12	--	--	--	Flows	Irr	1946. Sulphur water. Flow, 26 gallons a minute July 1,1946.
N-13	--	--	--	Flows	N	Cased to Temperature 99° F. 1,680 feet. Sulphur water. Es-
N-14	--	--	--	Flows	N	timated flow, 300 gallons a min- Gray- ute in 1946. See log. son shale from 1,450 to 1,505 feet. Flow, 50 gallons a minute,
N-15	--	- 80	1946	C,W	D	Mineralized December 6, 1933. water.
N-16	--	- 51.12	July 1, 1946	J,E, 1/4	D,S	Dug. Mineralized water.
N-17	--	--	--	Flows	N	Sulphur water. Flow, 270 gallons a minute, August 31, 1934. Tem-
N-18	--	- 40 to 50	--	C,G	D,S	Water sand perature 116° F. from 125 to 130 feet.
N-19	575.50	+ 96.5 + 92.7	May 14, 1934 Oct. 9, 1934	Flows	N	Sulphur water. Flow, 180 gallons a minute, September 7, 1934. Tem-
N-20	--	- 57.5	--	None	N	Dug. perature 115° F on December 6, 1933. See log.
N-21	--	- 56.73	July 1, 1946	C,G	D	
N-22	--	- 43.61	do.	J,E	D,S	Dug.
N-23	628.61	+ 42.8 + 39.7	May 22, 1934 Oct. 9, 1934	Flows	S	Sulphur water. Flow, 500 gallons a minute May 22, 1934.
N-24	--	- 62.27	July 18, 1946	B,H	D,S	Dug.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
N-25	12½ miles southwest	L. H. Blessing	--	--	60	6	--
N-26	12¾ miles southwest	Chas. P. Koch	--	--	52	--	--
N-27	13¼ miles southwest	C. Terrell	N. B. Oliver	1946	47	--	--
N-28	13 miles southwest	E. M. Baker	J. R. Johnson	1945	1,330	6	--
N-29	14 miles southwest	L. A. Kerr, Jr.	--	--	90	6	--
N-30	14½ miles southwest	V. M. Wilhelm	--	--	80	6	--
N-31	14¾ miles southwest	G. Kurz	N. B. Oliver	--	110	--	--
N-32	15½ miles southwest	Hoffman Nursery	--	1939	160	8	--
N-33	15¾ miles southwest	H. J. Hoffman	Fred Burkett	1946	248	8	--
N-34	16½ miles southwest	M. Manade	M. Manade	1933	134±	--	--
N-35	16¾ miles southwest	Somerset Townsite	--	--	2,320	--	--
N-36	15¾ miles southwest	F. A. Wagner	N. B. Oliver	1945	96	6	--
N-37	15 miles southwest	F. E. Jett	do.	--	145	6	--
N-38	16 miles southwest	Marshall Surfees	do.	1946	165	8	--
N-39	17 miles southwest	W. S. Klemcke	-- Workman	1938	124	6	--
N-40	17¾ miles south	L. C. Akers	--	--	200	6-5/8	--
N-41	do.	John Brauchle	Gus Braendle	1926	225±	6-5/8	--
N-42	17½ miles south	A. H. McCall	-- Beasley	1945	80	4	--
N-43	17¾ miles south	R. M. Cage	Henry Gier	1910	120	4	--
N-44	17½ miles south	C. Webb	--	--	150	6¾	--
N-45	17 miles south	W. R. Schupp	--	1940	135	7	--
N-46	do.	Mrs. B. Chambers	--	--	--	--	--
N-47	do.	C. L. Kight	C. L. Kight	1927	69	--	--
N-48	16¾ miles south	G. W. Allen	--	--	148	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
N-25	--	--	--	None	N	Gravel from 12 to 48 feet.
N-26	--	- 48.61	July 8, 1946	C,E, ¾	P	Dug.
N-27	--	- 39.45	July 18, 1946	J,-	D,S	Well 100 yards southwest encountered dry blue clay from 30 to 200 feet.
N-28	--	--	--	None	N	Flows black sulphur water. See log.
N-29	--	--	--	C,W	D,S	
N-30	--	--	--	C,W	D,S	
N-31	--	- 49.20	July 11, 1946	C,G	N	Drilled to 400 feet, plugged back to 110 feet. Blue clay 120 to 400 feet.
N-32	--	--	--	T,G	D,S, Irr	Sulphur water. Flows 7 gallons a minute, pump yields 175 gallons a minute.
N-33	--	- 77.21	July 11, 1946	None	N	Will be used for irrigation.
N-34	--	--	--	C,G, 8	P	Sand from 90 to 134 feet. Chloride 120 parts per million, hardness 500 parts per million by field tests.
N-35	--	--	--	None	N	Oil test. Abandoned. Grayson shale from 2,030 to 2,100 feet.
N-36	--	- 78	1945	C,W	D,S	
N-37	--	- 55	1946	C,E, 1/3	D,S	
N-38	--	- 90	1946	T,G	D,S, Irr	Sand from 120 to 165 feet. Yield 400 gallons a minute.
N-39	--	--	--	C,W	D,S	
N-40	--	-204.00	June 27, 1946	C,W	D	
N-41	--	-183.57	do.	C,W	D	
N-42	--	- 70	1945	C,G, 2	D	
N-43	--	-106.16	June 27, 1946	C,G, 2½	D	
N-44	--	-125.10	do.	C,W	N	
N-45	--	-118.06	do.	C,H	D	
N-46	--	-137.10	June 28, 1946	C,W	D	
N-47	--	- 59	1946	C,W	D	
N-48	--	-130	1946	C,W	D	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
N-49	16½ miles south	Mrs. L. Martin	--	1925	155	7	--
N-50	do.	G. O. Miller	Wm Cravens	1936	143	6	--
N-51	16¼ miles south	W. W. Thiel	--	1934	120	--	--
N-52	do.	do.	--	1931	60	--	--
N-53	15¾ miles south	E. Thiele	--	1876	62	36	--
N-54	14¾ miles south	D. C. Pegg	D. C. Pegg	1930	127	4	--
N-55	do.	C. T. Russell	-- Forest	1945	120	--	--
N-56	do.	A. L. Eckert	--	Old	110	5	--
N-57	do.	Mrs. E. Frees	--	Old	70	--	--
N-58	14½ miles south	D. F. Gayle	D. F. Gayle	1941	80	4	--
N-59	14 miles southwest	A. H. Mueller	A. H. Mueller	1930	55	7½	--
N-60	do.	J. Coerlin	--	1940	75	--	--
N-61	13½ miles southwest	H. E. Bursell	--	1936	90	--	--
N-62	13¼ miles southwest	M. Matthews	Wm. Cravens	1941	80	--	--
N-63	do.	Herman Mueller	--	--	85	6	--
N-64	13 miles south	Jose Centano	--	--	81	5¼	--
N-65	13½ miles south	L. E. Cope	--	Old	61	40	--
N-66	13 miles south	F. A. W. Ernst	-- Englehardt	1910	102	--	--
N-67	do.	Lee Hubbard	--	--	--	--	--
N-68	12½ miles south	Swearingen No. 1	Buckeye Oil Co.	--	2,470	--	"Edwards" limestone
N-69	14¼ miles south	H. F. Gayle	-- Oliver	1945	211	6-5/8	--
N-70	15 miles south	John Gayle	--	1905	65	42	--
N-71	14 miles south	Elmer Hodges	Fred Burkett	1946	150	5-3/8	--
N-72	13½ miles south	Frank Applewhite	--	--	170	6	--
N-73	do.	Oaks - Applewhite No. 1	Wiegand Bros.	1941	2,500	--	"Edwards" limestone

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
N-49	--	-130	1946	C,W	D	
N-50	--	-131	1944	C,W	D,S	
N-51	--	- 80	1946	C,G, 2	D	
N-52	--	- 52	1946	C,H	S	
N-53	--	- 58.80	June 28, 1946	C,W	D	Dug.
N-54	--	- 96.70	do.	C,W	D	
N-55	--	- 88	1945	J,E, 1	S	
N-56	--	-100	1944	C,W	D	
N-57	--	- 57	1946	C,W	D	Dug.
N-58	--	- 70.7	June 28, 1946	C,W	D	
N-59	--	- 49.38	do.	C,W	D,S	
N-60	--	--	--	C,W	D	Dug.
N-61	--	- 55.26	July 1, 1946	C,W	D	Cased to 80 feet.
N-62	--	- 66.35	do.	C,W	D	
N-63	--	- 58.9	Dec. 6, 1933	C,W	D,S	Sands at 60-65; 80-90; and at about 220 feet. Quality of water improves with depth.
N-64	--	- 60.83	July 3, 1946	C,W	D	
N-65	--	- 39.68	do.	C,W	D	Dug.
N-66	--	--	--	C,W	D,S	
N-67	--	--	--	C,W	S	
N-68	548	--	--	--	--	Oil test. Flowed hot sulphur water from "Edwards" limestone.
N-69	--	- 80	1946	C,W	D	Cased to 185 feet. See log. Good water reported from 325 to 350 feet.
N-70	--	- 35.39	July 3, 1946	C,W	D	Dug. Rock crib-bed to bottom.
N-71	--	-113	1946	--	D	Cased to bottom. Sand from 127 to 150 feet.
N-72	--	-110.79	July 3, 1946	None	N	Sands at 140 and 170 feet. Reported yield 17 gallons a minute.
N-73	--	--	--	--	--	Oil test. Electrical log available. See log.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
N-74	14 miles south	Frank Applewhite	Frank Applewhite	1922	153	4½	--
N-75	14¼ miles south	R. W. Devilbiss	--	1894	196	4½	--
N-76	13¾ miles south	Mrs. James Watson	--	1916	120	5	--
N-77	13½ miles south	Mrs. Cora Dillon	T. B. Applewhite	--	165	6	--
N-78	do.	J. N. Arnold	-- Wright	1938	121	5¾	--
N-79	14 miles south	Mrs. J.N.Meredith	--	1930	86	--	--
N-80	13½ miles south	Thelma School	--	--	110	4	--
N-81	14 miles south	Mrs. Thelma Baker	Jim Higdon	1945	160	6	--
N-82	14¼ miles south	J. O. Lopez	-- Dillon	1944	148	6	--
N-83	do.	Celedonio Villarreal	-- Russell	1916	142	4½	--
N-84	14½ miles south	Mrs. J. W. Coleman	--	Old	120	4	--
N-85	15 miles south	Mrs. Helen Johnson	Frank Burkett	1936	110	6	--
N-86	15¾ miles south	Englehardt Estate	--	1910	150±	4	--
N-87	16 miles south	Louis Whitehead	Guadalupe Englehardt	1922	134	4½	--
N-88	17¼ miles south	Duke Carver	--	--	140	6	--
O- 1	6½ miles south	G. C. Daugherty	--	--	148	6	--
O- 2	7¼ miles south	Louisa Oppenheimer No. 2	Humble Oil and Refining Co.	1929	4,535	--	--
O- 3	do.	Louisa Oppenheimer No. 1	do.	1928	1,509	--	--
O- 4	8¼ miles southeast	Cassin No. 2	Dingman Drilling Co.	1930	1,602	--	"Edwards" limestone
O- 5	8 miles southeast	C. N. Pack	--	1942	35	20	--
O- 6	9 miles southeast	San Antonio Cotton Mills	--	--	220±	10	--
O- 7	do.	do.	--	1920	223±	10	--
O- 8	9¼ miles southeast	Ben Gonzales	Bill Nation	1944	69	4	--
O- 9	9¾ miles southeast	W. R. Wiseman	H. Bump	1913	200	--	--
O-10	10¼ miles southeast	C. A. Goeth	--	--	150	--	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
N-74	--	-123	1946	C,W	D	Cased to bottom. Sands at 125 to 133 feet and 145 to 153 feet. Reported yield 6 gallons a minute.
N-75	--	-110	1946	C,W	D,S	
N-76	--	- 82.99	July 11, 1946	C,W,G	S	
N-77	--	-109.42	do.	H	N	
N-78	--	-103.69	do.	C,W	D,S	Cased to bottom.
N-79	--	- 72.23	do.	C,W	S	
N-80	--	- 87.53	do.	C,W	P	
N-81	--	--	--	J,E, 3/4	D	Cased to 160 feet. Supplies 5 houses and service station.
N-82	--	- 41.96	July 6, 1946	C,E, 1	D,S	Cased to 148 feet.
N-83	--	-102.38	do.	C,W	D	First water at 100 feet.
N-84	--	- 70.06	do.	None	N	
N-85	--	- 56.69	do.	C,W	D	Cased to 110 feet.
N-86	--	-100.65	July 5, 1946	C,W,G	D,S	Cased to bottom.
N-87	--	-120.76	do.	C,W	D	Do.
N-88	--	-124.75	do.	C,E	D,S	
O- 1	--	--	--	C,W	D,S	
O- 2	607	--	--	--	--	Oil test. See log.
O- 3	602	--	--	--	--	Do.
O- 4	580	--	--	--	--	Oil test. Strong flow of sulphur water from "Edwards" limestone.
O- 5	--	- 18.25	July 18, 1946	C,W	D	Dug. Brick cribbed to bottom. See log.
O- 6	--	--	--	A,E	P,Ind	Supplies mill and town.
O- 7	--	--	--	A,E	P,Ind	Do.
O- 8	--	- 36.98	July 17, 1946	C,G	D	
O- 9	--	- 60	1946	C,G	D,S	
O-10	--	--	--	--	--	Sand from 130 to 135 feet.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
O-11	9¼ miles southeast	J. E. Niemann	-- Higdon	1921	140	5-3/8	--
O-12	9½ miles southeast	Hill Top Garage	Hidgon Bros.	1923	110	6	--
O-13	do.	Frank Taylor	-- Higdon	1932	250	6	--
O-14	10 miles southeast	George Gembler	Louis Janszen	1925	270	5	--
O-15	do.	H. M. Schmidt	--	1942	205	8	--
O-16	10½ miles southeast	H. H. Crowell	-- Palacios	1938	155	4	--
O-17	10¾ miles southeast	M. T. Hubbell	--	1943	150	4½	--
O-18	11 miles southeast	I. J. Pollock	L. B. Palacios	1946	205	5	--
O-19	do.	-- McFarland	do.	1946	200	6	--
O-20	11¼ miles southeast	-- Anaworth	-- Higdon	1946	181	5½	--
O-21	11½ miles southeast	Otis Floyd	--	1931	130	4	--
O-22	12 miles southeast	J. W. Cockrill	Wm. Cravens	1945	169	5	--
O-23	9¾ miles southeast	Albert Gembler	Wiegand Bros.	1942	1,720	--	"Edwards" limestone
O-24	10¼ miles southeast	Fred Gembler	-- Crouch	1933	805	--	--
O-25	10½ miles southeast	State Agriculture Experiment Farm	Fred Burkett	--	92	6	--
O-26	12½ miles southeast	Jose Cassiano No. 1	McElreath, Saggett and Wentz	1930	2,343	--	"Edwards" limestone
O-27	13½ miles southeast	Virginia LeMaster	L. B. Palacios	1938	165	6	--
O-28	14¾ miles southeast	Alamo Clay Products	--	Old	276	4	--
O-29	do.	Joseph Hartl	--	Old	--	4	--
O-30	14½ miles southeast	John Ball	--	--	251	--	--
O-31	do.	Star Brick and Pipe Co.	Craven Well Drilling Co.	--	230±	8	--
O-32	14 miles southeast	W. A. Collins	Wm. Cravens	1930	180	4	--
O-33	13½ miles southeast	Joe Hartl	--	--	128	5	--
O-34	12¾ miles southeast	Otto Weller	Otto Weller	1909	79	5	--
O-35	12½ miles southeast	W. W. Owentson	--	--	125	6	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
0-11	--	- 91.59	July 17, 1946	C,E	D	
0-12	--	- 90.82	Jan. 29, 1934	C,G	S	
0-13	--	--	--	C,W	D	
0-14	--	-115	1946	C,W	D,S	Cased to 165 feet. First water at 160 feet.
0-15	--	-106.95	July 17, 1946	C,W	D,S	
0-16	--	-125.12	July 16, 1946	C,W	D,S	Cased to bottom.
0-17	--	--	--	C,W	D,S	
0-18	--	--	--	--	--	Cased to 200 feet. First water at 115 feet. See log.
0-19	--	-114.54	July 16, 1946	None	N	Cased to bottom.
0-20	--	- 73.43	do.	C,W	D	
0-21	--	- 30	1946	C,E, 1	D,S	Cased to bottom.
0-22	--	--	--	C,E, 1	D	Do.
0-23	571	--	--	--	--	Oil test. Electrical log available. See log.
0-24	--	--	--	--	--	Oil test.
0-25	--	--	--	C,W	--	Sand and gravel at 90 feet. Chloride 570, hardness 2,400 parts per million by field tests.
0-26	497	--	--	--	--	Oil test. See log.
0-27	--	- 53	1946	C,W	D,S	Cased to bottom.
0-28	--	--	--	C,E	Ind	
0-29	--	- 60.45	--	C,W	D,S	
0-30	--	--	--	C,W	D,S	Draws water mainly from beds at 175 to 200 feet.
0-31	--	- 56.03	Jan. 29, 1934	C,E	N	
0-32	--	--	--	C,W,G	D,S	First water at 80 feet.
0-33	--	- 94.79	July 17, 1946	C,W	D,S	
0-34	--	- 71.77	--	C,W	D,S	Cased to bottom. First water at 70 feet.
0-35	--	-105	1946	C,E	D	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
0-36	12½ miles southeast	W. W Owentson	Bob Johnson	1943	250	6	--
0-37	12¼ miles southeast	Mrs. Charlotte Brandenburg	--	--	125	--	--
0-38	11½ miles southeast	-- Crow	Walter Bull	1941	200	8	--
0-39	11 miles southeast	John Cush	W. C. Nieman	Old	190	8	--
0-40	do.	J. A. Adam	--	1924	125	6	--
0-41	12¼ miles southeast	-- Seale	--	1905	105	--	--
0-42	13¼ miles southeast	Victor Prassel	-- Marquart	--	180±	--	--
0-43	do.	H. A. Rothman	--	1930	165	3	--
0-44	11¾ miles southeast	J. H. Clay	--	1900	72	36	--
0-45	11½ miles southeast	Jimmy Lucas	Jimmy Higdon	1946	87	6	--
0-46	10 miles southeast	H. Alexander	--	--	340	9	--
0-47	9¾ miles south	J. O. Chapman	--	--	120	8	--
0-48	10½ miles south	C. A. Goeth	--	--	104	--	--
0-49	do.	Fred Gates	--	1916	130	--	--
0-50	11½ miles south	Blue Wing Club	Jacob Wolf	Old	2,444	8,5-3/16	"Edwards" limestone
0-51	do.	do.	Dingman Drilling Co.	1929	2,558	--	do.
0-52	11 miles south	C. C. Crumvine	--	--	46	--	--
0-53	9¾ miles south	S. M. Ojeda	--	--	82	6	--
0-54	10½ miles south	Buena Vista School	--	--	122	6¼	--
0-55	10 miles south	Yturri No. 1	Wm. H. Reynolds	--	3,852	--	"Edwards" limestone
0-56	10½ miles south	Frank Webb	--	--	98	6	--
0-57	11 miles south	A. K. McAfee	--	1926	96	6	--
0-58	12 miles south	Lloyd Wright	--	1910	1,600±	10, 8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
0-36	--	-105.03	July 17, 1946	C,E, 3/4	S	
0-37	--	-120.78	do.	C,W	D	
0-38	--	-144.41	do.	C,W	D	
0-39	--	--	--	C,W	D,S	
0-40	--	- 90	1946	C,W	D,S	Casing to bottom.
0-41	--	- 73.22	July 17, 1946	C,W	D,S	
0-42	--	--	--	C,W	D,S	Found water at 90 to 120 feet and at 160 feet.
0-43	--	--	--	C,W	D,S	Cased to 165 feet.
0-44	--	- 50	1946	C,E	D,S	Dug. Rock lined to bottom.
0-45	--	- 48.51	July 17, 1946	J,E	D,S	Cased to 87 feet.
0-46	--	- 65.07	July 18, 1946	C,W	D,S	
0-47	--	--	--	C,E, 3	D	
0-48	--	--	--	C,W,G	D,S	
0-49	--	- 61.70	July 18, 1946	C,W,G	D	
0-50	--	--	--	Flows	N	Casing: 440 feet of 8-inch; 1,305 feet of 6-inch; 370 feet of 5-3/16-inch. Reported yield 100 gallons a minute in 1934. Water flows into Blue Wing Lake. Temperature 118° F. when drilled.
0-51	--	--	--	Flows	N	Reported yield 300 gallons a minute in 1934. Water flows into Blue Wing Lake. See log.
0-52	--	- 33	1946	C,W	D,S	
0-53	--	- 58.12	July 18, 1946	C,W	D	
0-54	--	- 35.82	do.	None	N	
0-55	525	--	--	--	--	Oil test. Flowed hot sulphur water. See log.
0-56	--	--	--	C,W	D,S	Water at 63 feet.
0-57	--	--	--	C,G	D	Casing: 96 feet of 6-inch with 40 feet of 4-inch liner.
0-58	--	- 73.03	July 18, 1946	C,W,E	D,S	Supplies dairy.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
0-59	11½ miles south	J. L. Martinez	J. L. Martinez	1939	101	6	--
0-60	12⅝ miles south	John Wilton	W. W. Trumbo	1920	100	4	--
0-61	12¾ miles south	W. W. Trumbo	do.	1923	140	4¾	--
0-62	13¼ miles south	T. Mendoza	Richard Gray	1921	140	4	--
0-63	14 miles south	Jas Watson	--	1904	78	8	--
0-64	do.	B. J. Steen	Fred Burkett	1946	246	7, 5	--
0-65	13 miles south	--	--	--	143	6	--
0-66	do.	J. H. Matthey No.1	Houston Oil Co.	1919	2,890	--	"Edwards" limestone
0-67	13⅝ miles southeast	Chavez No. 1	J. F. Camp and Humble Oil and Refining Co.	1931	2,633	--	do.
0-68	14¾ miles southeast	Joe Lamm	T. B. Slick	--	3,044	--	do.
0-69	12⅝ miles south	--	--	--	72	4	--
0-70	12½ miles south	Wright Bros.	--	1900	1,600±	14	--
0-71	12¾ miles south	P. Friemel	Powell Friemel	1914	100	4	--
0-72	13¼ miles south	T. V. Guiterriez	--	1946	68	36	--
0-73	14 miles south	T. M. Rakowitz	--	1931	60	36	--
0-74	do.	Carmen School	--	--	102	--	--
0-75	do.	M. B. Castanos	--	--	187	6	--
0-76	do.	Joe Pinn	--	--	124+	5	--
0-77	14½ miles south	A. L. Toudouze	-- Englehardt	1909	115	4½	--
0-78	14⅝ miles south	J. F. Bailey	--	--	2,000±	6	--
0-79	do.	Joe Lamm	--	--	2,873	8	--
0-80	14¼ miles south	A. P. Heinen	--	--	--	42	--
0-81	14⅝ miles south	do.	Fred Burkett	1939	207	7½	--
0-82	do.	do.	do.	1939	163	8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
0-59	--	86.46	July 11, 1946	C,W	D	Bored. Cased to 101 feet.
0-60	--	- 67.73	do.	C,W	D	Sand from 80 to 100 feet.
0-61	--	- 80.09	do.	C,W	D,S	Cased to bottom.
0-62	--	- 78.57	do.	C,W	D,S	Do.
0-63	--	- 53.05	Feb. 1, 1934	C,W	D,S	Sand from surface down.
0-64	--	- 90	1946	C,E	D	Casing: 164 feet of 7-inch; 82 feet of 5-inch. See log.
0-65	--	- 88.64	July 2, 1946	C,W	S	
0-66	--	--	--	--	--	Oil test. Flowed sulphur water from "Edwards" limestone. See log.
0-67	--	--	--	--	--	Oil test. See log.
0-68	--	--	--	--	--	Oil test. Flowed hot sulphur water. See log.
0-69	--	- 55.31	--	C,W	D	
0-70	--	- 72.99	Feb. 1, 1934	C,W	D,S	
0-71	--	- 80.47	July 18, 1946	C,W	D	
0-72	--	- 61.55	do.	C,G	D	Dug. Lined with brick and tile to bottom.
0-73	--	- 38.23	July 8, 1946	C,W,E	D,S	Lined with tile to bottom.
0-74	--	- 83.95	do.	C,W	P	
0-75	--	- 99.9	do.	C,W	D,S	
0-76	--	-100.80	do.	C,W	D	
0-77	--	- 81.60	do.	C,W	S	Cased to 115 feet.
0-78	585.61	- 0.42 - 0.21	Feb. 1, 1934 Oct. 9, 1934	Flows	N	Oil test. Flows at times.
0-79	571.30	+ 3.24 - 1.79	Feb. 1, 1934 Oct. 9, 1934	Flows	N	Oil test. Flows at times. Flowed sulphur water from "Edwards" limestone.
0-80	--	- 9.5	July 8, 1946	B,H	D	Dug. Cased with 78 feet of galvanized iron.
0-81	--	- 98.29	do.	C,W	D	Cased to bottom. Reported yield, 300 gallons a minute from 40 feet of water sand.
0-82	--	- 90	1939	None	N	Cased to bottom. Reported 33 to 37 feet of water sand, yielding 18,000 gallons in 24 hours.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
0-83	14 miles south	A. R. Schautteet	W. J. Pegg	1945	160	6	--
0-84	15 miles south	Bartley and Binger	--	1945	270	4	--
0-85	do.	A. R. Loeffler	--	1917	65	--	--
0-86	15¾ miles south	W. T. Lamison	--	Old	130	4	--
0-87	17 miles south	J. F. Hair	--	--	222	8	--
0-88	17¾ miles south	Jesse Garcia	Frank Shirley	1946	130	6	--
0-89	15¾ miles south	O. B. Boyle	--	--	180	6	--
0-90	15½ miles south	Mrs. A. Cunningham	--	1936	180	7¼	--
0-91	15 miles south	A. C. McClure	--	--	182	8	--
0-92	14½ miles south	S. W. Slack	--	1934	80	5	--
0-93	do.	Mrs. Roy D. Cramer	--	1932	136	4½	--
0-94	do.	A. J. Weigand	--	1846	39	54	--
0-95	do.	Mrs. May Gerollymy	--	--	24	--	--
0-96	do.	B. Jensen	-- Goforth	1941	72	7	--
0-97	14½ miles south	Joe Pintz	--	1896	65	60	--
0-98	do.	R. M. Thompson	--	--	78	4½	--
0-99	do.	P. R. Busby	--	1936	91	6	--
0-100	14½ miles south	Earl Pollard	--	--	90	36	--
0-101	15½ miles south	G. L. Brown	--	--	80	8	--
0-102	do.	Joe McDonnell	--	--	750±	12	--
0-103	15¾ miles south	J. E. Lamm	--	--	85	4	--
0-104	15¼ miles southeast	Ben Morris	--	--	--	--	--
0-105	do.	T. R. Russell	--	--	100	--	--
0-106	15 miles southeast	E. C. Deen	Wm. Cravens	1930	70	5	--
0-107	do.	Borrego School	--	1939	61	8	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
0- 83	--	-105.34	July 2, 1946	C,W	D	
0- 84	--	- 42.29	do.	C,W	D	
0- 85	--	- 42.79	July 24, 1946	J,E	D	Dug.
0- 86	--	-114.59	July 2, 1946	C,W	--	
0- 87	--	-184.97	do.	C,W	--	Cased to bottom.
0- 88	--	-123.58	July 9, 1946	-,H	D	
0- 89	--	- 48	1946	C,W,G	D	
0- 90	--	- 61.73	July 8, 1946	C,E, 1½	D	
0- 91	--	- 40	1946	J,E, ¾	D	
0- 92	--	- 50.50	July 8, 1946	C,E, ½	D,S	Cased to bottom.
0- 93	--	- 62.76	do.	C,W	D	Cased to 100 feet.
0- 94	--	- 6.5	1946	C,G, 1½	D	Dug. Rock lined to bottom. Yield 10 gallons a minute.
0- 95	--	- 14.53	July 8, 1946	C,W	D	
0- 96	--	- 32	1941	J,E, 1/3	D	Water sand at 49-72 feet.
0- 97	--	- 53	1946	C,G	D,S	Dug. Rock lined to 25 feet.
0- 98	--	- 50.27	July 10, 1946	C,W	D,S	
0- 99	--	- 68	1946	C,E, 1½	D,S	Cased to bottom.
0-100	--	- 67.5	July 10, 1946	C,W,E	D,S	Lined with tile to bottom.
0-101	--	- 73.91	do.	C,G, 3	D,S	
0-102	--	- 58.2	Jan. 29, 1934	None	N	Oil test.
0-103	--	- 56.85	July 10, 1946	C,W	D	
0-104	--	- 80.83	do.	C,W	D	
0-105	--	- 68.7	do.	C,W	D,S	
0-106	--	- 58.78	do.	C,W	D	Cased to bottom.
0-107	--	- 58.21	do.	C,W	P	

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
O-108	14¾ miles southeast	Jud and Ormond	--	1931	1,100±	4	--
O-109	16 miles southeast	W. N. Smith	--	1908	110	4	--
O-110	do.	K. J. Smith	--	1945	112	7	--
O-111	16½ miles southeast	Edith Gelven	--	--	80	4	--
O-112	16¾ miles southeast	Pioneer Flour Mills	--	--	120	4½	--
O-113	17¼ miles southeast	R. T. Flores	R. T. Flores	1927	45	5½	--
O-114	17½ miles southeast	R. M. McKay	--	1936	180	8	--
O-115	18 miles southeast	Joseph Hartl	--	Old	40	8	--
P- 1	12½ miles southeast	C. Schoenfeld	J. R. Johnson	1942	168	--	--
P- 2	13 miles southeast	do.	do.	1941	182	6	--
P- 3	13½ miles southeast	do.	do.	1941	108	--	--
P- 4	13¾ miles southeast	do.	do.	1941	201	--	--
P- 5	do.	W. H. Terrell	--	1909	65	24	--
P- 6	15¾ miles southeast	J. T. Salter	--	--	63	32	--
P- 7	16 miles southeast	W. R. Miller	--	--	205	6	--
P- 8	do.	Stuart No. 1	Sun-Marland	--	2,603	--	"Edwards" limestone
P- 9	16¼ miles southeast	E. M. Reus	-- Mowinkle	1936	250	6-5/8	--
P- 10	14¾ miles southeast	Robert Bernhardt	Wm. Craven	1936	126	6¼	--
P- 11	do.	Utzville School	--	--	80	30	--
P- 12	14 miles southeast	M. B. Morales	L. B. Palacios	1942	87	4½	--
P- 13	14½ miles southeast	John Martin	-- Palacios	1934	105	5	--
P- 14	do.	Mrs. Lillian Burrow	--	1936	92	6	--
P- 15	14¾ miles southeast	H. K. Rietz	--	1945	136	--	--
P- 16	do.	M. B. Morales	--	1939	96	24	--
P- 17	15 miles southeast	Oscar Koehler	--	1901	100	30	--

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
0-108	--	+ 3.5	Jan. 30, 1934	C,G	D,S	Drilled as an oil test and most of casing pulled out. Estimated flow 5 gallons a minute in 1934.
0-109	--	- 81.99	July 12, 1946	J,E	D	
0-110	--	- 80	1945	J,E	D	
0-111	--	- 60	1946	C,W	S	Cased to bottom.
0-112	--	- 57.79	July 10, 1946	C,W,G	D,S	
0-113	--	- 37	do.	C,W	D,S	First water at 40 feet.
0-114	--	- 48.39	do.	C,W,G	D,S	Cased to bottom.
0-115	--	- 25.72	do.	C,E	D,S	
P- 1	--	-150	1942	C,W,G	S	Reported yield 7 gallons a minute. See log.
P- 2	--	- 92.20	June 13, 1946	C,G	D,S	Casing to 150 feet. Reported yield 12 gallons a minute. See log.
P- 3	--	- 80	1941	C,W	D,S	See log.
P- 4	--	- 80	1941	C,W	N	Do.
P- 5	--	- 47.54	July 19, 1946	C,W,E	D,S	Dug.
P- 6	--	- 57.50	July 18, 1946	B,H	D	
P- 7	--	-133.3	July 19, 1946	C,E	D,S	
P- 8	558	--	--	--	N	Oil test. Sulphur water from Edwards, plugged. See log.
P- 9	--	- 67.80	July 19, 1946	C,W	S	Oil test. Drilled to 400 feet; plugged back to 250 feet and cased.
P- 10	--	- 78.18	do.	C,W	S	Cased to bottom. First water at 86 feet.
P- 11	--	- 32.50	July 18, 1946	C,W	P	Dug.
P- 12	--	- 43.80	July 16, 1946	C,H	D	
P- 13	--	- 35	1934	C,W	D	Cased to bottom.
P- 14	--	- 79.62	July 16, 1946	J,E, 1½	D	
P- 15	--	- 72	1946	C,W	D	
P- 16	--	--	--	J,E	D	Dug.
P- 17	--	- 71.65	July 16, 1946	C,W	D,S	Dug. Cased to 96 feet.

Records of wells in Bexar County -- Continued

Well	Distance from Bexar County Court House	Owner	Driller	Date completed	Depth of well (ft.)	Diameter of well (in.)	Water-bearing formation
P-18	15¾ miles southeast	R. E. Allison	L. B. Palacios	1936	100	8	--
P-19	17 miles southeast	E. J. Petsch	--	--	61	4	--
P-20	15½ miles southeast	R. X. Ball	-- Emhoff	1913	228	6	--
P-21	do.	Mrs. Agnas Brehm	--	--	90	4	--
P-22	15½ miles southeast	Mrs. H. Michaelis	Wm. Cravens	1946	150	6	--
P-23	16¾ miles southeast	--	--	--	--	36	--
P-24	16¼ miles southeast	--	--	--	155+	--	--
Q- 1	17½ miles south	Osburn Sand Plant	--	--	240	12¾	--
Q- 2	17¾ miles south	Duke Carver	--	--	113	6	--
Q- 3	18½ miles south	Mrs. L. G. Wilson	--	--	185	6	--
Q- 4	19 miles south	Mrs. Ida Sylvester	Walter Cook	1916	171	4½	--
R- 1	18¾ miles south	-- Halliday	--	--	141+	4	--
R- 2	19 miles south	W. D. Sylvester	Ed Schwartz	1915	171	6	--
R- 3	18 miles south	C. J. Russell	Wm. Cravens	1937	127	6	--
R- 4	19 miles south	Oakley School	--	--	134	6	--
R- 5	19¼ miles south	Ben M. Brown	Tom Dillon	1943	115	6¼	--
R- 6	20 miles south	Rufus Schields	--	--	139	4	--
R- 7	19¾ miles south	Alfons Chapaty	--	--	111	--	--
R- 8	18¼ miles south	J. J. Brown	-- Swirts	1936	155	4½	--
R- 9	do.	C. H. Hardy	C. H. Hardy	1941	39	--	--
R-10	18½ miles south	J. F. Shilling	Ruford Schields	1940	160	4	--
R-11	18½ miles south	C. L. Rohmer, Sr.	--	1906	156	4	--
R-12	20 miles south	J. J. Brown	-- Swirts	1946	167	--	--

a/ Land surface datum approximately at land surface. Water levels shown to nearest foot are reported, those to tenths and hundredths were measured.

b/ Pump and power: C, cylinder; T, deep-well turbine; Cf, centrifugal; J, jet (small capacity); A, air lift; B, bucket; G, gasoline or diesel; W, windmill; E, electric; S, steam; H, hand. Number indicates horsepower.

Well	Altitude of land surface (ft.)	WATER LEVEL: Above or below land surface (ft.) a/	WATER LEVEL: Date of measurement	Method of lift b/	Use of water c/	Remarks e/
P-18	--	- 59.01	July 15, 1946	C,E	D,S	
P-19	--	- 41.68	July 16, 1946	C,W	D,S	
P-20	--	- 56	1946	C,G, 2½	D	Cased to 226 feet.
P-21	--	- 72.23	July 12, 1946	C,W	D	
P-22	--	--	--	None	N	See log.
P-23	--	-108.09	July 12, 1946	C,W	D,S	Dug.
P-24	--	- 82.60	do.	C,W	D,S	
Q- 1	--	-161.84	July 5, 1946	C,E, 5	Ind	Measured yield 10 gallons a minute.
Q- 2	--	-101.15	do.	C,W	S	
Q- 3	--	- 85	1946	C,E	D	
Q- 4	--	- 98.79	July 5, 1946	C,W	D	Cased to 100 feet.
R- 1	--	-141+	1946	C,W	D	
R- 2	--	- 91.90	Feb. 1, 1934	C,W	D,S	Rock from 109 to 171 feet.
R- 3	--	-100	1937	C,E	D,S	Cased to 126 feet. Rock at 104 feet.
R- 4	--	- 71.53	July 9, 1946	C,W	P	
R- 5	--	- 84.34	do.	C,E, ¼	D	Cased to bottom.
R- 6	--	-113.99	do.	C,W	N	
R- 7	--	-101.07	do.	C,W	D,S	
R- 8	--	-106.78	do.	C,G	D,S	
R- 9	--	- 35	1946	H	D	Bored.
R-10	--	-148.35	July 9, 1946	C,W	D,S	Cased to bottom.
R-11	--	-139.6	do.	C,W	D,S	
R-12	--	-117.02	do.	C,W	S	

c/ Use of water: P, public supply; D, domestic; S, stock; Ind, industrial; N, not used.

d/ Water level reported by driller or owner.

e/ Grayson shale formerly known as Del Rio clay is usually called "big mud" by drillers.

Table of drillers' logs, Bexar County, Texas
(The airline distances and directions are from the county courthouse in San Antonio)

	Thickness (feet)	Depth (feet)
Well 8		
G. Potchernick, at McCullough and Park Hill, 3 miles north.		
Surface	3	3
Yellow clay	37	40
Caliche	7	47
Yellow clay	93	140
Yellow limestone	60	200
Greyish-blue limestone	60	260
Hard grey water sand	16	276
Well 9		
Don Danvers, at Olmos and Jones, 3 miles north.		
Soil	1	1
Hard yellow chalk	132	133
Limestone	9	142
Greyson shale (Del Rio clay)	58	200
"Edwards" limestone:		
Limestone	9	209
Well 21		
City of San Antonio, at New Braunfels and Highway 81, 4½ miles north.		
Soil	2	2
Yellow clay	80	82
Blue shale	78	160
Yellow clay	10	170
Hard marl	45	215
Chalk	40	255
Shale	10	265
Limestone	30	295
Greyson shale (Del Rio clay)	55	350
"Edwards" limestone:		
Limestone	26	376
Porous limestone, water	3	379
Hard white limestone	29	408
Grey limestone	42	450
Hard sandy limestone	20	470
Porous limestone, water	10	480
Hard sandy limestone	14	494
Porous limestone, water	3	497

	Thickness (feet)	Depth (feet)
Well 21-Continued		
"Edwards" limestone-continued.		
Hard limestone	6	503
Porous limestone, water-	4	507
Hard limestone	6	513
Crevice, water	2	515
Limestone	6	521
Porous limestone, water	2	523
Limestone	4	527
Porous limestone, water	2	529
Limestone	2	531
Porous limestone, water	5	536
Hard sandy limestone	4	540
Grey limestone	25	565
Soft white limestone	30	595
Hard limestone splinters	24	619
Porous limestone, water	6	625
Hard grey limestone	25	650
Well 22		
Jack Brosseau, at Garratt and Eldon, 4 miles northeast.		
Black soil	2	2
White adobe	13	15
Yellow clay	41	56
Clay	89	145
Marl	79	224
Chalk	283	507
Shale (lignite)	25	532
Limestone	51	583
Greyson shale (Del Rio clay)	55	638
"Edwards" limestone:		
Limestone	26	664
Well 23		
C. G. Hamil, at Garratt and Eldon, 4 miles northeast.		
Surface	2	2
Yellow gravel	13	15
Yellow clay	21	36
Soft blue clay	58	94
Hard greyish-blue marl	160	274
Chalk	252	526
Shale (lignite)	20	546

(continued on next page)

Table of drillers' logs, Bexar County -- Continued

	Thickness (feet)	Depth (feet)
Well 23-Continued		
Limestone	62	608
Grayson shale (Del Rio clay)	56	664
"Edwards" limestone: Limestone	96	760
Well 24		
W. B. Osborn, at Garrett and Eldon, 4 miles northeast.		
Soil	3	3
Yellow clay	46	49
Brown clay	4	53
Clay	143	196
Chalk	288	484
Shale (lignite)	30	514
Limestone	44	558
Grayson shale (Del Rio clay)	61	619
"Edwards" limestone: Limestone	85	704
Well 26		
Ed. Steves and Sons, at Burr Road and old Austin Road, 4¼ miles northeast.		
Black soil	4	4
Joint clay	19	23
Yellow clay	35	58
Blue clay and boulders	16	74
Sticky gumbo	24	98
Blue shale	22	120
Grey shale	30	150
Gumbo	21	171
Hard grey shale	25	196
Blue shale	44	240
Hard grey shale	188	428
Hard grey chalky shale	107	535
Lignite	20	555
Limestone	50	605
Hard smooth blue limestone	10	615
Grayson shale (Del Rio mud hole)	45	660
"Edwards" limestone: Light brown colored limestone	30	690
White "Edwards" limestone	18	708
Porous or honeycomb limestone	3	711
Soft limestone, some water	39	750
Porous or honeycomb limestone, water	2	752
Soft limestone, some water	4	756
Hard limestone	½	756½
Well 28		
City of San Antonio, at Hildebrand and Olmos Cr., 3 miles northeast.		
Mud and soil	12	12
Rock	9	21
Yellow rock	44	65
Blue rock	8	73
Yellow rock	9	82
Brown rock	5	87
Blue rock	9	96
Yellow rock	5	101
Brown lignite	15	116
Hard yellow rock	28	144
Hard white rock	5	149
Herd grey rock	24	173
Grayson shale (Del Rio clay)	61	234
"Edwards" limestone: Very hard yellow water rock; some flint to bottom of well	468	702
Well 32		
St. Anthony Apostolic School, at Kings Highway and McCullough Ave., 2¼ miles north.		
Surface	1	1
Chalk	90	91
Broken pink chalk	17	108
Blue chalk	10	118
Shale (lignite)	40	158
White limestone	47	205
Grayson shale (Del Rio clay)	49	254
"Edwards" limestone: Limestone	128	382

Table of drillers' logs, Bexar County -- Continued

	Thickness (feet)	Depth (feet)
Well 33		
City of San Antonio, at Mistletoe and Ripley, 2 miles north.		
Surface soil	7	7
Clay	2	9
Clay and gravel	2	11
Rock	18	29
Hard sticky shale	9	38
Rock	17	55
Tough blue shale and rock	16	71
Rock shale	67	138
No returns	20	158
Rock	54	212
Hard chalk	68	280
Rock	4	284
Shale (lignite)	16	300
Hard white limestone	48	348
Hard limestone	14	362
Dark limestone	16	378
Grayson shale (Del Rio clay)	41	419
"Edwards" limestone:		
Yellow limestone	14	433
Hard limestone	14	447
Hard white limestone	16	463
Rock limestone	1	464
Hard limestone	39	503
Limestone and sand	10	513
Hard limestone	51	564
Limestone and sand	11	575
Crystalline limestone	1	576
Hard limestone	4	580
Sandy limestone	5	585
Hard limestone	3	588
Soft limestone	5	593
Hard limestone	19	612
No returns	86	698
Limestone	41	739
No returns	26	765
Limestone	86	851
Well 37		
City of San Antonio, at St. Cloud and Seeling Blvd., 4 miles northwest.		
Soil	3	3
Yellow clay	71	74
Clay	101	175
Gray sand	3	178
Hard marl	58	236
Marl	65	301
Hard marl; fossils	5	306
Chalk	80	386
Shale (lignite)	24	410
Limestone	48	458
Grayson shale (Del Rio clay)	47	505
"Edwards" limestone:		
Limestone	489	994
No records	210	1204
Well 38		
O. O. Bachtel, at Donaldson and Main, 4¾ miles northwest.		
Top soil	3	3
Yellow clay	36	39
Limestone	171	210
Chalk	138	348
Shale (lignite)	31	379
Limestone	57	436
Grayson shale (Del Rio clay)	76	512
"Edwards" limestone:		
Limestone	12	524
Well 44		
Lakeview Addition, at Wood and Monterey, 4½ miles west.		
Gravel and yellow clay	60	60
Shale	330	390
Soft white limestone	138	528
Shale (lignite)	32	560
Hard white limestone	60	620
Grayson shale (Del Rio clay)	52	672
"Edwards" limestone:		
Light brown limestone	28	700
White to gray limestone	300	1000

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 46		
Richard Dullnig, at U. S. Highway 90 and Acme Road, 5¼ miles west.		
Surface soil	4	4
Adobe and yellow clay	1	5
Yellow clay	20	25
Gravel	2	27
Yellow clay	2	29
Gravel	1	30
Yellow clay	42	72
Blue shale	100	172
Rock	1	173
Blue shale	47	320
Rock	1	321
Blue shale	379	700
Chalky shale	160	860
Lignite	1	861
Limestone	24	885
Grayson shale(Del Rio clay)	20	905
"Edwards"limestone:		
Limestone	60	965
Well 49		
Dr. Adolph Herff, at Stephenson and Mathess, 3½ miles west.		
Surface clay and gravel	31	31
Yellow clay	50	81
Blue clay	540	621
Magnesium limestone	160	781
Blue limestone	30	811
White limestone	140	951
Lignite	18	969
Gray limestone	81	1050
Greyson shale(Del Rio clay)	60	1110
"Edwards" limestone:		
Brown limestone	30	1140
Porous limestone	146	1286
Well 50		
Lady at the Lake College, at Durango and West 26th St., 2¾ miles west.		
Black soil	8	8
Gravel	10	18
Yellow clay	43	61
Blue clay	589	650
Dark gray limestone	40	690
Dark blue limestone	300	990
Lignite	12	1002
Hard white limestone	52	1054
Grayson shale(Del Rio clay)	50	1104
"Edwards"limestone:		
Blue limestone	22	1126
Flint lime	64	1190
Brown and gray sandstone	36	1226
Cavities	144	1370
Bottom	10	1380
Well 51		
Chas. Metyear, at Martin and Stanley, 3 miles west.		
Black earth	4	4
Yellow clay	27	31
Soft blue clay	12	43
Hard streaks	144	187
Black sand rock	3	190
Hard limestone	91	281
Black lignite	10	291
Rock	58	349
Black lignite	60	409
Rock	32	441
Grayson shale(Del Rio clay)	53	494
"Edwards"limestone:		
Soft dark sand rock	28	522
"Granite"	64	586
Sand rock, water	5	591
Well 58		
Mrs. L. M. Hubble, at Zarzamora and Menchaca, 2¼ miles northwest.		
Surface	8	8
Gravel and clay	8	16
Blue clay	194	210
Rock	3	213
Black rock shale	2	215
Limestone	-	-
Grayson shale(Del Rio clay)-		470
"Edwards"limestone:		
Blue speckled rock	20	490
Cave	8	498

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 62		
City of San Antonio, at Dwango and W. 19th St., 2½ miles west.		
Clay and gravel, boulders	27	27
Clay	442	469
Marl	188	657
Shale (lignite)	179	836
Limestone	54	890
Grayson shale(Del Rio clay)	52	942
"Edwards"limestone:		
Limestone	271	1213
Well 64		
Southern Ice and Cold Storage Co., at Frio and Durango, ¾ mile west.		
Soft pebbles	5	5
Hard pebbles	3	8
Yellow clay	40	48
Brown clay	112	160
Light brown clay	100	260
Magnesium rock	125	385
Limestone, sulphur water	135	520
White limestone	37	557
White clay	9	566
Not recorded	19	585
"Coal"	15	600
"White limestone"	50	650
Grayson shale(Del Rio clay)	61	711
"Edwards"limestone:		
Limestone	200	911
Well 65		
International Great Northern Ry., at W. Commerce and Salado Ave., ¾ mile west.		
Surface	10	10
White clay	4	14
Yellow clay	6	20
Gravel	4	24
Yellow clay	66	90
Dark gumbo	138	228
Chalk	428	656
Grayson shale (Del Rio clay)	55	711
Limestone with flint	528	1239
Well 80		
U. S. Government, at East end of Appler St., 1¾ miles northeast.		
Blue loam and flint boulders	3	3
Yellow clay	38	41
Blue clay	217	258
Magnesium limestone,water	96	354
Gray limestone, sulphur water	38	392
Hard gray limestone	37	429
Yellow limestone	39	468
Gray limestone	67	535
"Lignite"	31	566
Gray limestone	54	620
Grayson shale(Del Rio clay)	53	673
"Edwards"limestone:		
Blue limestone	15	688
Hard yellow limestone	18	706
Calcareous limestone with water	2	708
Open cavity	5	713
Hard limestone, with fissures filled with clay	16	729
Well 82		
E. Y. White Laundry, at Josephine and Euclid, 1¼ miles northeast.		
Surface soil and gravel	8	8
Caliche	12	20
Gravel	5	25
Yellow clay	7	32
Blue clay	10	42
Rock	3	45
Blue clay	22	67
Shale	100	167
Hard gray shale, sulphur water	22	189
Gray chalky shale	166	355
Chalk rock	150	505
Lignite	32	537
Limestone	56	593
Grayson shale (Del Rio clay) (hard with pyrites and boulders)	53	646
"Edwards"limestone:		
Limestone	35	681
Hard brown limestone	29	710

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 82-Continued		
"Edwards" limestone, continued:		
White limestone, a little water	17	727
Soft broken limestone	9	736
Hard brown limestone	4	740
Soft broken limestone, a little water	4	744
Hard brown limestone, a little water	4	748
Soft broken limestone, a little water	4	752
Hard and broken brown limestone	4	756
Very hard white limestone	11	767
Porous honeycomb limestone, good water, "lost some returns"	2	769
Very hard white limestone	2	771
Porous limestone with 6-inch cavity at 776 feet	16	787
Hard flint	2	789
Honeycomb and porous limestone, good water strata	31	820
Very hard limestone	6	826
Soft porous honeycomb limestone with several cavities of from 4 to 10 inches from depth of 843 to 851 feet.	27	853
Well 93		
Southern Greyhound Lines, at Ave. B and 8th, 1 mile northeast.		
Black residual soil	4	4
Impervious yellow clay	12	16
Gravel	20	36
Blue clay	300	336
Soapstone	250	586
Black mud	60	646
Very hard sandstone	5	651
Well 117		
St. Anthony Hotel, at Travis and Navarro, ½ mile northeast.		
Hotel basement	16	16
Yellow gravel	16	32
Yellow clay	30	62
Clay	165	227
Marl	174	401
Chalk	154	555
Shale (lignite)	26	581
Limestone	68	649
Grayson shale (Del Rio clay)	38	687
"Edwards" limestone:		
Limestone	118	805
Well 120		
U. S. Postoffice, at Houston and North Alamo, ½ mile northeast.		
Fill	7	7
Gravel	7	14
Cemented gravel	4	18
Yellow clay	32	50
Blue shale	23	73
Rock	1	74
Blue shale	43	117
Rock	6	123
Blue shale	58	181
Rock	1	182
Blue shale	60	242
Blue shale with thin rock ledges	110	352
Chalk	40	392
Chalk with gas and sulphur water	30	422
Chalk	127	549
Shale	28	577
Limestone	60	637
Grayson shale (Del Rio clay)	50	687
"Edwards" limestone:		
White limestone	46	733
Brown flint and limestone	24	757
Yellow limestone	10	767
Brown limestone and flint	150	917
Gray limestone	50	967
White limestone and gray flint	70	1037
White limestone and brown flint	18	1055
Gray limestone and gray flint	45	1100

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 120-Continued		
White limestone and brown flint	15	1115
White limestone and grey flint	22	1137
Brown limestone and flint	13	1150
White limestone and gray flint	9	1159
Well 122		
Nix Bldg., at Navarro and College, ¼ mile northeast.		
Surface ground	4	4
Chalky clay and gravel	10	14
Yellow clay	16	30
Blue clay	50	80
Hard blue shale	68	148
Gumbo	2	150
Hard gray shale	51	201
Broken limestone	8	209
Gray shale and limestone with soft and hard streaks.	208	417
Hard limestone	148	565
Brown shale and lignite	28	593
Hard white limestone	47	640
Hard blue limestone	9	649
Grayson shale(Del Rio clay)	48	697
"Edwards"limestone:		
Hard gray limestone	19	716
Brown limestone	19	735
Gray limestone	3	738
Yellow honeycomb limestone, water	1	739
Gray limestone	11	750
Porous limestone, water	2	752
Hard gray limestone	11	763
Porous crystallized limestone, water	12	775
Gray limestone	5	780
White limestone	3	783
Porous limestone, water	5	788
Gray limestone	16	804
Brown limestone	17	821
Fine-grained gray limestone	19	840
Coarse-grained gray limestone	15	855
Porous limestone	4	859

	Thickness (feet)	Depth (feet)
Well 122-Continued		
"Edwards"limestone, continued:		
Brown coarse-grained limestone	16	875
Soft limestone	20	895
Brown limestone	15	910
Porous gray limestone	5	915
Brown limestone	13	928
Blue limestone	22	950
Hard gray limestone	36	986
Rough yellowish-gray limestone with hard and soft spots	51	1037
Hard white magnesium limestone	6	1043
Well 123		
Texas Steam Laundry, at Losoya and College, ¼ mile northeast.		
Surface soil	12	12
Concrete gravel	6	18
Yellow clay	18	36
Blue clay	254	290
Magnesium limestone	130	420
Yellow limestone, sulphur water	40	460
Blue limestone	45	505
Gray limestone	50	555
"Lignite"	30	585
Gray limestone	60	645
Grayson shale(Del Rio clay)	58	703
"Edwards"limestone:		
Yellow limestone	44	747
Well 126		
Joske Bros. Co., at Commerce and Alamo, ½ mile east.		
Surface soil	4	4
Soft clay with sand	10	14
Gravel	15	29
Yellow clay	9	38
Hard blue clay and shale	121	159
Hard blue gumbo	51	210
Limestone	4	214
Soft sandy shale	9	223
Hard grey shale	11	234
Limestone	2	236

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 126-Continued		
Soft shale	4	240
Hard limestone	74	314
Hard streaks of broken limestone in grey shale	126	440
Chalk with streaks of gray shale	44	484
Soft chalk	8	492
Hard gray chalk	48	540
Light brown chalk	22	562
Grey chalk	66	628
Shale (lignite)	23	651
Limestone	51	702
Greyson shale(Del Rio clay)	55	757
"Edwards"limestone:		
Limestone	41	798
Hard limestone	2	800
Soft limestone with rough spots	2	802
Hard brown limestone	9	811
Soft white limestone	30	841
Very soft porous limestone, water	1	842
White limestone	25	867
Soft porous limestone	2	869
Hard limestone	1	870
Soft porous limestone	2	872
Hard limestone	3	875
White limestone	3	878
Soft limestone	1	879
White limestone	4	883
Tan limestone	6	889
Brown limestone, rough spots	29	918
Very hard limestone	1	919
Porous limestone	8	927
Very hard limestone	1	928
Cavity	½	928½
Soft porous limestone	1½	930
Very hard limestone	½	930½
Cavity	7½	938
Porous limestone	3	941
Hard brown limestone	2	943
Cavity	1	944
Porous limestone	5	949
Hard limestone	2	951
Cavity	½	951½
Soft limestone	2½	954
Cavity	1	955
Soft white magnesium limestone	6	961

	Thickness (feet)	Depth (feet)
Well 140		
City of San Antonio Market St. No 13, at Market and San Antonio River, ¼ mile east.		
Rotary table to ground	4½	4½
Surface of ground to basement floor	17	21½
Soft mud	10½	32
Loose gravel	6	38
Sand and gravel	9	47
Hard shell rock	1	48
Blue shale	36	84
Hard shale rock	3	87
Blue shale	13	100
Gray shale	22	122
Black shale	57	179
Hard rock	6	185
Grey shale	½	185½
Hard rock	3½	189
Blue shale	10	199
Rock	2	201
Very hard gray chalky shale	114	315
Chalk rock	17	332
Dark gray limey shale with hard and soft streaks	68	400
Broken limestone	24	424
Hard gray limey shale	72	496
Shale	16	512
Porous limestone, sulphur water	3	515
Hard gray limestone	79	594
Porous limestone, sulphur water	7	601
Hard gray limestone	32	633
Brown shale with lignite	9	642
Hard brown shale	5	647
Brown shale	15	662
Gray limestone	55	717
Hard white limestone	4	721
Greyson shale(Del Rio clay)	55	776
"Edwards"limestone:		
Gray limestone	3	779
Hard gray limestone	28	807
Yellow porous honeycomb limestone, some water	2	809
Hard gray lime	17	826
Crevice, water	1	827
Hard grey limestone	5	832
Honeycombed crystallized limestone, water	23	855
Gray sandstone	9	864
Soft porous limestone with cavities, water	3	867

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 140-Continued		
"Edwards" limestone, continued:		
Gray sandstone	5	872
Hard gray limestone	2	874
Soft honeycombed crystallized limestone, water	7	881
Grey limestone	1	882
Soft honeycombed crystallized limestone, water	1	883
Hard grey limestone	9	892
Honeycombed crystallized limestone with crevices, water	8	900
Hard gray limestone	12½	912½
Well 144		
Alamo National Bank, at St. Marys and Commerce, east.		
Basement	14	14
Yellow clay	14	28
Caliche and gravel	12	40
Herd blue clay	21	61
Hard blue sandy shale	99	160
Herd gray shale with some rock	141	301
Herd limestone	17	318
Hard gray shale	150	468
Hard brown limestone	117	585
Herd brown shale (lignite)	21	606
Hard limestone	62	668
Greyson shale (Del Rio clay)	51	719
"Edwards" limestone:		
Bluish-gray limestone	21	740
Soft gray limestone	4	744
Hard black limestone	9	753
Hard yellow limestone	27	780
White limestone	25	805
White sandy limestone, water	15	820
Brown limestone	14	834
White limestone	21	855
Porous limestone, water	2	857
Yellow limestone with soft spots, water	55	912
Soft limestone, water	4	916
Brown limestone	14	930
Yellow limestone, water	10	940
Blue limestone	18	958
Porous limestone, water	1	959
Blue limestone	9	968

	Thickness (feet)	Depth (feet)
Well 148		
U. S. Government (arsenal), at St. Marys and Martinez, ¼ mile south.		
Surface	3	3
Yellow hardpan	15	18
Herd brown gravel	13	31
Soft yellow clay	18	49
Soft blue clay	126	175
Soft light clay	129	304
Soft light chalk	114	418
Hard gray limestone	70	488
Soft yellow limestone	72	560
Soft gray limestone	58	618
Soft black lignite	27	645
Soft gray limestone	58	703
Greyson shale (Del Rio clay)	53	756
"Edwards" limestone:		
Limestone	59	815
Soft yellow limestone	21	836
Well 150		
Mrs. -- Johanna, at King William and Johnson, ¾ mile south.		
Surface	2	2
Herd pan	17	19
Grevel	15	34
Yellow clay	8	42
Blue clay	208	250
Chalk	192	442
White limestone	30	472
Yellow limestone	17	489
Grey limestone	91	580
Lignite	33	613
Grey limestone	69	682
Greyson shale (Del Rio clay)	52	734
"Edwards" limestone:		
Crystallized limestone	24	758
Well 151		
Pioneer Flour Mills, at King William and Guenther, ¾ mile south.		
Yellow clay and sand	43	43
Blue clay	19	62
Black shale	73	135
Gumbo	39	174

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 151-Continued		
Hard grey shale	12	186
Grey limestone and specks	284	470
Brown limestone	42	512
Grey limestone	29	541
Hard blue limestone	9	550
Grey limestone	25	575
Brown shale and lignite	35	610
White limestone	23	633
Hard blue limestone	55	688
Greyson shale (Del Rio clay)	18	706
"Edwards" limestone:		
Limestone	41	747
Brown limestone	18	765
Honeycomb rock	8	773
White limestone	4	777
Honeycomb rock	51	828
Brown limestone	2	830
Honeycomb rock	17	847
Gray limestone	31	878
Black flint	20	898
Gray limestone	1	899
Light gray limestone	89	988
Dark gray limestone	332	1320
Light gray limestone	332	1652

Well 153

Gugenheim-Goldsmith, at Alamo and Blue Star, 1 mile south.

Surface	1	1
Yellow clay	29	30
Yellow gravel	11	41
Clay	23	64
Marl	319	383
Chalk	225	608
Shale (lignite)	80	688
White limestone	60	748
Greyson shale (Del Rio clay)	63	811
"Edwards" limestone:		
Limestone	33	844

	Thickness (feet)	Depth (feet)
Well 159		
SA and AP Railroad, at Simpson and Probandt, ½ mile south.		
Soil	6	6
Soft white clay	16	32
Sticky yellow clay	8	30
Hard blue clay	70	100
Soft blue clay	150	250
Hard gray clay	50	300
Soft white soapstone	50	350
Hard blue clay	50	400
Soft white clay	100	500
Hard white rock	100	600
Soft gray rock, sulphur water	100	700
Hard gray rock	50	750
Hard white rock	100	850
Hard brown rock	50	900
Greyson shale (Del Rio clay)	50	950
"Edwards" limestone:		
Hard white limestone	153	1103

Well 163

San Antonio Public Service Co., at Concepcion Road and Fair Play, ½ mile south.

Pump pit	13	13
Gravel	7	20
Yellow clay	27	47
Blue clay	8	55
Hard rock	4	59
Blue clay	91	150
Hard rock	3	153
Blue clay	227	380
Limestone	12	392
Blue clay	88	480
Limestone	13	493
Blue clay	15	508
Chalk	14	522
"Cavy" clay	16	538
Chalk	60	598
Shale	30	628
Chalk	57	685
Water strata	20	705
Chalk	83	788

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 163-Continued		
Lignite	27	815
Limestone	63	878
Greyson shale(Del Rio clay)	58	936
"Edwards"limestone:		
Blue limestone	17	953
Yellow limestone	45	998
Well 164		
San Antonio Public Service Co., at Concepcion and Fair Play, 1⅛ mile south.		
White sandy clay	13	13
Gravel	5	18
Yellow clay	23	41
Hard blue shale	12	53
Rock	2	55
Blue shale	352	407
Chalk	10	417
Shale	53	470
Limestone	11	481
Shale	17	498
Chalk	16	514
Hard shale	14	528
Chalk	253	781
Shale	31	812
Limestone	62	874
Shale	53	927
Limestone	43	970
Limestone, very porous, water	53	1023
Limestone and shale	29	1052
Well 167		
City of San Antonio Mission Plant No. 1, at Parkview Dr. and San Antonio River, 2 miles south.		
Surface materials	54	54
Blue clay	726	780
Magnesium limestone	120	900
Grey limestone	292	1197
Lignite	26	1223
Limestone with crevices (water flowing at surface 3000 gallons per minute)	57	1280
Grayson shale(Del Rio clay)	48	1328
Well 167-Continued		
"Edwards"limestone:		
Limestone with crevices and water	112	1440
Well 173		
City of San Antonio Mission Plant No. 7, at Parkview Dr. and San Antonio River, 2 miles south.		
Black surface soil	3	3
Gravel and clay	9	12
Hard red sand	16	28
Gravel	12	40
Yellow clay and gravel	22	62
Blue clay	23	85
Green sand	2	87
Shale and boulders	383	470
Hard sticky shale	215	685
Hard gray shale	48	733
Broken limestone	71	804
Hard limestone	12	816
Broken limestone with soft streaks	60	876
Hard limestone	61	937
Very hard crystal-like limestone	7	944
Hard rough porous limestone	65	1009
White limestone	8	1017
Porous yellow limestone	7	1024
Streaks of grey and blue limestone, water	86	1110
Yellow porous honeycomb, water	5	1115
Gray limestone or chalk rock	35	1150
Lignite	30	1180
White limestone	35	1215
Bluish-gray limestone	15	1230
Greyson shale(Del Rio clay)	13	1243
"Edwards"limestone:		
Yellow and gray limestone	18	1261
Brown limestone	9	1270
Gray limestone	23	1293
Porous honeycomb limestone	1	1294
Hard gray limestone	26	1320
Hard brown limestone	20	1340
Hard gray limestone	20	1360
Brown limestone with streaks of black flint, very hard	10	1370

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 173-Continued		
"Edwards" limestone, continued:		
Brown limestone with some very soft streaks, water	210	1580
Brown limestone	190	1770
Brown limestone with small white crystals and some particles of dark brownish-yellow clay.	71	1841
Well 174		
City of San Antonio, at Mission Plant No. 8, 2 miles south.		
Gravel and clay	30	30
Yellow clay	15	45
Gravel	5	50
Blue clay	30	80
Brown shale	700	780
Hard marl	250	1030
Chalk	175	1205
Lost circulation	1	1206
Grayson shale (Del Rio clay)	49	1255
"Edwards" limestone:		
Limestone	145	1400
Well 177		
Steves Irrigated Garden, at Edwards and Green, 2 miles southwest.		
Surface materials	28	28
Blue clay	576	604
White clay	124	728
Gray rock	52	780
Yellow rock	25	805
Gray rock	89	894
Lignite	28	922
Grey rock	61	983
Grayson shale (Del Rio clay)	58	1041
"Edwards" limestone:		
Gray rock	19	1060
Brown rock	40	1100
Hard brown flint?	40	1140
Hard gray flint?	20	1160
Hard yellow flint?	25	1185
Well 179		
Union Meet Company, at San Marcos and Pendleton, 1½ miles southwest.		
Gravel	60	60
Blue shale	240	300
Gray limestone	316	616
Lignite	30	646
Hard gray limestone	64	710
Grayson shale (Del Rio clay)	70	780
"Edwards" limestone:		
Gray limestone	580	1360
White limestone	40	1400
Well 180		
Union Meet Company, at San Marcos and Pendleton, 1½ miles southwest.		
Gravel and yellow clay	60	60
Blue shale	280	340
White limestone	316	656
Lignite (or shale)	30	686
Hard white limestone	65	751
Grayson shale (Del Rio clay)	69	820
"Edwards" limestone:		
Light brown limestone	330	1150
White and gray limestone (no water below 1250)	250	1400
Well 181		
Kothman Bros. Packing Company, at Seltillo and Coloredo, 1½ miles southwest.		
Gravel and yellow clay	60	60
Blue shale	280	340
Soft white limestone	316	656
Lignite (or shale)	30	686
Hard white limestone	65	751
Greyson shale (Del Rio clay)	69	820
"Edwards" limestone:		
Light brown limestone	330	1150
White and gray limestone	250	1400
Well 182		
Gebhardt Canning Company, at Laredo and Coloredo, 1½ miles southwest.		

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 182-Continued		
Gravel	21	21
Yellow clay	34	55
Blue clay	285	340
Grey limestone; sulphur water and gas at 510	320	660
Lignite	30	690
Grey limestone	55	745
Greyson shale(Del Rio clay)	58	803
"Edwards"limestone:		
Gray limestone, fresh water	27	830
Gray limestone	197	1027
Well 186		
S. M. Reyes and Sons, at Laredo and Brazos, 1½ miles southwest.		
Black dirt	4	4
Yellow clay and gravel	29	33
Soft marl	128	161
Herd marl	212	373
Chalk	271	644
Shale	31	675
Limestone	62	737
Greyson shale(Del Rio clay)	56	793
"Edwards"limestone:		
Limestone	155	948
Well 187		
Mrs. M. Stuernegel Packing Co., at Laredo and Brazos, 1½ miles southwest.		
Black dirt	4	4
Yellow clay and gravel	29	33
Blue shale	90	123
Herd marl	337	460
Chalk	213	673
Shale	30	703
Limestone	59	762
Greyson shale(Del Rio clay)	55	817
"Edwards" limestone:		
Limestone	34	851
Well 188		
Melton and Rheiner Packing Co., at Brazos and Southern Pacific Railway, 1½ miles southwest.		
Soil	6	6
Caliche and gravel	8	14
Pea gravel	9	23
Gravel	10	33
Yellow clay	21	54
Clay	263	317
Marl	239	556
Chalk	150	706
Shale (lignite)	28	734
Limestone	63	797
Greyson shale(Del Rio clay)	54	851
"Edwards"limestone:		
Limestone	270	1121
Crevice	5	1126
Well 189		
Apache Packing Co., at Tampico and Sabinas, 1¾ miles southwest.		
Surface	1	1
Sandy gravel	12	13
Clay and gravel	20	33
Shale	237	270
Marl	71	341
Chalk	260	601
Shale (lignite)	32	633
Limestone	61	694
Greyson shale(Del Rio clay)	39	733
"Edwards"limestone:		
Limestone	278	1011
Well 222		
South San Antonio Water Co., at Somerset and Lester, 4¾ miles southwest.		
Black soil	4	4
Caliche	18	22
Caliche and gravel	7	29
Yellow clay and gravel	13	42
Soft rock	3	45
Yellow clay and gravel	9	54
Yellow clay	16	70
Rock	1	71
Blue clay	38	109
Blue sticky shale with boulders	242	351
Grey sandy shale	303	654

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well 222-Continued		
Rock	3	657
Hard gray shale	148	805
Broken gray limestone "chalky"	65	870
Soft sandy shale	17	887
Soft limestone "chalky"	10	897
Hard limestone	68	965
Hard chalk	15	980
Porous yellow limestone, some hard streaks; sulphur water	58	1038
Cavity, sulphur water	1	1039
Soft and broken limestone	77	1116
Lignite	28	1144
White limestone	46	1190
Greyson shale (Del Rio clay)	103	1293
"Edwards" limestone:		
Limestone	4	1297
Very soft porous limestone "fresh water"	3	1300
Honeycomb limestone	27	1327
Cavity	1	1328
Honeycomb limestone, water	½	1328½
Well 223		
San Jose Water Co., at Somerset and Lester, 4¾ miles southwest.		
Clay and sand	40	40
Clay, sand and rocks	55	95
Shale and boulders	260	355
Clay and gravel	25	380
Hard rock	10	390
Shale	325	715
Hard rock	3	718
Hard gray shale	79	797
Grey shale with hard streaks	88	885
Hard limestone	73	958
Chalk	16	974
Yellow limestone	65	1039
Porous limestone with hard streaks	10	1049
Broken limestone	66	1115
Broken limestone and lignite	22	1137
Hard limestone	49	1186
Grayson shale (Del Rio clay)	16	1202
"Edwards" limestone:		
Shale streaks	43	1245
Limestone	15	1260
Hard limestone	10	1270
Well 223-Continued		
"Edwards" limestone-continued:		
Porous limestone	10	1280
Soft limestone with layers of hard rock, probably chert	46	1326
Well B-3		
Ralph E. Fair, 23 miles northwest.		
Surface	2	2
Yellow limestone	16	18
Soft blue limestone	10	28
Yellow limestone	46	74
White limestone	33	107
Yellow limestone	54	161
White limestone	44	205
Hard yellow limestone	26	231
Blue limestone	226	457
Soft blue shale	45	502
Gray limestone	8	510
Blue shale	64	574
Grey shale and limestone	82	656
White chalky shale	18	674
Brown limestone	24	698
Pink shale	11	709
White and pink shale	31	740
Water sand	49	789
Hard white sand	4	793
Hard red sand	49	842
Hard brown sand	12	854
Grey sand and shale	2	856
Hard black limestone	18	874
Well B-4		
Ralph E. Fair, 23 miles northwest.		
Caliche	3	3
Hard caliche	1	4
Yellow limestone	21	25
White limestone	39	64
White and red shale	41	105
White and grey limestone	116	221
Yellowish-white limestone	20	241
Brown sandy shale	30	271
Red clay, cavey	6	277
Red clay, boulders	6	283
Grey limestone	6	289
Blue shale	16	305

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well B-4-Continued		
Grey limestone	17	322
Blue shale and limestone	91	413
Hard shale	32	445
Blue shale and limestone	42	487
Gray limestone	86	573
Grey sandy limestone	30	603
Blue shale	10	613
Well B-27		
U. S. Government, 19½ miles north.		
Black soil	4	4
Gravel	11	15
Yellow limestone	10	25
Blue limestone, a little water	19	44
Blue clay	6	50
Blue limestone	8	58
Blue clay	12	70
Blue clay and yellow limestone mixed	25	95
Yellow limestone	30	125
Blue limestone	15	140
Blue clay	15	155
Gray limestone	5	160
Yellow limestone	20	180
Yellow honeycombed limestone	19	199
Blue clay	11	210
Gray limestone	37	247
Blue clay	7	254
Grey limestone	55	309
Crystallized limestone	6	315
Blue limestone	51	366
Grey limestone	9	375
Hard white limestone	7	382
Gray limestone, clay in seams	18	400
Yellow limestone	33	433
Blue clay	54	487
Gray limestone	48	535
Dark gray sandstone	35	570
Blue clay	50	620
Blue sandstone	70	690
Brown stone	18	708
Blue stone	67	775
Blue clay	15	790
Red clay	2	792
Brown stone	8	800
Light blue clay	42	842
Red clay	5	847

	Thickness (feet)	Depth (feet)
Well B-27-Continued		
Blue clay	8	855
Green and red clay mixed	10	865
Gray stone	10	875
Red clay	100	975
Red sandstone	10	985
Gray sandstone	25	1010
Conglomerate rock, small vein of water	5	1015
Brown clay	30	1045
Slate	139	1184
Slate mixed with quartz	121	1305
Slate and oil	39	1344
Slate mixed with quartz	691	2035
Slate	465	2500
Well B-28		
U. S. Government, 19½ miles north.		
Surface	3	3
Yellow limestone	11	14
Limestone	147	161
Yellow clay	15	176
Limestone with clay	295	471
Bluish-green shale	18	489
Blue limestone	4	493
White limestone	77	570
Blue shale	51	621
Sandy limestone	4	625
Gray limestone	135	760
Shale and gray sand	35	795
Blue shale	40	835
Pink and red clay and sand	174	1009
Schist	13	1022
Well D-1		
Mrs. Kate Benke, 8 miles northwest.		
Yellow clay and rock	300	300
White magnesium limestone and blue medium hard limestone	485	785
Lignite	35	820
Limestone	60	880
Grayson shale(Del Rio clay)	60	940
"Edwards"limestone: Limestone	60	1000

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well D-6		
Charles E. Hoffman, 15 miles west.		
Surface	4	4
Pink gravel	14	18
Caliche	2	20
Marl	22	42
Chalk	188	230
Shale (lignite)	32	262
Limestone	59	321
Grayson shale(Del Rio clay)	54	375
"Edwards" limestone:		
Limestone	91	466
Well D-7		
Louis Tezel, 12½ miles northwest.		
Rock	55	55
Lignite	35	90
Limestone	60	150
Grayson shale(Del Rio clay)	60	210
"Edwards" limestone:		
Limestone	35	245
Well E-1		
U. S. Government, 16½ miles north.		
Caliche and boulders	4	4
Broken yellow limestone	32	36
Gray limestone	40	76
Yellow limestone	88	164
Broken yellow limestone	37	201
Hard white limestone	31	232
Yellow limestone, crevices	52	284
Cave, water	2	286
Broken honeycomb limestone	21	307
Cave, honeycomb limestone	5	312
Broken honeycomb limestone	68	380
Loose broken limestone	40	420
White limestone	25	445
Gray limestone	7	452
Blue limestone	200	652
Blue limestone and shale strata	172	824
Sandy gray limestone	153	977
Gray limestone with hard white sandy sections	60	1037
Red sand	103	1140
Schist	2	1142
(Plugged back to 445 feet)		
Well E-2		
U. S. Government, 16½ miles north.		
Red beds and caliche	25	25
Yellow limestone, water at 62 feet	37	62
Blue limestone	191	253
Yellow limestone	31	284
Blue limestone	5	289
Well E-3		
U. S. Government, 16½ miles north.		
Soil	8	8
Yellow limestone	29	37
Soft light gray limestone	166	203
Hard white limestone	20	223
Bluish-gray limestone with honeycomb rock	15	238
Dark gray limestone, 2-inch crevices at 230 feet, water	2	240
Light gray limestone	20	260
Well E-4		
U. S. Government, 16 miles north.		
Top soil	4	4
Yellow limestone and boulders, 6 feet hard yellow clay	15	19
Blue limestone	42	61
Yellow limestone(water seep at 71 feet)	32	93
Blue limestone, fossils	155	248
Yellow limestone	43	291
(Honeycomb rock and crevices at 255 feet)		
Well E-10		
U. S. Government, 15½ miles north.		

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-10-Continued		
Soil	4	4
Hard yellow limestone	4	8
Soft yellow limestone	16	24
Limestone	106	130
Gray shale	33	163
Yellow limestone	52	215
Blue limestone and shale	155	370
Blue sandy limestone	55	425
Blue shale	22	447
Hard blue limestone	20	467
Medium and hard gray limestone	143	610
Blackish-gray sandy limestone	32	642
Gray limestone	89	731
Blue shale	12	743
Hard gray limestone	82	825
Blue shale	9	834
Black limestone	12	846
Sticky blue shale	9	855
Blue shale, cavey	22	877
Hard gray limestone	6	883
Blue shale, cavey	23	906
White sandstone	176	1002
Gray limestone	38	1120
Sandy, red, blue and green shale	50	1170
Grayish-black limestone	3	1173
Well E-22		
Myrtle Rains, 13½ miles northwest.		
Surface	2	2
Solid rock	10	12
Cave	2	14
Red bed	46	60
Hard yellow limestone	25	85
Sand with red clay	41	126
Yellow limestone	79	205
Blue limestone	62	267
Yellow limestone	7	274
Gray limestone	67	341
Blue shale	2	343
Blue limestone	76	419
Well E-24		
F. A. Talmedge, 15 miles northwest.		
Limestone	170	170
Blue shale	20	190
Limestone	110	300
White sand	20	320
Limestone	209	529
Shale	41	570
Fine-grained weter sand	30	600
Well E-25		
Ed Bacon, 13 miles northwest.		
Buff-colored limestone	14	14
Buff-colored marl	24	38
Yellow marl	12	50
Yellow clay	3	53
Straw-colored limestone	12	65
Yellow limestone, fine texture	3	68
White limestone	4	72
Yellow limestone	6	78
White limestone	11	89
Cream-colored limestone	4	93
White limestone	20	113
Cream, light grey limestone	5	118
Light grey limestone with grey flint	6	124
Cream and light grey limestone	5	129
Compact gray limestone	17	146
Cream-colored limestone, some flint	12	158
Cream-colored and light gray limestone	12	170
Compact cream-colored limestone	16	186
Cream and light gray limestone	8	194
Cream and some yellow limestone	3	197
Grayish-white limestone	10	207
Compact cream-colored limestone	14	221
Light cream-colored limestone	9	230
Yellow foraminiferal limestone	2	232

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-25-Continued		
Yellow limestone, red blotches	5	237
Yellow and gray limestone, red streaks	7	244
Blue limestone	2	246
Bluish-gray limestone	9	255
Yellow limestone	5	260
Yellow and gray limestone	17	277
Yellow limestone	11	288
Yellow limestone and light gray sandstone	4	292
Light gray dolomite	10	302
Gray limestone	13	315
Gray dolomite	10	325
Gray limestone	6	331
Dolomitic gray limestone	17	348
Oolitic foraminiferal gray limestone	4	352
Gray limestone and marl	8	360
Gray impure limestone	27	387
Gray fine-grained limestone	5	392
Light bluish-gray limestone	5	397
Fine-grained gray limestone	18	415
Soft gray marly limestone	41	456
Gray oolitic foraminiferal limestone	16	472
Gray marly limestone	21	493
Soft gray organic limestone	22	515
Gray dolomitic limestone, some shale	5	520
Gray foraminiferal limestone	10	530
Gray dolomitic limestone, some quartz sand	5	535
Gray organic fragmental limestone	73	608
White foraminiferal limestone	4	612
White fine-grained limestone	5	617
White porous organic fragment	9	626
White limestone, some quartz sand	4	630
Grey limestone, some bluish-gray marly shale	16	646
Gray limestone	9	655
Fragment of stalacite	5	660
Gray foraminiferal and organic fragment limestone	19	679
Grey marly limestone and bluish-grey marly shale	4	683
Light gray foraminiferal and organic fragment limestone	24	707
Bluish-grey marl	30	737
Light gray marl limestone	6	743
Light gray limestone	347	1090
Gray limestone	10	1100
Dark gray limestone	12	1112
Dark gray limestone and gray marl	7	1119
Grey limestone and white marl	1	1120
Grey limestone and grey marl	5	1125
Grey limestone, organic fragment	19	1144
Gray limestone, some gray marl	6	1150
Dark grey marl, some dark gray limestone	11	1161
Gray marl	6	1167
Gray limestone, white limestone, blue marl	6	1173
Well E-28		
Wallace Rogers, 14¼ miles north.		
Soil	1	1
Limestone	159	160
Blue limestone	78	238
Gray limestone	43	281
Brown sandy section	169	450
Well E-29		
Wallace Rogers, 13¾ miles north.		
Surface	1	1
Red bed, cavey	199	200
Blue limestone	275	475
Blue honeycomb limestone	25	500
Blue limestone	98	598
Sand rock	17	615
Blue limestone	5	620

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-31		
Stowers Ranch, 13 miles north.		
Red limestone with cavities, dry	200	200
Blue limestone	275	475
Blue honeycomb limestone	20	495
Blue limestone	103	598
Sand rock, water	17	615
Blue limestone	5	620
Well E-34		
Soil	1	1
Red bed	20	21
Sand, clay and gravel	38	59
Hard and soft red bed	126	185
Herd gray rough rock	19	204
Grey limestone	104	308
Blue limestone	185	493
Well E-48		
T. A. Santleben, 9¼ miles northwest.		
Soil	4	4
Marl	67	81
Chalk	172	253
Shale (lignite)	33	286
Limestone	49	335
Grayson shale(Del Rio clay)	41	376
"Edwards"limestone:		
Limestone	29	405
Well E-49		
J. H. Rogers, 9½ miles northwest.		
Black dirt	2	2
Limestone	99	101
Grayson shale(Del Rio clay)	35	136
"Edwards"limestone:		
Limestone	146	282
Well E-50		
G. D. Fillingame, 10 miles northwest.		
Soil	1	1
Broken yellow limestone	11	12
Limestone	12	24
Grayson shale(Del Rio clay)	52	76
"Edwards"limestone:		
Hard limestone	230	306
Well E-52		
W. Winn, 9½ miles northwest.		
Surface	1	1
Broken yellow limestone	44	45
Solid limestone	17	62
Grayson shale(Del Rio clay)	16	78
"Edwards"limestone:		
Limestone	294	372
Well E-53		
Leona Bethea, 9½ miles northwest.		
Surface	1	1
Broken chalk	51	52
Greyson shale(Del Rio clay)	25	77
"Edwards"limestone:		
Limestone	227	304
Well E-54		
Glen Chapin, 9½ miles northwest.		
Yellow clay	30	30
Limestone	50	80
Greyson shale(Del Rio clay)	44	124
"Edwards"limestone:		
Limestone	244	368
Well E-59		
Jack Pitluk, 8 miles northwest.		
Soil and subsoil	3	3
White caliche and gravel	7	10
Chalk	143	153
Shale (lignite)	27	180

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-59-Continued		
Hard white limestone	60	240
Grayson shale(Del Rio clay)	51	291
"Edwards"limestone:		
Limestone	4	295
Porous limestone, water	7	302
Hard white limestone	13	315
Porous limestone, water	7	322
Hard white limestone	4	326
Well E-60		
-- Blackburn, 9 miles northwest.		
Hard light grey chalk	112	112
Dark grayish-blue shale	46	158
Hard light limestone	38	196
Blue mud	39	235
Yellow soft honeycomb limestone	19	254
Limestone	1	255
Well E-61		
W. Keith Maxwell, 8 miles north.		
Surface	1	1
Caliche	17	18
Chalk	133	151
Shale (lignite)	35	186
Limestone	55	241
Grayson shale(Del Rio clay)	52	293
"Edwards"limestone:		
Limestone	30	323
Well E-62		
L. R. Brown, 8 miles north.		
Soil	3	3
Hard chalk	22	25
Yellow chalk	90	115
Gray chalk	10	125
Shale	34	159
White limestone	56	215
Grayson shale(Del Rio clay)	45	260
"Edwards"limestone:		
Hard yellow limestone	40	300
Well E-63		
W. E. Parrish, 8 miles north.		
Surface	1	1
Yellow limestone	93	94
White limestone	22	116
Shale (lignite)	28	144
White limestone	55	199
Grayson shale(Del Rio clay)	49	248
"Edwards"limestone:		
Limestone	22	270
Well E-64		
W. N. Johnson, 8 miles north.		
Black soil	2	2
Red bed	116	118
Shale (lignite)	34	152
Limestone	50	202
Grayson shale(Del Rio clay)	48	250
"Edwards"limestone:		
Limestone	42	292
Well E-65		
C. T. Flewellen, 8 miles north.		
Surface	2	2
Adobe	4	6
Yellow clay	19	25
Blue limestone	50	75
Yellow limestone	45	120
Blue limestone	20	140
Yellow limestone	37	177
Grayson shale(Del Rio clay)	50	227
"Edwards"limestone:		
Limestone	30	257
Well E-66		
A. F. Ford & H. L. Graham, 8¼ miles north.		
Soil	2	2
Caliche	64	66
Blue shale	4	70
Chalk	175	245
Shale (lignite)	20	265
Limestone	68	333

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
E-66-Continued		
Grayson shale(Del Rio clay)	27	360
"Edwards"limestone:		
Limestone	81	441
Well E-67		
G. Walker, 10 miles north.		
Gravel	17	17
Clay	16	33
Yellow sand	27	60
White sandy limestone	25	85
Hard limestone	10	95
Brown limestone	72	167
Yellow limestone	8	175
Limestone	52	227
Gray limestone	30	257
Soft limestone	8	265
Red adobe	4	269
Limestone	12	281
Limestone, honeycomb	4	285
Hard gray limestone	35	320
Hard limestone	6	326
Soft limestone	19	345
Grey limestone	173	518
Blue broken sandy shale	3	521
Broken limestone	49	570
Broken sandy limestone	6	576
Sandy limestone	24	600
Gray limestone	75	675
Grey clay and sticky mud	25	700
Hard limestone	5	705
Limestone	7	712
Sandy shale	12	724
Sandy limestone and shale	66	790
Brown sandy limestone	27	817
Hard brown sandy limestone	3	820
Brown sandy limestone and blue shale	53	873
Sandy limestone and shale	121	994
Soft brown limestone	6	1000
Hard sandy gray limestone	26	1026
Hard brown limestone	19	1045
Soft brown limestone	10	1055
Hard gray limestone	31	1086
Hard limestone	19	1105
Blue shale	4	1109
Hard limestone	11	1120
Grey clay	13	1133
Grey shale and mud	2	1135
Brown limestone	23	1158
Grey limestone	12	1170
Blue mud	8	1178
No record	2	1180
Gray limestone	10	1190
Hard brown limestone	45	1235
Hard gray limestone	55	1290
Limestone	20	1310
Brown water sand	20	1330
Hard grey limestone	20	1350
Grey limestone	17	1367
Blue mud	18	1385
No record	11	1396
Hard limestone	6	1402
Shells, mud and limestone	34	1436
Sand	11	1447
Shale, mud and water sand	19	1466
Hard limestone	18	1484
Hard white limestone	1	1485
Hard limestone	9	1494
Limestone, water	18	1512
Limestone	28	1540
Blue shale	40	1580
Hard limestone	15	1595
Limestone	20	1615
Water sand(water over derrick)	10	1625
Limestone	17	1642
Hard limestone	73	1715
Water sand	8	1723
Hard rock	5	1728
Sandy limestone	14	1742
Hard limestone	27	1769
Gray shale	1	1770
Well E-70		
Jud Harrison, 8 miles north.		
No record	185	185
Lignite	5	190
Hard limestone	55	245
Grayson shale (Del Rio clay)	55	300
"Edwards"limestone:		
Limestone	28	328

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-71		
Leslie Bowman, 7½ miles north.		
Chalk	15	15
Shale	80	95
Limestone	51	146
Grayson shale(Del Rio clay)	50	196
"Edwards"limestone:		
Limestone	108	304
Well E-72		
-- Koch, 7¼ miles north.		
Surface	2	2
Broken yellow chalk	48	50
Gummy yellow chalk	19	69
Yellow chalk	50	119
Grayson shale(Del Rio clay)	60	179
"Edwards" limestone:		
Yellow honeycomb limestone	31	210
Well E-73		
J. D. Wheeler, 6¾ miles northwest.		
Surface	1	1
Caliche	69	70
Marl	86	156
Chalk	146	302
Shale (lignite)	23	325
Limestone	52	377
Grayson shale(Del Rio clay)	61	438
"Edwards"limestone:		
Limestone	29	467
Well E-74		
Alex Chitwood, 6½ miles northwest.		
Surface	2	2
Adobe	3	5
Yellow clay	25	30
Yellow limestone	50	80
Blue limestone	20	100
Yellow limestone	20	120
Blue limestone	40	160
Yellow limestone	40	200
Blue limestone	25	225
Well E-74-Continued		
Yellow limestone	24	249
Blue limestone	51	300
Yellow limestone	20	320
Grayson shale(Del Rio clay)	96	416
"Edwards"limestone:		
Limestone	20	436
Well E-75		
Frank Miller, 6¾ miles north.		
Soil	6	6
Chalk (water at 185 feet)	203	209
Shale (lignite)	28	237
Limestone	14	251
Grayson shale (Del Rio clay)	43	294
"Edwards"limestone:		
Limestone	31	325
Well E-76		
Miss Novella McCleb, 6½ miles north.		
Surface	2	2
Gravel	4	6
Yellow clay	88	94
Clay	52	146
Marl	24	170
Chalk	100	270
Yellow honeycomb chalk	12	282
Well E-80		
E. W. Bickett, 6½ miles north.		
Surface	2	2
Yellow clay	54	56
Yellow limestone	17	73
Clay	10	83
Marl	123	206
Chalk	104	310
Shale (lignite)	93	403
Limestone	37	440
Grayson shale (Del Rio clay)	25	465
"Edwards"limestone:		
Limestone	33	498

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well E-81		
C. O. Hill, 5¾ miles north.		
Soil and subsoil	3	3
Yellow clay and gravel	13	16
Yellow clay	29	45
Blue clay	32	77
Chalk	146	223
Shale (lignite)	27	250
Limestone	53	303
Grayson shale(Del Rio clay)	51	354
"Edwards"limestone:		
Limestone	36	390
Well F-7		
W. S. Marshall, 12½ miles north.		
Soil and boulders	4	4
Hard limestone	82	86
Broken limestone	229	315
Grey limestone	15	330
Well F-8		
Louis Yates, 13½ miles north.		
Surface	1	1
Red bed boulders	204	205
Limestone	105	310
Flint streaks	7	317
Well F-25		
T. W. Weaver, 14¼ miles northeast.		
Surface	2	2
White rock	7	9
Yellow clay	71	80
Blue shale	18	98
Chalk	157	255
Shale (lignite)	15	270
Well F-27		
Perry Shankle, 11¾ miles northeast.		
Surface	1	1
Yellow caliche	56	57
Grey shale	78	135
White and yellow chalk	139	274
Shale (lignite)	27	301
White limestone	54	355
Grayson shale(Del Rio clay)	48	403
"Edwards"limestone:		
Limestone	9	412
Limestone, hard flint streaks, honeycomb and crevices	270	682
Well F-31		
Oscar Pape, 10½ miles north.		
Surface	2	2
Caliche	10	12
Chalk	93	105
Shale	71	176
Limestone	49	225
Grayson shale(Del Rio clay)	54	279
"Edwards"limestone:		
Limestone	21	300
Well F-35		
W. W. Smith, 10½ miles north.		
Gravel	20	20
Yellow chalk	70	90
Soft black shale (lignite)	25	115
Hard white limestone	50	165
Grayson shale(Del Rio clay)	53	218
"Edwards"limestone:		
Hard yellow limestone	46	264
Well F-37		
Carl Wurzbach, 10¾ miles north.		
Surface	2	2
Yellow clay	10	12
Chalk	48	60
Grayson shale(Del Rio clay)	48	108
"Edwards"limestone:		
Limestone	222	330

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well F-39		
Gerald Mellif, 10¼ miles north.		
Surface	1	1
Yellow limestone	24	25
Yellow clay	20	45
Grayson shale(Del Rio clay)	30	75
"Edwards"limestone:		
Limestone	165	240
Well F-40		
R. V. Smith, 9½ miles north.		
Clay	100	100
Limestone	120	220
Lignite	25	245
Limestone	55	300
Grayson shale(Del Rio clay)	60	360
"Edwards"limestone:		
Limestone and yellow clay	10	370
Dark limestone	35	405
Light colored limestone	10	415
Well F-42		
R. E. Turnage, 8¾ miles north.		
Surface	1	1
Clay	1	2
Gravel	5	7
Broken yellow chalk	63	70
Blue clay	5	75
Yellow chalk	40	115
Shale (lignite)	25	140
Limestone	43	183
Grayson shale(Del Rio clay)	49	232
"Edwards"limestone:		
Limestone	8	240
Well F-43		
W. C. Arnett, 8¾ miles north.		
Surface	3	3
Yellow gravel	12	15
Chalk	105	120
Shale (lignite)	27	147
Limestone	45	192
Well F-43-Continued		
Grayson shale(Del Rio clay)	59	251
"Edwards"limestone:		
Limestone	9	260
Well F-44		
M. L. Thompson, 8¾ miles north.		
Surface gravel	2	2
Chalk	103	105
Shale (lignite)	20	125
Limestone	61	186
Grayson shale(Del Rio clay)	47	233
"Edwards"limestone:		
Limestone	12	245
Well F-45		
Mrs. A. E. Wallenhaupt, 8½ miles north.		
Surface	1	1
Gravel	15	16
Yellow clay	25	41
Yellow limestone	56	97
Grayson shale(Del Rio clay)	44	141
"Edwards"limestone:		
Limestone	49	190
Well F-46		
C. J. Whall, 8½ miles north.		
Surface	1	1
Yellow gravel	15	16
Yellow clay	25	41
Yellow limestone	56	97
Grayson shale(Del Rio clay)	50	147
"Edwards"limestone:		
Limestone	53	200
Well F-49		
Army Airport, 8 miles north.		
Surface	1	1
Gravel	17	18
Yellow clay	2	20

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well F-49-Continued		
Blue shale	15	35
Yellow clay	6	41
Blue shale	14	55
Yellow clay	33	88
Marl	20	108
Chalk	85	193
Shale	26	219
White limestone	51	270
Grayson shale(Del Rio clay)	40	310
"Edwards"limestone:		
Limestone	92	402
Well F-50		
R. V. Scott, 8 miles north.		
Surface	1	1
Yellow clay and boulders	24	25
Yellow gravel	55	80
Broken blue limestone	145	225
Grayson shale(Del Rio clay)	56	281
"Edwards" limestone:		
Limestone	52	333
Well F-51		
Louis Magers, 7 miles north.		
Surface	2	2
Yellow clay	54	56
Marl	168	224
Chalk	138	362
Shale	27	389
Limestone	41	430
Grayson shale(Del Rio clay)	63	493
"Edwards"limestone:		
Limestone	9	502
Well F-52		
B. G. Rothwell, 7½ miles north.		
Surface	2	2
Yellow clay	50	52
Marl	80	132
Chalk	127	259
Shale (lignite)	7	266

	Thickness (feet)	Depth (feet)
Well F-54		
E. A. Scott, 7½ miles north.		
Surface	3	3
Red gravel	4	7
Yellow caliche	40	47
Blue marl	122	169
White "capper"	3	172
Green and white sandy limestone	12	184
Yellow sandy limestone	12	196
Well F-57		
City Airport, 7 miles north.		
Surface	3	3
Yellow gravel	23	26
Yellow clay	9	35
Clay	57	92
Chalk	157	249
Shale (lignite)	23	272
Limestone	51	323
Grayson shale(Del Rio clay)	47	370
"Edwards"limestone:		
Limestone	91	461
Well F-63		
F. Grote, 6 miles north.		
Soft "adobe" limestone	17	17
Hard limestone	170	187
Lignite	35	222
Hard limestone	50	272
Grayson shale(Del Rio clay)	60	332
"Edwards"limestone:		
Hard limestone	7	339
Well F-64		
Earl Fuller, 6 miles north.		
Soil	5	5
Gravel	10	15
Chalk	150	165
Shale (lignite)	25	190
Limestone	60	250
Grayson shale(Del Rio clay)	40	290
"Edwards"limestone:		
Limestone	58	348

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well F-65		
L. L. LeRoy, 7¼ miles northeast.		
Soil	2	2
Rock	18	20
Chalk	95	115
Shale (lignite)	20	135
Limestone	57	192
Grayson shale(Del Rio clay)	53	245
"Edwards"limestone:		
Limestone	114	359
Well F-66		
Wallace Rogers, 7¼ miles northeast.		
Surface	2	2
Yellow clay	16	18
Chalk	99	117
Shale (lignite)	20	137
Limestone	43	180
Grayson shale(Del Rio clay)	54	234
'Edwards' limestone:		
Limestone	84	318
Well F-69		
Hal W. Hartline, 7¾ miles northeast.		
Surface	4	4
Gravel and yellow clay	8	12
Rock	13	25
Yellow clay	65	90
Chalk	33	123
Shale (lignite)	23	146
Limestone	54	200
Grayson shale (Del Rio clay)	52	252
"Edwards"limestone:		
Limestone	32	284
Well F-70		
R. A. Wagner, 7¾ miles northeast.		
Surface	1	1
Yellow clay and gravel	5	6
Hard chalk	19	25
Medium chalk	100	125
Shale (lignite)	29	154
White limestone	46	200
Hard rock	5	205
Grayson shale(Del Rio clay)	50	255
"Edwards"limestone:		
Limestone	31	286
Well F-71		
Elmer Schneider, 9½ miles northeast.		
Soil	2	2
Chalk	166	168
Shale (lignite)	10	178
Limestone	20	198
Grayson shale(Del Rio clay)	42	240
"Edwards"limestone:		
Limestone	75	315
Well F-72		
W. D. Engle, 10 miles northeast.		
Soil	4	4
Yellow clay	36	40
Marl	108	148
Chalk	156	304
Shale (lignite)	25	329
Limestone	66	395
Grayson shale (Del Rio clay)	30	425
"Edwards"limestone:		
Limestone	30	455
Well F-74		
Col. J. E. McCord, 10 miles northeast.		
Surface	2	2
Yellow clay	43	45
Clay	84	129
Marl	73	202
Chalk	114	316
Shale (lignite)	18	334
Limestone	55	389
Grayson shale(Del Rio clay)	48	437
"Edwards"limestone:		
Limestone	20	457

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well F-75		
Bird and Shankle, 10½ miles northeast.		
Soil	4	4
Yellow gravel	44	48
Clay	22	70
Marl	14	84
Chalk	116	200
Shale (lignite)	50	250
Limestone	50	300
Grayson shale (Del Rio clay)	44	344
"Edwards" limestone:		
Limestone	94	438
Well F-81		
-- Bleakley, 11½ miles northeast.		
Soil	2	2
Yellow clay	70	72
Marl	32	104
Chalk	126	230
Shale (lignite)	34	264
Limestone	44	308
Grayson shale(Del Rio clay)	56	364
"Edwards" limestone:		
Brown limestone	86	450
White limestone	11	461
Black limestone	3	464
Limestone	45	509
Well F-82		
-- Bleakley, 11¾ miles northeast.		
Soil	2	2
Adobe	38	40
Marl	78	118
Chalk	132	250
Shale	32	282
Limestone	52	334
Grayson shale(Del Rio clay)	51	385
"Edwards" limestone:		
Limestone	32	417
Well F-85		
Grandma Cookie Co., 8¾ miles northeast.		
Surface	1	1
Yellow clay	11	12
Yellow clay and gravel	16	28
Shale	74	102
Chalk	154	256
Shale (lignite)	24	280
Limestone	30	310
Grayson shale(Del Rio clay)	56	366
"Edwards" limestone:		
Very porous limestone	76	442
Well F-88		
J. C. Keir, 7½ miles northeast.		
Black dirt	2	2
Yellow clay	35	37
Gravel	6	43
Blue shale	38	81
Hard marl	64	145
Chalk	65	210
Shale (lignite)	21	231
Limestone	35	266
Grayson shale(Del Rio clay)	55	321
"Edwards" limestone:		
Hard limestone	55	376
Well F-89		
Edgar Tobin, 6¾ miles northeast.		
Soil	4	4
Gravel	12	16
Chalk	152	168
Shale (lignite)	35	203
Limestone	28	231
Grayson shale(Del Rio clay)	37	268
"Edwards" limestone:		
Limestone	79	347
Well G-5		
Gustav Engelmann, 14¾ miles northeast.		
Soil	6	6
Clay	14	20
Gravel	8	28

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well G-5-Continued		
Rock	7	35
Red clay, adobe	25	60
Limestone	10	70
Chalk	40	110
Gray rock	8	118
Blue clay	7	125
Herd rock	3	128
Black shale	7	135
Black rock	7	142
Black shale (lignite)	28	170
Limestone	30	200
Shale	30	230
Clay	25	255
Hard limestone	35	290
Water sand	5	295
Limestone	45	340
Porous limestone, fresh water	20	360
Yellow limestone	20	380
Hard limestone	10	390
Yellow limestone	10	400
Brown rock	30	430
Hard rock	5	435
Honeycomb, rock, limestone	5	440
Blue clay	5	445
Hard blue rock	48	493
Yellow limestone	44	537
Sand	5	542
Yellow limestone	20	562
Hard blue rock	16	578
Hard limestone, fresh water	12	590
Hard white limestone	10	600
Sand	4	604
White limestone	11	615
Brown rock	7	622
Hard brown rock	13	635
Brown flinty rock	15	650
White limestone	15	665
Gray rock	29	694
Brown rock	31	725
Hard black rock	55	780
Packsand	5	785
Brownish-white marly limestone	115	900
Hard brown rock	78	978
Brown limestone	2	980
Blue clay and mud	10	990
Blue mud, like gumbo	10	1000
Blue slate rock and soft blue mud	30	1030
Bluish mud	80	1110
Gray sand rock	5	1115
Gray rock	5	1120
Gray and brownish rock	180	1300
Sand, sulphur water	10	1310
Gray rock	5	1315
Marly limestone and sand	5	1320
Herd blue rock	8	1328
Brown sand	22	1350
Sandy marl, chalky limestone, blue shale	20	1370
Gray rock	50	1420
Blue rock	25	1445
Brown limestone	52	1497
Well G-10		
Southern Pacific Rl R., 15 miles northeast.		
Black soil	4	4
Brown clay	8	12
Cement gravel	20	32
Yellow clay	32	64
Blue clay	224	288
Magnesium limestone	30	318
Blue limestone	50	368
Lignite	21	389
Gray limestone	37	426
Grayson shale(Del Rio clay)	53	479
"Edwards"limestone:		
Yellow limestone	57	536
Grey limestone	18	554
Well G-11		
U. S. Government, 14¾ miles northeast.		
Black mud	5	5
Yellow clay and gravel conglomerate well cemented	62	67
Blue clay	11	78
Magnesium limestone	147	225
White limestone	40	265
Gray limestone	35	300
Blue sandy shale	43	343
Lignite	22	365
Limestone	60	425
Grayson shale(Del Rio clay)	50	475

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well G-11-Continued		
"Edwards"limestone:		
White limestone	35	510
Brown limestone	3	513
Grey limestone	9	522
White limestone	19	541
Brown limestone	42	583
Flint rock	3	586
Brown limestone	31	617
White limestone	39	656
Brown limestone	15	671
White limestone	29	700
Well G-12		
U. S. Government, 14¾ miles northeast.		
Black clay mud	4	4
White caliche	4	8
Yellow clay	62	70
Blue clay	19	89
Gray shale	12	101
Hard gray shale	39	140
Shale	71	211
Grey limestone	65	276
Limestone	69	345
Lignite	23	368
Limestone	61	429
Grayson shale(Del Rio clay)	50	479
"Edwards"limestone:		
White limestone	36	515
Grey limestone	5	520
Yellow limestone	6	526
Cavity	2	528
Porous brown limestone with crystals	35	563
Well G-13		
U. S. Government, 14¾ miles northeast.		
Black clay and mud	7	7
Yellow clay	58	65
Blue clay	22	87
Hard clay and shale	55	142
Hard gray chalky shale	80	222
Hard gray limestone	83	305
Brown shale	4	309
Hard gray shale	4	313
Grey limestone	31	344

	Thickness (feet)	Depth (feet)
Well G-13-Continued		
Brown shale with lignite	30	374
Limestone	56	430
Grayson shale(Del Rio clay)	45	475
"Edwards"limestone:		
Limestone	31	506
Yellow honeycomb lime-stone	44	550
Hard limestone	28	578
Flint rock	6	584
Well G-14		
U. S. Government, 14¾ miles northeast.		
Black soil	4	4
Yellow clay	64	68
Blue clay	15	83
Grey shale	57	140
Hard gray chalky shale	84	224
Hard grey limestone	120	344
Lignite and brown shale	31	375
Limestone	48	423
Grayson shale(Del Rio clay)	51	474
"Edwards"limestone:		
Limestone	35	509
Yellow limestone	41	550
Gray limestone	10	560
Broken limestone, small cavities	8	568
Hard limestone	4	572
Hard brown limestone	7	579
Smooth limestone or flint	5	584
Well G-15		
U. S. Government, 14¾ miles northeast.		
Black soil	4	4
Yellow clay	65	69
Blue clay	17	86
Grey shale	52	138
Hard gray shale	82	220
Hard white limestone	55	275
Broken gray limestone "rough" shale	16	291
Chalk, gray limestone	51	342
Lignite	28	370
Limestone	52	422

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well G-15-Continued		
Grayson shale (Del Rio clay)	52	474
"Edwards" limestone:		
Gray limestone	31	505
No record	79	584
Well G-16		
U. S. Government, 14¾ miles northeast.		
Black soil	5	5
Hard yellow clay	14	19
Hard rock	3	22
Hard sandy clay	20	42
Yellow clay	18	60
Fine-grained sand	9	69
Blue clay	14	83
Soft gray shale	50	133
Hard grey shale	92	225
White limestone	53	278
Streaks of gray and brown limestone	30	308
Hard grey limestone	42	350
Lignite	27	377
Limestone	59	436
Grayson shale(Del Rio clay)	49	485
"Edwards" limestone:		
Hard gray limestone	30	515
Limestone	5	520
Hard rough limestone	40	560
Limestone	12	572
Brown limestone	19	591
White sandy limestone	9	600
Hard brown limestone	3	603
Hard white limestone	3	606
Hard flint	3	609
Well G-17		
U. S. Government, 14¾ miles northeast.		
Black soil	4	4
Gravel	10	14
Yellow clay	30	44
Rock	2	46
Yellow clay and gravel	12	58
Blue clay	12	70
Hard gray shale	84	154
Hard chalky shale	78	232

	Thickness (feet)	Depth (feet)
Well G-17-Continued		
Chalk	76	308
Gray limestone	42	350
Lignite	26	376
Blue limestone	60	436
Grayson shale(Del Rio clay)	46	482
"Edwards" limestone:		
Gray limestone	36	518
Brown limestone	22	540
Gray limestone	27	567
Open cavity	1	568
Porous limestone	14½	582½
Hard flint	½	583
Well G-18		
U. S. Government, 14¾ miles northeast.		
Black soil	4	4
Hard yellow sand rock	21	25
Yellow clay and gravel	33	58
Blue clay	11	69
Hard grey shale	103	172
Hard chalky shale	44	216
Chalk	92	308
Gray limestone	36	344
Lignite	24	368
Limestone	70	438
Grayson shale(Del Rio clay)	34	472
"Edwards" limestone:		
Gray limestone	4	476
Very hard flint	2	478
Gray limestone	17	495
Brown limestone	6	501
Brown honeycomb limestone, water	2	503
Hard brown limestone	5	508
Brown limestone, honeycomb, water	4	512
Hard brown limestone	64-5"	576-5"
Very hard flint	2"	576-7"
Well G-19		
U. S. Government, 14¾ miles northeast.		
Black soil	4	4
Yellow clay, sand and gravel	26	30
Yellow clay	38	68

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well G-19-Continued		
Blue clay	58	126
Gray shale	39	165
Hard chalky shale	68	233
Chalk	77	310
Rough gray limestone	40	350
Lignite	26	376
Limestone	54	430
Grayson shale(Del Rio clay)	51	481
"Edwards"limestone:		
Limestone	39	520
Hard brown limestone	10	530
Soft limestone, a little water	9	539
Hard brown limestone	37	576
Flint	½	576½
Hard limestone	13½	590
Very hard flint	2	592
Soft limestone, water	6	598
Hard limestone	11	609
Soft limestone	7	616
Hard limestone	44	660
Very hard flint	1	661
Soft limestone, water	1	662
Very hard flint	1	663
Hard limestone	50	713
Soft limestone, water	23	736
Hard limestone	3	739
Soft limestone with some hard streaks, water	51	790
Very soft limestone, water	4	794
Rough limestone	3	797
Soft limestone	5	802
Hard limestone	6	808
Soft and rough limestone	8	816
Hard limestone	9	825
Soft limestone	7	832
Hard limestone	8	840
Soft limestone	11	851
Very soft limestone, water	21	872
Hard limestone	34	906
Soft limestone	14	920
Hard broken limestone	10	930
Hard smooth limestone	8	938
Soft limestone, water	40	978
Hard limestone	25	1003

	Thickness (feet)	Depth (feet)
Well G-20		
U. S. Government, 14½ miles northeast.		
Surface soil and yellow clay	17	17
Caliche	8	25
Sticky clay	30	55
Blue shale	15	70
Sticky shale	105	175
Soft shale	25	200
Hard shale	50	250
Gray shale	40	290
Shale and limestone, sandy	10	300
Chalky limestone	50	350
Black shale	30	380
Limestone	45	425
Very hard limestone	13	438
Grayson shale(Del Rio clay)	42	480
"Edwards"limestone:		
Limestone	18	498
Hard limestone	15	513
Soft sandy limestone	2	515
Hard limestone	3	518
Well H-2		
Fritz Gass, 16½ miles west.		
Surface	20	20
Yellow clay	40	60
"Soapstone"	90	150
Limestone	95	245
Chalk	200	445
Shale	35	480
Limestone	60	540
Grayson shale(Del Rio clay)	60	600
Well H-10		
C. A. Pepper, 11½ miles west.		
Marl	12	12
Chalk	198	210
Blue shale	63	273
Black shale	19	292
Lignite	36	328
White limestone	23	351
Gray limestone	29	380

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well H-10-Continued		
Greyson shale(Del Rio cley)	40	420
"Edwards"limestone:		
Herd white limestone	42	462
Honeycomb limestone	2	464
Herd pink limestone	17	481
Limestone	38	519
Herd white limestone	40	559
Grey limestone, water	5	564
Herd limestone	6	570
Honeycomb limestone	6	576
White limestone	19	595
Water sand	5	600
White limestone	4	604
Gray limestone	56	660
Blue shale	3	663
Hard gray limestone	9	672
White limestone	112	784
Grey limestone	14	798
Gray limestone, water	6	804
Yellow mud	1	805
White limestone	30	835
Gray limestone	5	840
Soft gray limestone	5	845
White limestone	41	886
Hard gray limestone	99	985
Honeycomb limestone	5	990
Gray limestone	11	1001
Glen Rose limestone:		
Blue shale	10	1011
Hard gray limestone	169	1180
Gray limestone	135	1315
Blue shale	3	1318
Gray limestone	12	1330
Blue shale	1	1331
Gray limestone	8	1339
Broken limestone	36	1375
Water	1	1376
Grey limestone	76	1452
Blue shale	6	1458
Gray limestone, shelly	55	1513
Water	2	1515
Gray and yellow limestone	45	1560
Water	5	1565
Yellow limestone	5	1570
Water	5	1575
Gray limestone	5	1580
Very hard grey limestone	86	1666
Dark brown limestone	4	1670
Grey limestone	15	1685
Brown limestone	5	1690

	Thickness (feet)	Depth (feet)
Well H-10-Continued		
Glen Rose limestone-continued.		
Gray limestone	18	1708
Blue shale	1	1709
Dark gray limestone	203	1912
Pearsall formation:		
Grey sandy limestone	18	1930
Gray sand	7	1937
Blue mud	3	1940
Gray sand	10	1950
Blue shale	4	1954
Herd grey sand	7	1961
Hard white limestone	7	1968
Hard sharp gray sand	30	1998
Blue shale	14	2012
Gray sand	13	2025
White limestone	3	2028
Hard white limestone	29	2057
Shale	2	2059
Alternating gray lime-stone and shale	127	2186
Gray limestone,shells and slate	11	2197
Blue shale	11	2208
Gray limestone	25	2233
Water	3	2236
Gray limestone	32	2268
Blue shale and gray limestone	87	2355
Gypsum shale and grey limestone	120	2475
Sligo formation:		
Shale and gray lime-stone	22	2497
Hard gray limestone	60	2557
Soft red shale	1	2558
Blue shale and limestone shells	24	2582
Gray limestone	3	2585
Red shale	8	2593
Limestone	2	2595
Red rock	5	2600
Hard grey limestone	10	2610
Hosston formation:		
Sandy limestone and blue shale	75	2685
Sand water	170	2855
Paleozoic or pre-Cembrian:		
Black limestone,igneous	415	3270
Gray sandy limestone and slate	36	3306
Black slate	89	3395

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well H-10-Continued		
Paleozoic or Pre-Cambrian-continued.		
Dark gray limestone	80	3475
Black slate	101	3576
Black slate, pyrites of iron	51	3627
Gray sand, some dark	149	3776
Gray sand, heaving	7	3783
Interpretation by Ralph W. Imlay.		
Well H-11		
Henry Neal, 11½ miles west.		
Yellow clay	80	80
Limestone	150	230
Lignite, coal	30	260
Limestone	146	406
Gray shale (Del Rio clay)	60	466
"Edwards" limestone:		
Limestone	30	496
Well H-13		
Fullers Earth Plant, 13½ miles west.		
Blue marl	400	400
Soft white rock	200	600
Shale	35	635
Limestone	50	685
Grayson shale (Del Rio clay)	65	750
"Edwards" limestone:		
Limestone	28	778
Well H-19		
Straus-Medina Hereford Ranch, 16 miles west.		
Yellow clay	30	30
Soft marl	474	504
Hard marl	118	622
Chalk	182	804
Shale (lignite)	38	842
Limestone	47	889
Grayson shale (Del Rio clay)	51	940
"Edwards" limestone:		
Limestone	360	1300
Well I-3		
Tom Slick, 10¼ miles west.		
Surface	8	8
Brown gravel	25	33
Yellow clay	9	42
Blue shale	25	67
White limestone	12	79
Chalk	163	242
Shale (lignite)	30	272
Limestone	53	325
Grayson shale (Del Rio clay)	38	363
"Edwards" limestone:		
Limestone	45	408
Well I-4		
Tom Slick, 10 miles west.		
Surface and caliche	5	5
Marl	61	66
Chalk	300	366
Shale (lignite)	38	404
White limestone	51	455
Grayson shale (Del Rio clay)	50	505
"Edwards" limestone:		
Limestone	40	545
Well I-5		
Tom Slick, 9¼ miles west.		
Surface	3	3
Yellow clay	24	27
Marl	65	92
Yellow clay	19	111
Blue limestone	6	117
Chalk	333	450
Shale (lignite)	45	495
Limestone	52	547
Grayson shale (Del Rio clay)	57	604
"Edwards" limestone:		
Limestone	141	745
Well I-6		
Tom Slick, 9 miles west.		

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-6-Continued		
Surface	6	6
Yellow clay	22	28
Clay	110	138
Chalk	158	296
Shale, lignite	40	336
Limestone	60	396
Grayson shale(Del Rio clay)	62	458
"Edwards"limestone:		
Limestone	305	763
Well I-10		
Mrs. S. F. Austin, 8¼ miles northwest.		
Surface	1	1
Yellow gravel	18	19
Yellow clay	41	60
Blue shale	60	120
Chalk	175	295
Shale, lignite	25	320
White limestone	65	385
Grayson shale(Del Rio clay)	51	436
"Edwards"limestone:		
Limestone	25	461
Well I-14		
H. S. George, 7 miles northwest.		
Surface	4	4
Gravel	10	14
Blue marl	58	72
Chalk	136	208
Shale, lignite	22	230
Limestone	90	320
Grayson shale(Del Rio clay)	50	370
"Edwards"limestone:		
Limestone	130	500
Well I-19		
Gugenheim-Goldsmith, 6 miles northwest.		
Surface	1	1
Gravel	3	4
Rock	9	13
Yellow clay	50	63
White clay	12	75
Marl	115	190
Chalk	155	345
Broken chalk	12	357
Chalk	10	367
Shale, lignite	33	400
Limestone	52	452
Grayson shale(Del Rio clay)	60	512
"Edwards"limestone:		
Limestone	41	553
Well I-25		
William Conrad, 5½ miles north.		
Soil	1	1
Yellow clay	18	19
Yellow adobe	45	64
Marl	46	110
Chalk	149	259
Shale, lignite	32	291
Limestone	55	346
Grayson shale		
(Del Rio clay), contact		346
Well I-26		
Fred Dodgen, 5¼ miles north.		
Soil	4	4
Gravel	2	6
Yellow clay	20	26
Marl	44	70
Chalk	205	275
Shale, lignite	28	303
Limestone	45	348
Grayson shale(Del Rio clay)	55	403
"Edwards"limestone:		
Limestone	100	503
Well I-31		
Mrs. D. L. Hern, 4½ miles north.		
Yellow clay	45	45
Blue joint clay	155	200
White rock	40	240
Yellow sand rock	90	330

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-33		
Olive L. Landa, 5 miles north.		
Yellow calcareous marl	50	50
Blue limestone	200	250
Lignite	15	265
Hard white rock	45	310
Greyson shale(Del Rio clay)	60	370
"Edwards"limestone:		
Limestone	15	385
Well I-34		
L. M. Bickett, 4½ miles north.		
Surface soil	3	3
Yellow clay	56	59
Yellow limestone	6	65
Clay	67	132
Chalk	152	284
Chalk, honeycombed	60	344
Well I-35		
-- Gorman, 4½ miles north.		
Surface	4	4
Yellow clay	48	52
Marl	45	97
Chalk	130	227
Yellow chalk	33	260
Well I-39		
Woodlawn Hills Addition, 6½ miles northwest.		
Soil	3	3
Gravel	10	13
Adobe, limestone and boulders	57	70
Blue clay	145	215
Yellow limestone	15	230
Crevice	2	232
White limestone	33	265
Blue clay	10	275
White limestone	20	295
Blue slate	30	325
Adobe limestone	10	335

	Thickness (feet)	Depth (feet)
Well I-39-Continued		
White limestone	35	370
Lignite	30	400
White limestone	60	460
Greyson shale(Del Rio clay)	50	510
"Edwards"limestone:		
White limestone	20	530
Crevice with water	2	532
Yellow limestone	18	550
Crevice with water	5	555
White limestone	60	615
Sand, brown limestone with water	130	745
White limestone	40	785
Brown limestone	10	795
White limestone	20	815
Brown limestone, water	15	830
White limestone	35	865
Brown limestone, water	5	870
White limestone	50	920
Brown limestone	5	925
White limestone	25	950
Crevice, brown limestone	5	955
White limestone	80	1035
Brown limestone	45	1080
Glen Rose limestone?:		
Blue limestone	110	1190
White limestone	40	1230
Blue limestone	30	1260
Blue slate	2	1262
White limestone	193	1455
Hard brown crystallized limestone	23	1478
Blue limestone	27	1505
Hard brown crystallized limestone	5	1510
White limestone	20	1530
Hard blue limestone	35	1565
Blue limestone	15	1580
Brown limestone	15	1595
White limestone	40	1635
Hard blue limestone	20	1655
Brown limestone, white hard streaks	45	1700
Hard blue limestone	15	1715
Brown limestone	20	1735
White limestone	60	1795
Hard brown limestone	65	1860
Soft gray rock	10	1870
Hard blue sandy rock	45	1915
No description	20	1935
Mud	18	1953

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-39-Continued		
Glen Rose (?) limestone-continued:		
White limestone	52	1985
Mud	2	1987
White limestone	10	1997
Mud	11	2008
Hard limestone, shells and mud	32	2040
Soft white limestone	30	2070
Pearsall (?) formation:		
Very hard sandy limestone	30	2100
White limestone	15	2115
Mud	25	2140
Limestone	50	2190
Blue mud	293	2483
Hard limestone, streaks of mud	117	2600
White sand	45	2645
White limestone	30	2675
Dark limestone and sand	24	2699
White sand, water	6	2705
Very hard cap rock	6	2711
Sand and hard streaks	73	2784
Very hard sandstone, filled with red mud	26	2810
Crevice	3	2813
Sandstone and shale	40	2853
Well I-40		
St. Mary's College, 4½ miles northwest.		
Flint	3	3
Adobe	2	5
Yellow clay	60	65
Blue clay	150	215
Magnesium limestone	73	288
Hard blue limestone	104	392
Hard yellow rock	10	402
Hard gray rock	53	455
Lignite	30	485
Limestone	57	542
Grayson shale(Del Rio clay)	48	590
"Edwards"limestone:		
Dark blue limestone	10	600
Yellow limestone	36	636
Crystallized limestone	44	680
Water rock	22	702

	Thickness (feet)	Depth (feet)
Well I-45		
Jimmie Witt, 6¾ miles west.		
Gravel and rock	20	20
Yellow clay	40	60
Hard grey limestone	28	88
Very hard gray limestone	2	90
Sand and limestone	40	130
Very hard limestone	30	160
Hard chalk	150	310
Shale, lignite	32	342
Limestone	60	402
Grayson shale(Del Rio clay)	51	453
"Edwards"limestone:		
Limestone	29	482
Limestone, cavity	4	486
Hard limestone	4	490
Well I-47		
Jack Neal, 7½ miles west.		
Gravel	2	2
Blue shale	30	32
Blue rock	177	209
Hard rock	1	210
Sand, limestone, sulphur water	278	488
Well I-48		
Acme Gravel Co., 8 miles west.		
Surface	2	2
Yellow gravel	16	18
Blue rock	12	30
Yellow adobe rock	15	45
Blue rock	8	53
Gray soapstone	67	120
Marl	75	195
Chalk	160	355
Shale, lignite	40	395
White limestone	53	448
Grayson shale(Del Rio clay)	43	491
"Edwards"limestone:		
Limestone	41	532

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-49		
Soil	3	3
Yellow clay and gravel	30	33
Marl	219	252
Chalk	159	411
Shale	27	438
Limestone	56	494
Grayson shale(Del Rio clay)	64	558
"Edwards"limestone:		
Limestone	127	685
Well I-52		
J. A. McDevitt, 7 miles west.		
Soil	6	6
Yellow clay and gravel	25	31
Yellow clay	31	62
Blue clay	117	179
Marl	427	606
Chalk	201	807
Shale, lignite	21	828
Limestone	54	882
Grayson shale(Del Rio clay)	49	931
"Edwards"limestone:		
Limestone	75	1006
Well I-56		
E. H. Powell, 7 miles west.		
Soil	2	2
Adobe	2	4
Yellow clay, gravel	38	42
Yellow clay	25	67
Blue clay	258	325
Shell of rock	1	326
Blue shale	259	585
Gray rock, oyster shells	7	592
Bluish-gray shale, sandy	143	735
White rock	20	755
Blue shale	254	1009
Gray rock	1	1010
Yellow shale	70	1080
Gray rock	20	1100
Gray shale	129	1229
Brown shale(looks like lignite)	14	1243
Hard white rock	57	1300
Lignite	27	1327
Limestone	59	1386
Grayson shale(Del Rio clay)	3	1389
"Edwards"limestone:		
Limestone	14	1403
Well I-59		
Louis Megers, 9½ miles west.		
Surface	1	1
Gravel	9	10
Yellow clay	46	56
Sand rock	28	84
Shale with sandy streaks	63	147
Gray shale, hard streaks	17	244
Hard sand rock	1	245
Blue shale, hard streaks	49	294
Mud rock	52	346
Marl	122	468
Blue shale	17	485
Marl	55	540
Blue shale	178	718
Sand and sandy shale	6	724
Blue shale	62	786
Brown shale	6	792
Blue shale	7	799
Gray marl	86	885
Blue shale	12	897
Chalk	441	1338
Limestone	96	1434
Grayson shale(Del Rio clay)	40	1474
"Edwards"limestone:		
Limestone, dry	32	1506
Well I-60		
U. S. Government, 8 miles west.		
Surface clay and gravel	59	59
Blue shale	51	110
Sandy shale	10	120
Blue shale with hard streaks	140	260
Shale	58	318
Hard boulder	2	320
Shale	12	332
Hard shale	40	372

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-60-Continued		
Soft shale	63	435
Shale and boulders	46	481
Marl	111	592
Hard limestone	2	594
Hard shale	16	610
Marl	101	711
Soft limestone	19	730
Hard marl and limestone	21	751
Chalky marl	18	769
Chalk	71	840
Soft chalk	18	858
Chalk	147	1005
Greyson shale(Del Rio clay?)	33	1038
Limestone	29	1067
Hard limestone	8	1075
Broken and soft limestone	9	1084
Hard limestone	78	1162
Very hard limestone	5	1167
Limestone	355	1522
Soft limestone	12	1534
Hard limestone	96	1630
Well I-61		
U. S. Government, 8¼ miles west.		
Soil	3	3
Caliche and gravel	17	20
Yellow clay	37	57
Blue shale	415	472
Hard blue shale	32	504
Gray shale	51	555
Gray sandy shale and limestone	29	584
Shale and broken limestone	72	656
Shale and limestone layers	91	747
Shale	88	835
Shale and layers limestone	30	865
Hard brown chalk	40	905
Chalk	153	1058
Hard chalk	26	1084
Chalk	102	1186
Hard chalk	43	1229
Chalk	37	1266
Shale	14	1280
Limestone	47	1327
Hard limestone	13	1340
Shale	50	1390
Hard limestone	8	1398
Limestone	62	1460

	Thickness (feet)	Depth (feet)
Well I-61-Continued		
Soft limestone	45	1505
Hard limestone	10	1515
Limestone	36	1551
Soft limestone	69	1620
Hard limestone	17	1637
Soft limestone	149	1786
Soft brown limestone	68	1854
Medium hard limestone	43	1897
Hard limestone	14	1911
Well I-62		
-- Fredricks, 8 miles southwest.		
No record	1047	1047
Dark gray shale	25	1072
White limestone	75	1147
Greyson shale(Del Rio clay)	56	1203
Edwards limestone:		
Gray limestone	27	1230
Brown sandy limestone, water	14	1244
White limestone	7	1251
Gray limestone	33	1284
White limestone	20	1304
Brown limestone	34	1338
White limestone	12	1350
Brown limestone	42	1392
Hard sandy limestone	16	1408
Hard sandy limestone	17	1425
Gray limestone	16	1441
Hard sandy limestone	6	1447
Grey limestone, water	15	1462
Hard gray limestone	18	1480
Well I-66		
U. S. Government, Kelly Field, 6½ miles west.		
Soil	4-6"	4-6"
Clay with gypsum	4-6"	9
Yellow clay	9	18
Gravel	16	34
Yellow clay	18	52
Blue clay	533	585
White shale	135	720
Yellow shale	30	750

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-66-Continued		
White shale	14	764
Rock	221	985
Lignite	35	1020
Limestone	65	1085
Grayson shale(Del Rio clay)	53	1138
"Edwards"limestone:		
Limestone	32	1170
Water, light	17	1187
Limestone	8	1195
Water, light	90	1285
Crevice	1	1286
Limestone	184	1470
Water	30	1500
Water, good	7	1507
Limestone	48	1555
Water	5	1560
Limestone	10	1570
Water	45	1615
White limestone	62	1677
Well I-67		
William Schultz, 7 miles west.		
Soil and subsoil	6	6
Yellow clay	10	16
Yellow clay and gravel	4	20
Yellow clay	16	36
Clay and gravel	4	40
Yellow clay	17	57
Blue gumbo	83	140
Shell or rock	2	142
Blue gumbo	56	198
Boulders	3	201
Blue clay	39	240
Boulder	1	241
Blue gumbo	219	460
Gray rock with oyster shells	16	476
Blue gumbo	311	787
White limestone	20	807
Blue clay	20	827
White limestone	40	867
Yellow rotten shale	25	892
Rock	54	946
Gray shale	17	963
White rock	34	997
Blue shale	11	1008
White limestone	212	1220
Well I-67-Continued		
Lignite, coal	27	1247
Limestone	48	1295
Grayson shale(Del Rio clay)	55	1350
"Edwards"limestone:		
Limestone	50	1400
Well I-71		
Blanks Estate, 5½ miles west.		
Surface materials, blue clay and rock	928	928
No record	235	1163
Grayson shale (Del Rio clay)	65	1228
"Edwards"limestone:		
Limestone	255	1483
Well I-72		
National Bank of Commerce, 5½ miles west.		
Soil	1	1
Gravel and clay	29	30
Gravel	5	35
Yellow clay gravel	7	42
Yellow clay	25	67
Blue clay	515	582
Rock shell	3	585
Blue shale	45	630
Limestone	6	636
Blue shale	74	710
Limestone shell	3	713
Gray shale	12	725
Limestone	15	740
Gray shale	25	765
Limestone	9	774
Gray shale	38	812
Limestone	4	816
Gray shale	8	824
Limestone	13	837
Yellow shale	20	857
Limestone	6	863
Yellow shale	17	880
Limestone	157	1037
Lignite, coal	30	1067
Limestone	62	1129

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-72-Continued		
Grayson shale(Del Rio clay)	46	1175
"Edwards"limestone:		
Limestone	40	1215
White limestone	2	1217
Grey sandy limestone	8	1225
Brown flint	12	1237
White limestone	17	1254
Yellow limestone	56	1310
Grey limestone	25	1335
Well I-74		
Thienpont and Decock, 5½ miles west.		
Soil and subsoil	6	6
Yellow clay	6	12
Yellow clay and gravel	16	28
Gravel water	14	42
Yellow clay	23	65
Blue shale	450	515
Shells	3	518.
Blue shale	195	713
White limestone	9	722
Yellow clay	16	738
White limestone	22	760
Yellow clay	20	780
Chalk	157	937
Lignite	27	964
Limestone	58	1022
Grayson shale(Del Rio clay)	53	1075
"Edwards"limestone:		
Hard bluish-grey limestone	7	1082
White limestone	38	1120
Hard white limestone	3	1123
Crevice, water	2	1125
Hard white limestone	3	1128
Grey limestone	32	1160
Brown flint	8	1168
Grey limestone	19	1187
Well I-75		
William Schultz et al, 5 miles west.		
Soil and subsoil	6	6
Yellow clay	12	18
Yellow clay and gravel	14	32
Gravel	6	38

	Thickness (feet)	Depth (feet)
Well I-75-Continued		
Yellow clay	32	70
Blue clay	455	525
Shell rock	3	528
Blue clay	202	730
White limestone	20	750
Yellow clay	8	758
White limestone	21	779
Yellow clay	16	795
Chalk	237	1032
Lignite	30	1062
Limestone	9	1071
Grayson shale(Del Rio clay)	7	1078
"Edwards"limestone:		
Blue limestone	7	1085
White limestone,water	28	1113
Grey limestone	12	1125
Hard white limestone	2	1127
Yellow limestone, water	3	1130
Well I-77		
Vander Poorten, 5 miles southwest.		
Surface	4	4
Yellow clay and sand	16	20
Sand and gravel	5	25
Yellow clay	31	56
Sticky clay with hard boulders	126	182
Rock and hard sand	223	405
Grey marl, hard streaks	156	561
Chalk	19	880
Shale, lignite	39	919
Hard limestone	20	939
Grayson shale(Del Rio clay)	59	998
"Edwards"limestone:		
Limestone	44	1042
Well I-90		
South San Antonio Water Company, 4½ miles southwest.		
Brown loam	8	8
Cement gravel	17	25
Yellow clay	35	60
Blue clay	540	600
Magnesium limestone	120	720

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-90-Continued		
Yellow limestone	80	800
Blue, grey and yellow limestone	110	910
Lignite	40	950
Hard blue and white limestone	50	1000
Rotten blue clay	54	1054
Crystallized limestone	131	1185
Sulphur rock	65	1250
White limestone	100	1350
Yellow porous limestone	103	1453
Well I-93		
U. S. Government, Camp Normoyle, 4½ miles southwest.		
Soil	40	40
Gravel and clay	190	230
Black shale	490	720
Chalky rock	260	980
"Salty rock"	50	1030
Grayson shale(Del Rio clay)	60	1090
"Edwards"limestone:		
Water-bearing rock	30	1120
Well I-97		
U. S. Government, Duncan Field, 5½ miles southwest.		
Gravel	25	25
Yellow clay	35	60
Blue clay with slate	540	600
White limestone	120	720
Yellow limestone	80	800
Bluish-gray limestone	110	910
Lignite	40	950
Hard white limestone	50	1000
Grayson shale(Del Rio clay)	54	1054
"Edwards"limestone:		
White limestone	196	1250
Light yellow limestone	340	1590
Well I-98		
International Great Northern Ry. Shops, 5½ miles southwest.		
Soil and clay	30	30
Gravel	16	46
Yellow clay	20	66
Rock	9	75
Gumbo and shale	35	110
Rock	2	112
Gumbo and rock	11	123
Gumbo	21	144
Shale and sand	37	181
Sandstone	12	193
Gumbo and shale	216	409
Gumbo	56	465
Soft rock	5	470
Gumbo	29	499
Gumbo and gypsum	46	545
Rock	47	592
Rock gypsum	28	620
Rock	78	698
Gumbo	2	700
Hard sand	7	707
Rock gypsum	9	716
Gumbo	10	726
Grey sandstone	40	766
Gumbo	7	773
Rock	12	785
Gumbo	27	812
Rock	91	903
Rock, porous, sulphur water	12	915
Rock	51	966
Gumbo	2	968
Rock	89	1057
Gumbo	18	1075
Rock, iron pyrites, sulphur water	10	1085
Mud hole	9	1094
Gumbo	16	1110
Gravel	2	1112
Cap rock	4	1116
Hard porous rock, water	44	1160
Well I-102		
Judge -- Kennon, 8½ miles southwest.		
Surface gravel	5	5
Yellow clay	38	43
Blue shale, water seep	127	170
Blue shale, dry	27	197
Limestone shell	½	197½
Blue shale	120½	318

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-102-Continued		
Sandy shale	33	351
Light sandy shale	67	418
Gravel with white herd streaks	20	438
Blue shale	20	458
Light sandy shale	95	553
Blue shale	17	570
Blue shale mixed with yellow clay	2	572
Dark sandy shale	8	580
Light sandy shale	117	697
Sandy shale with small gravel	6	703
Light sandy shale	27	730
Chalk	13	743
Sandy shell	3	746
Chalk	77	823
Limestone shell	32	855
Chalk	18	873
White limestone	4	877
Chalk	33	910
Limestone shell	6	916
Chalk	1	917
Chalk	24	941
Limestone shell	6	947
Chalk	18	965
White shale	128	1093
Broken limestone	25	1118
Hard limestone shell	13	1131
Dark shale	32	1163
Limestone	59	1222
Grayson shale(Del Rio clay)	58	1280

Well I-114

— Verstuyft et al, 6½ miles southwest.

Soil and subsoil	6	6
Yellow clay	18	24
Gravel and water	4	28
Yellow clay	35	63
Blue clay	337	400
Shell of rock	5	405
Blue clay	95	500
Rotten yellow clay	21	521
Blue shale	99	620
Shell of rock	4	624
Blue shale	104	728
Limestone	4	732
Shale	7	739

	Thickness (feet)	Depth (feet)
Well I-114-Continued		
Limestone	6	745
Shale	9	754
Limestone, porous, water	14	768
Limestone	4	772
Shale	10	782
Limestone	63	845
Shale	15	860
Limestone	12	872
Shale	28	900
Limestone	27	927
Limestone	186	1113
Lignite	18	1131
Limestone	60	1191
Grayson shale(Del Rio clay)	50	1241
"Edwards"limestone:		
Limestone	131	1372

Well I-120

San Jose Beach, 5½ miles south.

Gravel, clay, marl and coal	140	140
Blue marl, brown coal	140	280
Herd shell conglomerate composed of Gryphaea Vesiculeris	340	620
Limestone	380	1000
Rock, sulphur water first water in well	310	1310
Yellow joint clay	70	1380
Limestone	45	1425
Water	110	1535
Rock, water	350	1885

Well I-123

U. S. Government, Kelly Field, 5¼ miles southwest.

Clay and gravel	38	38
Yellow clay and gravel	21	59
Soft blue shale	51	110
Sandy shale	10	120
Blue shale with hard streaks	140	260
Soft blue shale	58	318
Hard boulders	2	320

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well I-123-Continued		
Soft shale	12	332
Hard shale	40	372
Soft shale	63	435
Soft shale and boulders	46	481
Soft marl	111	592
Hard limestone	2	594
Hard shale	16	610
Soft marl	101	711
Soft limestone	19	730
Hard marl and limestone	21	751
Soft chalk	254	1005
Shale and limestone	33	1038
Grayson shale(Del Rio clay)	29	1067
"Edwards" limestone:		
Limestone	8	1075
Broken and soft limestone	9	1084
Hard limestone	32	1116
Hard limestone	46	1162
Boulder	3	1165
Limestone	2	1167
Hard limestone	53	1220
Soft limestone	182	1402
Hard and soft limestone	40	1442
Hard limestone	74	1516
Hard limestone(sandy)	58	1574
Very hard limestone	17	1591
Hard limestone	41	1632

Well J-5

San Antonio Portland Cement Company, 5½ miles north.

Yellow clay	60	60
White and yellow limestone	150	210
Hard honeycombed limestone	240	450
Lignite	12	462
Hard yellow limestone	110	572
Black rock	15	587
Grayson shale(Del Rio clay)	70	657
"Edwards" limestone:		
Hard limestone	10	667

Well J-10

Charlie Aronson, 6 miles northeast.

Gravel	4	4
Yellow clay	46	50
Shale	116	166
Chalk	115	281
Yellow limestone	18	299
Shale	1	300

Well J-12

Fred Ackerman, 6 miles northeast.

Gravel	22	22
Limestone	168	190
Chalk	128	318
Shale (lignite)	30	348
Limestone	57	405
Grayson shale (Del Rio clay)	55	460

Well J-13

Col. -- Oldsmith, 6¼ miles northeast.

Soil	3	3
Brown clay	8	11
Gravel	19	30
Limestone	160	190
Chalk	128	318
Shale (lignite)	30	348
Limestone	57	405
Grayson shale (Del Rio clay)	55	460
"Edwards" limestone:		
Limestone	275	735

Well J-14

A. G. Janszen, 7 miles northeast.

Soil and subsoil	6	6
Yellow clay, adobe streaks	20	26
Yellow clay, fine gravel	10	36
Gravel	6	42

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well J-14-Continued		
Yellow clay	16	58
Blue shale	142	200
Limestone and shells	4	204
Blue shale	15	219
White limestone	46	265
Yellow limestone	6	271
White limestone	82	353
Shale (lignite)	29	382
Limestone	58	440
Greyson shale(Del Rio clay)	50	490
"Edwards"limestone:		
Soft grey limestone	7	497
Herd gray limestone	43	540
Hard yellow limestone	5	545
White limestone	25	570
Brown flint	12	582
Grey limestone	38	620
Black flint	9	629
Grey limestone, brown streaks	31	660
Herd brown shale, limestone streaks	50	710
Hard white limestone	20	730
Black flint	7	737
Gray limestone	19	756
Black flint	6	762
White limestone	18	780
Brown flint	9	789
Gray limestone	13	802
Well J-17		
U. S. Government, Fort Sam Houston, 5½ miles northeast.		
Soil	2	2
Yellow clay	53	55
Blue clay	135	190
Magnesium limestone	20	210
Soft shale	10	220
Herd light gray limestone	20	240
Very hard bluish-gray limestone	20	260
Hard white limestone	20	280
Soft white limestone	20	300
Herd blue and white limestone	20	320
No record	10	330
Hard blue and white limestone	10	340
Very hard white limestone	13	353
Soft black lignite	27	380
Gray shaly rock	20	400
Hard white limestone	18	418
Greyson shale(Del Rio clay)	76	494
"Edwards" limestone:		
Hard, slightly yellow limestone	63	557
Limestone, light colored	18	575
Porous limestone	5	580
Hard brown limestone	10	590
Soft limestone	35	625
Hard brown limestone	30	655
Flinty limestone	2	657
Soft limestone	14	671
Herd white limestone	9	680
Soft brown limestone	10	690
Herd limestone	58	748
Black flint	2	750
Very hard yellow limestone	45	795
Very hard limestone	40	835
Soft light brown sandstone	20	855
Light brown limestone	19	874
Well J-21		
Salado Water Company, 5 miles northeast.		
Surface	8	8
Dark blue clay	100	108
Light blue clay	107	215
Soft white rock	115	330
Yellow rock, sulphur water	20	350
Hard white chalk	95	445
Lignite	25	470
Hard white rock	40	510
White pearl rock	10	520
Hard blue rock	20	540
Sand hole	45	585
Herd white rock	25	610
Red sand rock, gas flow	7	617
Hard white rock	25	642
Brown flint	5	647
Yellow rock, white streaks	55	702
Well J-23		
G. Berckmoes, 3¾ miles east.		
Soil	4	4
Yellow clay	12	16
Gravel	6	22

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well J-23-Continued		
Yellow clay	32	54
Blue clay	291	345
Rock	2	347
Blue shale	128	475
White chalk	270	745
Honeycombed chalk, crevices	15	760
Well J-24		
Frank and Richard Aelovet, 4 miles east.		
Soil	4	4
Yellow clay	10	14
Gravel	2	16
Yellow clay	42	58
Blue shale	298	356
Rock	4	360
Hard shale	182	542
Honeycomb limestone	8	550
Chalk	198	748
Shale	27	775
Limestone	61	836
Grayson shale(Del Rio clay)	61	897
"Edwards"limestone:		
Limestone	4	901
Crevice	3	904
Well J-25		
A. Van Hecke, 4 miles east.		
Soil	4	4
Yellow clay	14	18
Gravel	9	27
Yellow clay	29	56
Blue clay	284	340
Rock	2	342
Blue shale	128	470
Chalk	290	760
Shale	27	787
Limestone	60	847
Grayson shale(Del Rio clay)	50	897
"Edwards"limestone:		
Limestone and yellow clay	3	900
Rock	1	901
Honeycombed limestone	10	911
Hard limestone	33	944
Yellow honeycombed limestone	18	962
Hard limestone	13	975

	Thickness (feet)	Depth (feet)
Well J-36		
Texas Refinery, 6 miles northeast.		
Soil	4	4
Gravel	12	16
Yellow clay	8	24
Gravel	9	33
Yellow clay	27	60
Blue clay	190	250
Chalk	277	527
Lignite	26	553
Limestone	54	607
Grayson shale(Del Rio clay)	53	660
"Edwards"limestone:		
Blue rock	9	669
White rock	20	689
Brown flint	10	699
Hard yellow limestone	39	738
Crevice in rock, water	1	739
Hard yellow rock	3	742
Crevice, water	4	746
Yellow rock	3	749
Crevice, water	3	752
Hard white limestone	1	753
Well J-47		
Palfrey No. 1, 6½ miles southeast.		
Sand and clay	39	39
Sand and shale	16	55
Rock	3	58
Sand and shale	45	103
Clay	16	119
Rock	2	121
Sticky shale and boulders	109	230
Rock	2	232
Sticky shale, boulders	238	470
Shale	55	525
Clay	45	570
Sticky shale	40	610
Shale and boulders	10	620
Rock	1	621
Shale	2	623
Rock	2	625
Shale	3	628
Rock	13	641
Mucky shale	8	649
Sticky shale, boulders	61	710
Shale	10	720
Clay	30	750
Gumbo	30	780

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well J-47-Continued		
Limestone	2	782
Shale	8	790
Sticky shale	22	812
Limestone boulders	1	813
Sticky shale	105	918
Tough gumbo	49	967
Sticky shale	10	977
Clay	5	982
Shale	80	1062
Clay	16	1078
Sandy shale	51	1129
Sticky shale	19	1148
Clay	22	1170
Shale	50	1220
Shale and clay	20	1240
Clay	69	1309
Gray shale, limestone	8	1317
Gray shale, pyrites	93	1410
Rock	33	1443
Chalk and shale	55	1498
Rock	16	1514
Shale	2	1516
Rock	16	1532
Hard limestone	15	1547
Limestone	65	1612
Clay	8	1620
Limestone	5	1625
Clay	24	1649
Broken limestone and shale	6	1655
Limestone	16	1671
Shale	20	1691
Blue shale, limestone	7	1698
Limestone	62	1760
Grayson shale(Del Rio clay)	48	1808
"Edwards"limestone:		
Limestone	35	1843
Clay	2	1845
Broken limestone	4	1849
Limestone	183	2032
Well J-48		
Mrs. Francis Dullnig No. 2, 6½ miles southeast.		
Surface	40	40
Shale	75	115
Rock	25	140
Shale and boulders	35	175
Rock	2	177
Shale and boulders	33	210
Gumbo	16	226
Shale and boulders	149	375
Sticky shale	125	500
Gummy shale	47	547
Shale and limestone	19	566
Sticky shale	42	608
Shale	44	652
Sticky shale	298	950
Sandy limestone	150	1100
Chalk	206	1306
Shale	50	1356
Limestone	54	1410
Grayson shale(Del Rio clay)	56	1466
"Edwards"limestone:		
Limestone	109	1575
Well J-50		
Hot Wells Tourists' Lodges, 4 miles south.		
Soil	5	5
Yellow clay	10	15
Black sand	5	20
Sand and gravel, water	10	30
Yellow clay	22	52
Blue shale	38	90
Streaks of lignite	5	95
Gumbo and blue clay	30	125
Sandy shale	50	175
Gumbo	148	323
Sandy rock	2	325
Gumbo	12	337
Sandy rock	3	340
Gumbo	11	351
Rock	2	353
Sandy shale	59	412
Gumbo	94	506
Sandy shale	71	577
Sandy rock	10	587
Gumbo	10	597
Sandy shale	113	710
Hard gumbo	280	990
Limestone	455	1445
Hard gumbo and shale	9	1454

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well J-50-Continued		
Limestone	286	1740
Hard shale	8	1748
Hard pink limestone	117	1865
Sandy limestone, some water	10	1875
Porous rock, sulphur water	3	1878
Well J-51		
J. A. Gambler, No. 1, 6½ miles southeast.		
Surface soil and clay	40	40
Shale	160	200
Hard sand	15	215
Shale	70	285
Rock	5	290
Sandy shale	147	437
Shale and shell	103	540
Gummy shale	75	615
Broken limestone	17	632
Sticky shale	358	990
Marl	130	1120
Chalk	150	1270
Shale	24	1294
Limestone	38	1332
Grayson shale(Del Rio clay)	43	1375
"Edwards"limestone:		
Limestone	90	1465
Soft formation	10	1475
Identity undetermined	15	1490
Limestone	78	1568
Well K-6		
Peter Kioibassa, 19 miles east.		
Clay	15	15
Lignite	3	18
Sand	24	42
Shale and clay	43	85
Sand	18	103
Sand and shells	4	107
Shale	33	140
Sand	63	203
Sand and shells	3	206
Shale	14	220
Shale and shells	100	320
Sand	5	325
Shale and shells	95	420

	Thickness (feet)	Depth (feet)
Well K-6-Continued		
Shale	27	447
Shells	2	449
Shale	7	456
Shells	1	457
Shale	223	680
Shells	2	682
Shale	68	750
Sandy shale	50	800
Shale	49	849
Shells	1	850
Limestone shells	4	854
White shale	21	875
Shale	145	1020
Shells	2	1022
Shale	18	1040
Shells and brown limestone	4	1044
Shells	2	1046
Shale	9	1055
Gray sand	3	1058
Shale	17	1075
Shells	1	1076
Shale	49	1125
Sand	3	1128
Shale	12	1140
Sticky shale	73	1213
Sandy shale	24	1237
Broken shale	9	1246
Shale	12	1258
Shale, cored	16	1274
Hard sand, cored	4	1278
Sandy shale, cored	48	1326
Shale, cored	19	1345
Sticky shale	20	1365
Sandy shale, cored	20	1385
Sticky shale	152	1537
Shale	61	1598
White shale	132	1730
Shale	1	1731
Chalk	65	1796
Cavity in chalk	1	1797
Hard chalk	3	1800
Broken chalk	3	1803
Breaks, cored	4	1807
Broken chalk, cored	10	1817
Chalk	8	1825
Chalk, cored	5	1830
Shale, cored	15	1845
Chalk, cored	7	1852
Shale, cored	2	1854
Chalk, cored	2	1856

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well K-6-Continued		
Limestone, cored	1	1857
Chalk with shale breaks, cored	20	1877
Shale	3	1880
Chalk	5	1885
Shale	1	1886
Chalk	13	1899
Shale	1	1900
Chalk	5	1905
Chalk, cored	58	1963
Shale, cored	15	1978
Limestone, cored	2	1980
Shale	5	1985
Sandy limestone	1	1986
Shale	5	1991
Limestone	16	2007
Limestone, cored	15	2022
Clay, cored	41	2063
Shale, cored	2	2065
Limestone, cored	29	2094
Brown limestone, cored	3	2097
Limestone, cored	5	2102
Limestone, hard	10	2112
Limestone, soft	8	2120
Limestone, hard	2	2122
Limestone, soft	8	2130
Well K-7		
Winkler No. 1, 18½ miles east.		
Surface	40	40
Rock	4	44
Water sand	6	50
Sand and boulders	100	150
Rock	3	153
Sandy shale	49	202
Rock	5	207
Sandy shale	96	303
Hard sand	17	320
Clay	10	330
Sandy shale	70	400
Blue shale	40	440
Brown rock	4	444
Sandy shale	7	451
Sticky shale and gumbo	490	941
Brown rock	5	946
Sticky shale and gumbo	104	1050
Gumbo and shale	97	1147
Shale	15	1162
Well K-7-Continued		
Gumbo	95	1257
Gumbo and shale	128	1385
Shale	211	1596
Hard chalky shale	30	1626
Hard white shale	88	1714
Chalk rock, cored	168	1882
Chalk	99	1981
Shale	2	1983
Limestone	42	2025
Grayson shale(Del Rio clay)	51	2076
"Edwards"limestone:		
Limestone	108	2184
Well K-8		
Mary Strzelczyk, No. 1, 18 miles east.		
Top soil	2	2
Soft yellow clay	48	50
Bluish-yellow clay	5	55
Soft blue sandy shale	13	68
Soft black sandy shale	10	78
Soft grey sandy shale	35	113
Gray water sand	16	129
Hard blue gumbo	28	157
Hard brown rock	5	162
Soft gray quicksand	9	171
Hard brown rock	1	172
Hard blue gumbo	72	244
Soft grey water sand	12	256
Hard blue gumbo	44	300
Hard gray rock	1	301
Hard blue gumbo and gravel	59	360
Hard gray rock	1	361
Hard blue gumbo and gravel	124	485
Soft blue shale	128	613
Soft blue rock	1	614
Soft blue shale	76	690
Hard gray marl	10	700
Soft blue shale	83	783
Hard gray rock	2	785
Soft blue shale	5	790
Soft gray shell of rock	1	791
Soft blue shale	9	800
Hard gray shell of rock	1	801
Soft blue shale	124	925
Shale and sand	22	947
Soft loose shale	14	961
Hard grey rock	6	967

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well K-8-Continued		
Soft blue shale	72	1039
Hard pyrites of iron	1	1040
Hard blue shale	38	1078
Hard pyrites of iron	56	1134
Soft blue shale	18	1152
Hard blue gumbo	43	1195
Hard blue shale	55	1250
Hard blue marl	60	1310
Soft blue marl	78	1388
Solid blue marl	52	1440
Solid blue gumbo	5	1445
Soft sandy shale	20	1465
Medium gummy shale	30	1495
Hard blue gumbo	8	1503
Hard gray chalky shale	52	1555
Hard blue gumbo	8	1563
Medium layers shale and gumbo	53	1616
Medium chalk	22	1638
Light chalk	69	1707
Gray pyrites	31	1738
Gray chalk rock	32	1770
Gray pyrites	11	1781
Gray limestone	48	1829
Broken gray limestone	64	1893
Crystallized limestone	2	1895
Hard black shale	11	1906
Black and white shale and tough gumbo	81	1987
Sticky limey shale	2	1989
Tough gumbo	2	1991
Limey shale	16	2007
Tough gumbo	2	2009
Limey shale and shell	3	2012
Hard limestone	1	2013
Medium shells and pyrites	2	2015
Shells and pyrites	2	2017
Hard limestone	3	2020
Rock and black shale	26	2046
Soft white limestone	3	2049
Hard limestone and black shale	2	2051
Soft black shale	13	2064
Soft limestone full of fossils	19	2083
Hard rock	1	2084
Hard porous limestone	2	2086
Medium hard limestone	3	2089
Hard porous limestone	1	2090
Soft limestone with hard streaks	5	2095

	Thickness (feet)	Depth (feet)
Well K-8-Continued		
Hard porous limestone	5	2100
Hard limestone with soft streaks, porous and full of crystallized rock	4	2104
Hard sandy pyrites	1	2105
Hard limestone	3	2108
Soft porous limestone with hard streaks	11	2119
Soft porous limestone, sandy pyrites	10	2129
Sandy pyrites	1	2130
Soft porous limestone	2	2132
Soft porous limestone with streaks, crystallized rock	6	2138
Pyrites	1	2139
Hard flinty limestone	6	2145
Pyrites	1	2146
Chalky limestone	5	2151
Pyrites	-6"	2151-6"
Sandy pyrites, hard streak	1-6"	2153
Brown limestone	6	2159
Very hard pyrites	1	2160
Hard limestone	5	2165
Flinty limestone	13	2178
Chalky limestone	11	2189
Hard flinty limestone	2	2191
Porous limestone	2	2193
Flinty limestone	3	2196
Hard flinty limestone	4	2200
Flinty limestone	3	2203
Flinty limestone and pyrites	2	2205
Porous limestone, streaks pyrites, boulders	6	2211
Limestone and pyrites	3	2214
Porous limestone	12	2226
Porous limestone and pyrites	1	2227
Pyrites	1-6"	2228-6"
Limestone	5-6"	2234
Hard flinty limestone	16	2250
Hard black limestone	1	2251
Hard limestone with dark streaks	4	2255
Hard limestone and pyrites	3	2258
Chalky limestone	4	2262
Soft limestone	6	2268
Porous limestone	19	2287

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well K-8-Continued		
Hard porous crystallized limestone	1	2288
Crystallized rock	2	2290
Hard limestone	4	2294
Porous limestone	14	2308
Soft porous limestone	15	2323
Hard porous limestone	21	2344
Soft porous limestone	5	2349
Blue shale and gumbo	6	2355
Soft porous limestone	1	2356
Soft porous limestone with small amount shale	16	2372
Broken limestone and gumbo	3	2375
Hard limestone	2	2377
Broken shale and dark limestone	20	2397
Hard porous limestone	5	2402
Hard limestone	10	2412
Soft porous limestone	4	2416
Hard limestone	2	2418
Porous limestone, sticky shale	5	2423
Porous limestone	5	2428
Hard limestone	2	2430
Porous limestone	4	2434
Hard blue limestone	20	2454
Porous limestone and shale	6	2460
Hard blue limestone	6	2466
Limestone and gypsum	5	2471
Limestone	25	2496
Porous limestone	28	2524
Well K-9		
Sudrock No. 1, 16½ miles east.		
Shale and boulders	30	30
Water sand	60	90
Rock	90	180
Shale	20	200
Boulders	12	212
Shale	18	230
Sticky shale and boulders	168	398
Rock	4	402
Shale	36	438
Gummy shale	72	510
Shale	48	558
Green sandy shale	7	565
Gumbo	15	580
Well K-9-Continued		
Sandy shale	13	593
Sticky gumbo	27	620
Sandy shale	5	625
Gumbo and shale	75	700
Sandy shale	3	703
Shale	84	787
Sandy shale	18	805
Shale	45	850
Gumbo and shale	33	883
Hard shale	43	926
Hard shale and gumbo	71	997
Sandy shale	26	1023
Shale	74	1097
Gumbo and shale	15	1112
Gummy shale	288	1400
Shale	50	1450
Tough white gumbo	154	1604
Broken shale	69	1673
Chalk, core	100	1773
Shale core at 1800	37	1810
Limestone	43	1853
Grayson shale (Del Rio clay)	85	1938
"Edwards" limestone:		
White limestone	30	1968
Porous limestone, core 1973	40	2008
Well K-10		
Dan Kosub No. 1, 15 miles east.		
Sand and clay	7	7
Sand rock	3	10
Sand and gravel	10	20
Sand	8	28
Fine gravel	7	35
Clay and gravel	25	60
Sand	22	82
Sand rock	1	83
Sandy clay	37	120
Shale	25	145
Sand	15	160
Shell	19	179
Rock	2	181
Sandy shale	21	202
Rock	2	204
Sandy shale	96	300
Rock	1	301
Shale	13	314
Rock	1	315
Shale	15	330

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well K-10-Continued		
Rock	1	331
Sandy shale	8	339
Rock	1	340
Shale	51	391
Rock	3	394
Shale, boulders	56	450
Rock	2	452
Sticky shale	27	479
Rock	1	480
Shale	105	585
Rock	2	587
Shale	63	650
Cored	126	776
Shale, boulders	14	790
Shale	85	875
Rock	1	876
Shale	7	883
Shale, boulders	40	923
Shale	95	1018
Sandy shale, cored	36	1054
Gray sandy shale	13	1067
Rock	2	1069
Sand and shale	26	1095
Sandy shale	54	1149
Shale	95	1244
Shale, shells	63	1307
Sandy shale	30	1337
Sandy shale, shells	48	1385
Sandy shale	45	1430
Shale	14	1444
Sticky shale	9	1453
Sandy shale	19	1472
Gray shale, soft marl	10	1482
Gray shale	1	1483
Sandy shale,	27	1510
Black shale	39	1549
Shale	73	1622
Shale, limestone	6	1628
Sandy shale	14	1642
Marl	313	1955
Chalk	98	2053
Shale	30	2083
Limestone	69	2152
Grayson shale(Del Rio clay)	53	2205
"Edwards" limestone:		
Limestone	54	2259

	Thickness (feet)	Depth (feet)
Well K-11		
Albert Stephens No. 1, 11 miles east.		
Surface clay and sand	45	45
Hard sand rock	2	47
Water sand	14	61
Sand and shale	357	418
Shale	92	510
Sand	5	515
Shale	223	738
Sand	12	750
Shale	370	1120
Marl	235	1355
Chalk, cored 1358-1362	75	1430
Broken chalk and shale	20	1450
Broken chalk	10	1460
Limestone, cored 1547-1551	88	1548
Grayson shale(Del Rio clay)	46	1594
"Edwards" limestone:		
Limestone	30	1624
Adobe, cored 1618-1627	4	1628
Hard limestone, cored 1627-1636	4	1632
Adobe	4	1636
Limestone	38	1674
Well K-15		
Mrs. J. B. Cover No. 1, 12½ miles southeast.		
Surface soil	5	5
Sandy clay	9	14
Rock	7	21
Sand	27	48
Rock	2	50
Sand	14	64
Rock	7	71
Sand	14	85
Rock	4	89
Sand	3	92
Rock	2	94
Sand	21	115
Rock	2	117
Sand	13	130
Shale	20	150
Rock	2	152
Shale	8	160
Rock	2	162
Sand	3	165

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well K-15-Continued		
Shale	220	385
Gumbo	20	405
Shale	135	540
Gumbo	15	555
Sticky shale	63	618
Sandy shale	22	640
Shale and boulders	23	663
Gumbo	12	675
Rock	3	678
Sandy shale	37	715
Gumbo	10	725
Rock	3	728
Gumbo	7	735
Shale	20	755
Limestone	4	759
Shale	5	764
Shale and boulders	21	785
Shale	5	790
Hard shale	15	805
Shell	2	807
Sandy shale	18	825
Gumbo	10	835
Sticky shale	65	900
Rock	1	901
Shale and boulders	15	916
Gumbo	64	980
Shell	1	981
Sandy shale	16	997
Sticky shale	13	1010
Gumbo	10	1020
Rock	1	1021
Shale	4	1025
Gumbo	20	1045
Hard shale	90	1135
Shale	35	1170
Gumbo	15	1185
Sticky shale	115	1300
Hard shale	130	1430
Sandy shale	5	1435
Hard shale	5	1440
Hard sticky shale	10	1450
Gumbo	10	1460
Hard shale	52	1512
Broken limestone and shale	33	1545
Chalk rock	185	1730
Broken shale	7	1737
Hard limestone	48	1785
Hard sticky shale	35	1820
"Edwards" limestone:		
Limestone	133	1953

	Thickness (feet)	Depth (feet)
Well L-1		
H. C. Weiters No. 1, 20½ miles east.		
Surface soil	2	2
Sand rock	30	32
Shale and gumbo	153	185
Blue shale	65	250
Black shale	26	276
Sand rock	2	278
Sandy shale	12	290
Gumbo	10	300
Shale	20	320
Clay, gumbo	10	330
Sticky shale	20	350
Gumbo	20	370
Rock	2	372
Gumbo	3	375
Rock	3	378
Gumbo	22	400
Light blue shale	60	460
Shale	30	490
Gummy shale	20	510
Shale	30	540
Rock	2	542
Sandy shale	20	562
Soft rock	3	565
Gumbo	20	585
Rock	3	588
Shale	12	600
Sticky shale	20	620
Gumbo	20	640
Shale	50	690
Sticky shale	10	700
Gumbo	45	745
Shale and small boulders	20	765
Marl, gumbo	30	795
Shale	35	830
Tough gumbo	40	870
Shale	85	955
Sticky shale	25	980
Sticky green shale	40	1020
Sandy shale, streaks of chalk	20	1040
Gummy shale	161	1201
Chalk, core	30	1231
Chalky shale	21	1252
Chalk, core at 1258	6	1258
Chalk, little shale	27	1285
Chalk, cored at 1285 and 1295	10	1295
Hard chalk, core	1	1296

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well L-1-Continued		
Chalk, cored at 1395 and 1410	164	1460
Hard shale, core at 1460	3	1463
Limestone	71	1534
Grayson shale(Del Rio clay)	9	1543
"Edwards"limestone:		
Limestone, cores at 1543, 1550,1561	26	1569
Clay	27	1596
Limestone, cored at 1600'	30	1626
Limestone, cored at 1640'	77	1703
Gumbo	.5	1703.5
Limestone	10.5	1714
Hard limestone	.5	1714.5
Soft limestone	5.5	1720
Soft limestone with hard streaks	20	1740
Soft porous limestone with hard streaks	222	1962
Hard compact limestone, soft streaks	68	2030
Brittle compact limestone	47	2077
Hard compact limestone	108	2185
Hard limestone	75	2260
Well L-2		
Koch No. 1, 21½ miles east.		
Surface	14	14
Shell rock	10	24
Shale and boulders	241	265
Shale	125	390
Shell rock	5	395
Shale and boulders	73	468
Gumbo	232	700
Rock	2	702
Hard shale	118	820
Rock, limestone	2	822
Sticky shale	18	840
Limestone	4	844
Gumbo	20	864
Shale and boulders	62	926
Rock, limestone-	3	929
Gumbo	13	942
Hard shale	73	1015
Gumbo	35	1050
Rough gumbo	45	1095
Sand and shale	10	1105
Sandy shale	4	1109
Sticky shale	24	1133
Rough gumbo	14	1147
Gumbo	208	1355
Show gas	5	1360
Gumbo	25	1385
Shale	56	1441
Gumbo	1	1442
Chalk	42	1484
Broken chalk and shale	30	1514
Hard chalky shale	16	1530
Hard limestone	11	1541
Shale	2	1543
Chalky shale	22	1565
Hard chalky shale	5	1570
Chalk rock, cored at 1582	12	1582
Chalk rock	131	1713
Hard shale, cored at 1720'	7	1720
Chalk	68	1788
Grayson shale(Del Rio clay)	46	1834
"Edwards"limestone:		
Limestone	105	1939
Sandy limestone	41	1980
No record	54	2034
Well L-3		
Gutz No. 1, 20 miles east.		
Surface red sandy clay	50	50
Water sand	75	125
Clay	11	136
Limestone	3	139
Lignite	22	161
Broken limestone and sand	59	220
Hard white limestone	36	256
Hard black rock	15	271
White sand	18	289
Broken limestone and sand	26	315
Shale	17	332
Hard limestone	30	362
Gray shale	4	366
Hard limestone	1	367
Gray shale	89	456
Broken soft limestone and shale	22	478
Gray shale	52	530
Limestone	2	532
Grey shale	196	728
Hard limestone	3	731

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well L-3-Continued		
Gray shale	29	760
Limestone	2	762
Sticky shale	23	785
Sandy limestone	39	824
Limestone	1	825
Hard sandy limestone	21	846
Blue shale	44	890
Limestone	2	892
Sticky shale	53	945
Limestone	2	947
Hard shale	43	990
Shale	18	1008
Limestone	2	1010
Hard limestone	8	1018
Shale	16	1034
Sandy limestone	4	1038
Broken shale and limestone	11	1049
Hard limestone	2	1051
Blue shale	69	1120
Limestone	2	1122
Blue shale	68	1190
Broken shale and sand	13	1203
Broken shale and brown sand	13	1216
Blue gumbo and sticky shale	127	1343
Gumbo	11	1354
Marl	111	1465
Pyrites	202	1667
Marl	49	1716
Pyrites	2	1718
Marl	38	1756
Pyrites	21	1777
Marl	8	1785
Chalk	24	1809
Dry serpentine	3	1812
Chalk	91	1903
Shale, cored	6	1909
Shale, black	5	1914
Bluish shale	7	1921
Limestone	27	1948
Gray limestone	13	1961
Soft gray limestone	3	1964
Hard dark gray limestone	9	1973
Grayson shale(Del Rio clay)	43	2016
"Edwards"limestone:		
Limestone	18	2034
Soft limestone	13	2047
Adobe	4	2051
Soft light brown limestone	30	2081
Hard limestone, flint	1	2082
Well L-3-Continued		
"Edwards"limestone-continued.		
Hard flint	1	2083
Breaks, hard and soft limestone	11	2094
Black sandy mixture, sulphur water	4	2098
No record	3	2101
Well M-19		
Eastwood No. 1, 18½ miles southwest.		
Surface dirt	3	3
Sandy shale	25	28
Sand rock	1	29
Sandy shale	31	60
Sand	5	65
Sandy shale	35	100
Pyrites	2	102
Shale, shells of sand rock	63	165
Pyrites	4	169
Sand, pyrites, boulders	43	212
Sandy shale and boulders	38	250
Pyrites and sand rock	5	255
Sandy shale and boulders	105	360
Hard sand and rock	4	364
Shale	11	375
Sticky shale	35	410
Sand rock	3	413
Rock	2	415
Shale	88	503
Sticky shale	242	745
Shale boulders	205	950
Shale	47	997
Shale boulders	107	1104
Sticky shale	126	1230
Shale	80	1310
Sandy shale	5	1315
Shale	22	1337
Sticky shale	135	1472
Hard shale	8	1480
Sticky shale	87	1567
Broken limestone	29	1596
Limestone	11	1607
Limestone, pyrites	51	1658
Limestone	32	1690
Brown limestone	7	1697
Chalk	233	1930
Limestone	6	1936
Chalk	36	1972

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well M-19-Continued		
Limestone	38	2010
Black shale, cored	43	2053
Limestone, cored at 2055, 2057, 2063 and 2154	101	2154
Clay	78	2232
Limestone	46	2278
Lost returns	2	2280
Limestone	104	2384
Soft limestone	84	2468
Limestone	70	2538
Soft limestone	169	2707
Limestone	202	2909
Limestone, hard with soft streaks	93	3002
Limestone and shale	52	3054
Limestone	23	3077
Yellow clay	108	3185
Limestone	324	3509
Yellow limestone	114	3623
Hard brown limestone	20	3643
Hard limestone	281	3924
Hard blue limestone	56	3980
Sandy limestone, cored at 4036	64	4044
Black sandy limestone	42	4086
Hard black sandy limestone	8	4094
Black sandy limestone	16	4110
Sandy shale	18	4128
Black shale, some sand	2	4130
Hard gray sandy shale	1	4131
Black shale	58	4189
Hard white limestone	91	4280
Black shale	1	4281
Hard gray limestone	4	4285
Gray limestone	40	4325
Hard gray limestone	80	4405
Cored	10	4415
Hard gray limestone	231	4646
Buff colored limestone clay	74	4720
Limestone clay, cored	2	4722
Brown shale, cored	103	4825
Hard crystal limestone	61	4886
Hard limestone	9	4895
Cemented red sand, cored	1	4896
Cemented pink sandstone	52	4948
White limestone, cored	2	4950
Limestone	31	4981
Limestone, slightly crystalline, cored	9	4990
Hard limestone	4	4994
Hard grey limestone	56	5050
Hard gray limestone, cored	10	5060
Gray limestone	28	5088
Sandy limestone, cored	3	5091
Sandy limestone, crystalline	10	5101
Sandy limestone	12	5113
Hard sand	12	5125
Hard gray sand	42	5167
Hard sand	28	5195
Hard grey sand	63	5258
Sand	74	5332
Sandy pebbles	29	5361
Well M-23		
Pocenheimer No. 1, 18½ miles southwest.		
Surface sand and clay	8	8
Very hard rock	132	140
Limestone and shale	28	168
Shale and boulders	5	173
Limestone	2	175
Limestone, shale and boulders	44	219
Shale, boulders and limestone	68	287
Sticky shale	23	310
Limestone	2	312
Shale and boulders	138	450
Hard shale	24	474
Sticky shale and limestone	76	550
Rock	2	552
Sticky shale	73	625
Limestone	2	627
Shale and boulders	40	667
Limestone and shale	38	705
Limestone	3	708
Sticky shale	2	710
Shale and boulders	35	745
Limestone and shale	140	885
Hard shale	20	905
Gumbo	35	940
Sticky shale	55	995
Gumbo	13	1008
Hard shale	37	1045
Hard sandy shale	1	1046
Sandy shale, cored	4	1050
Sandy shale	12	1062
Sandy shale, cored	8	1070

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well M-23-Continued		
Sandy shale	15	1085
Sandy shale and sand	20	1105
Hard sandy shale	15	1120
Sticky shale	70	1190
Limestone and shale	10	1200
Hard shale	105	1305
Limey shale and chalk	75	1380
Chalk	220	1600
White limey chalk	95	1695
Shale	117	1812
Limestone	28	1840
Grayson shale(Del Rio clay)	74	1914
"Edwards"limestone:		
Limestone	112	2026
Well N-3		
C. F. Krause, 13 miles southwest.		
Light sand	20	20
Gravel	6	26
Yellow clay	4	30
Gravel, water	23	53
Dark blue shale	67	120
Blue shale	86	206
Black sandy shale	39	245
Blue shale	10	255
Green sandy shale	8	263
Light shale, shells 340-420	77	340
Blue shale	130	470
Blue shale, hard shells	165	635
Hard blue shale and sandy shells	10	645
Dark shell	35	680
Blue shale	94	774
Hard gray shells	6	780
Grey shale	270	1050
Light sandy shale	80	1130
White chalky limestone	6	1136
Hard grey limestone	129	1265
Soft blue slate	15	1280
Soft light soapstone	5	1285
Hard gray limestone	70	1355
Hard white limestone	75	1430
Hard gray limestone	30	1460
Soft black shale and slate	23	1483
Hard white limestone	52	1535
Hard gray limestone	12	1547
Dark shells and shale	53	1600
Hard grey limestone	23	1623
Soft gray sand, water flowing 10 gallons a minute	10	1633
Hard gray limestone, water flowing 30 gallons a minute	3	1636
Well N-4		
O. R. Mitchell, 12 miles southwest.		
No record	1519	1519
Greyson shale (Del Rio clay)	42	1561
"Edwards"limestone:		
Limestone	348	1909
Well N-5		
O. R. Mitchell, 10¾ miles southwest.		
No record	1409	1409
Limestone	47	1456
Greyson shale(Del Rio clay)	36	1492
"Edwards"limestone:		
Limestone	279	1771
Well N-6		
C. Verstuyft, 10¼ miles southwest.		
Soil	4	4
Yellow clay	18	22
Gravel, water	4	26
Yellow clay	42	68
Blue shale	29	97
Green sand and shale	45	142
Blue shale	508	650
Oyster shell	4	654
Blue shale	354	1008
Light gray shale	32	1040
White limestone	27	1067
Yellow clay, shale, oil sand	36	1103
White limestone	50	1153
Light gray shale	37	1190
White limestone, sulphur water	20	1210
White limestone	135	1345
Shale (lignite)	30	1375

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well N-6-Continued		
Limestone	68	1443
Grayson shale (Del Rio clay)	57	1500
"Edwards" limestone:		
Limestone	5	1505
Hard limestone	25	1530
Crevice, water	2	1532
Well N-7		
W. W. Schultz, 7½ miles southwest.		
Soil and subsoil	6	6
Yellow clay	21	27
Gravel	3	30
Green sand and shale	27	57
Yellow clay and green sand	43	100
Blue shale	60	160
Blue shale and boulders	43	203
Blue shale with thin strata of gray rock	275	478
Rock	4	482
Blue gumbo with shell rock	210	692
Hard gray rock	26	718
Blue shale	105	823
Gray rock	3	826
Light gray shale	78	904
Shell rock	2	906
Blue gumbo	28	934
Light shale	62	996
White limestone	22	1018
Well N-10		
W. Kelso, 8 miles south.		
Black surface soil	3	3
Yellow clay	59	62
Rock	3	65
Blue clay	63	128
Rock	11	139
Shale and boulders	81	220
Green sand and shale	54	274
Shale and boulders	635	909
Hard gray shale	71	980
Sandy shale	30	1010
Hard shale	145	1155
Blue sticky shale	5	1160
Brown chalk	160	1320

	Thickness (feet)	Depth (feet)
Well N-10-Continued		
Shale	20	1340
Limestone	62	1402
Grayson shale (Del Rio clay)	56	1458
"Edwards" limestone:		
Limestone	101	1559
Well N-13		
O. R. Mitchell, 9¼ miles southwest.		
Soil	4	4
Sand and shale	55	59
Coarse white sand	6	65
Limestone, sandstone, and shales	213	278
Green sand	40	318
Clay	728	1046
Marl	303	1349
Chalk	97	1446
Shale (lignite)	66	1512
Limestone	88	1600
Grayson shale (Del Rio clay)	50	1650
"Edwards" limestone:		
Limestone	117	1767
Well N-19		
Clinton Brown, 11¾ miles southwest.		
Blue clay	42	42
Black sand	83	125
Blue clay	36	161
Sand rock	65	226
Gumbo	21	247
Sand rock	14	261
Gumbo	1	262
Sand rock	6	268
Gumbo	1	269
Sand rock	4	273
Gumbo, some sand rock	2	275
Sand rock	64	339
Gumbo, some sand rock	21	360
Gumbo	33	393
Shale	9	402
Hard rock	21	423
Hard rock and gumbo	26	449
Shale and gumbo	27	476
Shale	125	601

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well N-19-Continued		
Soft rock	19	620
Gumbo	6	626
Shale	87	713
Gumbo	11	724
Rock	104	828
Gumbo	22	850
Soft rock	15	865
Gumbo	4	869
Soft rock	3	872
Gumbo	14	886
Soft rock	4	890
Gumbo	2	892
Hard rock	149	1041
Yellow rock	22	1063
Sand, soil and a little water	88	1151
White limestone	10	1161
Yellow rock, sulphur water	50	1211
White rock, lignite	110	1321
Black rock	30	1351
Mud hole, sea shells	106	1457
Hard black rock, water	34	1491
Hot sulphur water	100	1591
White rock, salt water	270	1861
Cold water (?)	20	1881
No record	474	2355
Well N-28		
E. M. Baker, 13 miles southwest.		
Surface	2	2
Sand	38	40
Gravel	30	70
Shale and shells	540	610
Shale	168	778
Limestone, shell and shales	12	790
Shale	150	940
Marl	50	990
Shale	126	1116
Shale and broken limestone	3	1119
Shale	57	1176
No record	149	1325
Chalk, flows sulphur water	5	1330
Well N-68		
Swearingen No. 1, 12¼ miles south.		
Surface	290	290
Well N-68-Continued		
Shale	410	700
Gumbo	18	718
Shale and boulders	14	732
Hard rock	16	748
Gumbo and boulders	22	770
Shale	86	856
Gumbo	20	876
Shale	40	916
Sticky shale	45	961
Gumbo	10	971
Sticky shale	114	1085
Gumbo	11	1096
Blue gumbo	42	1138
Sticky shale	127	1265
Gumbo	30	1295
Sticky shale	50	1345
Gumbo	20	1365
Sticky shale	147	1512
Hard shale	38	1550
Broken shale and chalk	47	1597
Broken shale	16	1613
Chalky core	6	1619
Hard chalk	20	1639
Chalk	15	1654
Broken shale, pyrites	2	1656
Broken shale and chalk	7	1663
Hard sand and limestone	5	1668
Chalk	57	1725
Chalk, sand, core	16	1741
Chalk, sand	6	1747
Chalk	154	1901
Black shale, little show of sulphur water	3	1904
Shale, cored	37	1941
Limestone	59	2000
Grayson shale (Del Rio clay)	53	2053
Core	2	2055
"Edwards" limestone:		
Limestone	37	2092
Limestone, cored	3	2095
Limestone	11	2106
Limestone, cored	5	2111
Sandy limestone, shows sulphur water	24	2135
Core	20	2155
Sandy limestone	21	2176
Limestone, cored	20	2196
Limestone	135	2329
Limestone, sulphur water	21	2350
Limestone	37	2387
No record	83	2470

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well N-73		
Oeks-Applewhite No. 1, 13½ miles south.		
Surface soil	42	42
Sand, shale and boulders	259	301
Sand rock	5	306
Hard shale and boulders	34	340
Shale and boulders	250	590
Sticky shale and shells	80	670
Shale	130	800
Sticky shale	208	1008
Sand	8	1016
Sticky shale	65	1081
Shale	24	1105
Rock	1	1106
Shale	15	1121
Hard shale	26	1147
Rock	3	1150
Hard shale and boulders	10	1160
Shale and shells	102	1262
Rock	21	1283
Hard shale	148	1431
Shale with hard streaks	18	1449
Hard chalky shale	13	1462
Soft sandy shale	7	1469
Shale and sand streaks	6	1475
Black sandy shale	8	1483
Streaky shale	8	1491
Shale	14	1505
Sticky shale	25	1530
Rock	2	1532
Shale and sand streaks	128	1660
Shale	55	1715
Rock	1	1716
Sandy shale	97	1813
Sand and shale	7	1820
Rock	2	1822
Sandy shale	44	1866
Hard shale and limestone streaks	5	1871
Shale	5	1876
Hard limey shale	39	1915
Shale	68	1983
Hard shale	13	1996
Soft serpentine	1	1997
Hard chalk	138	2135
Chalk	153	2288
Shale (lignite)	25	2313
Limestone	62	2375
Grayson shale (Del Rio clay)	58	2433
"Edwards" limestone: Limestone	67	2500

	Thickness (feet)	Depth (feet)
Well O-2		
Louise Oppenheimer No. 2, 7¼ miles south.		
Surface, sand and gravel	79	79
Shale with hard streaks	111	190
Shale and limestone	308	498
Sandy shale	92	590
Shale with streaks of limestone	565	1155
Shale and chalk	140	1295
Chalk	103	1398
Chalk and limestone	12	1410
Limestone with shale streaks	95	1505
Hard sandy limestone	5	1510
Limestone and shale	65	1575
Limestone, shells and pyrites	47	1622
Limestone	482	2104
Limestone and pyrites	132	2236
Limestone	48	2284
Limestone and shale	18	2302
Limestone	52	2354
Limestone and shale	16	2370
Hard sandy limestone and calcite	114	2484
Sand	4	2488
Sandy limestone and shale	30	2518
Hard sandy limestone and calcite	34	2552
Hard sandy shale and limestone	253	2805
Hard limestone	17	2822
Limestone and shale	26	2848
Limestone and pyrites	10	2858
Limestone	98	2956
Limestone and shale	79	3035
Limestone	128	3163
Sandy limestone and shale	108	3271
Hard sandy shale and limestone	31	3302
Sandy shale	58	3360
Hard sandy limestone and pyrites	95	3455
Shale	10	3465
Sandy shale, limestone	314	3779
Hard limestone	146	3925
Sandy shale	12	3937
Hard limestone	19	3956
Limestone and shale	160	4116
Sandy limestone and shale	57	4173
Anhydrite and limestone	13	4186
Sandy limestone and shale	182	4368

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-2-Continued		
Hard blue sandy shale	48	4416
Hard sand and limestone	42	4458
Sand and shale	32	4490
Sand and gravel	42	4532
Hard sand, gravel and pyrites	3	4535
Well O-3		
Louisa Oppenheimer No. 1, 7½ miles south.		
Surface sand	15	15
Caliche	35	50
Shale and streaks of hard limestone	21	71
Hard limestone and shales	23	94
Hard limestone	5	99
Hard shale and limestone	22	121
Shale and limestone with hard streaks	56	177
Hard shale and limestone	66	243
Shale and limestone streaks	51	294
Hard shale with streaks of limestone	63	357
Hard limestone	12	369
Shale and limestone	18	387
Hard limestone	15	402
Sandy shale and limestone	18	420
Shale, limey sand streaks	45	465
Sandy shale, limestone	15	480
Limestone	8	488
Shale and limestone	11	499
Shale and limestone with hard streaks	101	600
Hard limestone	14	614
Shale and limestone	18	632
Shale, limestone with hard streaks	56	688
Shale and limestone	22	710
Hard limestone	12	722
Shale and limestone	30	752
Hard limestone	10	762
Shale and limestone	84	846
Shale	46	892
Shale and limestone	27	919
Shale, sand and limestone	15	934
Hard limestone	12	946
Tough shale and limestone	33	979

	Thickness (feet)	Depth (feet)
Well O-3-Continued		
Shale and limestone	40	1019
Shale, limestone, pyrites	19	1038
Hard shale and limestone	5	1043
Shale, limestone, pyrites	16	1059
Hard limestone, shale, pyrites	10	1069
Hard limestone, shale	62	1131
Hard limestone	32	1163
Hard limestone and pyrites	9	1172
Hard limestone	20	1192
Chalk	19	1211
Chalk and shale	16	1227
Shale and gray chalk	17	1244
Chalk	12	1256
Chalk, streaked	6	1262
Chalk	58	1320
Grayson shale(Del Rio clay)	53	1373
"Edwards" limestone: Limestone	136	1509
Well O-4		
Cassin No. 2, 8 miles south.		
Black surface soil	4	4
Yellow clay	26	30
Clay and gravel	20	50
Blue clay	30	80
Black shale	155	235
Green sand	4	239
Black sandy shale	21	260
Green sand	20	280
Sandy shale	19	299
Hard sand rock	1	300
Gumbo or sticky shale	37	337
Soft sandy shale	22	359
Shale and boulders	131	490
Hard gumbo	138	628
Gray shale with shells	17	645
Hard and soft streaks of shale with boulders	405	1050
Chalky shale	43	1093
Broken limestone and shale	32	1125
Limestone	105	1230
Brown chalk and white chalk	135	1365
Shale	24	1389
Limestone	61	1450
Grayson shale (Del Rio clay)	59	1509
"Edwards" limestone: Limestone	93	1602

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-18		
I. J. Pollock, 11 miles southeast.		
No record	140	140
Blue clay and sand	20	160
Lignite	10	170
Blue shale	5	175
Gray fine water sand	30	205
Well O-23		
Albert Gembler, 9¾ miles southeast.		
Surface soil	3	3
Yellow clay, limestone, shell	32	35
Gray shale	40	75
Shale and shells	168	243
Gray shale	192	435
Limestone, shells	4	439
Gray shale	41	480
Shale and shells	295	775
Shells	24	799
Gumbo	4	803
Shale	10	813
Shalpy sand	12	825
Shale	45	870
Sticky shale	56	926
Shale	185	1111
Hard shale	291	1402
Chalk	119	1521
Shale	20	1541
Limestone	51	1592
Grayson shale(Del Rio clay)	67	1659
"Edwards"limestone:		
Limestone	61	1720
Well O-26		
Jose Cassiano No. 1, 12½ miles southeast.		
Surface sand and clay	32	32
Blue sand	168	200
Sand and shale	80	280
Sand rock	5	285
Shale	20	305
Sand rock	4	309
Shale	41	350
Sand	3	353

	Thickness (feet)	Depth (feet)
Well O-26-Continued		
Shale	62	415
Sand rock	3	418
Shale	52	470
Sand rock	2	472
Shale	38	510
Shale and boulders	20	530
Rock	4	534
Sticky shale	591	1125
Flakey shale and calcite	55	1180
Sticky shale	120	1300
Broken limestone and shells	20	1320
Shale	89	1409
Soft marl	156	1565
Marl, last 20' white and sticky	143	1708
Marl, sticky white shale	72	1780
Marl	92	1872
Hard marl	22	1894
Marl and pyrite	12	1906.
Marl	79	1985
Chalk	99	2084
Shale	29	2113
Limestone	59	2172
Grayscn shale(Del Rio clay)	73	2245
"Edwards" limestone:		
Limestone	37	2282
Adobe	4	2286
Limestone	57	2343
Well O-51		
Blue Wing Club, 11½ miles south.		
Surface soil and gravel	4	4
Yellow sand and gravel	28	32
Blue sand	50	82
Rock	1	83
Blue sand	32	115
Rock	5	120
Sand, boulders	29	149
Very hard rock	4	153
Sand and boulders	63	216
Hard rock	3	219
Sand and shale	45	264
Shale and boulders	223	487
Gumbo	19	506
Soft black sticky shale	224	730

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-51-Continued		
Gumbo	30	760
Shale and boulders	430	1190
Gumbo	30	1220
Hard gray shale	158	1378
Gumbo	19	1397
Hard gray sticky shale	520	1917
Hard chalk	181	2098
Chalk rock	62	2160
Lignite	24	2184
Limestone	86	2270
Grayson shale(Del Rio clay), hard, " All hard out with roller bit"	40	2310
"Edwards"limestone:		
Limestone, some yellow	57	2367
Honeycomb limestone, water	6	2373
Gray limestone	29	2402
Brown limestone	26	2428
Gray limestone	15	2443
Brown limestone	35	2478
Gray limestone	18	2496
Brown limestone	34	2530
Soft honeycomb limestone, water	3	2533
Hard gray limestone, and flint boulders	14	2547
Very hard flint	11	2558
Well O-55		
Yturri No. 1, 10 miles south.		
Sand	50	50
Blue mud	40	90
Black mud	10	100
Coal	10	110
Sand	25	135
Black mud	61	196
Sand	224	420
Blue shale	160	580
White shale	112	692
Sand	3	695
Shale	45	740
Limestone	2	742
Shale and sand	8	750
White shale	55	805
Limestone	2	807
White shale	27	834

	Thickness (feet)	Depth (feet)
Well O-55-Continued		
Limestone	2	836
White shale	309	1145
Brown shale	55	1200
White shale	120	1320
Blue shale	156	1476
White shale	149	1625
Limestone	3	1628
White shale	256	1884
Blue shale	26	1910
White limestone	60	1970
Grayson shale (Del Rio clay)	56	2026
"Edwards"limestone:		
Limestone	64	2090
Well O-64		
B. J. Steen, 14 miles south.		
Rock	168	168
Black gumbo	62	230
Water sand	12	242
Black rock	4	246
Well O-66		
J. H. Matthey, No. 1, 13 miles south.		
Red clay and small gravel	68	68
Bluish-grey sand rock	6	74
Black gumbo	4	78
Bluish-grey sand rock	2	80
Red clay and small gravel	20	100
Bluish-grey sand rock	2	102
Red clay and sand	28	130
Black gumbo	5	135
Hard red gumbo and sand, water	45	180
Black gumbo	10	190
Black shale	11	201
Black gumbo	7	208
Dry brown sandy shale	14	222
Brown sand rock	2	224
Black gumbo	16	240
Dry brown sandy shale	20	260
Shell	3	263
Dry brown sandy shale	27	290
Brown sand rock	3	293

(continued on next page)

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-66-Continued		
Dry and hard brown sandy shale	37	330
Black gumbo	6	336
Dry and hard brown sandy shale	14	350
Black gumbo	8	358
Grey sand rock	1	359
Black sandy gumbo	6	365
Gray sand rock	2	367
Black shale with lignite	18	385
Black sandy gumbo	24	409
Gray sand rock, water	36	445
Black gumbo	20	465
Gray sand rock	1	466
Black sandy gumbo	5	471
Gray sand rock	1	472
Black sandy gumbo and boulders	33	505
Black shale	10	515
Gray sand rock	4	519
Black sandy gumbo and small boulders	38	557
Black shale and lignite	13	570
Grey sand and limestone	4	574
Black shale and lignite	16	590
Black gummy shale and gumbo	537	1127
Gray sand rock	2	1129
Hard black gummy shale	36	1165
Hard brown sandy shale	5	1170
Hard black gummy shale	30	1200
Gray sand rock	2	1202
Hard black gummy shale	12	1214
Gray sand rock with pyrites	1	1215
Hard black gummy shale	145	1360
Hard black sandy shale	12	1372
Gray gumbo and shale	348	1720
Hard gray gumbo	20	1740
Black gummy shale	100	1840
Soft black shale	5	1845
Hard grey sandy gumbo	16	1861
Gray limestone	1	1862
Hard grey sandy gumbo	8	1870
Soft grey shale	15	1885
Hard gray sandy shale	7	1892
Bluish-grey chalk	133	2025
Bluish-grey limestone and chalk	13	2038
Break in limestone	1	2039
Limey shale	3	2042

	Thickness (feet)	Depth (feet)
Well O-66-Continued		
Hard chalk and limestone pyrites	108	2150
Grey limestone	20	2170
Gray chalky limestone	15	2185
Gray limestone, pyrites	15	2200
Yellowish-gray limestone	12	2212
Light grey crystalline limestone	73	2285
Dark limestone and clay	15	2300
Light gray limestone, calcite, pyrites and quartz	30	2330
Grey limestone	33	2363
Hard gray limestone, pyrites	2	2365
Dark gray limestone	30	2395
Shale	7	2402
Gumbo and boulders	13	2415
Soft limestone	3	2418
Hard limestone	52	2470
Shale and limestone	26	2496
Limestone	1	2497
Hard limestone	5	2502
Limestone	12	2514
Shale	10	2524
Hard limestone	2	2526
Limestone	107	2633
Limestone, chalky	11	2644
Limestone	21	2665
Chalky limestone and shale	23	2688
Limestone	33	2721
Sandy limestone	17	2738
Sandy limestone and shale	7	2745
Limestone	54	2799
Shale and limestone	9	2808
Shale and limestone boulders	7	2815
Limestone	1	2816
Hard limestone	2	2818
Limestone	18	2836
No record	1	2837
Shale	5	2842
Limestone	43	2885
Sand, sulphur water	5	2890

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-67		
Chavez No. 1, 13½ miles southeast.		
Surface soil, light clay and sand	109	109
Hard sand rock, sharp	6	115
Streaks shale and sand shells	18	133
Hard sand rock	2	135
Sand rock with shells of hard and soft shale	11	146
Very hard sand rock	4	150
Sand rock, shells and sandy shale	98	248
Hard, sharp sand rock	2	250
Sandy shale, shells and lignite	114	364
Sand rock	2	366
Blue shale	15	381
Sand rock	3	384
Shale	60	444
Sand rock	2	446
Blue shale	68	514
Sand, water	15	529
Blue shale	9	538
Hard shale with hard sand shells	46	584
Sand	14	598
Shells, sand, shale	38	636
Hard sand rock	2	638
Shale with hard sand shells	53	691
Blue shale	46	737
Sand rock	2	739
Sticky shale	30	769
Sand rock	2	771
Sticky shale	30	801
Sand rock	2	803
Shells and shale	34	837
Shale and shells	204	1041
Blue shale	84	1125
Soft sticky shale	10	1135
Hard gray shale	9	1144
Sticky gray shale	11	1155
Soft sand	3	1158
Blue shale	52	1210
Gray sticky shale	58	1268
Hard sand rock	1	1269
Shale	34	1303
Sand rock	5	1308
Hard shale	22	1330
Sand and boulders	5	1335

	Thickness (feet)	Depth (feet)
Well O-67-Continued		
Hard limestone	1	1336
Blue shale and streaks of sandy shale	133	1469
Sticky dark shale	99	1568
Hard dark shale	418	1986
Hard dark shale with streaks soft white marl and shells of hard, white pyritic chalky shale	14	2000
Soft chalky marl with streaks of dark hard shale and a few white hard chalk and pyrite shells	95	2095
Soft chalky marl	49	2144
Soft gray chalky shale	29	2173
Chalk and streaks of sticky and sandy shale	25	2198
Soft white marl and streaks of soft dark shale, sand and pyrite shells	24	2222
Marl	22	2244
Hard chalk with hard sand streaks	6	2250
Marl	17	2267
Chalk and hard shale	20	2287
Hard chalk, very small amount of pyrite glauconite and quartz in washed cuttings	112	2399
Hard grey shale	34	2433
Hard shale and hard white limestone	10	2443
Hard white limestone	35	2478
Soft dark shale	2	2480
Dark shale	2	2482
Limestone	15	2497
Shale	17	2514
Limestone	1	2515
Sticky shale and limestone	13	2528
Limestone	12	2540
Shale	13	2553
Limestone	19	2572
Cored	61	2633

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-68		
Joe Lamm, 14¾ miles southeast.		
Clay	150	150
Sand shell	2	152
Soft white sand	20	172
Shale and sand	23	195
Limestone shells	4	199
Soft sand	30	229
Sand, shell	2	231
Gumbo	10	241
Shale	154	395
Gumbo	12	407
Sand, shell	6	413
Shale and sand	72	485
Sandy limestone	18	503
Sandy shale	16	519
Sand and shale	70	589
Limestone shells	8	597
Sand and shale	85	682
Gumbo	8	690
Sand rock	4	694
Loose sand	30	724
Sandy limestone	2	726
Sand and shale	62	788
Sandy limestone	2	790
Sticky shale	25	815
Sandy shale	130	945
Sandy limestone	4	949
Shale and sand	211	1160
Sticky shale	20	1180
Shale and sand	50	1230
Gumbo	30	1260
Tough gumbo	100	1360
Limestone, shells	2	1362
Gumbo	40	1402
Sand shell	2	1404
Hard sandy shale	50	1454
Gumbo and limestone shells, cored	46	1500
Very tough gumbo	120	1620
Hard shale and limestone shells	180	1800
Gumbo	30	1830
Hard shale	40	1870
Tough gummy shale	73	1943
Sticky shale	107	2050
Tough gumbo	103	2153
Gumbo and shale, gray limestone, cored	82	2235

	Thickness (feet)	Depth (feet)
Well O-68-Continued		
Shale	5	2240
Soft chalk	30	2270
Sandy shale	55	2325
Grey chalky limestone, cored	6	2331
Shale	6	2337
Chalky shale	13	2350
Hard gray limestone	45	2395
Hard sandy shale	7	2402
Hard shale	8	2410
Chalk	30	2440
Hard chalk	12	2452
Chalk	48	2500
Sandy limestone	10	2510
Hard sand	5	2515
Sandy limestone	18	2533
Hard chalk	127	2660
Hard limestone	10	2670
Shale	20	2690
Hard white limestone	30	2720
Gray limestone	27	2747
Grayson shale (Del Rio clay)	33	2780
"Edwards" limestone:		
Limestone, cored at 2791 and 2800	20	2800
Limestone and black shale, fossils, cored	17	2817
Hard and porous limestone, cored 2820⅔	3	2820
Hard and porous limestone, cored 2930	10	2830
Soft white limestone, cored at 2952	22	2852
Chalky limestone, cored at 2865	13	2865
Hard and porous limestone, cored at 2878	13	2878
Very porous limestone, cored at 2885	7	2885
Porous brown limestone, cored at 2895	10	2895
Hard and crystalline limestone, cored 2910	15	2910
Porous brown limestone, interbedded black shale, cored at 2920	10	2920
Hard white limestone, cored 2935	15	2935
Porous, very dark brown limestone, cored 2950	15	2950

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well O-68-Continued		
"Edwards" limestone, continued.		
Crystalline, light brown limestone, core 2975	25	2975
Hard crystalline and white limestone, core 3000	25	3000
Gray medium limestone, core 3010	10	3010
No record	34	3044
Well P-1		
C. Schoenfeld, 12½ miles southeast.		
Surface	1	1
Yellow sand, clay strata	61	62
Sandy shale	46	108
Sand and shale	17	125
Water sand	20	145
Brown sand, shale	10	155
Blue shale	13	168
Well P-2		
C. Schoenfeld, 13 miles southeast.		
Surface	1	1
Yellow sandy shale and clay	56	57
Sticky gray shale	31	88
Gray sand rock	1	89
Brown sticky shale	46	135
Gray sandy shale	17	152
Hard shale, with strata of water sand	30	182
Well P-3		
C. Schoenfeld, 13½ miles southeast.		
Surface	1	1
Red clay	4	5
Sand rock	4	9
Sand and sandy shale	16	25
Sandy shale	45	70
Sand and sandy shale	14	84
Sand rock strata	8	92
Sand (water)	15	107
Sand rock	1	108
Well P-4		
C. Schoenfeld, 13¾ miles southeast.		
Surface	1	1
Red clay	11	12
Sandy shale	38	50
Black sandy shale	30	80
Gray sandy shale and blue shale	35	115
Sand and shale	27	142
Water sand and hard shale	40	182
Shale	19	201
Well P-8		
Stuart No. 1, 16 miles southeast.		
Clay and sand	11	11
Rock	10	21
Sand and clay	11	32
Rock	1	33
Clay	4	37
Rock	1	38
Sand	5	43
Rock	2	45
Sand	7	52
Shale	18	70
Sand and clay	39	109
Rock	1	110
Sand	11	121
Rock	1	122
Sand	13	135
Shale	25	160
Rock	1	161
Sand and shale	25	186
Rock	8	194
Sand and shale	31	225
Rock	1	226
Sandy shale	74	300
Rock	1	301
Sand	29	330
Shale	22	352
Rock	2	354
Sand	8	362
Rock	6	368
Sand and shale	62	430
Shale, sand and lignite	12	442
Sand and shale	18	460
Shale and boulders	35	495
Rock	5	500

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Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well P-8-Continued		
Sandy shale	15	515
Rock	1	516
Sandy shale	16	532
Rock	1	533
Sandy shale	6	539
Rock	6	545
Sandy shale	9	554
Rock	1	555
Hard sandy shale	7	562
Rock	2	564
Hard sandy shale	10	574
Rock	2	576
Hard sandy shale	21	597
Gummy shale	19	616
Rock	2	618
Packsand	4	622
Rock	2	624
Sticky shale	38	662
Sandy shale	89	751
Rock	1	752
Shale	7	759
Gumbo	25	784
Shale	4	788
Rock	1	789
Shale	19	808
Rock	3	811
Shale	6	817
Hard gumbo	23	840
Shale	44	884
Gumbo	22	906
Sticky shale and boulders	44	950
Gumbo	15	965
Shale	21	986
Sticky shale and boulders	110	1096
Gumbo	8	1104
Shale and boulders	35	1139
Sand	4	1143
Shale and boulders	17	1160
Gumbo	43	1203
Shale	6	1209
Gumbo	31	1240
Shale	107	1347
Sand rock	2	1349
Sandy shale	11	1360
Sticky shale	13	1373
Rock	5	1378
Sand, cored	1	1379
Sand	3	1382
Shale	10	1392
Gumbo	68	1460

	Thickness (feet)	Depth (feet)
Well P-8-Continued		
Shale	30	1490
Gumbo	2	1492
Shale	32	1524
Gumbo	7	1531
Sand, dry	3	1534
Shale and boulders	37	1571
Limestone	9	1580
Shale	26	1606
Gumbo, cored sandy shale	8	1614
Sandy shale	4	1618
Gumbo, cored sand at 1652	33	1651
Sand	3	1654
Gummy shale	26	1680
Sandy shale	32	1712
Sticky shale	17	1729
Sandy shale	9	1738
Sticky shale	4	1742
Sandy shale	11	1753
Sticky shale	5	1758
Sandy shale	40	1798
Gummy shale	10	1808
Gumbo	63	1871
Sandy shale	7	1878
Sticky shale	7	1885
Gumbo	20	1905
Sticky shale	36	1941
Sandy shale	55	1996
Chalky shale, cored chalk	4	2000
Chalk	20	2020
Chalk and shale	102	2122
Chalk, cored	14	2136
Chalky shale, cored	47	2183
Hard chalk	4	2187
Chalk and shale	2	2189
Hard chalk	7	2196
Chalky shale, cored at 2216	16	2212
Hard white chalk	188	2400
Hard shale	2	2402
Sticky shale	1	2403
Hard shale	14	2417
Limestone	62	2479
Clay, cored	64	2543
Hard clay, cored limestone at 2559	12	2555
Limestone, cored at 2590	31	2586
Broken limestone, cored	17	2603

Table of drillers' logs, Bexar County--Continued

	Thickness (feet)	Depth (feet)
Well P-22		
Mrs. H. Michaelis, 15⅝ miles southeast.		
Brown sand with clay	65	65
Red sandstone	1	66
Blue sandy shale with boulders	60	126
Blue rock	2	128
Water sand	7	135
Well P-22-Continued		
Hard blue sand rock	4	139
Water sand, coarse with flecks of coal, sandy shale, medium hardness	11	150

Water levels in wells in Bexar County, Texas
(The airline distances and directions are from the county courthouse in San Antonio. Altitudes are referred to mean sea level.)

Well 5

Formerly U. S. Geological Survey well 21. Davis Heights Addition, Blanco and Lovera Streets, 4 miles north. Top of pipe clamp, altitude 761.46 feet, at land surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Aug. 24	- 86.85	674.71	1934, Nov. 20	- 91.45	670.01
Sept.18	- 86.20	675.26	Dec. 19	- 91.43	670.03
Oct. 17	- 86.77	674.69	1935, Jan. 31	- 91.37	670.09
Nov. 20	- 86.88	674.58	Mar. 1	- 90.98	670.48
Dec. 18	- 86.95	674.51	Apr. 8	- 91.84	669.62
1934, Feb. 19	- 86.21	675.25	May 20	- 81.69	679.77
Mar. 19	- 85.40	676.06	June 26	- 70.60	690.86
Apr. 18	- 84.74	676.72	Aug. 3	- 75.68	685.78
June 19	- 89.37	672.09	Sept.26	- 76.15	685.31
Aug. 22	- 90.90	670.56	Nov. 19	- 77.42	684.04
Sept.19	- 91.40	670.06	1936, Jan. 18	- 78.97	682.49
Oct. 12	- 92.02	669.44	Aug. 28	- 76.69	684.77
Oct. 25	- 92.50	668.96	Dec. 29	- 76.20	685.26

Measurements discontinued.

Well 6

Formerly U. S. Geological Survey well 31. Mrs. Mettke, Olmos and Judson Streets, 3 miles north. Top of pipe clamp, altitude 773.89 feet, at land surface.

1933, Aug. 24	-101.5	672.4	1934, Sept.19	-105.81	668.08
Sept.18	-100.89	673.00	Oct. 12	-106.42	667.47
Oct. 17	-101.49	672.40	Oct. 25	-106.72	667.17
Nov. 20	-101.48	672.41	Nov. 19	-105.69	668.20
Dec. 18	-101.46	672.43	Dec. 19	-105.44	668.45
1934, Jan. 18	-101.33	672.56	1935, Jan. 31	-105.41	668.48
Feb. 19	-100.90	672.99	Apr. 8	-105.92	667.97
Mar. 19	-100.60	673.69	May 19	- 97.75	676.14
Apr. 19	- 99.22	674.67	June 26	- 89.38	684.51
June 19	-104.12	669.77	Aug. 3	- 92.83	681.06
July 27	-103.86	670.03	Nov. 20	- 93.78	680.11
Aug. 22	-105.54	668.08			

Measurements discontinued.

Well 19

Formerly U. S. Geological Survey well 35. Dr. D. T. Atkinson, U. S. Highway 81 and New Braunfels Avenue, 4½ miles north. Top of casing, altitude 803.54 feet, 0.3 foot above land-surface datum.

1932, July 20	-131.77	671.47	1933, July 17	-131.83	671.41
Oct. 19	-128.30	674.94	Aug. 18	-131.70	671.54
1933, Jan. 23	-128.19	675.05	Sept.19	-131.31	671.93
Apr. 10	-128.90	674.34	Oct. 18	-132.01	671.23

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Water levels in wells in Bexar County -- Continued

Well 19 -- Continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Nov. 21	-132.02	671.22	1934, Nov. 19	-136.26	666.98
Dec. 20	-132.01	671.23	Dec. 20	-136.09	667.15
1934, Jan. 19	-131.70	671.54	1935, Jan. 31	-135.92	667.32
Feb. 20	-131.30	671.94	Mar. 1	-135.53	667.71
Mar. 20	-130.62	672.62	Apr. 8	-136.40	666.84
Apr. 19	-129.83	673.41	May 19	-128.33	674.91
May 22	-132.28	670.96	June 26	-118.48	684.76
June 20	-134.59	668.65	Aug. 3	-122.70	680.54
July 27	-134.53	668.71	Sept.26	-123.21	680.03
Aug. 23	-135.94	667.30	Nov. 19	-123.80	679.44
Sept.20	-136.25	666.99	1936, Jan. 18	-125.14	678.10
Oct. 12	-136.90	666.34	Aug. 28	-124.10	679.14
Oct. 25	-137.21	666.03	1937, Jan. 5	-122.89	680.35

Measurements discontinued.

Well 26

Formerly U. S. Geological Survey well 436. Ed. Steves and Sons, Burr and old Austin Roads, 4¼ miles northeast. Top of casing, altitude 724.06 feet, 1.5 feet above land-surface datum. Water stage recorded installed November 11, 1932. Highest daily water level in feet below land-surface datum and altitude in feet above mean sea level.

(from recorder graph)

1932, Nov. 12	- 46.96	675.60	1932, Dec. 5	- 46.82	675.74
Nov. 13	- 46.74	675.82	Dec. 6	- 46.68	675.88
Nov. 14	- 46.59	675.97	Dec. 7	- 46.73	675.83
Nov. 15	- 46.64	675.92	Dec. 8	- 46.75	675.81
Nov. 16	- 46.82	675.74	Dec. 9	- 46.62	675.94
Nov. 17	- 46.68	675.88	Dec. 10	- 46.66	675.90
Nov. 18	- 46.68	675.88	Dec. 14	- 46.56	676.00
Nov. 19	- 46.64	675.92	Dec. 15	- 46.57	675.99
Nov. 20	- 46.59	675.97	Dec. 16	- 46.55	676.01
Nov. 21	- 46.54	676.02	Dec. 17	- 46.72	675.84
Nov. 22	- 46.64	675.92	Dec. 18	- 46.75	675.81
Nov. 23	- 46.58	675.98	Dec. 19	- 46.68	675.88
Nov. 24	- 46.66	675.90	Dec. 20	- 46.65	675.91
Nov. 25	- 46.58	675.98	Dec. 21	- 46.62	675.94
Nov. 26	- 46.66	675.90	Dec. 23	- 46.51	676.05
Nov. 27	- 46.64	675.92	Dec. 24	- 46.53	676.03
Nov. 28	- 46.69	675.87	Dec. 25	- 46.61	675.95
Nov. 29	- 46.72	675.84	Dec. 26	- 46.55	676.01
Nov. 30	- 46.64	675.92	Dec. 27	- 46.52	676.04
Dec. 1	- 46.63	675.93	Dec. 28	- 46.53	676.03
Dec. 3	- 46.84	675.72	Dec. 29	- 46.52	676.04
Dec. 4	- 46.92	675.64	Dec. 30	- 46.46	676.10
			Dec. 31	- 46.75	675.81

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1933 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	46.79	675.77	-	-	46.61	675.95	-	-	47.97	674.59	-	-
2	46.67	675.89	-	-	46.46	676.10	-	-	48.38	674.18	48.43	674.13
3	46.62	675.94	46.57	675.99	46.48	676.08	-	-	48.42	674.14	48.62	673.94
4	46.57	675.99	46.58	675.98	46.48	676.08	-	-	48.30	674.26	48.64	673.92
5	46.65	675.91	46.63	675.93	46.37	676.19	-	-	48.50	674.06	48.56	674.00
6	46.70	675.86	46.47	676.09	46.33	676.23	-	-	48.45	674.11	48.73	673.83
7	46.60	675.96	46.40	676.16	46.27	676.29	-	-	48.45	674.11	48.80	673.76
8	46.61	675.95	46.88	675.68	46.26	676.30	-	-	-	-	48.97	673.59
9	46.58	675.98	47.18	675.38	46.31	676.25	-	-	-	-	49.07	673.49
10	46.54	676.02	47.10	675.46	46.46	676.10	-	-	-	-	-	-
11	46.48	676.08	-	-	46.42	676.14	-	-	-	-	-	-
12	46.56	676.00	-	-	46.38	676.18	-	-	-	-	-	-
13	46.56	676.00	-	-	46.32	676.24	-	-	-	-	-	-
14	46.58	675.98	-	-	46.37	676.19	47.66	674.90	-	-	-	-
15	46.45	676.11	-	-	46.55	676.01	47.26	675.30	-	-	-	-
16	46.38	676.18	-	-	46.59	675.97	47.43	675.13	-	-	-	-
17	46.37	676.19	45.55	677.01	46.62	675.94	47.38	675.18	48.72	673.84	-	-
18	46.37	676.19	45.63	676.93	46.55	676.01	47.50	675.06	48.85	673.71	-	-
19	46.41	676.15	45.59	676.97	46.63	675.93	-	-	48.91	673.65	-	-
20	46.40	676.16	45.60	676.96	46.58	675.98	-	-	48.87	673.69	-	-
21	46.35	676.21	45.66	676.90	46.67	675.89	-	-	48.88	673.68	-	-
22	46.35	676.21	45.74	676.82	46.67	675.89	-	-	48.72	673.84	48.86	673.70
23	-	-	45.75	676.81	46.90	675.66	-	-	49.00	673.56	49.01	673.55
24	46.30	676.26	45.75	676.81	46.90	675.66	-	-	49.07	673.49	49.16	673.40
25	46.36	676.20	-	-	46.99	675.57	47.51	675.05	-	-	49.23	673.33
26	46.38	676.18	-	-	46.95	675.61	47.48	675.08	-	-	49.13	673.43
27	46.48	676.08	-	-	46.82	675.74	47.63	674.93	-	-	49.44	673.12
28	46.50	676.06	46.62	675.94	46.78	675.78	47.90	674.66	-	-	49.51	673.05
29	46.37	676.19	-	-	46.72	675.84	48.00	674.56	-	-	49.68	672.88
30	46.38	676.18	-	-	-	-	48.06	674.50	-	-	-	-
31	46.43	676.13	-	-	-	-	-	-	-	-	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1933--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	-	-	49.87	672.69	49.52	673.04	49.44	673.12	50.20	672.36	50.33	672.23
2	-	-	49.78	672.78	49.40	673.16	49.35	673.21	50.15	672.41	50.43	672.13
3	-	-	49.80	672.76	49.35	673.21	49.30	673.26	50.16	672.40	50.32	672.24
4	-	-	49.93	672.63	49.13	673.43	49.36	673.20	50.10	672.46	50.28	672.28
5	-	-	49.96	672.60	49.16	673.40	49.52	673.04	50.13	672.43	50.34	672.22
6	-	-	49.94	672.62	49.28	673.28	49.72	672.84	50.08	672.48	50.43	672.13
7	-	-	49.87	672.69	49.45	673.11	49.84	672.72	50.07	672.49	50.44	672.12
8	49.58	672.98	50.03	672.53	49.61	672.95	49.94	672.62	49.98	672.58	50.46	672.10
9	49.54	673.02	50.11	672.45	49.77	672.79	49.85	672.71	50.09	672.47	50.36	672.20
10	49.38	673.18	50.24	672.32	49.80	672.76	50.10	672.46	50.29	672.27	50.26	672.30
11	49.71	672.85	50.26	672.30	49.70	672.86	50.14	672.42	50.30	672.26	50.06	672.50
12	49.99	672.57	50.25	672.31	49.94	672.62	50.14	672.42	50.27	672.29	50.18	672.38
13	50.13	672.43	50.28	672.28	50.08	672.48	50.25	672.31	50.21	672.35	50.19	672.37
14	50.18	672.38	50.08	672.48	50.24	672.32	50.36	672.20	50.32	672.24	50.19	672.37
15	50.26	672.30	50.49	672.07	50.22	672.34	50.20	672.36	50.33	672.23	50.23	672.33
16	50.19	672.37	50.11	672.45	50.13	672.43	50.13	672.43	50.53	672.03	50.16	672.40
17	49.94	672.62	50.05	672.51	49.82	672.74	50.13	672.43	50.55	672.01	50.14	672.42
18	50.22	672.34	50.00	672.56	49.57	672.99	50.32	672.24	50.55	672.01	50.04	672.52
19	50.41	672.15	49.98	672.58	49.53	673.03	50.46	672.10	50.51	672.05	50.09	672.47
20	50.45	672.11	49.90	672.66	49.48	673.08	50.48	672.08	50.26	672.30	50.11	672.45
21	50.62	671.94	49.78	672.78	49.62	672.94	50.52	672.04	50.33	672.23	50.10	672.46
22	50.62	671.94	50.00	672.56	49.80	672.76	50.51	672.05	50.44	672.12	50.10	672.46
23	50.50	672.06	50.19	672.37	49.74	672.82	50.35	672.21	50.53	672.03	50.11	672.45
24	50.31	672.25	50.37	672.19	49.77	672.79	50.50	672.06	50.55	672.01	50.08	672.48
25	50.57	671.99	50.01	672.55	49.52	673.04	50.62	671.94	50.55	672.01	50.00	672.56
26	50.57	671.99	49.86	672.70	49.35	673.21	50.65	671.91	50.55	672.01	49.84	672.72
27	50.77	671.79	49.73	672.83	49.22	673.34	50.64	671.92	50.26	672.30	50.30	672.26
28	50.82	671.74	49.64	672.92	49.21	673.35	50.56	672.00	50.45	672.11	50.36	672.20
29	50.69	671.87	49.81	672.75	-	-	50.39	672.17	50.50	672.06	50.11	672.45
30	50.20	672.36	49.94	672.62	49.34	673.22	50.20	672.36	50.47	672.09	50.04	672.52
31	49.86	672.70	49.76	672.80	-	-	50.28	672.28	-	-	50.11	672.45

Water levels in wells is Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1934 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	50.12	672.44	49.06	673.50	49.64	672.92	49.52	673.04	48.94	673.62	51.57	670.99
2	50.27	672.29	49.11	673.45	48.50	674.06	49.44	673.12	48.88	673.68	51.56	671.00
3	50.15	672.41	49.10	673.46	47.80	674.76	49.60	672.96	48.69	673.87	51.48	671.08
4	50.25	672.31	49.15	673.41	49.69	674.78	49.74	672.82	48.80	673.76	51.38	671.18
5	50.35	672.21	49.17	673.39	47.53	675.03	49.77	672.79	48.93	673.63	51.73	670.83
6	50.37	672.19	49.32	673.24	47.59	674.97	49.44	673.12	48.86	673.70	51.76	670.80
7	50.45	672.11	49.34	673.22	47.62	674.94	48.79	673.77	48.99	673.57	51.88	670.68
8	50.55	672.01	49.30	673.26	47.84	674.72	48.31	674.25	49.37	673.19	52.02	670.54
9	50.55	672.01	49.47	673.09	47.97	674.59	47.89	674.67	49.66	672.90	52.14	670.42
10	50.55	672.01	49.49	673.07	48.14	674.42	47.96	674.60	49.92	672.64	52.14	670.42
11	50.47	672.09	49.35	673.21	48.16	674.40	47.92	674.64	49.99	672.57	52.03	670.53
12	50.38	672.18	49.35	673.21	48.14	674.42	48.14	674.42	49.93	672.63	52.40	670.13
13	50.47	672.09	49.43	673.13	48.23	674.33	48.05	674.51	49.93	672.63	52.50	670.06
14	50.35	672.21	49.45	673.11	48.53	674.03	48.12	674.44	49.96	672.60	52.75	669.81
15	50.34	672.22	49.40	673.16	48.56	674.00	48.10	674.46	49.98	672.58	52.89	669.67
16	50.36	672.20	49.61	672.95	48.68	673.88	48.09	674.47	49.89	672.67	52.87	669.69
17	50.28	672.28	49.66	672.90	48.69	673.87	48.23	674.33	50.04	672.52	52.96	669.60
18	50.17	672.39	49.56	673.00	48.94	673.62	48.40	674.16	50.10	672.46	52.83	669.73
19	49.97	672.59	49.56	673.00	48.83	673.73	48.22	674.34	50.18	672.38	52.95	669.61
20	49.86	672.70	49.64	672.92	48.95	673.61	47.85	674.71	50.35	672.21	53.08	669.48
21	49.97	672.59	49.65	672.91	49.07	673.49	47.57	674.99	50.32	672.24	53.24	669.32
22	49.99	672.57	49.69	672.87	49.12	673.44	47.36	675.20	50.64	671.92	53.44	669.12
23	50.05	672.51	49.83	672.73	49.17	673.39	47.40	675.16	50.99	671.57	53.53	669.03
24	49.84	672.72	49.70	672.96	49.22	673.34	47.61	674.95	51.14	671.42	53.56	669.00
25	49.79	672.77	49.72	672.84	49.08	673.48	47.83	674.73	50.96	671.60	53.21	669.35
26	49.80	672.76	49.86	672.70	49.00	673.56	48.09	674.47	50.92	671.64	53.53	669.03
27	49.60	672.96	50.07	672.49	49.21	673.35	48.40	674.16	50.98	671.58	53.69	668.87
28	49.35	673.21	49.94	672.62	49.25	673.31	48.48	674.08	50.85	671.71	53.84	668.72
29	49.12	673.44	-	-	49.34	673.22	48.65	673.91	51.10	671.46	53.94	668.62
30	49.32	673.24	-	-	49.38	673.18	48.71	673.85	51.28	671.28	53.92	668.64
31	49.27	673.29	-	-	49.47	673.09	-	-	51.46	671.10	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1934--continued(from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	54.06	668.50	51.55	671.01	55.18	667.38	54.68	667.88	55.66	666.90	54.40	668.16
2	53.72	668.84	51.63	670.93	55.15	667.41	54.46	668.10	55.62	666.94	54.30	668.26
3	54.11	668.45	51.59	670.97	54.89	667.67	54.33	668.23	55.32	667.24	54.38	668.18
4	54.09	668.47	51.52	671.04	54.68	667.88	54.22	668.34	54.99	667.57	54.46	668.10
5	53.90	668.66	51.49	671.07	54.77	667.79	54.28	668.28	54.93	667.63	54.46	668.10
6	53.98	668.58	51.52	671.04	54.94	667.62	54.32	668.24	55.05	667.51	54.40	668.16
7	54.13	668.43	51.69	670.87	55.10	667.46	54.44	668.12	55.02	667.54	54.38	668.18
8	54.21	668.35	51.80	670.76	55.09	667.47	54.39	668.17	54.91	667.65	54.37	668.19
9	54.01	668.55	52.03	670.53	55.00	667.56	54.60	667.96	55.08	667.48	54.26	668.30
10	54.26	668.30	52.23	670.33	54.87	667.69	54.80	667.76	55.20	667.36	54.34	668.22
11	54.45	668.11	52.32	670.24	54.96	667.60	55.09	667.47	55.02	667.54	54.49	668.07
12	54.10	668.46	52.38	670.18	54.72	667.84	55.16	667.40	-	-	54.50	668.06
13	54.17	668.39	52.40	670.16	54.76	667.80	55.29	667.27	55.00	667.56	54.43	668.13
14	54.07	668.49	52.81	669.75	54.83	667.73	55.20	667.36	55.14	667.42	54.42	668.14
15	54.31	668.25	53.18	669.38	54.82	667.74	55.17	667.39	55.08	667.48	54.40	668.16
16	54.10	668.46	53.40	669.16	54.53	668.03	55.37	667.19	54.92	667.64	54.42	668.14
17	54.40	668.16	53.60	668.96	54.26	668.30	55.49	667.07	54.73	667.83	54.39	668.17
18	54.51	668.05	53.75	668.81	54.41	668.15	55.52	667.04	54.75	667.81	54.20	668.36
19	54.84	667.72	53.78	668.78	54.60	667.96	55.41	667.15	54.58	667.98	54.35	668.21
20	55.01	667.55	-	-	54.59	667.97	55.35	667.21	54.50	668.06	54.33	668.23
21	55.07	667.49	53.98	668.58	54.79	667.77	55.30	667.26	54.44	668.12	54.29	668.27
22	54.94	667.62	54.26	668.30	54.84	667.72	54.99	667.57	54.60	667.96	54.44	668.12
23	54.56	668.00	54.38	668.18	54.84	667.72	55.35	667.21	54.70	667.86	54.37	668.19
24	54.78	667.78	54.53	668.03	54.67	667.89	55.43	667.13	54.60	667.96	54.42	668.14
25	54.98	667.58	54.70	667.86	55.03	667.53	55.45	667.11	54.51	668.05	54.44	668.12
26	54.15	668.41	54.68	667.88	55.17	667.39	55.65	666.91	54.50	668.06	54.34	668.22
27	52.91	669.65	54.49	668.07	55.41	667.15	55.71	666.85	54.45	668.11	54.33	668.23
28	52.36	670.20	54.68	667.88	55.29	667.27	55.68	666.88	54.54	668.02	53.66	668.90
29	51.92	670.64	54.85	667.71	55.09	667.47	55.43	667.13	54.50	668.06	53.40	669.16
30	51.69	670.87	55.03	667.53	54.97	667.59	55.61	666.95	54.42	668.14	53.42	669.14
31	51.63	670.93	55.22	667.34	-	-	55.75	668.81	-	-	53.34	669.22

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1935 (from recorded graph)

	Jenuery		February		March		April		May		June	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	53.56	669.00	54.05	668.51	53.79	668.77	55.18	667.38	54.97	667.59	44.88	677.68
2	53.63	668.93	54.17	668.39	53.74	668.82	55.30	667.26	54.88	667.68	44.63	677.93
3	53.58	668.98	54.12	668.44	53.75	668.81	55.26	667.30	54.68	667.88	44.45	678.11
4	53.75	668.81	54.08	668.48	53.68	668.88	55.07	667.49	54.62	667.94	44.02	678.54
5	53.73	668.83	54.24	668.32	53.74	668.82	54.82	667.74	53.85	668.71	43.70	678.86
6	53.73	668.83	54.34	668.22	53.78	668.78	54.70	667.86	52.86	669.70	43.60	678.96
7	53.64	668.92	54.43	668.13	53.89	668.67	54.65	667.91	52.48	670.08	43.57	678.99
8	53.73	668.83	54.30	668.26	53.88	668.68	54.63	667.93	52.55	670.01	43.58	678.98
9	53.86	668.70	54.25	668.31	53.84	668.72	54.60	667.96	52.70	669.86	-	-
10	53.89	668.67	54.18	668.38	53.82	668.74	54.70	667.86	52.23	670.33	-	-
11	53.96	668.60	53.86	668.70	53.79	668.77	54.98	667.58	51.40	671.16	-	-
12	54.01	668.55	53.53	669.03	54.16	668.40	55.05	667.51	51.00	671.56	-	-
13	54.08	668.48	53.19	669.37	53.91	668.65	55.33	667.23	50.90	671.66	-	-
14	54.13	668.43	52.86	669.70	53.98	668.58	55.49	667.07	51.05	671.51	-	-
15	54.11	668.45	52.77	669.79	54.19	668.37	55.50	667.06	51.23	671.33	-	-
16	54.10	668.46	52.82	669.74	54.27	668.29	55.77	666.79	51.25	671.31	-	-
17	54.20	668.36	52.95	669.61	54.48	668.08	56.01	666.55	50.75	671.81	-	-
18	54.23	668.33	52.89	669.67	54.36	668.20	56.25	666.31	49.90	672.66	-	-
19	54.26	668.30	53.05	669.51	54.45	668.11	56.45	666.11	48.25	674.31	-	-
20	54.27	668.29	53.24	669.32	54.64	667.92	55.67	666.89	46.88	675.68	-	-
21	53.60	668.96	53.34	669.22	54.73	667.83	55.48	667.08	46.75	675.81	-	-
22	53.71	668.85	53.29	669.27	54.94	667.62	55.32	667.24	46.05	676.51	-	-
23	53.64	668.92	53.37	669.19	55.08	667.48	55.30	667.26	45.93	676.63	-	-
24	53.70	668.86	53.31	669.25	55.18	667.38	55.37	667.19	45.82	676.74	-	-
25	53.74	668.82	53.29	669.27	55.16	667.40	55.50	667.06	45.93	676.63	-	-
26	53.67	668.89	53.59	668.97	55.26	667.30	55.61	666.95	46.05	676.51	37.02	685.54
27	53.79	668.77	53.76	668.80	55.39	667.17	55.53	667.03	45.95	676.61	37.30	685.26
28	53.80	668.76	53.80	668.76	55.59	666.97	55.50	667.06	46.09	676.47	37.65	684.91
29	53.89	668.67	-	-	55.76	666.80	55.35	667.21	45.81	676.75	-	-
30	53.97	668.59	-	-	55.49	667.07	55.05	667.51	45.41	677.15	-	-
31	54.00	668.56	-	-	55.32	667.24	-	-	45.13	677.43	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1938--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	-	-	-	-	44.19	678.37	40.52	682.04	-	-	42.46	680.11
2	-	-	-	-	44.10	678.46	40.67	681.89	-	-	42.50	680.06
3	-	-	-	-	44.20	678.36	40.76	681.80	-	-	42.60	679.96
4	-	-	41.28	681.28	44.35	678.21	-	-	-	-	42.65	679.91
5	-	-	41.25	681.31	44.20	678.36	-	-	-	-	42.55	680.01
6	-	-	41.60	680.96	44.10	678.46	-	-	-	-	42.51	680.05
7	-	-	41.69	680.87	43.69	678.87	-	-	-	-	42.48	680.08
8	-	-	41.92	680.64	43.36	679.20	-	-	-	-	42.40	680.16
9	-	-	42.11	680.45	43.06	679.50	-	-	-	-	42.35	680.21
10	-	-	42.23	680.33	42.81	679.75	-	-	-	-	42.45	680.11
11	-	-	42.19	680.37	42.63	679.93	-	-	-	-	42.41	680.15
12	-	-	42.02	680.54	42.48	680.08	-	-	-	-	42.45	680.11
13	-	-	42.15	680.41	42.32	680.24	-	-	-	-	42.37	680.19
14	-	-	42.32	680.24	-	-	-	-	-	-	42.38	680.18
15	-	-	42.34	680.22	-	-	-	-	-	-	42.50	680.06
16	-	-	42.34	680.22	-	-	-	-	-	-	42.42	680.14
17	-	-	42.57	679.99	-	-	-	-	-	-	42.52	680.04
18	-	-	42.64	679.92	-	-	-	-	-	-	42.52	680.04
19	-	-	42.62	679.94	42.10	680.46	-	-	-	-	42.55	680.01
20	-	-	42.91	679.65	42.15	680.41	-	-	42.00	680.56	42.62	679.94
21	-	-	43.17	679.39	42.34	680.22	-	-	42.02	680.54	42.52	680.04
22	-	-	43.28	679.28	42.36	680.20	-	-	42.15	680.41	42.48	680.08
23	-	-	43.43	679.13	42.25	680.31	-	-	42.30	680.26	42.44	680.12
24	-	-	43.48	679.08	42.18	680.38	-	-	42.28	680.28	42.56	680.00
25	-	-	43.56	679.00	41.88	680.68	-	-	42.21	680.35	42.60	679.96
26	-	-	43.48	679.08	41.50	681.06	-	-	42.15	680.41	42.61	679.95
27	-	-	43.62	678.94	41.24	681.32	-	-	42.15	680.41	42.65	679.91
28	-	-	43.87	678.69	-	-	-	-	42.33	680.23	42.50	680.06
29	-	-	44.02	678.54	-	-	-	-	42.35	680.21	42.60	679.96
30	-	-	44.20	678.36	40.59	681.97	-	-	42.46	680.10	42.58	679.98
31	-	-	44.22	678.34	-	-	-	-	-	-	42.62	679.94

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1936 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	42.61	679.95	43.70	678.86	44.58	677.98	44.22	678.34	44.98	677.58	39.60	682.96
2	42.60	679.96	43.62	678.94	44.38	678.18	44.52	678.04	45.00	677.56	39.54	683.02
3	42.52	680.04	43.52	679.04	44.02	678.54	44.62	677.94	45.02	677.54	39.56	683.00
4	42.60	679.96	43.80	678.76	43.65	678.91	44.47	678.09	44.95	677.61	39.70	682.86
5	42.45	680.11	43.95	678.61	43.52	679.04	44.45	678.11	45.20	677.36	39.75	682.81
6	42.60	679.96	43.96	678.60	43.39	679.17	44.60	677.96	45.32	677.24	39.80	682.76
7	42.85	679.71	44.05	678.51	43.33	679.23	44.74	677.82	45.47	677.09	39.90	682.66
8	42.89	679.67	44.07	678.49	43.30	679.26	44.74	677.82	45.48	677.08	39.98	682.58
9	42.91	679.65	44.13	678.43	43.24	679.32	44.74	677.82	45.35	677.21	40.27	682.29
10	42.98	679.58	44.08	678.48	43.22	679.34	44.98	677.58	45.15	677.41	40.45	682.11
11	43.02	679.54	44.10	678.46	43.22	679.34	45.19	677.37	44.98	677.58	40.68	681.88
12	43.08	679.48	44.12	678.44	43.27	679.29	45.32	677.24	44.92	677.64	40.74	681.82
13	43.07	679.49	44.13	678.43	43.21	679.35	45.15	677.41	44.95	677.61	40.77	681.79
14	43.15	679.41	44.22	678.34	43.27	679.29	45.62	676.94	44.92	677.64	40.97	681.59
15	43.25	679.31	44.30	678.26	43.30	679.26	45.76	676.80	44.93	677.63	40.93	681.63
16	43.25	679.31	44.32	678.24	43.34	679.22	45.75	676.81	44.95	677.61	-	-
17	43.29	679.27	44.20	678.36	43.49	679.07	45.84	676.72	44.98	677.58	-	-
18	43.32	679.24	44.45	678.11	43.45	679.11	45.94	676.62	45.04	677.52	-	-
19	43.60	678.96	44.45	678.11	43.57	678.99	-	-	45.15	677.41	-	-
20	43.35	679.21	44.34	678.22	43.72	678.84	45.73	676.83	45.00	677.56	-	-
21	43.38	679.18	44.42	678.14	43.76	678.80	45.59	676.97	45.08	677.48	-	-
22	43.44	679.12	44.47	678.09	43.67	678.89	45.45	677.11	45.15	677.41	-	-
23	43.48	679.08	44.50	678.06	43.60	678.96	45.40	677.16	45.02	677.54	-	-
24	43.54	679.02	44.35	678.21	43.80	678.76	43.39	677.17	44.08	678.48	-	-
25	43.61	678.95	44.42	678.14	43.96	678.60	45.37	677.19	43.07	679.49	-	-
26	43.65	678.91	44.40	678.16	43.92	678.64	45.44	677.12	42.23	680.33	-	-
27	43.65	678.91	44.52	678.04	44.00	678.56	45.35	677.21	41.76	680.80	-	-
28	43.76	678.80	44.57	677.99	44.15	678.41	45.20	677.36	40.75	681.81	-	-
29	43.65	678.91	44.66	677.90	44.18	678.38	45.08	677.48	40.27	682.29	-	-
30	43.68	678.88	-	-	44.12	678.44	45.05	677.51	39.90	682.66	-	-
31	43.75	678.81	-	-	44.29	678.27	-	-	39.80	682.76	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1936--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	-	-	-	-	41.45	681.11	40.85	681.71	40.39	682.17	40.58	681.98
2	-	-	-	-	41.34	681.22	40.72	681.84	40.34	682.22	40.60	681.96
3	-	-	-	-	41.45	681.11	40.72	681.84	40.45	682.11	40.65	681.91
4	-	-	-	-	41.55	681.01	40.70	681.86	40.53	682.03	40.80	681.76
5	-	-	-	-	41.68	680.88	40.60	681.96	40.55	682.01	40.73	681.83
6	-	-	39.64	682.92	41.75	680.81	40.73	681.83	40.54	682.02	40.75	681.81
7	-	-	39.82	682.74	41.62	680.94	40.73	681.83	40.65	681.91	40.75	681.81
8	-	-	39.90	682.66	41.75	680.81	40.48	682.08	40.75	681.81	40.84	681.72
9	-	-	40.03	682.53	41.92	680.64	40.38	682.18	40.70	681.86	40.75	681.81
10	-	-	39.93	682.63	42.22	680.34	40.30	682.26	40.75	681.81	40.73	681.83
11	-	-	40.35	682.21	42.32	680.24	40.32	682.24	40.60	681.96	40.81	681.75
12	-	-	40.55	682.01	42.45	680.11	40.25	682.31	40.50	682.06	40.89	681.67
13	-	-	40.78	681.78	42.47	680.09	40.30	682.26	40.51	682.05	40.80	681.76
14	-	-	40.78	681.78	42.20	680.36	40.35	682.21	40.56	682.00	40.78	681.78
15	-	-	41.06	681.50	42.10	680.46	40.39	682.17	40.50	682.06	40.95	681.61
16	-	-	40.96	681.60	41.95	680.61	40.50	682.06	40.62	681.94	40.95	681.61
17	-	-	40.90	681.66	41.80	680.76	40.58	681.98	40.55	682.01	40.87	681.69
18	-	-	41.25	681.31	41.57	680.99	40.67	681.89	40.60	681.96	41.02	681.54
19	-	-	41.40	681.16	41.36	681.20	40.68	681.88	40.65	681.91	41.00	681.56
20	-	-	41.57	680.99	41.30	681.26	40.84	681.72	40.65	681.91	41.03	681.53
21	-	-	41.71	680.85	41.18	681.38	41.00	681.56	40.60	681.96	40.90	681.66
22	-	-	41.80	680.76	41.15	681.41	41.12	681.44	40.60	681.96	41.02	681.54
23	-	-	41.82	680.74	41.07	681.49	41.10	681.46	40.55	682.01	41.02	681.54
24	-	-	41.74	680.82	41.12	681.44	40.93	681.63	40.61	681.95	41.05	681.51
25	-	-	41.84	680.72	41.15	681.41	40.70	681.86	40.68	681.88	40.98	681.58
26	-	-	41.90	680.66	41.00	681.56	40.67	681.89	40.69	681.87	40.85	681.71
27	-	-	42.06	680.50	40.98	681.58	40.66	681.90	40.67	681.89	40.90	681.66
28	-	-	42.00	680.56	40.94	681.62	40.70	681.86	40.68	681.88	40.90	681.66
29	-	-	41.85	680.71	40.85	681.71	40.57	681.99	40.56	682.00	40.85	681.71
30	-	-	41.85	680.71	40.80	681.76	40.50	682.06	40.55	682.01	40.84	681.72
31	-	-	41.62	680.94	-	-	40.45	682.11	-	-	41.05	681.51

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1937 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	40.97	681.59	41.82	680.74	42.45	680.11	41.43	681.13	43.97	678.59	44.25	678.31
2	41.03	681.53	41.99	680.57	42.51	680.05	41.50	681.06	44.13	678.43	43.87	678.69
3	41.07	681.49	41.93	680.63	42.50	680.06	41.60	680.96	43.95	678.61	43.35	679.21
4	41.04	681.52	42.05	680.51	42.43	680.13	41.53	681.03	44.28	678.28	42.85	679.71
5	41.10	681.46	42.00	680.56	42.42	680.14	41.66	680.90	44.41	678.15	41.68	680.88
6	41.19	681.37	41.95	680.61	42.25	680.31	41.78	680.78	44.50	678.06	41.18	681.38
7	41.15	681.41	41.97	680.59	42.05	680.51	41.85	680.71	44.63	677.93	40.75	681.81
8	41.24	681.32	41.80	680.76	41.91	680.65	42.05	680.51	44.75	677.81	40.60	681.96
9	41.52	681.04	42.17	680.39	41.94	680.62	42.12	680.44	44.80	677.76	40.51	682.05
10	41.62	680.94	42.35	680.21	41.80	680.76	42.23	680.33	44.66	677.90	40.48	682.08
11	41.52	681.04	42.47	680.09	41.70	680.86	42.32	680.24	44.89	677.67	40.57	681.99
12	41.42	681.14	42.47	680.09	41.77	680.79	42.23	680.33	44.98	677.58	40.56	682.00
13	41.41	681.15	42.46	680.10	41.75	680.81	42.26	680.30	45.19	677.37	40.66	681.90
14	41.38	681.18	42.48	680.08	41.60	680.96	42.29	680.27	44.82	677.74	40.61	681.95
15	41.48	681.08	42.29	680.27	41.57	680.99	42.34	680.22	44.82	677.74	40.87	681.69
16	41.48	681.08	42.36	680.20	41.46	681.10	42.57	679.99	44.82	677.74	41.03	681.53
17	41.28	681.28	42.45	680.11	41.43	681.13	42.77	679.79	44.74	677.82	41.22	681.34
18	41.34	681.22	42.62	679.94	41.46	681.10	42.95	679.61	45.01	677.55	41.42	681.14
19	41.42	681.14	42.54	680.02	41.42	681.14	42.92	679.64	45.17	677.39	41.57	680.99
20	41.38	681.18	42.54	680.02	41.45	681.11	43.21	679.35	45.34	677.22	41.81	680.75
21	41.46	681.10	42.60	679.96	41.53	681.03	43.21	679.35	45.44	677.12	41.78	680.78
22	41.56	681.00	42.50	680.06	41.44	681.12	42.85	679.71	45.48	677.08	42.02	680.54
23	41.73	680.83	42.44	680.12	41.50	681.06	42.70	679.86	45.55	677.01	42.23	680.33
24	41.60	680.96	42.45	680.11	41.50	681.06	42.76	679.80	45.47	677.09	42.40	680.16
25	41.54	681.02	42.57	679.99	41.40	681.16	42.77	679.79	45.70	676.86	42.62	679.94
26	41.73	680.83	42.62	679.94	41.41	681.15	42.74	679.82	45.64	676.92	42.66	679.90
27	41.87	680.69	42.50	680.06	41.43	681.13	42.97	679.59	45.70	676.86	42.78	679.78
28	41.89	680.67	42.54	680.02	41.43	681.13	43.08	679.48	45.80	676.76	42.70	679.86
29	41.91	680.65	-	-	41.34	681.22	43.43	679.13	45.20	677.36	42.90	679.66
30	41.89	680.67	-	-	41.37	681.19	43.78	678.78	44.93	677.63	42.82	679.74
31	41.83	680.73	-	-	41.42	681.14	-	-	44.78	677.78	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1937--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	42.88	679.68	45.07	677.49	-	-	47.26	675.30	46.61	675.95	46.82	675.74
2	43.20	679.36	45.00	677.56	-	-	47.18	675.38	46.79	675.77	46.91	675.65
3	43.30	679.26	45.26	677.30	-	-	47.15	675.41	46.93	675.63	46.88	675.68
4	43.25	679.31	45.32	677.24	46.85	675.71	47.05	675.51	46.91	675.65	46.89	675.67
5	42.94	679.62	45.40	677.16	46.80	675.76	47.30	675.26	46.96	675.60	46.84	675.72
6	42.95	679.61	45.40	677.16	46.63	675.93	47.40	675.16	46.98	675.58	46.79	675.77
7	43.05	679.51	45.65	676.91	46.80	675.76	47.62	674.94	46.93	675.63	46.70	675.86
8	43.25	679.31	45.82	676.74	46.85	675.71	47.57	674.99	46.78	675.78	46.76	675.80
9	43.18	679.38	45.68	676.88	47.01	675.55	47.64	674.92	46.90	675.66	46.88	675.68
10	43.01	679.55	45.92	676.64	47.07	675.49	47.52	675.04	46.69	675.87	46.93	675.63
11	42.93	679.63	46.15	676.41	47.05	675.51	47.24	675.32	46.68	675.88	46.89	675.67
12	42.80	679.76	46.25	676.31	46.89	675.67	47.43	675.13	46.68	675.88	46.79	675.77
13	42.92	679.64	46.32	676.24	46.73	675.83	47.48	675.08	46.74	675.82	46.68	675.88
14	42.97	679.59	46.31	676.25	47.00	675.56	46.95	675.61	46.75	675.81	46.81	675.75
15	43.20	679.36	46.35	676.21	47.04	675.52	46.70	675.86	46.62	675.94	46.64	675.92
16	43.27	679.29	46.12	676.44	47.06	675.50	46.55	676.01	46.79	675.77	46.28	676.28
17	43.40	679.16	46.20	676.36	47.02	675.54	46.33	676.23	46.86	675.70	46.13	676.43
18	43.35	679.21	46.22	676.34	47.03	675.53	46.13	676.43	46.87	675.69	46.13	676.43
19	43.28	679.28	46.38	676.18	46.85	675.71	46.20	676.36	46.97	675.59	46.07	676.49
20	43.58	678.98	46.50	676.06	46.70	675.86	46.24	676.32	47.21	675.35	46.19	676.37
21	43.86	678.70	46.50	676.06	46.98	675.58	46.14	676.42	47.04	675.52	46.22	676.34
22	44.03	678.53	46.45	676.11	47.15	675.41	46.24	676.32	46.91	675.65	46.15	676.41
23	44.16	678.40	46.30	676.26	47.28	675.28	46.25	676.31	46.91	675.65	46.21	676.35
24	44.28	678.28	46.67	675.89	47.30	675.26	46.21	676.35	46.86	675.70	46.19	676.37
25	44.34	678.22	46.70	675.86	47.23	675.33	46.13	676.43	46.82	675.74	46.17	676.39
26	44.30	678.26	46.88	675.68	47.13	675.43	46.22	676.34	46.73	675.83	46.11	676.45
27	44.56	678.00	46.85	675.71	46.90	675.66	46.39	676.17	46.67	675.89	46.07	676.49
28	44.74	677.82	46.87	675.69	47.05	675.51	46.52	676.04	46.82	675.74	46.14	676.42
29	44.90	677.66	46.76	675.80	47.16	675.40	46.58	675.98	46.76	675.80	46.11	676.45
30	44.95	677.61	46.58	675.98	47.25	675.31	46.70	675.86	46.83	675.73	45.40	677.16
31	45.05	677.51	46.70	675.86	-	-	46.77	675.79	-	-	44.88	677.68

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1938 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	44.68	677.88	41.84	680.72	43.23	679.33	43.92	678.64	41.45	681.11	42.55	680.01
2	44.52	678.04	41.72	680.84	43.24	679.32	44.07	678.49	41.30	681.26	42.69	679.87
3	44.47	678.09	41.80	680.76	43.30	679.26	44.10	678.46	41.30	681.26	42.75	679.81
4	44.60	677.96	41.85	680.71	43.30	679.26	44.02	678.54	41.35	681.21	42.95	679.61
5	44.57	677.99	41.87	680.69	43.45	679.11	44.10	678.46	41.20	681.36	43.12	679.44
6	44.52	678.04	41.98	680.58	43.63	678.93	44.13	678.43	41.17	681.39	43.05	679.51
7	44.69	677.87	42.01	680.55	43.55	679.01	44.22	678.34	41.28	681.28	43.15	679.41
8	44.72	677.84	42.11	680.45	43.61	678.95	44.15	678.41	41.29	681.27	43.51	679.09
9	44.66	677.90	42.20	680.36	43.50	679.06	44.20	678.36	41.18	681.38	43.50	679.06
10	44.63	677.93	42.34	680.22	43.50	679.06	44.20	678.36	41.26	681.30	43.49	679.07
11	44.64	677.92	42.34	680.22	43.43	679.13	44.15	678.41	41.40	681.16	43.74	678.82
12	44.65	677.91	42.46	680.10	43.45	679.11	44.35	678.21	41.61	680.95	43.95	678.61
13	44.75	677.81	42.47	680.09	43.43	679.13	44.42	678.14	41.70	680.86	43.95	678.61
14	44.73	677.83	42.50	680.06	43.37	679.19	44.47	678.09	41.75	680.81	44.45	678.11
15	44.80	677.76	42.68	679.88	43.44	679.12	44.52	678.04	41.90	680.66	44.50	678.06
16	44.82	677.74	42.81	679.75	43.55	679.01	44.60	677.96	41.83	680.73	44.44	678.12
17	44.77	677.79	42.88	679.68	43.65	678.91	44.77	677.79	41.69	680.88	44.46	678.10
18	44.86	677.70	42.88	679.68	43.66	678.90	44.60	677.96	41.61	680.95	44.60	677.96
19	44.90	677.66	43.09	679.47	43.82	678.74	44.54	678.02	41.62	680.94	44.70	677.86
20	44.92	677.64	43.10	679.46	43.75	678.81	44.40	678.16	41.68	680.88	44.79	677.77
21	44.94	677.62	43.07	679.49	43.75	678.81	44.12	678.44	41.68	680.88	45.01	677.55
22	45.02	677.54	43.11	679.45	43.81	678.75	43.94	678.62	41.72	680.84	45.19	677.37
23	44.72	677.84	43.04	679.52	43.88	678.68	43.61	678.95	41.69	680.87	45.36	677.20
24	43.27	679.29	43.12	679.44	43.88	678.68	43.35	679.21	41.78	680.78	45.39	677.17
25	42.83	679.73	43.14	679.42	43.92	678.64	42.91	679.65	41.75	680.81	45.47	677.09
26	42.47	680.09	43.17	679.39	44.02	678.54	42.68	679.88	41.76	680.80	45.55	677.01
27	42.18	680.38	43.17	679.39	44.02	678.54	42.55	680.01	41.82	680.74	45.28	677.28
28	41.98	680.58	43.16	679.40	43.80	678.76	42.15	680.41	41.92	680.64	45.44	677.12
29	41.78	680.78	-	-	43.82	678.74	41.85	680.71	42.06	680.50	45.64	676.92
30	41.63	680.93	-	-	43.85	678.71	41.68	680.88	42.12	680.44	45.80	676.76
31	41.78	680.78	-	-	43.93	678.63	-	-	42.28	680.28	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1938--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	45.94	676.62	46.67	675.89	48.33	674.23	48.55	674.01	48.83	673.73	48.56	674.00
2	46.05	676.51	47.01	675.55	48.42	674.14	48.60	673.96	48.72	673.84	48.55	674.01
3	46.06	676.50	47.20	675.36	48.47	674.09	48.44	674.12	48.90	673.66	48.57	673.99
4	45.94	676.62	47.20	675.36	48.33	674.23	48.67	673.89	48.80	673.76	48.56	674.00
5	46.06	676.50	47.28	675.28	48.00	674.56	48.81	673.75	48.80	673.76	48.66	673.90
6	46.26	676.30	47.33	675.23	48.08	674.48	48.82	673.74	48.62	673.94	48.55	674.01
7	46.37	676.19	47.31	675.25	48.28	674.28	48.84	673.72	48.67	673.89	48.52	674.04
8	46.57	675.99	47.18	675.38	48.28	674.28	48.75	673.81	48.56	674.00	48.63	673.93
9	46.45	676.11	47.49	675.07	48.29	674.27	48.65	673.91	48.55	674.01	48.70	673.86
10	46.47	676.09	46.65	675.91	48.40	674.16	48.43	674.13	48.50	674.06	48.73	673.83
11	46.33	676.23	47.81	674.75	48.25	674.31	48.57	673.99	48.43	674.13	48.86	673.70
12	46.61	675.95	47.93	674.63	47.95	674.61	48.66	673.90	48.40	674.16	48.85	673.71
13	46.69	675.87	47.90	674.66	47.81	674.75	48.80	673.76	48.42	674.14	48.87	673.69
14	46.90	675.66	47.81	674.75	47.76	674.80	48.85	673.71	48.45	674.11	48.84	673.72
15	46.85	675.71	47.66	674.90	47.69	674.87	-	-	48.45	674.11	48.94	673.62
16	46.97	675.59	47.99	674.57	47.57	674.99	-	-	48.34	674.22	48.90	673.66
17	46.91	675.65	48.27	674.29	47.49	675.07	-	-	48.40	674.16	49.04	673.52
18	46.76	675.80	48.32	674.24	47.41	675.15	48.85	673.71	48.32	674.24	48.98	673.58
19	47.11	675.45	48.44	674.12	47.37	675.19	48.58	673.98	48.30	674.26	48.95	673.61
20	47.19	675.37	48.38	674.18	47.45	675.11	48.68	673.88	48.40	674.16	48.98	673.58
21	47.37	675.19	48.33	674.23	47.63	674.93	48.82	673.74	48.55	674.01	48.88	673.68
22	47.24	675.32	48.09	674.47	47.73	674.83	48.90	673.66	48.50	674.06	48.90	673.66
23	46.98	675.58	48.45	674.11	47.80	674.76	-	-	48.35	674.21	49.03	673.53
24	46.65	675.91	48.49	674.07	47.92	674.64	48.69	673.87	48.55	674.01	48.92	673.64
25	46.40	676.16	48.33	674.23	47.98	674.58	48.61	673.95	48.73	673.83	48.89	673.67
26	46.65	675.91	48.30	674.26	47.80	674.76	48.48	674.08	48.84	673.72	48.90	673.66
27	46.69	675.87	48.35	674.21	48.09	674.47	48.70	673.86	48.68	673.88	48.78	673.78
28	46.85	675.71	48.23	674.33	48.27	674.29	48.72	673.84	48.65	673.91	48.55	674.01
29	46.90	675.66	47.93	674.63	48.40	674.16	48.84	673.72	48.75	673.81	48.75	673.81
30	46.96	675.60	48.06	674.50	48.45	674.11	48.90	673.66	48.61	673.95	48.73	673.83
31	46.79	675.77	48.32	674.24	-	-	48.89	673.67	-	-	48.53	674.03

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1939 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	-	-	48.66	673.90	49.45	673.11	50.79	671.77	52.86	669.70	53.67	668.89
2	48.50	674.06	48.75	673.81	49.52	673.04	50.91	671.65	53.29	669.27	53.38	669.18
3	48.46	674.10	48.92	673.64	49.42	673.14	50.93	671.63	53.45	669.11	53.27	669.29
4	48.47	674.09	49.00	673.56	49.37	673.19	51.26	671.30	53.56	669.00	53.13	669.43
5	48.65	673.91	48.95	673.63	49.53	673.03	51.46	671.10	53.36	669.20	52.96	669.60
6	48.67	673.89	48.86	673.70	49.58	672.98	51.67	670.89	53.48	669.08	53.07	669.49
7	48.75	673.81	48.97	673.59	49.73	672.83	51.58	670.98	53.43	669.13	53.16	669.40
8	48.69	673.87	49.06	673.50	49.53	673.03	51.57	670.99	53.35	669.21	53.20	669.36
9	48.61	673.95	48.93	673.63	49.53	673.03	51.52	671.04	53.86	668.70	53.25	669.31
10	48.64	673.92	49.19	673.37	49.58	672.98	51.35	671.21	54.04	668.52	53.47	669.09
11	48.62	673.94	49.38	673.18	49.61	672.95	51.93	670.63	54.46	668.10	53.70	668.86
12	48.59	673.97	49.43	673.13	49.83	672.73	52.20	670.36	54.61	667.95	53.61	668.95
13	48.60	673.96	49.25	673.31	49.78	672.78	52.20	670.36	54.67	667.89	54.06	668.50
14	48.57	673.99	49.28	673.28	49.86	672.70	52.09	670.47	54.14	668.42	54.38	668.18
15	48.58	673.98	49.45	673.11	50.02	672.54	52.07	670.49	53.79	668.77	54.65	667.91
16	48.56	674.00	49.46	673.10	50.10	672.46	52.07	670.49	54.06	668.50	54.87	667.69
17	48.50	674.06	49.48	673.08	50.10	672.46	52.03	670.53	54.22	668.34	54.95	667.61
18	48.59	673.97	49.38	673.18	50.12	672.44	52.44	670.12	53.34	668.22	55.07	667.49
19	48.62	673.94	49.16	673.40	50.12	672.44	52.54	670.02	54.40	668.16	54.82	667.74
20	48.62	673.94	49.06	673.50	50.03	672.53	52.82	669.74	54.68	667.88	55.25	667.31
21	48.62	673.94	49.48	673.08	50.21	672.35	53.04	669.52	54.68	667.88	55.26	667.30
22	48.67	673.89	49.72	672.84	50.28	672.28	53.08	669.50	54.45	668.11	55.50	667.06
23	48.53	674.03	49.60	672.96	50.41	672.15	53.07	669.49	54.89	667.67	55.55	667.01
24	48.60	673.96	49.49	673.07	50.37	672.19	52.95	669.61	55.11	667.45	55.81	666.75
25	48.79	673.77	49.37	673.19	50.25	672.31	53.17	669.39	55.17	667.39	55.75	666.81
26	48.71	673.85	49.47	673.09	50.08	672.48	53.46	669.10	54.74	667.82	55.53	667.03
27	48.71	673.85	49.34	673.22	50.01	672.55	53.32	669.24	54.87	667.69	55.88	666.68
28	48.53	674.03	49.44	673.12	50.27	672.29	53.21	669.35	54.87	667.69	56.22	666.34
29	48.45	674.11	-	-	50.56	672.00	53.21	669.35	54.59	667.97	56.34	666.22
30	48.56	674.00	-	-	50.59	671.97	53.07	669.49	54.82	667.74	56.46	666.10
31	48.65	673.91	-	-	50.66	671.90	-	-	54.12	668.44	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1939--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	56.54	666.02	-	-	-	-	-	-	-	-	54.67	667.89
2	56.43	666.13	-	-	-	-	-	-	-	-	54.71	667.85
3	56.24	666.32	-	-	-	-	-	-	-	-	54.62	667.94
4	56.50	666.06	-	-	-	-	-	-	-	-	54.54	668.02
5	56.61	665.95	-	-	-	-	-	-	-	-	54.72	667.84
6	56.87	665.69	-	-	-	-	-	-	-	-	54.79	667.77
7	-	-	-	-	-	-	-	-	-	-	54.77	667.79
8	-	-	-	-	-	-	-	-	-	-	54.82	667.74
9	-	-	-	-	-	-	-	-	-	-	54.79	667.77
10	-	-	-	-	-	-	-	-	-	-	54.74	667.82
11	-	-	-	-	-	-	-	-	-	-	54.67	667.89
12	56.66	665.90	-	-	-	-	-	-	-	-	54.87	667.69
13	55.84	666.92	-	-	-	-	-	-	-	-	55.12	667.44
14	55.18	667.38	-	-	-	-	-	-	-	-	55.17	667.39
15	54.83	667.73	-	-	-	-	-	-	-	-	55.14	667.42
16	54.44	668.12	-	-	-	-	-	-	55.07	667.49	55.08	667.48
17	54.01	668.55	-	-	-	-	-	-	54.98	667.58	55.12	667.44
18	54.16	668.40	-	-	-	-	-	-	54.91	667.65	54.84	667.72
19	54.42	668.14	-	-	-	-	-	-	54.80	667.76	55.02	667.54
20	54.56	668.00	-	-	-	-	-	-	54.70	667.86	55.07	667.49
21	-	-	-	-	-	-	-	-	54.85	667.71	55.04	667.52
22	-	-	-	-	-	-	-	-	54.85	667.71	55.02	667.54
23	-	-	-	-	-	-	-	-	54.90	667.66	54.88	667.68
24	-	-	-	-	-	-	-	-	54.90	667.66	55.02	667.54
25	-	-	-	-	-	-	-	-	54.96	667.60	54.77	667.79
26	-	-	-	-	-	-	-	-	55.00	667.56	54.47	668.09
27	-	-	-	-	-	-	-	-	54.85	667.71	54.52	668.04
28	-	-	-	-	-	-	-	-	55.00	667.56	54.52	668.04
29	-	-	-	-	-	-	-	-	54.95	667.61	54.62	667.94
30	-	-	-	-	-	-	-	-	54.79	667.77	54.49	668.07
31	-	-	-	-	-	-	-	-	-	-	54.34	668.22

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1940 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	54.22	668.34	55.00	667.56	55.84	666.72	-	-	57.86	664.70	56.67	665.89
2	54.30	668.26	54.90	667.66	55.95	666.61	-	-	58.05	664.51	56.79	665.77
3	54.35	668.21	54.88	667.68	56.08	666.48	-	-	58.23	664.33	56.74	665.82
4	54.24	668.32	54.69	667.87	55.90	666.66	-	-	58.50	664.06	57.05	665.51
5	54.34	668.22	54.51	668.05	56.10	666.46	-	-	58.65	663.91	57.29	665.27
6	54.27	668.29	54.54	668.02	56.05	666.51	-	-	58.60	663.96	57.55	665.01
7	54.19	668.37	54.66	667.90	56.29	666.27	-	-	59.15	663.41	57.73	664.83
8	54.22	668.34	54.71	667.85	56.47	666.09	-	-	59.22	663.34	58.00	664.56
9	54.27	668.29	54.92	667.64	56.55	666.01	-	-	59.35	663.21	58.15	664.41
10	54.17	668.39	54.87	667.69	56.51	666.05	-	-	58.35	664.21	57.68	664.88
11	54.07	668.49	54.78	667.78	56.41	666.15	-	-	58.11	664.45	57.90	664.66
12	54.16	668.40	54.70	667.86	56.65	665.91	-	-	57.99	664.57	58.30	664.26
13	54.07	668.49	54.97	667.59	56.95	665.61	-	-	57.78	664.78	58.65	663.91
14	54.20	668.36	55.25	667.31	56.86	665.70	-	-	57.96	664.60	58.20	664.36
15	54.36	668.20	55.25	667.31	57.06	665.50	-	-	58.26	664.30	57.73	664.83
16	54.39	668.17	55.17	667.39	57.10	665.46	-	-	58.55	664.01	57.10	665.46
17	54.36	668.20	55.15	667.41	57.02	665.54	-	-	58.52	664.04	56.82	665.74
18	54.37	668.19	55.23	667.33	56.90	665.66	-	-	58.35	664.21	56.85	665.71
19	55.04	667.52	55.05	667.51	57.20	665.36	-	-	58.21	664.35	56.95	665.61
20	55.38	667.18	55.35	667.21	57.00	665.56	-	-	57.81	664.75	56.45	666.11
21	55.22	667.34	55.42	667.14	56.85	665.71	-	-	58.05	664.51	-	-
22	55.00	667.56	55.55	667.01	-	-	-	-	58.30	664.26	55.98	666.58
23	55.08	667.48	55.42	667.14	-	-	-	-	57.92	664.64	53.80	666.76
24	55.18	667.38	55.44	667.12	-	-	-	-	57.07	665.49	55.70	666.86
25	55.28	667.28	55.57	666.99	-	-	-	-	56.89	665.67	55.81	666.75
26	55.26	667.30	55.45	667.11	-	-	-	-	56.90	665.66	56.02	666.54
27	55.26	667.30	55.38	667.18	-	-	57.98	664.58	56.81	665.75	56.30	666.26
28	55.13	667.43	55.54	667.02	-	-	57.82	664.74	56.95	665.61	56.47	666.09
29	54.93	667.63	55.65	666.91	-	-	57.37	665.19	56.92	665.64	56.61	665.95
30	54.98	667.58	-	-	-	-	57.56	665.00	56.60	665.96	54.92	667.64
31	55.00	667.56	-	-	-	-	-	-	56.55	666.01	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1940--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	54.66	667.90	58.90	663.66	62.39	662.17	60.28	662.28	58.60	663.96	56.18	666.38
2	54.83	667.73	58.96	663.61	60.08	662.48	60.48	662.08	58.44	664.12	56.34	666.22
3	54.96	667.60	59.14	663.42	60.20	662.36	60.70	661.86	58.32	664.24	56.59	665.97
4	55.11	667.45	59.06	663.50	60.51	662.05	60.85	661.71	58.13	664.43	56.66	665.90
5	55.13	667.43	59.02	663.54	60.69	661.87	61.05	661.51	58.21	664.35	56.78	665.78
6	55.33	667.23	59.39	663.17	60.90	661.66	61.07	661.49	58.06	664.50	56.87	665.69
7	55.49	667.07	59.56	663.00	61.01	661.55	60.74	661.82	58.09	664.47	56.93	665.63
8	55.51	667.05	59.75	662.81	61.04	661.52	60.30	662.26	58.09	664.47	57.06	665.50
9	55.93	666.63	59.97	662.59	60.74	661.82	60.14	662.42	57.90	664.66	57.04	665.52
10	56.28	666.28	60.03	662.53	61.12	661.44	60.12	662.44	57.80	664.76	57.15	665.41
11	56.61	665.95	59.86	662.70	61.46	661.10	60.15	662.41	57.82	664.74	57.23	665.33
12	56.86	665.70	59.74	662.82	61.42	661.14	60.19	662.37	57.94	664.62	57.27	665.29
13	56.94	665.62	60.13	662.43	61.43	661.13	60.11	662.45	58.13	664.43	56.56	666.00
14	56.67	665.89	60.31	662.25	61.39	661.17	59.86	662.70	58.27	664.29	55.87	666.69
15	56.31	666.25	60.35	662.21	61.16	661.40	60.00	662.56	58.33	664.23	55.20	667.36
16	56.32	666.24	60.43	662.13	60.93	661.63	60.05	662.51	58.26	664.30	53.64	668.92
17	56.20	666.36	60.61	661.95	61.34	661.22	60.15	662.41	58.21	664.35	52.72	669.84
18	56.06	666.50	60.76	661.80	61.49	661.07	60.29	662.27	58.13	664.43	52.23	670.33
19	56.21	666.35	60.26	662.30	61.53	661.03	60.40	662.16	58.23	664.33	51.92	670.64
20	56.38	666.18	60.12	662.44	61.60	660.96	60.34	662.22	58.39	664.17	51.69	670.87
21	56.50	666.06	60.24	662.32	61.46	661.10	60.29	662.27	58.42	664.14	51.55	671.01
22	56.41	666.15	60.32	662.24	61.13	661.43	60.63	661.93	58.52	664.04	51.48	671.08
23	56.92	665.64	60.41	662.15	60.61	661.95	60.87	661.69	58.23	664.33	51.33	671.23
24	57.06	665.50	60.54	662.02	60.56	662.00	60.97	661.59	57.40	665.16	51.32	671.24
25	57.30	665.26	60.42	662.14	60.51	662.05	60.56	662.00	56.44	666.12	51.23	671.33
26	57.56	665.00	60.36	662.20	60.41	662.15	60.12	662.44	56.02	666.54	51.13	671.43
27	57.76	664.80	60.72	661.84	60.31	662.25	59.77	662.79	56.02	666.54	51.35	671.21
28	57.85	664.71	61.05	661.51	60.34	662.22	59.51	663.05	56.12	666.44	51.47	671.09
29	57.75	664.81	60.82	661.74	60.29	662.27	59.53	663.03	56.10	666.46	51.68	670.88
30	58.25	664.31	60.78	661.78	60.17	662.39	59.42	663.14	56.18	666.38	51.77	670.79
31	58.68	663.88	60.57	661.99	-	-	59.31	663.25	-	-	51.85	670.71

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1941 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	52.07	670.49	53.99	668.57	48.11	674.45	45.67	676.89	42.45	680.11	41.76	680.80
2	52.18	670.38	51.42	671.14	48.04	674.52	45.73	676.83	42.17	680.39	41.67	680.89
3	52.33	670.23	50.02	672.54	48.10	674.46	45.74	676.82	41.64	680.92	41.86	680.70
4	52.48	670.08	49.31	673.25	48.22	674.34	45.88	676.68	41.09	681.47	41.89	680.67
5	52.49	670.07	48.76	673.80	48.26	674.30	46.00	676.56	40.69	681.87	41.93	680.63
6	52.53	670.03	48.29	674.27	48.16	674.40	46.02	676.54	40.41	682.15	41.97	680.59
7	52.74	669.82	48.09	674.47	48.22	674.34	45.91	676.65	40.20	682.36	42.01	680.55
8	52.94	669.62	48.00	674.56	48.28	674.28	45.92	676.64	40.16	682.40	41.99	680.57
9	53.13	669.43	47.80	674.76	48.23	674.33	45.94	676.62	40.10	682.46	41.94	680.62
10	53.26	669.30	47.59	674.97	48.17	674.39	46.12	676.44	40.17	682.39	42.16	680.40
11	53.33	669.23	47.67	674.89	48.37	674.19	46.18	676.38	40.18	682.38	42.21	680.35
12	53.31	669.25	47.55	675.01	48.47	674.09	46.32	676.24	40.10	682.46	42.34	680.22
13	53.24	669.32	47.50	675.06	48.75	673.81	46.09	676.47	40.22	682.34	42.38	680.18
14	53.16	669.40	47.69	674.87	48.74	673.82	45.99	676.57	40.35	682.21	42.49	680.07
15	53.19	669.37	47.74	674.82	48.66	673.90	46.07	676.49	40.61	681.95	42.67	679.89
16	53.31	669.25	47.71	674.85	48.63	673.93	46.08	676.48	40.77	681.79	42.58	679.98
17	53.46	669.10	47.62	674.94	48.65	673.91	46.12	676.44	40.99	681.57	42.51	680.05
18	53.67	668.89	47.73	674.83	48.45	674.11	46.29	676.27	41.14	681.42	42.54	680.02
19	53.82	668.74	47.80	674.76	47.82	674.74	46.42	676.14	40.95	681.61	42.65	679.91
20	53.75	668.81	47.90	674.66	47.32	675.24	46.67	675.89	41.21	681.35	42.77	679.79
21	53.80	668.76	48.05	674.51	47.02	675.54	46.67	675.89	41.55	681.01	43.00	679.56
22	53.90	668.66	48.17	674.39	46.83	675.73	46.64	675.92	41.25	681.31	43.00	679.56
23	53.99	668.57	48.11	674.45	45.62	676.94	46.70	675.86	41.27	681.29	42.91	679.65
24	54.13	668.43	48.08	674.48	46.38	676.18	46.91	675.65	41.20	681.36	43.22	679.34
25	54.22	668.34	47.98	674.58	46.25	676.31	47.08	675.48	41.20	681.36	43.49	679.07
26	54.27	668.29	47.97	674.59	46.17	676.39	47.20	675.36	41.14	681.42	43.55	679.01
27	54.30	668.26	48.14	674.42	46.05	676.51	47.16	675.40	41.30	681.26	43.42	679.14
28	54.25	668.31	48.12	674.44	46.07	676.49	45.38	677.18	41.31	681.25	43.21	679.35
29	54.18	668.38	-	-	46.04	676.52	43.60	678.96	41.50	681.06	43.16	679.40
30	54.17	668.39	-	-	45.79	676.77	42.81	679.75	41.51	681.05	43.09	679.47
31	54.24	668.32	-	-	45.64	676.92	-	-	41.63	680.93	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1941--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	43.38	679.18	47.00	675.56	48.55	674.01	46.30	676.26	44.73	677.83	44.82	677.74
2	43.62	678.94	47.19	675.37	48.63	673.93	46.20	676.36	44.75	677.81	44.94	677.62
3	43.89	678.67	47.12	675.44	49.09	673.47	46.20	676.36	44.65	677.91	45.00	677.56
4	44.01	678.55	46.81	675.75	48.20	673.36	45.67	676.89	44.73	677.83	45.04	677.52
5	44.04	678.52	47.12	675.44	49.40	673.16	44.55	678.01	44.83	677.73	45.08	677.48
6	44.11	678.45	47.00	675.56	49.60	672.96	44.13	678.43	44.96	677.60	45.35	677.21
7	45.10	677.46	46.94	675.62	49.35	673.21	44.05	678.51	45.05	677.51	45.32	677.24
8	44.51	678.05	46.67	675.89	48.46	674.10	44.07	678.49	45.16	677.40	45.20	677.36
9	44.79	677.77	46.66	675.90	49.00	673.56	44.07	678.49	45.08	677.48	45.14	677.42
10	45.03	677.53	46.76	675.80	48.21	674.35	44.12	678.44	44.92	677.64	45.22	677.34
11	44.95	677.61	46.54	676.02	48.02	674.54	44.07	678.49	45.09	677.47	45.08	677.48
12	44.60	677.96	46.95	675.61	47.77	674.79	44.05	678.51	45.16	677.40	45.02	677.54
13	44.66	677.90	47.20	675.36	48.02	674.54	44.06	678.50	45.20	677.36	45.06	677.50
14	44.61	677.95	47.28	675.28	48.22	674.34	44.13	678.43	45.26	677.30	45.12	677.44
15	44.65	677.91	47.27	675.29	48.04	674.52	44.25	678.31	45.35	677.21	44.99	677.57
16	44.71	677.85	47.39	675.17	47.86	674.70	44.44	678.12	45.16	677.40	45.04	677.52
17	44.85	677.71	47.23	675.33	48.02	674.54	44.34	678.22	45.00	677.56	45.07	677.49
18	44.92	677.64	47.00	675.56	47.00	675.56	44.60	677.96	45.13	677.43	45.11	677.45
19	45.14	677.42	47.47	675.09	46.58	675.98	44.66	677.90	45.13	677.43	45.18	677.38
20	45.24	677.32	47.55	675.01	46.40	676.16	44.65	677.91	45.21	677.35	45.28	677.28
21	45.11	677.45	47.58	674.98	46.25	676.31	45.63	676.93	45.13	677.43	45.23	677.33
22	45.49	677.07	47.70	674.86	46.12	676.44	45.91	676.65	44.93	677.63	45.02	677.54
23	45.79	676.77	47.86	674.70	46.10	676.46	46.12	676.44	44.96	677.60	45.17	677.39
24	45.91	676.65	47.90	674.66	46.09	676.47	46.08	676.48	44.95	677.61	45.20	677.36
25	46.10	676.46	47.52	675.04	47.00	675.56	46.01	676.55	44.99	677.57	45.21	677.35
26	46.10	676.46	47.84	674.72	46.70	675.86	45.92	676.64	44.98	677.58	45.18	677.38
27	46.24	676.32	48.37	674.19	46.77	675.79	45.81	676.75	44.93	677.63	45.30	677.26
28	46.09	676.47	48.50	674.06	46.69	675.87	45.36	677.20	44.92	677.64	45.42	677.14
29	46.58	675.98	48.89	673.67	46.58	675.98	45.19	677.37	44.92	677.64	45.34	677.22
30	46.72	675.84	49.09	673.47	46.45	676.11	44.90	677.66	44.94	677.62	45.33	677.23
31	46.87	675.69	48.65	673.91	-	-	44.88	677.68	-	-	45.39	677.17

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1942 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	45.35	677.21	46.64	675.92	46.42	676.14	47.86	674.70	46.79	675.77	47.94	674.62
2	45.48	677.08	46.55	676.01	46.50	676.06	47.98	674.58	46.86	675.70	48.17	674.39
3	45.60	676.96	46.72	675.84	46.50	676.06	48.09	674.47	46.94	675.62	48.38	674.18
4	45.63	676.93	46.80	675.76	46.40	676.16	48.18	674.38	46.77	675.79	48.57	673.99
5	45.71	676.85	46.68	675.88	46.60	675.96	48.16	674.40	46.79	675.77	48.67	673.89
6	45.77	676.79	46.71	675.85	46.63	675.93	-	-	46.89	675.67	48.25	674.31
7	45.75	676.81	46.85	675.71	46.61	675.95	-	-	47.00	675.56	47.87	674.69
8	45.87	676.69	46.88	675.68	46.83	675.73	-	-	46.80	675.76	47.70	674.86
9	45.85	676.71	46.65	675.91	46.80	675.76	47.13	675.43	46.83	675.73	47.67	674.89
10	46.03	676.53	46.92	675.64	46.89	675.67	46.79	675.77	46.90	675.66	47.73	674.83
11	46.04	676.52	46.76	675.80	46.94	675.62	46.64	675.92	46.82	675.74	47.91	674.65
12	45.89	676.67	46.85	675.71	47.04	675.52	46.59	675.97	46.77	675.79	48.09	674.47
13	46.08	676.48	46.90	675.66	47.19	675.37	46.39	676.17	46.85	675.71	48.45	674.11
14	46.14	676.42	46.90	675.66	47.27	675.29	46.57	675.99	47.16	675.40	48.69	673.87
15	46.22	676.34	46.55	676.01	47.21	675.35	46.76	675.80	47.38	675.18	48.58	673.98
16	46.15	676.41	46.29	676.27	47.06	675.50	46.93	675.63	47.40	675.16	48.95	673.61
17	46.19	676.37	46.23	676.33	47.40	675.16	46.94	675.62	47.43	675.13	48.87	673.69
18	46.17	676.39	46.27	676.29	47.59	674.97	47.00	675.56	47.25	675.31	49.05	673.51
19	46.12	676.44	46.47	676.09	47.64	674.92	46.95	675.61	47.50	675.06	49.22	673.34
20	46.23	676.33	46.43	676.13	47.57	674.99	46.84	675.72	47.35	675.21	49.33	673.23
21	46.32	676.24	46.52	676.04	47.72	674.84	47.07	675.49	47.28	675.28	49.45	673.11
22	46.33	676.23	46.44	676.12	47.74	674.82	47.14	675.42	47.17	675.39	49.35	673.21
23	46.36	676.20	46.15	676.41	47.59	674.97	47.35	675.21	47.24	675.32	49.50	673.06
24	46.42	676.14	46.32	676.24	47.71	674.85	47.05	675.51	47.33	675.23	49.63	672.93
25	46.40	676.16	46.42	676.14	47.55	675.01	47.00	675.56	47.20	675.36	49.81	672.75
26	46.22	676.34	46.41	676.15	47.55	675.01	46.74	675.82	47.44	675.12	49.77	672.79
27	46.38	676.18	46.57	675.99	47.57	674.99	46.50	676.06	47.45	675.11	49.75	672.81
28	46.53	676.03	46.53	676.03	47.68	674.88	46.55	676.01	47.67	674.89	49.71	672.85
29	46.52	676.04	-	-	47.79	674.77	46.67	675.89	47.75	674.81	49.70	672.86
30	46.45	676.11	-	-	47.70	674.86	46.70	675.86	47.99	674.57	50.15	672.41
31	46.61	675.95	-	-	47.93	674.63	-	-	48.04	674.52	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1942--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	51.00	671.56	50.86	671.70	51.34	671.22	46.71	675.85	38.01	684.55	-	-
2	50.85	671.71	50.92	671.64	51.27	671.29	46.89	675.67	37.99	684.57	-	-
3	50.90	671.66	50.73	671.83	51.34	671.22	46.99	675.57	38.29	684.27	-	-
4	50.77	671.79	50.97	671.59	51.08	671.48	46.48	676.08	38.40	684.16	41.38	681.18
5	50.54	672.02	51.17	671.39	49.24	673.32	43.31	679.25	38.47	684.09	41.40	681.16
6	48.90	673.66	51.36	671.20	48.66	673.90	42.43	680.13	38.69	683.87	41.56	681.00
7	48.07	674.49	51.36	671.20	48.42	674.14	41.90	680.66	38.84	683.72	41.45	681.11
8	47.75	674.81	51.51	671.05	48.12	674.44	41.62	680.94	38.89	683.67	41.63	680.93
9	47.67	674.89	51.49	671.07	46.36	676.20	41.42	681.14	38.87	683.69	41.70	660.86
10	47.73	674.83	51.36	671.20	45.42	677.14	41.45	681.11	39.17	683.39	41.79	680.77
11	48.01	674.55	51.70	670.86	44.92	677.64	41.37	681.19	39.36	683.20	41.76	680.80
12	48.26	674.30	51.94	670.62	44.69	677.87	41.22	681.34	39.48	673.08	41.93	680.63
13	48.28	674.28	52.13	670.43	44.59	677.97	41.38	681.18	39.60	682.96	41.96	680.60
14	48.67	673.89	52.36	670.20	44.43	678.13	41.57	680.99	39.82	682.74	41.97	680.59
15	48.84	673.72	52.31	670.25	44.51	678.05	41.67	680.89	39.82	682.74	42.01	680.55
16	49.16	673.40	51.96	670.60	44.67	677.89	41.03	681.53	39.70	682.86	42.16	680.40
17	49.33	673.23	51.40	671.16	44.85	677.71	40.57	681.99	40.03	682.53	42.24	680.32
18	49.48	673.08	51.57	670.99	45.02	677.54	40.17	682.39	40.25	682.31	42.31	680.25
19	49.56	673.00	51.74	670.82	45.22	677.34	38.44	684.12	40.36	682.20	42.32	680.24
20	49.42	673.14	51.82	670.74	45.38	677.18	38.00	684.56	40.42	682.14	42.37	680.19
21	49.84	672.72	52.02	670.54	45.14	677.42	37.56	685.00	40.48	682.08	42.22	680.34
22	50.16	672.40	51.84	670.72	45.30	677.26	37.32	685.24	40.47	682.09	42.30	680.26
23	49.87	672.69	51.85	670.71	45.50	677.06	37.26	685.30	40.36	682.20	42.39	680.17
24	49.98	672.58	51.76	670.80	45.78	676.78	37.22	685.34	40.44	682.12	42.42	680.14
25	50.10	672.46	52.07	670.49	45.98	676.58	37.20	685.36	40.44	682.12	42.45	680.11
26	50.18	672.38	52.22	670.34	46.10	676.46	37.32	685.24	40.69	681.87	42.28	680.28
27	50.16	672.40	52.42	670.14	46.10	676.46	37.38	685.18	40.77	681.79	42.45	680.11
28	50.37	672.19	52.52	670.04	46.00	676.56	37.40	685.16	40.77	681.79	42.57	679.99
29	50.60	671.96	52.64	669.92	46.37	676.19	37.59	684.97	40.88	681.68	42.63	679.93
30	50.65	671.91	51.82	670.74	46.49	676.07	37.74	684.82	40.84	681.72	42.70	679.86
31	50.80	671.76	51.44	671.12	-	-	37.90	684.66	-	--	42.83	679.73

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1943 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	42.98	679.58	44.28	678.28	45.67	676.89	46.48	676.08	50.16	672.40	49.97	672.59
2	42.98	679.58	44.32	678.24	45.72	676.84	46.58	675.98	50.13	672.43	49.99	672.57
3	43.08	679.48	44.30	678.26	45.92	676.64	46.77	675.79	50.02	672.54	50.07	672.49
4	43.11	679.45	44.38	678.18	45.77	676.79	46.81	675.75	50.42	672.14	50.11	672.45
5	43.24	679.32	44.45	678.11	45.60	676.96	46.74	675.82	50.57	671.99	50.09	672.47
6	43.15	679.41	44.75	677.81	45.78	676.78	47.04	675.52	50.75	671.81	49.82	672.74
7	43.10	679.46	44.82	677.74	45.90	676.66	47.09	675.47	50.68	671.88	49.26	673.30
8	43.16	679.40	44.70	677.86	45.84	676.72	47.03	675.53	50.86	671.70	49.00	673.56
9	43.18	679.38	44.87	677.69	45.97	676.59	46.79	675.77	50.81	671.75	48.91	673.65
10	43.15	679.41	45.03	677.53	45.98	676.58	46.68	675.88	50.58	671.98	48.84	673.72
11	43.13	679.43	45.23	677.33	46.05	676.51	46.72	675.84	50.36	672.20	48.81	673.75
12	43.19	679.37	45.25	677.31	45.94	676.62	46.67	675.89	50.50	672.06	48.89	673.67
13	43.17	679.39	45.42	677.14	46.21	676.35	46.99	675.57	50.68	671.88	48.90	673.66
14	43.20	679.36	45.28	677.28	46.50	676.06	47.20	675.36	50.88	671.68	48.57	673.99
15	43.23	679.33	45.19	677.37	46.09	676.47	47.22	675.34	50.91	671.65	48.74	673.82
16	43.17	679.39	45.45	677.11	46.32	676.24	47.16	675.40	50.79	671.77	48.83	673.73
17	43.27	679.29	45.39	677.17	46.43	676.13	47.84	674.72	50.60	671.96	49.08	673.48
18	43.25	679.31	45.50	677.06	46.53	676.03	47.86	674.70	50.93	671.63	49.14	673.42
19	43.73	678.83	45.57	676.99	46.58	675.98	47.75	674.81	51.14	671.42	49.03	673.53
20	44.12	678.44	45.70	676.86	46.77	675.79	48.01	674.55	51.32	671.24	49.03	673.53
21	44.00	678.56	45.62	676.94	46.79	675.77	48.38	674.18	51.22	671.34	49.02	673.54
22	43.95	678.61	45.52	677.04	46.80	675.76	48.47	674.09	51.24	671.32	49.36	673.20
23	44.12	678.44	45.52	677.04	46.92	675.64	48.78	673.78	51.56	671.00	49.56	673.00
24	44.10	678.46	45.60	676.96	46.79	675.77	48.98	673.58	50.21	672.35	49.83	672.73
25	43.93	678.63	45.69	676.87	46.53	676.03	49.10	673.46	50.30	672.26	49.98	672.58
26	44.33	678.23	45.71	676.85	46.30	676.26	48.93	673.63	50.41	672.15	50.23	672.33
27	44.40	678.16	45.79	676.77	46.22	676.34	49.43	673.13	50.52	672.04	50.31	672.25
28	44.19	678.37	45.69	676.87	46.20	676.36	49.62	672.94	50.76	671.80	50.29	672.27
29	44.20	678.36	-	-	46.12	676.44	49.67	672.89	50.57	671.99	50.64	671.92
30	44.24	678.32	-	-	46.25	676.31	49.99	672.57	50.20	672.36	50.94	671.62
31	44.23	678.33	-	-	46.30	676.26	-	-	49.94	672.62	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1943--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	51.08	671.48	50.42	672.14	53.19	669.37	51.54	671.02	52.83	669.73	52.40	670.16
2	51.22	671.34	50.29	672.27	53.01	669.55	51.47	671.09	53.01	669.55	-	-
3	51.08	671.48	50.80	671.76	52.58	669.98	51.48	671.08	52.69	669.87	-	-
4	51.15	671.41	51.14	671.42	52.02	670.54	51.37	671.19	52.60	669.96	-	-
5	50.98	671.58	51.44	671.12	51.85	670.71	51.43	671.13	52.50	670.06	-	-
6	51.28	671.28	51.63	670.93	51.67	670.89	51.57	670.99	52.40	670.16	-	-
7	51.56	671.00	51.76	670.80	51.79	670.77	51.66	670.90	52.51	670.05	-	-
8	51.87	670.69	51.67	670.89	51.73	670.83	51.75	670.81	52.40	670.16	-	-
9	51.68	670.88	51.58	670.98	51.77	670.79	51.92	670.64	52.47	670.09	-	-
10	51.48	671.08	52.02	670.54	51.74	670.82	51.93	670.63	52.58	669.98	-	-
11	51.18	671.38	52.05	670.51	51.73	670.83	51.66	670.90	52.67	669.89	-	-
12	50.62	671.94	52.12	670.44	51.72	670.84	51.66	670.90	52.67	669.89	-	-
13	50.45	672.11	52.23	670.33	51.56	671.00	51.65	670.91	52.79	669.77	-	-
14	49.53	673.03	52.43	670.13	51.78	670.78	51.79	670.77	52.67	669.89	-	-
15	48.62	673.94	52.43	670.13	52.00	670.56	51.88	670.68	52.45	670.11	-	-
16	48.30	674.26	52.22	670.34	51.91	670.65	52.05	670.51	52.46	670.10	-	-
17	48.23	674.33	52.54	670.02	51.83	670.73	51.96	670.60	52.42	670.14	-	-
18	48.29	674.27	52.98	669.58	51.68	670.88	51.85	670.71	52.42	670.14	-	-
19	48.31	674.25	53.00	669.56	51.55	671.01	52.17	670.39	52.43	670.13	-	-
20	48.68	673.88	53.15	669.41	51.40	671.16	52.35	670.21	52.42	670.14	-	-
21	48.95	673.61	53.28	669.28	51.55	671.01	52.50	670.06	52.37	670.19	-	-
22	49.25	673.31	53.28	669.28	51.76	670.80	52.69	669.87	52.30	670.26	53.07	669.49
23	49.52	673.04	53.02	669.54	51.87	670.69	52.75	669.81	52.45	670.11	53.20	669.36
24	49.73	672.83	53.54	669.02	51.93	670.63	52.77	669.79	52.56	670.00	53.33	669.23
25	49.86	672.70	53.68	668.88	52.04	670.52	52.72	669.84	52.60	669.96	53.25	669.31
26	49.68	672.88	53.87	668.69	51.98	670.58	52.85	669.71	52.46	670.10	53.11	669.45
27	49.90	672.66	53.96	668.60	51.58	670.98	52.90	669.66	52.50	670.06	53.06	669.50
28	50.10	672.46	54.05	668.51	51.50	671.06	52.78	669.78	52.35	670.21	53.34	669.22
29	50.07	672.49	53.98	668.58	51.55	671.01	52.80	669.76	52.35	670.21	53.45	669.11
30	50.08	672.48	53.64	668.92	51.59	670.97	52.95	669.61	52.46	670.10	53.46	669.10
31	50.40	672.16	53.51	669.05	-	-	52.95	669.61	-	-	53.57	668.99

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1944 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	53.54	669.02	52.77	669.79	50.90	671.66	46.55	676.01	48.50	674.06	45.07	677.49
2	53.16	669.40	.75	669.81	.72	671.84	.64	675.92	47.98	674.58	44.94	677.62
3	52.85	669.71	.72	669.84	.58	671.98	.53	676.03	.87	674.69	44.94	677.62
4	.77	669.79	.90	669.66	.57	671.99	.62	675.94	.88	674.68	45.01	677.55
5	.77	669.79	.83	669.73	.58	671.98	.64	675.92	.72	674.84	.03	677.53
6	.87	669.69	.80	669.76	50.51	672.05	.84	675.72	.75	674.81	.32	677.24
7	.69	669.87	.71	669.85	51.06	671.50	.83	675.73	.75	674.81	.27	677.29
8	52.94	669.62	.67	669.89	.27	671.29	.81	675.75	.70	674.86	.30	677.26
9	53.18	669.38	.76	669.80	.38	671.18	.70	675.86	47.89	674.67	.41	677.15
10	.02	669.54	52.78	669.78	.28	671.28	.58	675.98	48.11	674.45	.61	676.95
11	.06	669.50	53.02	669.54	51.10	671.46	46.81	675.75	.23	674.33	.68	676.88
12	.07	669.49	53.13	669.43	50.05	672.51	47.05	675.51	.43	674.13	.63	676.93
13	.27	669.29	52.97	669.59	.23	672.33	.17	675.39	.49	674.07	.50	677.06
14	.35	669.21	.73	669.83	.12	672.44	.15	675.41	.57	673.99	.52	677.04
15	.24	669.32	.85	669.71	50.18	672.38	.34	675.22	.44	674.12	.60	676.96
16	.17	669.39	.77	669.79	48.68	673.88	.60	674.96	.75	673.81	.73	676.83
17	.15	669.41	.73	669.83	47.87	674.69	.50	675.06	48.93	673.63	45.96	676.60
18	.24	669.32	.85	669.71	.39	675.17	.83	674.73	49.05	673.51	46.07	676.49
19	.25	669.31	.80	669.76	.16	675.40	47.87	674.69	49.04	673.52	45.98	676.58
20	.29	669.27	.73	669.83	47.00	675.56	48.06	674.50	48.68	673.88	46.25	676.31
21	.23	669.33	.57	669.99	46.98	675.58	.19	674.37	48.46	674.10	.60	675.96
22	.23	669.33	.56	670.00	.89	675.67	.23	674.33	.15	674.41	46.80	675.76
23	.20	669.36	.59	669.97	.72	675.84	.30	674.26	.15	674.41	47.05	675.51
24	53.05	669.51	.60	669.96	.50	676.06	.30	674.26	.83	673.73	.19	675.37
25	52.95	669.61	.63	669.93	.38	676.18	.54	674.02	.60	673.96	.28	675.28
26	52.96	669.60	52.15	670.41	.41	676.15	.54	674.02	48.01	674.55	.13	675.43
27	53.02	669.54	51.58	670.98	.35	676.21	.82	673.74	47.69	674.87	47.55	675.01
28	53.07	669.49	.21	671.35	.34	676.22	.86	673.70	46.52	676.04	48.54	674.02
29	52.93	669.63	51.07	671.49	.53	676.03	.95	673.61	45.60	676.96	49.25	673.31
30	.85	669.71	-	-	.54	676.02	48.70	673.86	.20	677.36	49.13	673.43
31	52.78	669.78	-	-	46.55	676.01	-	-	45.06	677.50	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1944--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	49.05	673.51	53.52	669.04	51.08	671.48	51.56	671.00	-	-	-	-
2	49.17	673.39	53.81	668.75	50.93	671.63	.48	671.08	-	-	-	-
3	48.40	674.16	54.05	668.51	.80	671.76	.81	670.75	-	-	-	-
4	.12	674.44	.15	668.41	.59	671.97	.36	671.20	-	-	-	-
5	.08	674.48	.30	668.26	.67	671.89	.54	671.02	-	-	-	-
6	48.95	673.61	54.14	668.42	50.77	671.79	.57	670.99	-	-	-	-
7	49.32	673.24	53.75	668.81	49.88	672.68	.55	671.01	-	-	-	-
8	.42	673.14	54.18	668.38	.47	673.09	.45	671.11	-	-	-	-
9	.75	672.81	.64	667.92	49.95	672.61	.31	671.25	-	-	-	-
10	49.82	672.74	.80	667.76	50.00	672.56	.43	671.13	-	-	-	-
11	50.05	672.51	.80	667.76	49.92	672.64	.47	671.09	-	-	-	-
12	.41	672.15	.95	667.61	50.25	672.31	.49	671.07	-	-	-	-
13	.83	671.73	.79	667.77	.45	672.11	.47	671.09	-	-	-	-
14	.85	671.71	.50	668.06	.56	672.00	.50	671.06	-	-	-	-
15	50.99	671.57	54.94	667.62	50.80	671.76	.57	670.99	-	-	-	-
16	51.02	671.54	55.24	667.32	51.02	671.54	.63	670.93	-	-	-	-
17	50.99	671.57	54.98	667.58	50.92	671.64	51.92	670.64	-	-	-	-
18	51.21	671.35	55.04	667.52	50.80	671.76	52.07	670.49	-	-	-	-
19	.48	671.08	.22	667.34	51.12	671.44	.29	670.27	-	-	-	-
20	51.80	670.76	.06	667.50	.35	671.21	.44	670.12	-	-	-	-
21	52.05	670.51	.17	667.39	.57	670.99	52.65	669.91	-	-	-	-
22	.24	670.32	55.43	667.13	.77	670.79	-	-	-	-	-	-
23	52.11	670.45	54.72	667.84	.76	670.80	-	-	-	-	-	-
24	51.99	670.57	.67	667.89	.84	670.72	-	-	-	-	-	-
25	52.38	670.18	.72	667.84	.64	670.92	-	-	-	-	-	-
26	.65	669.91	.72	667.84	.93	670.63	-	-	-	-	-	-
27	.90	669.66	54.61	667.95	.74	670.82	-	-	-	-	-	-
28	52.99	669.57	53.65	668.91	.48	671.08	-	-	-	-	-	-
29	53.25	669.31	52.91	669.65	.52	671.04	-	-	-	-	-	-
30	.42	669.14	51.86	670.70	51.57	670.99	-	-	-	-	-	-
31	53.34	669.22	50.87	671.69	-	-	-	-	-	-	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1945 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	-	-	43.61	678.95	41.68	680.88	41.87	680.69	42.62	679.94	46.76	675.80
2	-	-	43.62	678.94	41.71	680.85	41.33	681.23	42.74	679.82	47.06	675.50
3	-	-	43.62	678.94	41.81	680.75	41.11	681.45	42.90	679.66	47.05	675.51
4	-	-	43.64	678.92	41.83	680.73	41.05	681.51	42.66	679.90	47.05	675.51
5	46.88	675.68	43.45	679.11	41.78	680.78	40.96	681.60	42.67	679.99	47.38	675.18
6	46.73	675.83	43.22	679.34	41.98	680.58	40.83	681.73	42.50	680.06	47.60	674.96
7	46.76	675.80	43.15	679.41	42.08	680.48	40.85	681.71	42.38	680.18	47.75	674.81
8	46.70	675.86	43.20	679.36	42.14	680.42	40.80	681.76	42.71	679.85	48.02	674.54
9	46.87	675.69	43.06	679.50	42.40	680.16	40.65	681.91	42.79	679.77	48.16	674.40
10	46.95	675.61	43.13	679.43	42.65	679.91	40.77	681.79	42.88	679.68	48.12	674.44
11	46.95	675.61	43.15	679.41	42.63	679.93	40.87	681.69	42.90	679.66	47.91	674.65
12	46.98	675.58	42.84	679.72	42.63	679.93	40.95	681.61	43.03	679.53	48.26	674.30
13	47.00	675.56	41.58	680.98	42.88	679.68	41.08	681.48	43.03	679.53	47.61	674.95
14	47.05	675.51	41.28	681.28	42.88	679.68	41.21	681.35	42.99	679.57	47.55	675.01
15	47.03	675.53	41.17	681.39	42.94	679.62	41.26	681.30	43.27	679.29	47.66	674.90
16	47.25	675.31	41.07	681.49	43.08	679.48	41.12	681.44	43.48	679.08	47.92	674.64
17	47.20	675.36	40.95	681.61	43.34	679.22	41.23	681.33	43.68	678.88	47.93	674.63
18	46.77	675.79	40.98	681.58	43.19	679.37	41.46	681.10	43.80	678.76	47.85	674.71
19	45.28	677.28	40.84	681.72	42.91	679.65	41.68	680.88	44.02	678.54	47.38	675.18
20	44.60	677.96	40.81	681.75	43.00	679.56	41.76	680.80	44.33	678.23	47.40	675.16
21	43.98	678.58	41.27	681.29	43.02	679.54	41.57	680.99	44.04	678.52	47.31	675.25
22	43.78	678.78	41.48	681.08	43.03	679.53	41.44	681.12	44.23	678.33	47.37	675.19
23	43.70	678.86	41.52	681.04	42.99	679.57	41.37	681.19	44.43	678.13	47.25	675.31
24	43.52	679.04	41.54	681.02	42.96	679.60	41.55	681.01	44.65	677.91	47.17	675.39
25	43.43	679.13	41.50	681.06	43.14	679.42	41.64	680.92	45.01	677.55	47.06	675.50
26	43.60	679.06	41.42	681.14	43.07	679.49	42.01	680.55	45.29	677.27	47.35	675.21
27	43.40	679.16	41.53	681.03	43.36	679.20	42.23	680.33	45.18	677.38	47.60	674.96
28	43.42	679.14	41.65	680.91	43.52	679.04	42.27	680.29	45.09	677.47	47.87	674.69
29	43.44	679.12	-	-	43.56	679.00	42.40	680.16	45.92	676.64	48.01	674.55
30	43.55	679.01	-	-	43.32	679.24	42.37	680.19	46.32	676.24	48.30	674.26
31	43.61	678.95	-	-	42.68	679.88	-	-	46.62	675.94	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1945--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude	Water level	Alti-tude
1	48.33	674.23	50.54	672.02	52.00	670.56	-	-	50.49	672.07	50.95	671.61
2	48.26	674.30	50.37	672.19	51.93	670.63	-	-	50.55	672.01	50.99	671.57
3	48.45	674.11	50.18	672.38	51.81	670.75	51.27	671.29	50.62	671.94	50.78	671.78
4	48.51	674.05	50.26	672.30	52.05	670.51	51.18	671.38	50.72	671.84	50.77	671.79
5	48.50	674.06	50.29	672.27	52.30	670.26	51.13	671.43	50.55	672.01	50.78	671.78
6	48.82	673.74	50.23	672.33	52.60	669.96	50.93	671.63	50.81	671.75	50.77	671.79
7	48.97	673.59	50.58	671.98	52.88	669.68	50.60	671.96	51.00	671.56	50.84	671.72
8	48.98	673.58	50.81	671.75	53.02	669.54	50.30	672.26	51.05	671.51	50.77	671.79
9	48.92	673.64	51.15	671.41	52.95	669.61	50.35	672.21	51.15	671.41	50.80	671.76
10	49.27	673.29	51.30	671.26	52.85	669.71	50.04	672.52	50.95	671.61	50.91	671.65
11	49.58	672.98	51.51	671.05	53.15	669.41	49.70	672.86	50.60	671.96	50.95	671.61
12	49.57	672.99	51.57	670.99	53.38	669.18	49.53	673.03	50.39	672.17	50.18	672.38
13	49.85	672.71	51.43	671.13	53.38	669.18	49.47	673.09	50.36	672.20	49.80	672.76
14	49.95	672.61	51.90	670.66	53.08	669.48	49.36	673.20	50.51	672.05	49.81	672.75
15	49.91	672.65	52.10	670.46	53.22	669.34	49.19	673.37	50.59	671.97	49.82	672.74
16	49.64	672.92	52.12	670.44	53.03	669.53	49.35	673.21	50.42	672.14	49.82	672.74
17	49.76	672.80	52.32	670.24	52.75	669.81	49.23	673.33	50.45	672.11	49.62	672.94
18	50.05	672.51	52.63	669.93	53.00	669.56	49.42	673.14	50.42	672.14	49.45	673.11
19	50.23	672.33	52.57	669.99	53.28	669.28	49.43	673.13	50.37	672.19	49.64	672.92
20	50.32	672.24	52.40	670.16	53.65	668.91	49.56	673.00	50.34	672.22	49.75	672.81
21	50.49	672.07	52.79	669.77	53.75	668.81	49.55	673.01	50.47	672.09	49.62	672.94
22	50.38	672.18	53.07	669.49	53.75	668.81	49.59	672.97	50.56	672.00	49.58	676.98
23	50.22	672.34	52.70	669.86	53.62	668.94	49.75	672.81	50.54	672.02	49.50	673.06
24	50.52	672.04	52.39	670.17	52.90	669.66	49.97	672.59	50.54	672.02	49.32	673.24
25	50.60	671.96	52.25	670.31	52.94	669.62	49.86	672.70	50.56	672.00	49.27	673.29
26	50.84	671.72	51.98	670.58	53.05	669.51	50.02	672.54	50.55	672.01	-	-
27	50.90	671.66	51.57	670.99	53.12	669.44	50.24	672.32	50.62	671.94	-	-
28	51.12	671.44	51.61	670.95	53.13	669.43	50.28	672.28	50.78	671.78	-	-
29	51.01	671.55	51.78	670.78	52.90	669.66	50.20	672.36	50.84	671.72	-	-
30	50.85	671.71	51.81	670.75	-	-	50.39	672.17	50.92	671.64	-	-
31	51.14	671.42	51.86	670.70	-	-	50.47	672.09	-	-	-	-

Water levels in wells in Bexar County--Continued

Well 26--continued

Highest daily water level below land-surface datum and altitude in feet, 1946 (from recorded graph)

	January		February		March		April		May		June	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	-	-	51.17	671.39	49.52	673.04	-	-	51.05	671.51	50.64	671.92
2	-	-	51.27	671.29	49.83	672.73	51.16	671.40	50.68	671.88	50.30	672.26
3	-	-	51.17	671.39	49.84	672.72	51.37	671.19	50.52	672.04	50.07	672.49
4	49.77	672.79	51.07	671.49	49.78	672.78	51.65	670.91	50.46	672.10	50.15	672.41
5	49.72	672.84	51.18	671.38	49.92	672.74	51.70	670.86	50.52	672.04	50.25	672.31
6	49.60	672.96	51.27	671.29	50.00	672.56	51.71	670.85	50.30	672.26	50.33	672.23
7	49.57	672.99	51.34	671.22	50.16	672.40	51.75	670.81	50.40	672.16	50.44	672.12
8	50.37	672.19	51.33	671.23	50.39	672.17	51.60	670.88	50.48	672.08	50.62	671.94
9	50.65	671.91	51.47	671.09	50.44	672.12	52.08	670.48	50.45	672.13	50.75	671.81
10	50.84	671.72	51.42	671.14	50.50	672.06	52.26	670.30	50.55	672.01	50.53	672.03
11	50.19	672.37	51.31	671.25	50.43	672.13	52.48	670.08	50.50	672.06	50.31	672.25
12	50.57	671.99	51.53	671.03	50.37	672.19	52.43	670.13	50.45	672.15	50.21	672.35
13	50.12	672.44	51.50	671.06	49.84	672.72	52.58	669.98	50.22	672.34	50.30	672.26
14	49.83	672.73	51.70	670.86	49.57	672.99	52.68	669.88	50.33	672.23	50.38	672.18
15	49.70	672.86	51.85	670.71	-	-	52.44	670.12	50.45	672.11	50.51	672.05
16	49.60	672.96	51.78	670.78	-	-	52.52	670.04	50.62	671.94	50.74	671.82
17	50.16	672.40	51.73	670.83	-	-	52.59	669.97	50.50	672.06	50.71	671.85
18	50.37	672.19	50.70	671.86	-	-	52.67	669.89	50.50	672.06	51.15	671.41
19	50.40	672.16	50.12	672.44	-	-	52.82	669.74	50.29	672.27	51.38	671.18
20	50.43	672.13	49.70	672.86	-	-	52.88	669.68	50.24	672.32	51.74	670.82
21	50.47	672.09	49.33	673.23	-	-	52.39	670.17	50.14	672.42	51.25	671.31
22	50.72	671.84	49.09	673.47	-	-	51.86	670.70	50.10	672.46	50.75	671.81
23	50.77	671.79	48.98	673.58	-	-	52.04	670.52	50.16	672.40	50.25	672.31
24	50.93	671.63	48.96	673.60	-	-	51.91	670.65	50.16	672.40	49.95	672.61
25	50.89	671.67	48.97	673.59	-	-	51.92	670.64	50.30	672.26	49.89	672.67
26	50.84	671.72	48.71	673.85	-	-	52.04	670.52	50.30	672.26	49.79	672.77
27	51.09	671.47	48.96	673.60	-	-	52.00	670.56	50.24	672.32	49.85	672.71
28	50.95	671.61	49.33	673.23	-	-	52.04	670.52	50.50	672.06	49.91	672.65
29	51.00	671.56	-	-	-	-	51.91	670.65	50.54	672.02	50.14	672.42
30	50.97	671.59	-	-	-	-	51.41	671.15	50.68	671.88	50.25	672.31
31	51.14	671.42	-	-	-	-	-	-	50.63	671.93	-	-

Water levels in wells in Bexar County--Continued

Well 26--Continued

Highest daily water level below land-surface datum and altitude in feet, 1946--continued, (from recorded graph)

	July		August		September		October		November		December	
Day	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude	Water level	Altitude
1	50.27	672.29	56.41	666.15	53.19	669.37	41.52	681.04	44.13	678.43	43.93	678.63
2	50.57	671.99	55.64	666.92	52.72	669.84	41.41	681.15	44.10	678.46	43.95	678.61
3	50.69	671.87	55.49	667.07	52.51	670.05	41.41	681.15	44.00	678.56	44.10	678.46
4	50.85	671.71	55.37	667.19	52.52	670.04	41.48	681.08	43.96	678.60	44.23	678.33
5	50.96	671.60	55.25	667.31	52.55	670.01	41.60	680.96	44.07	678.49	44.34	678.22
6	51.25	671.31	55.92	666.64	52.48	670.08	41.75	680.81	44.04	678.52	44.43	678.13
7	51.40	671.16	56.18	666.38	52.62	669.94	41.81	680.75	44.07	678.49	44.52	678.04
8	51.42	671.14	56.55	666.01	52.72	669.84	42.05	680.51	44.17	678.39	44.52	678.04
9	51.78	670.78	56.84	665.72	52.36	670.20	42.09	680.47	44.13	678.43	44.44	678.12
10	52.12	670.44	57.11	665.45	52.72	669.84	41.98	680.58	43.33	679.23	44.65	677.91
11	52.47	670.09	57.07	665.49	52.90	669.66	42.15	680.41	42.53	680.03	44.40	678.16
12	52.76	669.80	56.91	665.65	53.12	669.44	42.25	680.31	42.40	680.16	43.80	678.76
13	53.08	669.48	57.44	665.12	53.13	669.43	42.19	680.37	42.34	680.22	43.55	679.01
14	53.22	669.34	57.70	664.86	53.32	669.24	42.10	680.46	42.25	680.31	43.25	679.31
15	53.20	669.36	58.08	664.48	50.55	672.01	42.25	680.31	42.25	680.31	42.97	679.59
16	53.52	669.04	58.16	664.40	49.87	672.69	42.35	680.21	42.30	680.26	42.75	679.81
17	53.77	668.79	58.30	664.26	49.37	673.19	42.39	680.17	42.40	680.16	42.75	679.81
18	54.09	668.47	58.12	664.44	48.95	673.61	42.49	680.07	42.28	680.28	42.78	679.78
19	54.30	668.26	57.89	664.67	48.76	673.80	42.55	680.01	42.50	680.06	42.76	679.80
20	54.45	668.11	58.40	664.16	48.59	673.97	42.70	679.86	42.60	679.96	42.70	679.86
21	54.10	668.56	58.39	664.17	48.52	674.04	42.65	679.91	42.70	679.86	42.90	679.66
22	53.66	668.90	58.57	663.99	48.42	674.14	42.80	679.76	42.90	679.66	42.82	679.74
23	53.83	668.73	58.74	663.82	48.44	674.12	42.91	679.65	42.95	679.61	42.75	679.81
24	54.35	668.21	58.95	663.61	48.58	673.98	43.04	679.52	42.95	679.61	42.86	679.70
25	54.55	668.01	58.84	663.72	48.75	673.81	43.14	679.42	42.90	679.66	42.90	679.66
26	54.68	667.88	58.50	664.06	47.98	674.58	43.31	679.25	43.20	679.36	42.85	679.71
27	54.93	667.63	58.85	663.71	43.25	679.31	43.41	679.15	43.40	679.16	42.90	679.66
28	55.08	667.48	58.88	663.68	42.50	680.06	43.36	679.20	43.60	678.96	42.94	679.62
29	55.02	667.54	57.23	665.33	41.99	680.57	43.75	678.81	43.60	678.96	43.15	679.41
30	55.52	667.04	54.82	667.74	41.58	680.98	43.86	678.70	43.82	678.74	43.20	679.36
31	56.13	666.43	54.03	668.53	-	-	44.00	678.56	-	-	43.34	679.22

Water levels in wells in Bexar County--Continued

Well 40

Formerly U. S. Geological Survey well 22. Westmoorland College, Ashby and Epworth Streets, 3½ miles northwest. Top of casing, altitude 715.94 feet, at land surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Aug. 25	- 40.57	675.37	1934, Apr. 18	- 38.98	676.96
Sept.18	- 40.30	675.64	May 21	- 40.50	675.44
Oct. 12	- 40.88	675.06	June 19	- 43.59	672.35
Nov. 20	- 40.98	674.96	July 30	- 42.34	673.60
Dec. 18	- 41.08	674.86	1935, Nov. 20	- 31.34	684.60
1934, Jan. 18	- 40.89	675.05	1936, Jan. 18	- 32.96	682.98
Feb. 19	- 40.23	675.71	Aug. 26	- 30.81	685.13
Mar. 19	- 39.59	676.35			

Measurements discontinued.

Well 44

Formerly U. S. Geological Survey well 20. Lakeview Addition, Wood and Monterey Streets, 4½ miles west. Top of pump base, altitude 711.26 feet, 1.0 foot above land surface datum.

1933, Aug. 25	- 33.90	676.36	1934, Oct. 25	- 40.28	669.98
Sept.18	- 33.61	676.65	Nov. 19	- 39.21	671.05
Oct. 17	- 34.35	675.91	Dec. 20	- 39.10	671.16
Dec. 20	- 34.55	675.71	1935, Feb. 1	- 39.17	671.09
1934, Jan. 18	- 34.42	675.84	Feb. 28	- 38.78	671.48
Feb. 19	- 33.94	676.32	Apr. 9	- 39.44	670.82
Mar. 19	- 33.18	677.08	May 21	- 30.04	680.22
Apr. 19	- 32.05	678.21	June 28	- 20.18	690.08
May 21	- 34.77	675.49	Aug. 3	- 24.22	686.04
June 19	- 37.33	672.93	Sept.27	- 24.12	686.21
Aug. 22	- 38.78	671.48	1936, Jan. 20	- 26.78	683.48
Sept.19	- 39.17	671.09	Aug. 27	- 24.87	685.39
Oct. 11	- 39.77	670.49	Dec. 30	- 23.79	686.47

Measurements discontinued.

Well 52

Formerly U. S. Geological Survey well 25. Owner unknown, Morales and 24th Streets, 2¾ miles west. Top of one-inch pipe, altitude 677.60 feet, 1.5 feet above land surface datum.

1933, Apr. 8	+ 1.43	677.53	1934, Mar. 19	- 0.56	675.54
July 18	- 1.55	674.55	Apr. 19	+ 0.61	676.71
Aug. 17	- 1.38	674.72	May 21	- 1.85	674.25
Sept.18	- 1.10	675.00	June 19	- 4.45	671.65
Oct. 17	- 1.84	674.26	Aug. 22	- 5.69	670.41
Nov. 20	- 1.85	674.25	Sept.19	- 6.14	669.96
Dec. 20	- 1.90	674.20	Oct. 11	- 6.67	669.43
1934, Jan. 18	- 1.75	674.35	Oct. 25	- 7.23	668.87
Feb. 19	- 1.24	674.86	Nov. 19	- 6.42	669.68

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Water levels in wells in Bexar County--Continued

Well 52--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Dec. 20	- 6.09	670.01	1935, Aug. 3	+ 7.70	683.80
1935, Jan. 31	- 5.86	670.24	Sept.27	+ 7.95	684.05
Feb. 28	- 5.78	670.32	1936, Jan. 21	+ 5.15	681.25
Apr. 8	- 6.66	669.44	Aug. 27	+ 6.50	682.60
May 20	+ 1.75	677.85	Dec. 30	+ 8.00	684.1
June 27	+ 12.00	688.10			

Measurements discontinued.

Well 58

Formerly U. S. Geolcgical Survey well 23. Mrs. L. M. Hubble, Zarzamora and Menchaca Streets, 2¼ miles northwest. Top of 1½-inch plug, altitude 665.23 feet, 1.9 feet above land surface datum.

1932, July 21	+ 11.4	674.7	1934, Aug. 22	+ 6.38	669.71
Oct. 18	+ 16.0	679.3	Sept.19	+ 6.15	669.48
Nov. 18	+ 14.8	678.1	Oct. 11	+ 5.61	668.94
1933, Apr. 9	+ 13.7	677.0	Oct. 25	+ 5.15	668.48
July 18	+ 10.9	674.2	Nov. 19	+ 6.30	669.63
Aug. 17	+ 11.2	674.5	Dec. 20	+ 6.41	669.74
Sept.18	+ 11.2	674.5	1935, Jan. 31	+ 6.48	669.81
Oct. 17	+ 10.7	674.0	Feb. 28	+ 6.70	670.03
Nov. 20	+ 10.6	673.9	Apr. 8	+ 6.00	669.33
Dec. 20	+ 10.6	673.9	May 20	+ 14.35	677.68
1934, Jan. 18	+ 10.9	674.2	June 27	+ 25.48	688.81
Feb. 19	+ 11.2	674.5	Aug. 3	+ 21.50	684.83
Apr. 19	+ 12.8	676.1	Sept.27	+ 21.70	685.03
May 21	+ 10.5	673.8	1936, Aug. 29	+ 18.7	682.0
June 19	+ 7.8	671.1	1937, Jan. 4	+ 20.1	683.4
July 27	+ 9.1	672.4			

Measurements discontinued

Well 67

Formerly U. S. Geological Survey well 24. R. Keilman, Perez and Comal Streets, 1 mile northwest. Top of stand pipe, altitude 672.11 feet, 5.0 feet above land surface datum.

1933, Aug. 1	+ 5.75	672.86	1934, Oct. 25	- 0.95	666.16
Sept.18	+ 6.29	673.40	Nov. 19	+ 0.64	667.75
Nov. 20	+ 5.25	672.36	Dec. 20	+ 1.10	668.21
Dec. 18	+ 5.36	672.47	1935, Jan. 31	+ 1.25	668.36
1934, Jan. 18	+ 5.69	672.80	Mar. 1	+ 1.50	668.61
Feb. 19	+ 5.93	673.04	Apr. 8	+ 0.92	668.03
Mar. 19	+ 6.36	673.47	May 21	+ 9.00	676.11
Apr. 19	+ 7.58	674.69	June 27	+ 17.75	684.86
May 21	+ 4.40	671.51	Sept.27	+ 13.95	681.06
June 19	+ 1.80	668.91	Nov. 20	+ 13.39	680.5
July 27	+ 2.48	669.59	1936, Jan. 21	+ 11.15	678.26
Aug. 22	+ 0.77	667.88	Aug. 27	+ 12.59	679.7
Sept.19	+ 0.45	667.56	1937, Jan. 4	+ 14.89	682.0
Oct. 11	- 0.09	667.02			

Measurements discontinued.

Water levels in wells in Bexar County--Continued

Well 87

Formerly U. S. Geological Survey well 34. Southern Ice Company, Pierce and Sharer Streets, 2 miles northeast. Top of concrete base, altitude 710.34, at land surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Aug. 7	- 38.76	671.58	1934, Oct. 25	- 44.33	666.01
Sept.19	- 37.79	672.55	Nov. 19	- 43.11	667.23
Oct. 18	- 38.95	671.39	Dec. 20	- 42.76	667.58
Nov. 21	- 38.68	671.66	1935, Jan. 31	- 42.85	667.49
Dec. 20	- 38.70	671.64	Mar. 1	- 42.42	667.92
1934, Jan. 20	- 38.64	671.70	Apr. 8	- 43.28	667.06
Feb. 20	- 37.95	672.39	May 19	- 34.73	675.61
Mar. 20	- 37.74	672.60	June 27	- 26.24	684.10
Apr. 19	- 36.38	673.96	Aug. 3	- 30.14	680.20
May 22	- 39.55	670.79	Sept.26	- 29.80	680.54
June 20	- 42.03	668.31	Nov. 19	- 30.62	679.72
July 27	- 41.46	668.88	1936, Jan. 21	- 31.61	678.73
Aug. 23	- 43.42	666.92	Aug. 29	- 30.58	679.76
Sept.20	- 43.47	666.87	1937, Jan. 5	- 29.07	681.27
Oct. 8	- 43.16	667.18			

Measurements discontinued.

Well 103

Formerly U. S. Geological Survey well 32. Sunset Wood and Coal Company, Hays and Chestnut Streets, 1 mile northeast. Top of valve, altitude 678.40 feet, 3.1 feet above land surface datum.

1933, Aug. 4	- 4.89	670.41	1934, Aug. 22	- 9.32	666.98
Sept.18	- 3.67	671.63	Sept.19	- 9.05	666.25
Oct. 18	- 4.77	670.53	Oct. 12	- 9.52	665.78
Nov. 21	- 4.74	670.56	Oct. 25	- 9.64	665.66
Dec. 20	- 3.57	671.73	Nov. 19	- 9.43	666.87
1934, Jan. 18	- 4.01	671.29	Dec. 20	- 8.21	667.09
Feb. 20	- 3.06	672.24	1935, Jan. 31	- 8.10	667.20
Mar. 20	- 2.44	672.86	Mar. 1	- 7.54	667.76
Apr. 19	- 2.23	673.07	Apr. 8	- 8.58	666.72
May 22	- 5.82	669.48	May 19	- 0.16	675.14
June 20	- 7.97	667.33	June 27	+ 3.1+	678.40+
July 27	- 7.02	668.28			

Measurements discontinued.

Well 118

Formerly U. S. Geological Survey well 33. Moore Building, Houston and Broadway Streets, ½ mile northeast. Top of pipe, altitude 645.66 feet, 1.3 feet above basement floor and 9.0 feet below land surface datum.

1933, July 26	+ 16.4	671.1	1933, Nov. 21	+ 17.6	672.3
Sept.19	+ 18.7	673.4	Dec. 20	+ 17.6	672.3
Oct. 18	+ 14.3	669.0	1934, Jan. 18	+ 18.2	672.9

(continued on next page)

Water levels in wells in Bexar County--Continued

Well 118--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Feb. 20	+ 17.8	672.5	1934, Dec. 20	+ 13.4	668.1
Mar. 20	+ 18.7	673.4	1935, Jan. 31	+ 14.1	668.8
Apr. 19	+ 19.2	673.9	Mar. 1	+ 14.3	669.0
May 22	+ 16.4	671.1	Apr. 9	+ 13.8	668.5
June 20	+ 13.3	668.0	May 21	+ 22.2	676.9
July 27	+ 14.5	669.2	June 27	+ 30.2	684.9
Aug. 22	+ 12.5	667.2	Aug. 5	+ 27.5	682.2
Sept.19	+ 12.6	667.3	Sept.26	+ 27.3	682.0
Oct. 12	+ 12.8	667.5	Nov. 21	+ 26.9	681.6
Oct. 25	+ 12.9	667.6	1936, Jan. 21	+ 25.6	680.3
Nov. 19	+ 13.6	668.3	Dec. 30	+ 27.3	682.0

Measurements discontinued.

Well 159

Formerly U. S. Geological Survey well 37. San Antonio and Aransas Pass R. R., Simpson and Probandt Streets, 1½ miles south. Top of cross on casing, altitude 629.55, 2.5 feet above land surface datum.

1933, Aug. 2	+ 47.6	674.6	1934, Sept.19	+ 42.1	669.1
Sept.18	+ 47.8	674.8	Oct. 9	+ 42.5	669.5
Oct. 18	+ 47.8	674.8	Oct. 25	+ 41.60	668.65
Nov. 20	+ 47.2	674.2	1935, Apr. 10	+ 42.70	669.75
Dec. 20	+ 47.1	674.1	May 21	+ 52.00	679.05
1934, Jan. 18	+ 47.2	674.2	June 27	+ 61.00	688.05
Feb. 19	+ 47.8	674.8	Aug. 5	+ 57.90	684.95
Mar. 19	+ 48.8	675.8	Sept.27	+ 57.8	684.8
Apr. 19	+ 49.3	676.3	Nov. 21	+ 61.2	688.2
May 21	+ 46.7	673.7	1936, Jan. 21	+ 56.4	683.4
June 19	+ 43.8	670.8	Aug. 29	+ 55.1	682.1
July 27	+ 44.9	671.9	Dec. 30	+ 57.1	684.1
Aug. 22	+ 42.4	669.4			

Measurements discontinued.

Well 175

Formerly U. S. Geological Survey well 38. City of San Antonio, Pleasanton Road and Sayers Street, 3¼ miles south. Top of concrete, altitude 622.57 feet, 1.0 foot above land surface datum.

1933, Aug. 21	+ 39.0	660.6	1934, June 19	+ 36.5	658.1
Sept.19	+ 39.8	661.4	July 27	+ 34.6	656.2
Oct. 18	+ 39.4	661.0	Aug. 22	+ 34.6	656.2
Nov. 20	+ 38.8	660.4	Sept.19	+ 34.6	656.2
Dec. 20	+ 38.6	660.2	Oct. 9	+ 34.4	656.0
1934, Jan. 18	+ 38.6	660.2	Oct. 25	+ 33.7	655.3
Feb. 19	+ 38.9	660.5	Nov. 19	+ 35.0	656.6
Mar. 19	+ 40.0	661.6	Dec. 20	+ 34.0	655.6
Apr. 19	+ 40.0	661.6	1935, Feb. 1	+ 34.6	656.2
May 21	+ 38.6	660.2	Feb. 28	+ 34.9	656.5

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Water levels in wells in Bexar County--Continued

Well 175--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1935, Apr. 10	+ 35.9	657.5	1935, Nov. 21	+ 46.8	668.4
May 21	+ 38.0	659.6	1936, Jan. 21	+ 45.7	667.3
June 27	+ 48.8	670.4	Aug. 29	+ 45.0	666.6
Aug. 5	+ 47.2	668.8	Dec. 30	+ 47.5	669.1
Sept.27	+ 45.7	667.3			

Measurements discontinued.

Well 204

Formerly U. S. Geological Survey well 29. N. H. White, Oriental Avenue at International and Great Northern R. R., 2¼ miles southwest. Top of valve, altitude 652.53 feet, 0.5 foot above land surface datum.

1933, Sept.15	+ 21.5	673.5	1934, Oct. 25	+ 16.2	668.2
Oct. 18	+ 22.0	674.0	Nov. 19	+ 18.05	670.08
Nov. 20	+ 23.0	675.0	Dec. 20	+ 18.3	670.3
Dec. 20	+ 23.6	675.6	1935, Jan. 31	+ 16.40	668.43
1934, Jan. 18	+ 22.5	674.5	Feb. 28	+ 19.20	671.23
Feb. 19	+ 22.5	674.5	Apr. 8	+ 18.4	670.4
Mar. 19	+ 22.9	674.9	May 21	+ 27.20	679.23
Apr. 19	+ 23.9	675.9	June 27	+ 35.9	687.9
May 21	+ 19.7	671.7	Aug. 5	+ 33.1	685.1
June 19	+ 18.5	670.5	Sept.27	+ 20.3	672.33
July 27	+ 19.70	671.73	Nov. 21	+ 31.7	683.7
Aug. 22	+ 16.9	668.9	1936, Jan. 21	+ 31.1	683.1
Sept.19	+ 16.9	668.9	Aug. 29	+ 29.4	681.4
Oct. 9	+ 17.1	669.1	Dec. 30	+ 32.0	684.0

Measurements discontinued.

Well 213

Palm Heights Water Company, Theo and Charlotte Streets, 3 miles southwest. Top of concrete, altitude 655.68 feet, 1.0 foot above land surface datum.

1933, Aug. 15	+ 20.0	674.7	1934, Aug. 6	+ 18.5	673.2
1934, May 14	+ 18.8	673.5	Oct. 9	+ 12.1	666.8

Measurements discontinued.

Well D-1

Formerly U. S. Geological well 1, Mrs. Kate Benke, 8 miles northwest. Top of pipe clamp, altitude 1044.64 feet, 0.5 foot above land surface datum.

1933, Sept.22	-286.90	757.24	1935, Feb. 4	-309.06	735.08
1934, May 23	-286.71	757.43	Apr. 9	-309.76	734.38
June 21	-292.15	751.99	May 21	-254.77	789.37
July 31	-279.59	764.55	June 28	-219.02	825.12
Aug. 24	-296.46	747.68	Aug. 2	-239.60	804.54
Sept.21	-300.21	743.93	Sept.27	-236.15	807.99
Oct. 10	-302.05	742.09	1936, Jan. 20	-267.10	777.04
Dec. 21	-303.27	740.87	Aug. 27	-241.67	802.47
1935, Feb. 3	-309.02	735.12	1937, Jan. 4	-259.26	784.88

Measurements discontinued.

Water levels in wells in Bexar County--Continued

Well D-12

Formerly U. S. Geological Survey well 3. Ben Biering, 14½ miles northwest. Top of casing, altitude 969.04 feet, 1.0 foot above land-surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1932, Oct. 18	-244.9	723.1	1934, July 30	-256.88	711.16
Nov. 18	-245.65	722.39	Aug. 22	-258.02	710.02
1933, Jan. 15	-246.95	721.09	Sept.19	-260.01	708.03
Apr. 9	-246.81	721.23	Oct. 13	-261.23	706.81
July 18	-252.37	715.67	Nov. 20	-263.08	704.96
Sept.18	-255.79	712.25	Dec. 19	-264.90	703.14
Oct. 17	-256.98	711.06	1935, Feb. 2	-265.53	702.51
Nov. 20	-258.32	709.72	Feb. 28	-265.12	702.92
Dec. 18	-259.66	708.38	Apr. 10	-265.94	702.10
1934, Jan. 19	-260.57	707.47	June 28	-229.10	738.94
Feb. 19	-259.96	708.08	Sept.29	-215.55	752.49
Mar. 19	-258.56	709.48	Nov. 19	-217.05	750.99
Apr. 18	-255.75	712.29	1936, Jan. 18	-223.83	744.21
May 21	-253.15	714.89	Aug. 26	-199.30	768.74
June 19	-255.05	712.99	Dec. 30	-214.53	753.51

Measurements discontinued.

Well D-13

Formerly U. S. Geological Survey well 4. Theo. Biering, 15 miles northwest. Top of pipe clamp, altitude 987.74 feet, 1.0 foot above land-surface datum.

1932, Oct. 18	-262	725	1934, May 21	-270.51	716.23
Nov. 18	-262.00	724.74	June 19	-272.56	715.18
1933, Jan. 15	-264.4	722.7	July 30	-272.85	713.89
Apr. 9	-263.2	723.5	Sept.19	-275.95	710.79
July 18	-268.42	718.32	Oct. 13	-277.32	709.42
Aug. 17	-270.2	716.5	Nov. 20	-279.24	707.50
Sept.18	-271.93	714.81	Dec. 19	-281.13	705.61
Oct. 17	-273.29	713.45	1935, Feb. 2	-281.78	704.96
Nov. 20	-274.62	712.12	Apr. 10	-282.66	704.08
Dec. 18	-276.04	710.70	May 20	-277.93	708.81
1934, Jan. 19	-276.82	709.92	1936, Aug. 26	-213.46	773.28
Feb. 19	-276.58	710.16	Dec. 30	-220.86	756.88
Apr. 18	-273.00	713.74			

Measurements discontinued.

Well D-15

Formerly U. S. Geological Survey well 5. A. L. Fuller, 16 miles northwest. Top of pipe clamp, altitude 1043.81 feet, 1.0 foot above land-surface datum.

1933, Sept.27	-161.72	881.09	1934, Apr. 18	-167.40	875.41
1934, Jan. 19	-170.40	872.41	May 21	-167.01	875.8
Feb. 19	-163.77	879.04	June 19	-193	850
Mar. 1	-166.65	876.16	July 30	-165.32	877.49
Mar. 19	-175.6	867.2	Oct. 12	-168.86	873.95

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Water levels in wells in Bexar County--Continued

Well D-15--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Dec. 19	-169.19	873.62	1935, June 28	-133.05	909.76
1935, Feb. 2	-171.15	871.66	Aug. 5	-144.62	898.19
Apr. 10	-171.80	871.01	Sept.29	-136.80	871.01
May 20	-168.80	874.07	1936, Aug. 26	-169.00	873.81

Measurements discontinued.

Well D-16

Formerly U. S. Geological Survey well 6. R. W. Barham, 16 miles northwest. Hole in pump base, altitude 1,050.33 feet, at land-surface datum.

1934, Mar. 19	- 78.00	972.33	1935, Feb. 28	- 77.73	972.60
Apr. 18	- 76.20	974.13	Apr. 10	- 77.39	972.94
May 21	- 77.74	972.59	May 20	- 65.83	984.50
June 19	- 77.76	972.57	June 28	- 71.11	979.22
July 30	- 75.92	974.41	Aug. 5	- 72.10	978.23
Aug. 22	- 78.20	972.13	Sept.29	- 68.80	981.53
Sept.19	- 78.24	972.09	Nov. 19	- 77.58	972.75
Oct. 12	- 78.26	972.07	1936, Jan. 18	- 77.68	972.65
Nov. 20	- 77.93	972.40	Aug. 26	- 77.08	973.25
Dec. 19	- 78.04	972.29	Dec. 30	- 77.22	973.11
1935, Feb. 2	- 78.33	972.00			

Measurements discontinued.

Well E-26

Formerly U. S. Geological Survey well 2. Top of casing, altitude 1004.92 feet, 1.0 foot above land-surface datum.

1933, Dec. 22	-288.08	715.84	1935, Mar. 1	-290.88	712.64
1934, Mar. 2	-288.50	715.42	Nov. 20	-259.98	743.54
Oct. 12	-291.28	712.24			

Measurements discontinued.

Well E-41

Formerly U. S. Geological Survey well 8. Adolph Benke, 12½ miles northwest. Top of pipe clamp, altitude 907.33 feet, 0.5 foot above land-surface datum.

1932, July 21	-204.7	702.1	1934, Jan. 19	-210.32	696.51
Oct. 18	-200.65	706.18	Feb. 19	-209.58	697.25
Nov. 18	-200.98	705.85	Mar. 19	-208.48	698.35
1933, Apr. 9	-201.06	705.77	Apr. 18	-207.02	699.81
July 18	-204.93	701.90	May 21	-205.95	700.88
Aug. 17	-206.18	700.65	June 19	-207.54	699.29
Sept.18	-207.14	699.69	July 30	-209.54	697.00
Oct. 17	-207.73	699.10	Aug. 22	-209.83	697.00
Nov. 20	-208.81	698.02	Sept.19	-211.50	695.33
Dec. 18	-209.73	697.10	Oct. 11	-213	694

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Water levels in wells in Bexar County--Continued

Well E-41--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Nov. 20	-214.05	692.78	1935, June 28	-188.12	718.71
Dec. 19	-214.99	691.84	Sept.29	-184.90	721.93
1935, Feb. 2	-215.36	691.47	Nov. 19	-183.00	723.83
Feb. 28	-215.09	691.74	1936, Jan. 18	-185.68	721.15
Apr. 10	-215.93	690.90	Aug. 26	-168.94	737.89
May 20	-211.50	695.33	Dec. 30	-176.61	730.22

Measurements discontinued.

Well E-45

Formerly U. S. Geological Survey well 7. George Calvert, 9½ miles northwest. Top of pipe clamp, altitude 876.57 feet, 1.0 foot above land-surface datum.

1932, July 21	-190.3	685.3	1934, July 30	-192.61	682.96
Oct. 18	-184.9	690.7	Aug. 22	-195.39	680.18
Nov. 18	-185.71	689.86	Sept.19	-196.54	679.03
1933, Apr. 9	-186.0	689.6	Nov. 20	-197.14	678.43
July 18	-190.17	685.40	Dec. 19	-197.51	678.06
Aug. 17	-190.51	685.06	1935, Feb. 2	-197.39	678.18
Sept.18	-190.65	684.92	Feb. 28	-197.05	678.52
Oct. 17	-191.23	684.34	Apr. 10	-197.70	677.87
Nov. 20	-191.65	683.92	May 20	-181.90	693.67
Dec. 18	-192.03	683.54	June 28	-170.28	705.29
1934, Jan. 19	-191.65	683.92	Aug. 5	-176.40	699.17
Feb. 19	-191.04	684.53	Sept.29	-175.72	699.85
Mar. 19	-189.96	685.61	1936, Jan. 18	-180.00	695.57
Apr. 18	-188.76	686.81	Aug. 26	-175.25	700.32
May 21	-190.84	684.73	Dec. 30	-175.88	699.69
June 19	-193.61	681.96			

Measurements discontinued.

Well F-11

Formerly U. S. Geological Survey well 9. I. G. Yates, 14 miles north. Top of pipe clamp, altitude 949.22, 1.0 foot above land-surface datum.

1932, July 20	-259.0	689.2	1933, Oct. 18	-262.64	685.58
Oct. 19	-260.5	687.7	Nov. 21	-262.75	685.47
1933, Apr. 10	-261.95	686.27	Dec. 20	-262.95	685.27
July 17	-262.42	685.80	1934, May 22	-259.7	688.5
Aug. 18	-261.40	686.82			

Well F-12

Formerly U. S. Geological Survey well 10. H. H. Classen, 13 miles north. Top of pipe clamp, altitude 908.65, 1.0 foot above land-surface datum.

1932, July 20	-234.08	673.57	1933, July 17	-234.68	672.97
Oct. 19	-232.4	675.2	Sept.19	-235.28	672.37
1933, Jan. 16	-232.38	675.27	Nov. 21	-235.77	671.88

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Water levels in wells in Bexar County--Continued

Well F-12--Continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Dec. 20	-236.04	671.61	1934, Oct. 10	-238.40	669.25
1934, Jan. 19	-236.17	671.48	Nov. 20	-239.00	668.65
Feb. 20	-234.88	672.77	1935, Feb. 2	-238.48	669.17
Mar. 20	-233.57	674.08	Mar. 1	-237.62	670.03
Apr. 19	-233.54	674.11	Apr. 10	-238.18	669.47
May 22	-234.20	673.45	June 26	-223.25	684.40
June 20	-235.76	671.89	Aug. 3	-221.63	686.02
July 30	-236.63	671.02	Nov. 20	-220.47	687.18
Aug. 23	-236.82	670.83	1936, Jan. 18	-222.85	684.80
Sept. 20	-238.00	669.65	Aug. 28	-218.26	689.39

Measurements discontinued.

Well F-20

J. P. Classen, 16½ miles northeast. Top of clamp, altitude 869.40 feet, 2.0 feet above land-surface datum.

1933, Oct. 12	-204.12	663.28	1935, Nov. 21	-190.08	677.22
1934, Oct. 10	-206.22	661.10	1936, Jan. 19	-191.82	675.58
1935, Aug. 9	-189.43	677.97			

Measurements discontinued.

Well F-24

K. Lijegren, 14½ miles northeast. Top of clamp, altitude 918.11 feet, 0.5 foot above land-surface datum.

1933, Oct. 12	-250.65	666.96	1935, Aug. 9	-241.60	676.01
1934, Oct. 8	-254.50	663.11	Nov. 21	-241.94	675.67

Measurements discontinued.

Well F-29

Formerly U. S. Geological Survey well 14. Albert Theis, 10½ miles northeast. Top of casing, altitude 821.57 feet, 0.5 foot above land-surface datum.

1933, Oct. 2	-138.31	682.76	1934, Nov. 20	-138.65	682.42
Oct. 18	-139.18	681.89	Dec. 19	-141.97	679.10
Nov. 21	-139.42	681.65	1935, Feb. 4	-138.80	682.27
Dec. 20	-140.27	680.80	Mar. 1	-135.35	685.72
1934, Jan. 19	-139.99	681.08	Apr. 10	-136.80	684.27
Feb. 20	-137.07	684.00	May 20	-124.34	696.73
Mar. 20	-135.93	685.14	June 26	-107.50	713.57
Apr. 19	-135.01	686.06	Aug. 3	-119.95	701.12
May 22	-134.01	687.06	Sept. 26	-128.08	692.99
June 20	-136.67	684.40	Nov. 20	-130.78	690.29
July 30	-137.16	683.91	1936, Jan. 18	-133.40	687.67
Aug. 23	-139.34	681.73	Aug. 28	-127.00	694.07
Sept. 20	-139.74	681.33	1937 Jan. 5	-127.00	693.72
Oct. 10	-139.65	681.42			

Measurements discontinued.

Water levels in wells in Bexar County--Continued

Well F-30

Formerly U. S. Geological Survey well 11. John Eisenheuer, 12½ miles north. Top of casing, altitude 874.82 feet, 0.5 foot above land-surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1932, July 20	-202.14	672.18	1934, June 20	-204.29	670.03
Oct. 19	-200.05	674.27	July 30	-204.54	669.78
1933, Jan. 16	-199.68	674.64	Aug. 23	-205.37	668.95
Apr. 10	-200.06	674.26	Sept.20	-206.25	668.07
July 17	-203.18	671.14	Oct. 10	-206.70	667.62
Aug. 18	-202.83	671.49	Nov. 20	-206.87	667.45
Oct. 18	-203.08	671.24	Dec. 19	-206.92	667.40
Nov. 21	-203.39	670.93	1935, Feb. 4	-206.31	668.01
Dec. 20	-203.50	670.82	Apr. 10	-206.13	668.19
1934, Jan. 19	-203.35	670.97	May 20	-200.18	674.14
Feb. 20	-202.48	671.84	Sept.29	-189.75	684.57
Mar. 20	-201.31	673.01	1936, Jan. 18	-192.11	682.21
Apr. 19	-200.85	673.47	Aug. 28	-188.11	686.21
May 22	-202.31	672.01	1937, Jan. 5	-189.56	684.76

Measurements discontinued.

Well F-58

Formerly U. S. Geological Survey well 13. Ed Haag, 7 miles north. Top of pipe clamp, altitude 782.81 feet, 0.5 foot above land-surface datum.

1933, Sept.29	-109.27	673.04	1935, Feb. 4	-114.20	668.11
1934, Feb. 20	-109.49	672.82	Mar. 1	-113.86	668.45
Mar. 20	-108.74	673.57	Apr. 10	-114.68	667.63
Apr. 19	-107.84	674.47	May 20	-104.50	677.81
May 22	-110.30	672.01	June 26	- 93.39	688.92
June 20	-112.39	669.92	Aug. 3	- 99.02	683.29
Aug. 23	-114.26	668.05	Sept.26	- 99.88	682.43
Sept.20	-114.50	667.81	Nov. 20	-101.03	681.28
Oct. 11	-114.90	667.41	1936, Jan. 18	-102.73	679.58
Nov. 20	-114.44	667.87	Aug. 28	-101.00	681.31
Dec. 19	-114.50	667.81	1937, Jan. 5	-100.15	682.16

Measurements discontinued.

Well F-62

Formerly U. S. Geolcgical Survey well 12. Amos Lorenz, 5⅔ miles north. Top of pipe clamp, altitude 821.16 feet, 0.5 foot above land-surface datum.

1932, July 19	-151.25	669.41	1934, Jan. 19	-148.88	671.78
Oct. 19	-145.50	675.16	Feb. 20	-148.55	672.11
1933, July 17	-149.05	671.61	Apr. 19	-146.88	673.78
Aug. 18	-148.88	671.78	June 20	-151.81	668.85
Sept.19	-148.64	672.12	Aug. 23	-153.18	667.48
Oct. 18	-149.28	671.38	Sept.20	-153.51	667.15
Nov. 21	-149.26	671.40	Oct. 10	-153.90	666.76
Dec. 20	-149.23	671.43	Nov. 20	-153.40	667.26

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Water levels in wells in Bexar County--Continued

Well F-62--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Dec. 19	-153.42	667.24	1935, Sept.26	-140.05	680.61
1935, Feb. 4	-153.17	667.49	Nov. 19	-140.82	679.84
Mar. 1	-152.76	667.90	1936, Jan. 18	-142.18	678.48
Apr. 8	-152.75	667.01	Aug. 28	-140.52	680.14
May 19	-145.15	675.51	1937, Jan. 5	-139.90	680.76
June 26	-135.35	685.31			
Measurements discontinued					

Well F-86

Formerly U. S. Geological Survey well XB-3. Beitel Church, 8 miles northeast. Top of pipe clamp, altitude 722.03 feet, 0.4 foot above land-surface datum.

1933, Oct. 3	- 52.34	669.29	1940, Mar. 22	- 59.51	662.12
1934, Oct. 10	- 57.85	663.78	Apr. 26	- 60.91	660.72
1935, Aug. 9	- 44.85	676.78	May 23	- 60.48	661.15
Aug. 28	- 44.00	677.63	June 21	- 59.03	662.60
Nov. 21	- 45.02	676.61	July 25	- 60.12	661.51
1938, Feb. 26	- 46.06	675.57	Aug. 28	- 63.67	657.96
Mar. 23	- 46.72	674.91	Sept.24	- 63.18	658.45
Apr. 26	- 45.65	675.98	Oct. 25	- 63.02	658.61
May 28	- 44.74	676.89	Dec. 4	- 59.58	662.05
June 27	- 48.10	673.63	1941, Jan. 23	- 57.03	664.60
July 26	- 49.72	671.91	Mar. 25	- 49.25	672.38
Aug. 22	- 51.11	670.52	May 29	- 44.23	677.40
Sept.25	- 51.00	670.63	Aug. 7	- 49.72	671.91
Oct. 26	- 51.89	669.74	Nov. 14	- 48.54	673.09
Dec. 8	- 51.80	669.83	1942, Apr. 9	- 50.21	671.42
1939, Jan. 24	- 51.48	670.15	Aug. 3	- 53.75	667.88
Feb. 28	- 52.57	669.06	Dec. 3	- 44.18	677.45
Mar. 29	- 53.41	668.22	1943, Apr. 20	- 50.70	670.93
Apr. 22	- 56.18	665.45	Sept. 9	- 55.13	666.50
May 25	- 56.48	665.15	Dec. 21	- 55.69	666.04
July 3	- 59.15	662.48	1944, Aug. 24	- 56.86	664.77
Oct. 5	- 59.60	662.03	Dec. 19	- 49.87	671.76
Dec. 19	- 58.17	663.46	1945, May 23	- 47.29	674.34
1940, Jan. 30	- 57.92	663.71	1946, Mar. 19	- 52.58	669.05
Feb. 20	- 58.43	663.20			

Well G-2

Turner Gravel Company, 16½ miles northeast. Top of pump base, altitude 758.62 feet, at land-surface datum.

1933, Oct. 3	- 96.41	662.21	1935, Nov. 21	- 89.31	669.31
1934, Oct. 8	-107.13	651.49	1936, Jan. 19	- 90.60	668.02
1935, Aug. 9	- 88.80	669.82			
Measurements discontinued.					

Water levels in wells in Bexar County--Continued

Well G-7

Formerly U. S. Geological Survey well XB-4. Simon and Borgfeld, 12½ miles northeast. Top of concrete, altitude 710.11 feet, at land-surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Oct. 2	- 39.20	670.91	1940, Apr. 26	- 47.63	662.48
1938, Feb. 26	- 31.93	678.18	May 23	- 47.21	662.90
Apr. 26	- 31.94	678.17	June 21	- 45.96	664.15
July 26	- 36.82	673.29	Sept. 24	- 50.30	659.81
Aug. 22	- 31.90	678.21	Oct. 25	- 50.13	659.98
1939, May 25	- 44.90	665.21	Dec. 4	- 46.46	663.65
July 4	- 46.10	664.01	1941, Jan. 23	- 44.03	666.08
Oct. 5	- 46.46	663.65	May 29	- 31.35	678.76
Dec. 19	- 44.83	665.28	Aug. 8	- 36.50	673.61
1940, Feb. 20	- 45.15	664.96	1942, Apr. 9	- 37.10	673.01
Mar. 22	- 46.34	663.77			

Measurements discontinued.

Well H-1

Formerly U. S. Geological Survey well 16. G. A. Kuentz, 12½ miles west. Top of pipe clamp, altitude 849.02 feet, 0.5 foot above land-surface datum.

1933, Sept. 21	-157.73	690.79	1935, Feb. 4	-165.86	682.66
1934, Jan. 9	-160.16	688.36	Mar. 2	-165.40	683.12
Apr. 20	-153.37	695.15	Apr. 9	-166.00	682.52
May 23	-158.47	690.05	May 21	-149.85	698.67
June 21	-161.38	687.14	June 28	-133.08	715.44
July 31	-159.99	688.53	Aug. 2	-140.32	708.20
Aug. 24	-163.30	685.22	Sept. 27	-140.30	708.22
Sept. 21	-163.64	683.88	1936, Jan. 20	-145.68	702.84
Oct. 11	-165.16	683.36	Aug. 27	-139.74	708.78
Dec. 21	-167.66	680.86	1937, Jan. 4	-141.17	707.35

Measurements discontinued.

Well H-12

Formerly U. S. Geological Survey well 27. A. J. Vogt, 12 miles west. Top of pipe clamp, altitude 765.97 feet, 1.0 foot above land-surface datum.

1933, Sept. 15	- 80.70	684.27	1934, Dec. 21	- 87.58	677.39
1934, Jan. 4	- 81.60	683.37	1935, Feb. 3	- 87.40	677.57
Apr. 20	- 78.84	686.13	Mar. 2	- 87.31	677.66
May 23	- 82.51	682.46	Apr. 9	- 88.08	676.89
June 21	- 84.87	680.10	May 21	- 78.25	686.72
July 31	- 83.53	681.44	June 28	- 65.56	699.41
Aug. 24	- 86.63	678.34	Aug. 3	- 69.44	695.53
Sept. 21	- 87.18	677.79	Sept. 27	- 68.58	696.39
Oct. 11	- 87.79	677.18	1936, Aug. 27	- 69.79	695.18
Nov. 20	- 87.26	677.71	1937, Jan. 4	- 68.14	696.83

Measurements discontinued.

Water levels in wells in Bexar County--Continued

Well H-13

Formerly U. S. Geological Survey well 26. Fullers Earth Plant, 13½ miles west. Top of concrete, altitude 790.15, 2.0 feet above land-surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1933, Sept.15	-103.20	684.95	1939, May 4	-106.91	681.24
1934, Jan. 4	-104.67	683.48	June 9	-106.62	681.53
Apr. 20	-102.22	685.93	July 6	-110.49	677.66
May 23	-105.87	682.28	Aug. 17	-108.39	679.76
June 21	-108.40	679.75	Sept.16	-109.04	679.11
July 31	-107.27	680.88	Oct. 26	-110.34	677.81
Aug. 24	-110.44	677.71	1940, Jan. 17	-108.83	679.32
Sept.21	-111.13	677.02	Feb. 21	-110.14	678.01
Oct. 11	-111.76	676.39	Mar. 18	-111.61	676.54
Nov. 20	-111.28	676.87	Apr. 23	-112.47	675.68
Dec. 21	-111.70	676.45	May 20	-112.64	675.51
1935, Feb. 3	-111.68	676.47	June 17	-111.79	676.36
Mar. 2	-111.52	676.63	July 22	-110.97	677.18
Apr. 9	-112.28	675.87	Aug. 23	-115.17	672.98
May 21	-102.50	685.65	Sept.24	-115.60	672.55
June 28	- 89.68	698.47	Oct. 21	-115.62	672.53
Aug. 3	- 91.85	696.30	Dec. 2	-111.71	676.44
Sept.27	- 91.21	696.94	1941, Jan. 20	-108.96	679.19
1936, Jan. 20	- 93.28	694.87	May 26	- 91.23	696.92
Aug. 27	- 90.97	697.18	Aug. 7	- 97.73	690.42
1937, Jan. 4	- 89.00	699.15	Nov. 14	- 95.72	692.43
1938, Feb. 23	- 93.67	694.48	1942, Apr. 6	- 99.38	688.77
Mar. 15	- 94.17	693.98	Aug. 4	-101.85	686.30
Apr. 26	- 93.65	694.50	Nov. 30	- 90.68	697.47
May 23	- 93.13	695.02	1943, Apr. 26	- 99.87	688.28
July 26	- 97.39	690.76	Aug. 26	-105.46	682.69
Aug. 22	- 97.42	690.73	Dec. 14	-105.61	682.54
Sept.24	- 99.32	688.83	1944, Apr. 29	-102.06	686.09
Oct. 26	-100.63	687.52	Aug. 8	-106.59	681.56
Dec. 8	-101.20	686.95	Dec. 18	- 99.56	688.59
1939, Jan. 27	-100.60	687.55	1945, June 4	- 97.56	690.59
Mar. 2	-102.35	685.80	1946, Apr. 4	-104.84	683.31
Apr. 3	-104.08	684.07			

Well H-16

Formerly U. S. Geological Survey well XB-2. Oscar Bippert, 16½ miles west. Top of pipe clamp, altitude 761.63, 1.3 feet above land-surface datum.

1934, Jan. 4	- 70.71	689.62	1937, Dec. 23	- 63.89	696.44
Oct. 9	- 77.03	683.30	1938, Jan. 19	- 63.09	697.24
1937, Aug. 21	- 63.04	697.29	Feb. 26	- 61.16	699.17
Sept.26	- 64.22	696.11	Mar. 15	- 61.58	698.75
Oct. 23	- 62.93	697.40	Apr. 26	- 60.07	700.26
Nov. 15	- 64.83	695.50	May 24	- 59.59	700.74

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Water levels in wells in Bexar County--Continued

Well H-16--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1938, June 27	- 63.04	697.29	1940, July 22	- 79.03	681.30
July 26	- 64.72	695.61	Aug. 23	- 83.04	677.29
Aug. 22	- 66.50	693.83	Sept.21	- 84.34	675.99
Sept.24	- 66.64	693.69	Oct. 25	- 83.85	676.48
Oct. 26	- 68.09	692.24	Dec. 2	- 80.02	680.31
1939, Jan. 27	- 69.10	691.23	1941, Jan. 20	- 77.19	683.14
Mar. 2	- 70.42	689.91	May 28	- 58.60	701.64
Apr. 3	- 72.07	688.26	Aug. 7	- 64.80	695.53
May 4	- 74.75	685.58	Nov. 12	- 62.42	697.91
June 9	- 74.70	685.63	1942, Apr. 8	- 66.04	694.29
July 6	- 78.32	682.01	Aug. 4	- 69.07	691.26
Aug. 17	- 76.02	684.31	Dec. 3	- 58.29	702.04
Sept.16	- 77.08	683.25	1943, Apr. 29	- 67.97	692.36
Oct. 26	- 77.12	683.21	Aug. 26	- 72.80	687.53
1940, Jan. 17	- 77.04	683.29	Dec. 14	- 73.24	687.09
Feb. 21	- 78.45	681.88	1944, Apr. 29	- 69.85	690.48
Mar. 21	- 79.79	680.54	Aug. 8	- 73.01	687.32
Apr. 26	- 80.90	679.43	Dec. 19	- 67.23	693.10
May 20	- 80.80	679.53	1945, June 4	- 64.79	695.54
June 17	- 80.00	680.33			

Well H-17

Formerly U. S. Geological Survey well 15. Robert Mechler, 17½ miles west. Top of pipe clamp, altitude 810.64, 1.5 feet above land-surface datum.

1933, Sept.15	-116.84	692.30	1938, Apr. 26	-108.87	700.27
1934, Jan. 4	-118.61	690.53	May 23	-108.17	700.97
Apr. 20	-116.47	692.67	July 26	-112.59	696.55
May 23	-119.76	689.38	Aug. 22	-114.35	694.79
June 21	-122.24	686.90	Sept.23	-115.34	693.80
July 31	-121.37	687.77	Oct. 26	-116.02	693.12
Aug. 24	-124.27	684.87	Dec. 8	-116.55	692.59
Sept.21	-125.09	684.05	1939, Jan. 27	-117.12	692.02
Oct. 9	-124.90	684.24	Mar. 2	-118.35	690.79
Nov. 21	-125.55	683.59	Apr. 3	-120.03	689.11
Dec. 21	-125.97	683.17	May 4	-122.76	686.38
1935, Feb. 3	-126.08	683.06	June 9	-122.72	686.42
Mar. 2	-126.00	683.14	July 6	-126.35	682.79
Apr. 9	-126.87	682.27	Aug. 17	-124.12	685.02
May 21	-117.34	691.80	Sept.16	-124.88	684.26
June 28	-102.36	706.78	Oct. 26	-126.30	682.84
Aug. 3	-105.50	703.64	1940, Jan. 17	-125.12	684.02
1936, Jan. 20	-107.35	701.79	Feb. 21	-126.53	682.61
Aug. 27	-105.48	703.66	Mar. 21	-127.87	681.27
1937, Jan. 4	-102.95	706.19	Apr. 23	-128.63	680.51
1938, Feb. 23	-109.04	700.10	May 20	-128.86	680.28
Mar. 21	-109.71	699.43	June 17	-128.06	681.08

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Water levels in wells in Bexar County--Continued

Well H-17--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1940, July 22	-127.13	682.01	1942, Aug. 4	-116.93	692.21
Aug. 23	-131.09	678.05	Nov. 30	-105.57	703.57
Sept.24	-131.73	677.41	1943, Apr. 26	-115.06	694.08
Oct. 25	-131.95	677.19	Aug. 26	-120.70	688.44
Dec. 2	-128.10	681.04	Dec. 14	-121.44	687.70
1941, Jan. 20	-125.32	683.82	1944, Apr. 29	-117.88	691.26
May 28	-106.51	702.63	Aug. 8	-121.62	687.52
Aug. 7	-112.69	696.45	Dec. 19	-116.17	692.97
Nov. 12	-110.32	698.82	1945, June 6	-112.72	696.42
1942, Apr. 6	-114.39	694.75	1946, Apr. 1	-119.78	689.36

Well I-11

Formerly U. S. Geological Survey well 18. Alfred Reininger, 8 miles northwest. Top of pipe clamp, altitude 892.13 feet, 0.5 foot above land-surface datum.

1932, July 21	-212.60	679.03	1934, June 19	-215.74	675.89
Oct. 18	-207.77	683.86	July 30	-214.65	676.98
Nov. 18	-208.34	683.29	Aug. 22	-217.38	674.25
1933, Jan. 15	-208.05	683.58	Sept.19	-218.17	673.46
Apr. 9	-208.80	682.83	Oct. 12	-218.89	672.74
July 18	-212.54	679.09	Nov. 20	-218.43	673.20
Aug. 17	-212.58	679.05	Dec. 19	-218.51	673.12
Sept.18	-212.48	679.15	1935, Feb. 2	-218.48	673.15
Oct. 17	-212.10	678.53	Apr. 10	-218.92	672.71
Nov. 20	-212.35	678.28	May 20	-207.34	684.29
Dec. 18	-213.54	678.09	June 28	-195.82	695.81
1934, Jan. 19	-213.09	678.54	Aug. 5	-201.15	690.48
Feb. 19	-212.69	678.94	Sept.29	-200.23	691.40
Mar. 19	-211.65	679.98	Nov. 19	-202.21	689.42
Apr. 18	-210.86	680.77	1936, Aug. 26	-200.71	690.92
May 21	-213.06	678.57	Dec. 30	-200.50	691.13

Measurements discontinued.

Well I-18

Formerly U. S. Geological Survey well 17. F. A. Fitch, 6½ miles northwest. Top of pipe clamp, altitude 881.83 feet, 1.0 foot above land-surface datum.

1932, July 21	-202.85	677.98	1933, Dec. 18	-203.86	676.97
Oct. 18	-198.45	682.38	1934, Jan. 19	-203.45	677.38
Nov. 18	-198.97	681.86	Feb. 19	-203.05	677.78
1933, Jan. 15	-198.70	682.13	Mar. 19	-202.15	678.68
Apr. 8	-199.50	681.33	Apr. 18	-201.42	679.41
July 18	-203.06	677.77	May 21	-203.55	677.28
Aug. 17	-203.00	677.83	June 19	-206.29	674.54
Sept.18	-202.89	677.94	July 30	-205.12	675.71
Oct. 17	-203.50	677.33	Aug. 22	-207.72	673.11
Nov. 20	-203.72	677.11	Sept.19	-208.45	672.38

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Water levels in wells in Bexar County--Continued

Well I-18--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1934, Oct. 12	-209.18	671.65	1935, June 28	-186.85	693.98
Nov. 20	-208.60	672.23	Aug. 5	-191.82	689.01
Dec. 19	-208.75	672.08	Sept.29	-191.20	689.63
1935, Feb. 2	-208.58	672.25	Nov. 19	-193.28	687.55
Feb. 28	-208.22	672.61	1936, Jan. 18	-194.92	685.91
Apr. 10	-209.02	671.81	Aug. 26	-192.00	688.83
May 20	-198.40	682.43	Dec. 30	-191.69	689.14

Measurements discontinued.

Well I-33

Formerly U. S. Geological Survey well 19, Olive L. Landa, 5 miles north. Top of pipe clamp, altitude 775.09 feet, 1.0 foot above land-surface datum.

1932, Oct. 29	- 93.77	678.32	1934, Aug. 22	-101.36	670.73
1933, Apr. 9	- 93.44	678.65	Oct. 12	-102.84	669.25
July 18	- 97.00	675.09	Nov. 20	-102.39	669.70
Aug. 17	- 97.42	674.67	Dec. 19	-102.39	669.70
Sept.18	- 97.19	674.90	1935, Jan. 31	-102.08	670.01
Oct. 17	- 97.55	674.54	Mar. 1	-101.85	670.24
Nov. 20	- 97.70	674.39	Apr. 8	-102.74	669.35
Dec. 18	- 98.00	674.09	May 20	- 92.25	679.84
1934, Jan. 18	- 97.58	674.51	June 26	- 81.05	691.04
Feb. 19	- 97.23	674.86	Aug. 3	- 86.23	685.86
Mar. 19	- 96.34	675.75	Sept.26	- 86.91	685.18
Apr. 18	- 95.00	677.09	Nov. 19	- 88.12	683.97
May 21	- 97.3	674.8	1936, Jan. 18	- 89.60	682.49
June 19	- 99.75	672.34	Aug. 28	- 87.23	684.86
July 27	-100.11	671.98	Dec. 29	- 86.53	685.56

Measurements discontinued.

Well I-57

Formerly U. S. Geological Survey well 28. Robert Boenig, 8 miles west. Top of pipe clamp, altitude 745.45 feet, 1.0 foot above land-surface datum.

1933, Sept.20	- 62.30	682.15	1935, Feb. 3	- 69.14	675.31
1934, Jan. 4	- 63.65	680.80	Mar. 2	- 69.92	674.53
Apr. 20	- 60.83	683.62	Apr. 9	- 69.74	674.71
May 23	- 64.63	679.82	May 21	- 60.26	684.19
June 21	- 66.89	677.56	June 28	- 48.13	696.32
July 31	- 65.36	679.09	Aug. 3	- 52.21	692.24
Aug. 24	- 68.63	675.82	Sept.27	- 51.46	692.99
Sept.21	- 69.05	675.40	1936, Jan. 20	- 54.53	689.92
Oct. 11	- 69.64	674.81	Aug. 27	- 52.66	691.79
Oct. 12	- 69.90	674.55	1937, Jan. 4	- 51.07	693.38
Nov. 20	- 69.10	675.35	1938, Feb. 23	- 54.88	689.57
Dec. 21	- 69.29	675.16	Mar. 15	- 55.13	689.32

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Water levels in wells in Bexar County--Continued

Well I-57--continued

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1938, Apr. 26	+ 54.53	689.92	1940, Aug. 23	+ 75.17	669.28
May 23	+ 53.29	691.16	Sept.24	+ 75.50	668.95
June 27	+ 57.26	687.19	Oct. 21	+ 75.40	669.05
July 26	+ 58.69	685.76	Dec. 2	+ 71.13	673.32
Aug. 22	+ 60.66	683.79	1941, Jan. 20	+ 68.57	675.88
Sept.24	+ 60.37	684.08	May 28	+ 52.32	692.13
Oct. 26	+ 61.68	682.77	Aug. 7	+ 58.60	685.85
Dec. 8	+ 61.80	682.65	Nov. 12	+ 56.96	687.49
1939, Jan. 27	+ 61.97	682.48	1942, Apr. 6	+ 60.44	684.01
Mar. 2	+ 63.03	681.42	Aug. 4	+ 62.94	681.51
Apr. 3	+ 64.80	679.65	Dec. 3	+ 52.36	692.09
July 6	+ 67.15	677.30	1943, Apr. 29	+ 61.97	682.48
Aug. 17	+ 69.20	675.25	Aug. 26	+ 66.63	677.82
Sept.16	+ 69.44	675.01	Dec. 14	+ 66.03	678.42
1940, Feb. 21	+ 70.09	674.36	1944, Apr. 29	+ 62.29	682.16
Mar. 18	+ 71.51	672.94	Aug. 8	+ 67.63	676.82
Apr. 26	+ 72.74	671.71	Dec. 19	+ 60.23	684.22
May 20	+ 72.63	671.82	1945, June 4	+ 58.73	685.72
June 17	+ 71.74	672.71	1946, Apr. 1	+ 64.46	679.99
July 22	+ 70.89	673.56			

Well I-122

Formerly U. S. Geological Survey well XB-1. Oscar Schievelbein, $9\frac{3}{4}$ miles west. Top of pipe clamp, 0.6 foot above land-surface datum.

1937, Aug. 21	-113.17	1940, Feb. 21	-125.67
Oct. 18	-126.96	Mar. 18	-127.08
Nov. 15	-124.04	Apr. 23	-128.02
1938, Jan. 19	-112.09	May 20	-128.15
Feb. 26	-110.03	June 17	-127.20
Mar. 15	-110.53	July 22	-126.43
Apr. 26	-109.80	Aug. 23	-130.67
May 24	-108.51	Sept.24	-130.87
June 27	-112.39	Oct. 21	-130.84
July 26	-113.81	Dec. 2	-126.70
Aug. 22	-115.76	1941, Jan. 20	-123.99
Sept.24	-115.63	May 28	-107.47
Oct. 26	-116.91	Aug. 7	-113.75
Dec. 8	-117.15	Nov. 12	-111.96
1939, Jan. 27	-117.27	1942, Apr. 8	-114.97
Mar. 2	-118.44	Aug. 4	-117.97
Apr. 3	-120.20	Nov. 30	-106.91
May 4	-122.97	1943, Apr. 26	-116.15
June 9	-122.51	Dec. 14	-121.52
July 6	-126.40	1944, May 3	-116.90
Aug. 17	-124.96	Aug. 7	-122.29
Sept.16	-124.90	Dec. 18	-115.25
Oct. 26	-126.21	1945, June 4	-113.91
1940, Jan. 17	-125.20	1946, Apr. 4	-120.59

Water levels in wells in Bexar County--Continued

Well J-35

Formerly U. S. Geological Survey well 36. A. A. Rothe, 5½ miles east. Top of pipe clamp, altitude 678.07 feet, 1.6 feet above land-surface datum.

Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level	Date	Water level above (+) or below (-) land surface datum (feet)	Altitude of water level
1932, Nov. 13	- 0.28	676.19	1934, Oct. 8	- 8.71	667.76
1934, Feb. 7	- 3.21	673.26			
Measurements discontinued.					

Well M-14

Formerly U. S. Geological Survey well 30. C. L. Cheek, 15 miles southwest. Top of gate valve, altitude 594.12 feet, 4.0 feet above land-surface datum.

1933, Aug. 26	+ 97.5	687.6	1934, Oct. 10	+ 91.7	681.8
Oct. 20	+ 97.3	687.4	1935, Nov. 22	+101.5	691.6
1934, May 22	+ 95.2	685.3			
Measurements discontinued.					

Analyses of water from wells in Bexar County, Texas

The water analyses shown in this table, except as noted, were made by the Quality of Water Division, U. S. Geological Survey by Margaret D. Foster, E. W. Lohr, W. W. Hastings, J. H. Rowley, M. W. Carroll, C. B. Cibulka, M. L. Begley, J. Yett and B. Irelan. Analyses made prior to 1930 were by W. T. Reed, J. R. Bailey and W. A. Noyes. 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	Silica (SiO_2)	Iron (Fe)	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	Lewis Maverick	923	Oct. 13, 1913	--	--	0	--	--	--	239	22	12	--	--	210
2	do.	650±	1913	--	--	0	--	--	--	349	42	20	--	--	220
3	Mrs. R. E. McIlvaine	340	June 28, 1913	--	--	0	--	--	--	312	43	233	--	--	88
4	do.	540	do.	--	--	0	--	--	--	282	33	290	--	--	120
5	Davis Heights	--	May 21, 1934	--	--	--	--	--	--	260	20	12	--	--	243
7	G. Potchernick	456	Oct. 13, 1913	--	--	0	--	--	--	249	19	8	--	--	182
11	Alamo Heights	490	Nov. 16, 1945	261	12	.06	67	16	3.4	247	17	12	0.2	3.9	233
44	Lakeview Addition	--	May 21, 1934	--	--	--	--	--	--	248	14	11	--	--	228
53	City of San Antonio	--	do.	--	--	--	--	--	--	246	16	10	--	--	228
58	Mrs. L. M. Hubble	498	do.	--	--	--	--	--	--	250	12	10	--	--	228
67	R. Keilman	802	do.	--	--	--	--	--	--	244	14	12	--	--	225
80	U. S. Government	729	Aug. 6, 1946	252	7.4	.06	62	17	7.1	245	16	14	.2	3.0	225
81	do.	729	do.	262	13	.05	63	16	8.4	246	16	14	.2	3.5	223
116	St. Anthony Hotel	831	1908?	266	12	.3	61	20	13	236	24	14	.4	.1	234
157	Martin Linen & Supply Co.	1,425	Nov. 20, 1941	394	15	.06	71	29	15	246	83	26	1.5	.0	296
159	San Antonio and Aransas Pass R. R.	1,103	May 21, 1934	--	--	--	--	--	--	240	46	23	--	--	264
164	San Antonio Public Service	1,052	June 16, 1942	268	15	.14	64	17	9.9	242	26	16	.1	3.0	230
174	City of San Antonio	1,400	Nov. 15, 1945	295	15	.06	68	18	9.8	240	35	19	.2	3.2	244

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
175	City of San Antonio	1,103	May 21, 1934	--	--	--	--	--	--	38	120	1,960	--	--	900
176	A. C. Oefinger	30	Aug. 25, 1941	577	--	--	--	--	--	418	48	65	--	41	318
198	Frank Brady	1,165	May 14, 1934	--	--	--	--	--	--	244	12	11	--	--	225
204	N. H. White	915	May 21, 1934	--	--	--	--	--	--	216	16	13	--	--	201
B- 3	Ralph E.Fair	874	July 26, 1946	--	--	--	--	--	--	283	22	14	--	1.2	285
a/B- 7	U. S. Government	241	June 5, 1943	446	48	.4	105	26	2.0	331	19	24	0.4	2.2	369
B- 8	do.	--	May 1943	356	7.4	.05	83	28	5.5	359	18	12	.6	3.8	322
B- 9	do.	--	May 20, 1943	330	--	.12	84	16	6.4	298	10	16	.2	15	276
B-18	do.	640	May 13, 1943	346	9.4	.02	96	16	6.2	338	16	13	.4	7.4	306
B-18	do.	640	Aug. 15, 1946	335	12	.05	84	22	9.7	338	20	14	.4	2.8	300
B-20	do.	590	May 13, 1943	342	8.4	.02	66	33	5.5	320	31	11	.6	.2	300
B-20	do.	590	Aug. 15, 1946	372	8.8	.02	68	35	17	332	46	20	1.0	1.0	314
B-21	do.	601	May 13, 1943	337	8.6	.05	66	33	8.0	328	28	12	.6	1.0	300
B-21	do.	601	Aug. 15, 1946	376	9.2	.10	68	36	18	336	45	22	.6	1.2	318
B-23	do.	2,500	May 15, 1943	319	9.2	.08	81	16	8.3	298	19	12	.2	5.8	268
B-24	do.	1,022	May 14, 1943	3,620	--	--	503	272	215	202	2,420	108	--	.0	2,374
B-30	do.	--	May 21, 1943	300	9.8	1.6	81	21	3.0	315	8.8	19	.4	.2	288
B-31	do.	380	Apr. 1943	346	12	.18	62	39	4.4	325	40	10	1.0	.2	315
C- 1	A. Friesenhahn	300+	July 23, 1946	--	--	--	--	--	--	315	20	16	--	--	318
C- 4	Otto Voges	185	July 24, 1946	--	--	--	--	--	--	178	14	13	--	16	248
C- 9	E. C. Schope	410	July 23, 1946	--	--	--	--	--	--	186	11	16	--	8.0	248
D- 1	Mrs. Kate Benke	1,010	May 23, 1934	--	--	--	--	--	--	216	60	14	--	--	274
D-16	R. W. Barham	216	May 21, 1934	--	--	--	--	--	--	252	12	12	--	--	219
E- 1	U. S. Government	445	Apr. 1943	1,125	13	.20	269	60	3.0	354	594	10	.8	.2	918

a/ Analysis by Texas State Department of Health.

Analyses of water in wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
E- 1	U. S. Government	445	Nov. 22, 1943	1,050	6.0	.72	245	33	52	358	528	10	0.8	.0	747
E- 1	do.	445	Aug. 6, 1946	991	7.6	.04	238	55	4.4	357	496	13	.7	.0	820
E- 2	do.	289	do.	352	8.6	.02	110	14	4.4	378	11	13	.2	1.2	332
E- 3	do.	260	Apr. 28, 1943	576	14	.20	116	47	1.1	379	149	11	.9	2.5	483
E- 3	do.	260	Nov. 22, 1943	460	7.2	.10	106	36	7.8	338	92	10	.5	.0	412
E- 3	do.	260	Aug. 6, 1946	620	8.8	.10	132	47	5.1	375	200	12	.6	.0	523
E- 4	do.	291	Apr. 28, 1943	417	13	2.9	98	35	2.8	375	67	10	.9	1.0	388
E-10	do.	1,173	do.	3,790	—	--	522	307	187	216	2,620	48	—	.0	2,560
E-11	do.	208	May 14, 1943	606	9.0	.08	89	59	12	324	183	23	0.8	.0	464
E-18	Beckman Rock Quarry	350	Oct. 13, 1913	--	--	0	—	--	—	327	215	20	—	—	268
E-18	do.	350	May 16, 1943	—	—	—	—	—	—	329	500	15	—	—	—
E-21	A. G. Uhl	601	do.	—	—	--	—	—	—	334	135	16	—	—	—
E-22	Myrtle Rains	419	do.	—	—	—	—	—	—	290	800	15	—	—	—
E-24	F. A. Talmadge	600	do.	—	—	--	—	--	—	328	95	15	—	—	—
E-26	Ed Bacon	320	do.	—	—	--	—	—	—	294	45	12	—	—	—
E-27	Stower's Ranch	800±	do.	--	--	—	—	—	--	286	18	12	--	--	--
E-27	do.	800±	July 20, 1943	—	—	—	—	—	—	232	18	21	—	—	290
E-31	do.	620	do.	—	—	—	—	—	—	325	240	14	—	—	1,000
E-36	H. Moss	350	May 16, 1943	—	--	--	--	—	--	282	15	12	—	—	--
E-37	do.	455	do.	--	—	--	—	—	—	292	18	12	—	—	--
E-43	H. M. Linn	416	Oct. 13, 1913	—	—	—	--	--	—	268	15	16	--	—	202
E-45	George Calvert	--	May 21, 1934	—	—	—	--	--	—	280	16	11	--	--	261
E-55	W. W. Wolf	455	June 28, 1913	--	—	0	—	—	—	254	24	16	—	—	198
E-57	Joe H. Frost	656	do.	--	—	0	--	—	—	284	24	115	--	--	162
E-58	Richard Bluemel	406	do.	--	—	0	—	—	—	372	24	20	--	--	180
E-67	G. Walker	2,135	Oct. 11, 1939	1,250	--	--	231	82	59	380	665	27	--	--	914
E-68	do.	300	July 24, 1946	—	—	--	—	--	—	46	10	18	--	--	78
E-69	— Maltsberger	361	June 28, 1913	—	—	0	--	--	—	298	24	16	—	—	216

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
E-82	Wm. Lancaster	270	Oct. 13, 1913	--	--	0	--	--	--	208	42	20	--	--	156
F-10	-- Fisher	--	July 23, 1946	--	--	--	--	--	--	307	30	12	--	.0	330
F-11	I. G. Yates	300±	May 22, 1934	--	--	--	--	--	--	286	10	7.0	--	--	252
F-15	T. Steubing	509	July 23, 1946	--	--	--	--	--	--	311	300	25	--	1.5	712
F-25	T. W. Weaver	270	June 30, 1946	--	--	--	--	--	--	342	65	41	--	25	345
F-28	Henry Koch	480	Oct. 13, 1913	--	--	0	--	--	--	293	15	16	--	--	228
F-29	Albert Theis	--	do.	--	--	--	--	--	--	410	3	74	--	--	238
F-38	Hill Country Estate	318	July 23, 1946	--	--	--	--	--	--	319	18	14	--	.0	204
F-55	Hermann Rusch	325	June 28, 1913	--	--	0	--	--	--	313	81	102	--	--	160
F-56	Ed Pape	220	do.	410	--	0	--	--	--	303	39	41	--	--	220
F-59	John Rence	190	Oct. 13, 1913	--	--	--	--	--	--	322	127	74	--	--	220
F-60	W. M. Schroeder	400	do.	--	--	0	--	--	--	337	65	70	--	--	180
F-61	San Antonio Portland Cement	299	do.	790	--	1.8	--	--	--	327	87	216	--	--	222
F-62	Amos Lorenz	370	May 22, 1934	--	--	--	--	--	--	248	16	11	--	--	234
F-80	C. N. Farrell	332	July 12, 1946	--	--	--	--	--	--	325	115	76	--	--	510
F-80	do.	358	July 17, 1946	--	--	--	--	--	--	218	80	24	--	.0	270
F-82	-- Bleakley	417	June 13, 1946	--	--	--	--	--	--	158	1	15	--	--	180
G- 4	Harry Ruebshan	480	July 22, 1946	--	--	--	--	--	--	240	30	16	--	1.5	243
G- 8	Frank Sonntag	652	Sept. 12, 1942	--	--	--	--	--	--	286	841	442	--	--	--
G- 9	Otto Knuepper	599	do.	--	--	--	--	--	--	246	41	24	--	--	--
G-10	Southern Pacific R. R.	564	Sept. 1942	315	11	.18	64	20	14	235	42	24	.3	2.5	242
G-10	do.	564	Jan. 11, 1944	304	9.6	.05	69	19	9.9	241	40	21	.2	2.8	250
G-11	U. S. Government	700	Sept. 1942	499	10	.06	74	29	40	244	89	68	.4	1.5	304
G-11	do.	700	Jan. 11, 1944	426	9.8	.02	73	26	35	244	80	56	.5	1.8	239
G-12	do.	563	Sept. 1942	336	12	.02	67	20	26	261	46	30	.3	.5	249
G-12	do.	563	Jan. 11, 1944	302	10	.02	69	19	10	243	41	20	.2	2.8	250
G-17	do.	583	Sept. 1942	363	11	.32	67	23	18	247	51	31	.3	0	262
G-17	do.	583	Dec. 21, 1943	528	8.0	.08	140	30	10	238	55	141	.6	1.5	473
G-17	do.	583	Jan. 13, 1944	376	9.6	.05	74	24	16	248	64	32	.5	2.0	283

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
G-18	U.S. Government	577	Sept. 1942	324	8.8	.16	51	26	27	231	43	42	.1	0	234
G-19	do.	1,003	Sept. 1942	5,340	--	--	472	263	1,013	347	1,687	1,732	--	--	2,280
G-20	do.	380-390	Dec. 1942	1,284	20	.10	98	71	294	446	40	535	5.2	1.5	536
G-20	do.	513-518	Dec. 1942	285	12	.02	57	19	11	208	41	21	.2	2.5	220
I-21	F. M. Gillespie	610	Oct. 13,1913	--	--	0	--	--	--	244	25	12	--	--	212
I-22	do.	250±	do.	--	--	--	--	--	--	342	57	49	--	--	258
I-23	do.	205±	do.	--	--	0	--	--	--	259	35	12	--	--	204
I-24	A. B. Spencer	205±	do.	--	--	0	--	--	--	264	15	16	--	--	212
I-29	D. A. Patterson	227	do.	340	--	0	--	--	--	293	25	12	--	--	188
I-30	M. J. Schwager	297	do.	--	--	0	--	--	--	264	25	12	--	--	220
I-31	Mrs. D. L. Horn	333	do.	390	--	0	--	--	--	264	55	33	--	--	242
I-32	R.Rittiman Estate	125	do.	350	--	0	--	--	--	264	42	20	--	--	212
I-33	Olive L. Landa	385	May 21, 1934	--	--	--	--	--	--	248	56	19	--	--	270
I-46	H. A. Neal	476	Aug. 21, 1911	248	--	1.6	68	16	5.3	231	14	21	--	--	236
I-47	Jack Neal	488	June 28, 1913	840	--	0	--	--	--	313	43	233	--	--	88
I-60	U.S. Government	1,609	May 24, 1944	247	13	.01	64	16	5.3	246	15	12	.2	3.4	226
I-60	do.	1,609	Aug. 1944	--	--	--	--	--	--	239	16	11	--	--	--
I-61	do.	1,911	May 24, 1944	285	14	.01	59	24	11	241	49	13	.4	1.2	246
I-61	do.	1,911	Aug. 1944	--	--	--	--	--	--	239	40	13	--	--	--
I-62	-- Fredricks	1,480	Oct. 2, 1939	436	11	--	37	25	102	311	1.0	106	4.0	0	195
I-77	Vander Poorten	1,042	June 1943	217	8.0	.10	47	14	3.5	177	15	12	.2	5.5	174
I-93	U.S. Government	1,120	Jan. 12, 1944	267	13	.02	65	17	8.3	250	21	14	.2	3.8	232
I-108	Charlie Persyn	1,660	Feb. 1908	4,600	31	--	718	211	530	629	1,737	1058	--	--	1,660
J- 2	San Antonio Portland Cement	580	Oct. 13, 1913	--	--	0	--	--	--	288	35	65	--	--	164
J- 3	do.	665	do.	730	--	4.7	--	--	--	239	186	135	--	--	232
J- 5	do.	667	do.	250	--	0	--	--	--	205	19	12	--	--	134
J-15	J. S. Mills	576	June 7, 1946	--	--	--	--	--	--	348	44	117	--	--	330
J-16	Don Danvers	640	June 11, 1946	--	--	--	--	--	--	198	60	36	--	--	255
J-18	U.S. Government	700±	Feb. 9, 1911	1,511	22	.21	235	50	173	--	778	204	--	--	793
J-19	do.	635±	Aug. 6, 1946	257	13	.06	63	16	7.8	246	16	13	.2	3.5	223

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
J-20	U.S. Government	635±	Aug. 6, 1946	257	8.0	.05	64	16	6.4	247	15	13	0.2	3.0	226
J-21	Salado Water Co.	702	June 28, 1913	--	--	0	--	--	--	225	41	25	--	--	196
J-25	A. Van Hecke	975	June 7, 1946	--	--	--	--	--	--	204	32	19	--	--	180
J-28	A.G. Brackenridge	932	do.	--	--	--	--	--	--	250	55	24	--	--	330
J-49	State Hospital	2,100	1895?	5,183	8.0	7.1	636	195	438	410	1,920	850	--	--	2,390
K-17	J. T. Terrell	33	July 19, 1946	--	--	--	--	--	--	224	85	256	--	42	345
M- 1	Otto Bippert	45	July 10, 1946	--	--	--	--	--	--	370	125	57	--	20	285
M- 2	F. V. Ford	43	do.	--	--	--	--	--	--	124	85	30	--	8.0	165
M- 3	F. W. Gray	143	July 9, 1946	--	--	--	--	--	--	242	770	291	--	6.5	585
M- 4	E. T. Williamson	18	July 10, 1946	--	--	--	--	--	--	158	383	64	--	1.0	442
M- 5	H. F. Franger	35	do.	--	--	--	--	--	--	135	320	74	--	1.2	292
M- 6	W. Rohmer	55	do.	--	--	--	--	--	--	164	250	180	--	8.2	450
M- 7	Joe Jackel	45	do.	--	--	--	--	--	--	292	418	95	--	19	360
M-10	R. Magnus	48	do.	--	--	--	--	--	--	156	250	118	--	21	330
M-14	C. L. Cheek	1,800±	May 22, 1934	--	--	--	--	--	--	220	200	122	--	--	417
M-14	do.	1,800±	July 8, 1946	--	--	--	--	--	--	116	181	84	--	--	278
M-15	Juan Bustamate	116	July 9, 1946	--	--	--	--	--	--	1,160	140	1,660	--	--	--
M-16	T. Casias	113	do.	--	--	--	--	--	--	392	801	548	--	.2	930
M-17	Carl Clark	112	do.	--	--	--	--	--	--	150	624	217	--	.2	555
M-18	Bill Jimenez	32	do.	--	--	--	--	--	--	208	22	82	--	18	165
M-20	H. James	35	do.	--	--	--	--	--	--	232	1,710	1,680	--	--	--
M-22	B. Jonas	72	do.	--	--	--	--	--	--	68	533	229	--	3.2	525
M-24	William Scott	59	do.	--	--	--	--	--	--	144	60	158	--	4.2	225
M-25	A. A. Koehler	60	do.	--	--	--	--	--	--	312	38	132	--	10	315
N- 4	O. R. Mitchell	1,909	July 29, 1946	--	--	--	--	--	--	238	34	22	--	3.2	192
N- 6	C. Verstuyft	1,532	July 19, 1946	--	--	--	--	--	--	131	75	26	--	--	150
N-11	-- Althiem	1,825	July 24, 1946	--	--	--	--	--	--	313	1,570	12	--	.0	--
N-13	O. R. Mitchell	1,743	May 12, 1944	4,500	--	--	656	208	564	285	1,750	1180	--	--	2,490
N-16	W. Tomasie	80	July 24, 1946	--	--	--	--	--	--	197	120	158	--	65	255
N-18	Mrs. C. Walsh	150	do.	--	--	--	--	--	--	261	100	140	--	.0	345
N-22	W. S. Willis	50	do.	--	--	--	--	--	--	353	75	30	--	.2	285

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
N-23	Otto Waechter	2,000±	May 22, 1934	—	—	—	—	—	—	250	1,300	852	—	—	1,335
N-24	Pedro Vasquez	64	July 18, 1946	—	—	—	—	—	—	144	100	38	—	2.0	240
N-30	V. M. Wilhelm	80	July 11, 1946	—	—	—	—	—	—	294	220	302	—	2.2	315
N-32	Hoffman Nursery	160	do.	—	—	—	—	—	—	360	462	117	—	.0	585
N-36	F. A. Wagner	96	do.	—	—	—	—	—	—	330	120	93	—	13	420
N-37	F. E. Jett	145	do.	—	—	—	—	—	—	506	509	395	—	4.2	630
N-38	Marshall Surtees	165	do.	—	—	—	—	—	—	152	30	7.0	—	.0	210
N-39	W. S. Klemcke	124	do.	—	—	—	—	—	—	235	95	184	—	.0	172
N-40	L. C. Akers	200	July 24, 1946	—	—	—	—	—	—	30	10	27	—	.2	75
N-51	W. W. Thiel	120	do.	—	—	—	—	—	—	204	190	336	—	.5	518
N-57	Mrs. E. Frees	70	do.	—	—	—	—	—	—	354	24	90	—	.2	262
N-70	John Gayle	65	do.	—	—	—	—	—	—	106	50	108	—	156	270
N-82	J. O. Lopez	148	July 25, 1946	—	—	—	—	—	—	540	830	374	—	18	1,020
O-10	C. A. Goeth	150	June 28, 1913	2,200	—	—	—	—	—	396	861	322	—	—	970
O-13	Frank Taylor	250	July 17, 1946	—	—	—	—	—	—	165	135	277	—	.5	375
O-35	W. W. Owentson	125	do.	—	—	—	—	—	—	214	270	130	—	.8	450
O-43	H. A. Rothman	165	do.	—	—	—	—	—	—	278	473	211	—	3.8	345
O-46	H. Alexander	340	July 18, 1946	—	—	—	—	—	—	362	583	185	—	3.2	450
O-48	C. A. Goeth	104	Feb. 7, 1912	950	—	.8	167	29	114	291	416	80	—	—	537
O-50	Blue Wing Club	2,444	June 20, 1913	4,182	—	0	709	206	369	154	1,865	957	—	—	2,617
O-52	C. C. Crumvine	46	July 18, 1946	—	—	—	—	—	—	b/	1,750	320	—	.8	1,290
O-58	Lloyd Wright	1,600±	do.	—	—	—	—	—	—	366	2	908	—	4.7	180
O-64	B. J. Steen	246	July 25, 1946	—	—	—	—	—	—	317	339	100	—	.0	540
O-71	P. Friemel	100	do.	—	—	—	—	—	—	368	500	306	—	.0	885
O-81	A. P. Heinen	207	do.	—	—	—	—	—	—	439	110	82	—	.2	300
O-85	A. R. Loeffler	65	do.	—	—	—	—	—	—	296	50	86	—	1.2	270
O-88	Jesse Garcia	130	do.	—	—	—	—	—	—	27	25	36	—	.0	48
O-90	Mrs. A.Cunningham	180	do.	—	—	—	—	—	—	175	100	60	—	.0	240
O-94	A. J. Weigand	39	do.	—	—	—	—	—	—	231	686	484	—	20.	892
O-96	B. Jensen	72	do.	—	—	—	—	—	—	392	125	96	—	.0	382

b/ Acidity 2.4 p.p.m..Expressed as H_2SO_4.

Analyses of water from wells in Bexar County--Continued
Results are in parts per million

Well	Owner	Depth of well (ft.)	Date of collection	Total dissolved solids	Silica (SiO_2)	Iron (Fe)	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.)
O-101	G. L. Brown	80	July 25, 1946	--	--	--	--	--	--	60	115	234	--	.0	360
O-106	E. C. Deen	70	do.	--	--	--	--	--	--	27	70	60	--	3.0	105
O-112	Pioneer Flour Mills	120	do.	--	--	--	--	--	--	122	65	42	--	.2	180
P- 2	C. Schoenfeld	168	June 14, 1946	--	--	--	--	--	--	154	675	232	--	1.2	705
P- 5	W. H. Terrell	65	July 19, 1946	--	--	--	--	--	--	82	50	61	--	.5	172
P- 6	J. T. Salter	63	July 19, 1946	--	--	--	--	--	--	168	40	176	--	1.0	270
P- 7	W. R. Miller	205	July 19, 1946	--	--	--	--	--	--	326	374	176	--	1.5	540
P- 20	R. X. Ball	228	July 25, 1946	--	--	--	--	--	--	279	240	156	--	.0	330
P- 24	Mrs. H. Michaelis	150	do.	--	--	--	--	--	--	232	260	106	--	4.0	285
Q- 1	Osburn Sand Plant	240	do.	--	--	--	--	--	--	56	50	60	--	.0	75
Q- 4	Mrs. Ida Sylvester	171	do.	--	--	--	--	--	--	74	10	39	--	14	120
R- 5	Ben M. Brown	115	do.	--	--	--	--	--	--	--	50	112	--	.0	48

PLATE I

EXPLANATION

- Well with windmill or small power pump
- Well with pumping plant - 5 horsepower or larger
- Unused well
- Flowing well
- Flowing well with small power pump
- Flowing well with pumping plant - 5 horsepower or larger
- Unused flowing well

MAP OF SAN ANTONIO, TEXAS SHOWING LOCATION OF WATER WELLS AND SPRINGS

0 1/4 1/2 3/4 1 Mile

Traced from map furnished by city engineer of San Antonio

mlc 1946

PLATE 2

EXPLANATION

- Well with hand pump, bucket, or bailer
- Well with windmill or small power pump
- Well with pumping plant-5 horsepower or larger
- Unused well
- Well drilled to test for oil or gas
- Flowing well
- Flowing well with windmill or small power pump
- Flowing well with pumping plant-5 horsepower or larger
- Unused flowing well
- Flowing well drilled to test for oil or gas
- Areas irrigated from ground water in 1946

SAN ANTONIO

For wells in this area see Plate I

•County Court House

Texas Board of Water Engineers
in cooperation with
U.S. Geological Survey

Base compiled from topographic maps
by Corps of Engineers, U.S. Army

MAP OF BEXAR COUNTY, TEXAS

SHOWING LOCATIONS OF WELLS AND AREAS IRRIGATED FROM GROUND WATER IN 1946

0 1 2 3 4 5 Miles

mlc

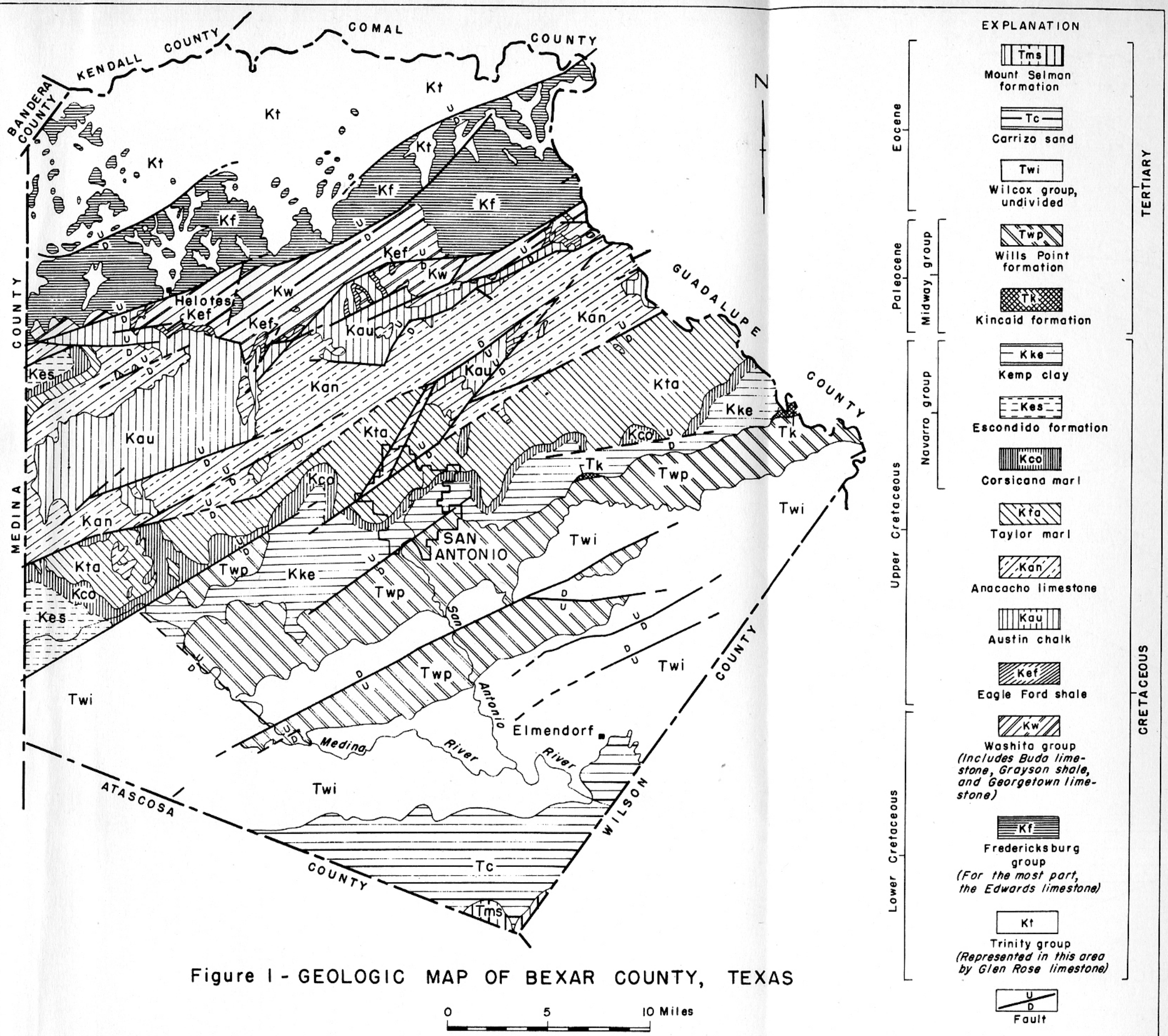

Figure 1 - GEOLOGIC MAP OF BEXAR COUNTY, TEXAS

From geologic map of Texas, U.S. Geological Survey, 1937 (symbols modified, 1947)

mlc

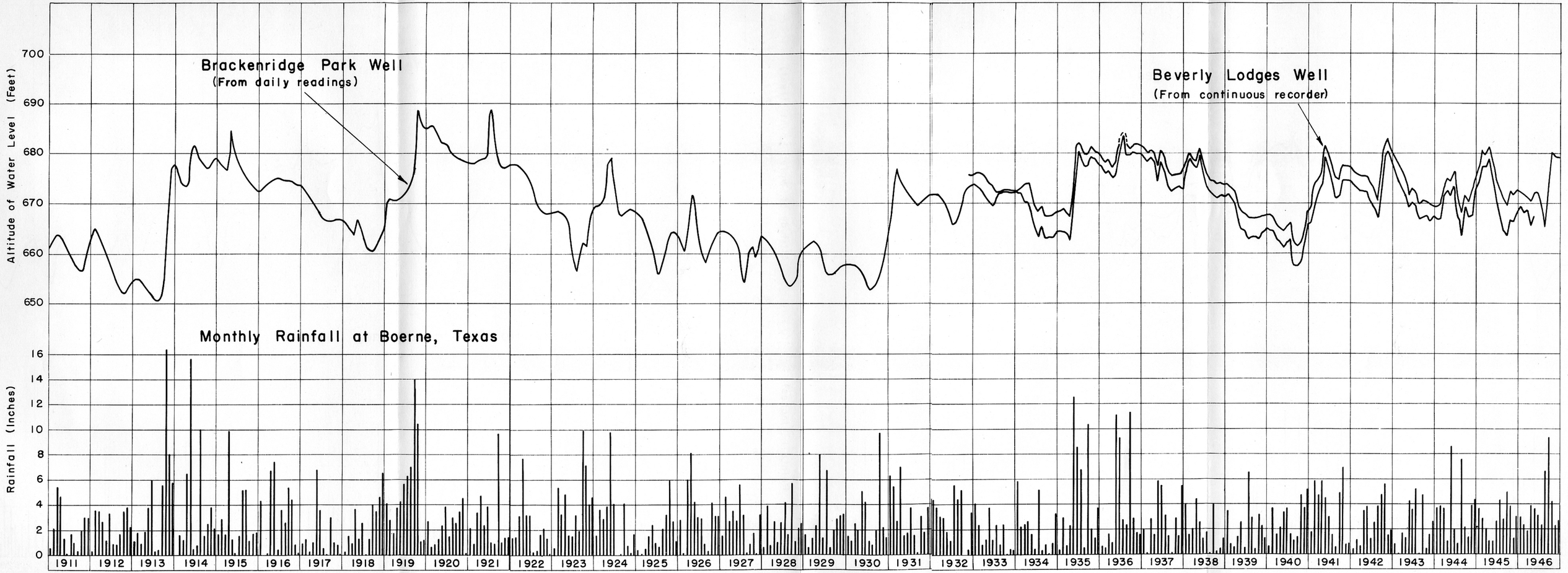

FIGURE 2-ARTESIAN WATER LEVELS IN BRACKENRIDGE PARK WELL AND BEVERLY LODGE'S WELL, AND RAINFALL AT BOERNE, TEXAS, 1911 TO 1946