

TEXAS BOARD OF WATER ENGINEERS

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BULLETIN 5405

RECORDS OF WATER-LEVEL MEASUREMENTS IN MARTIN COUNTY, TEXAS

1936 - 1953

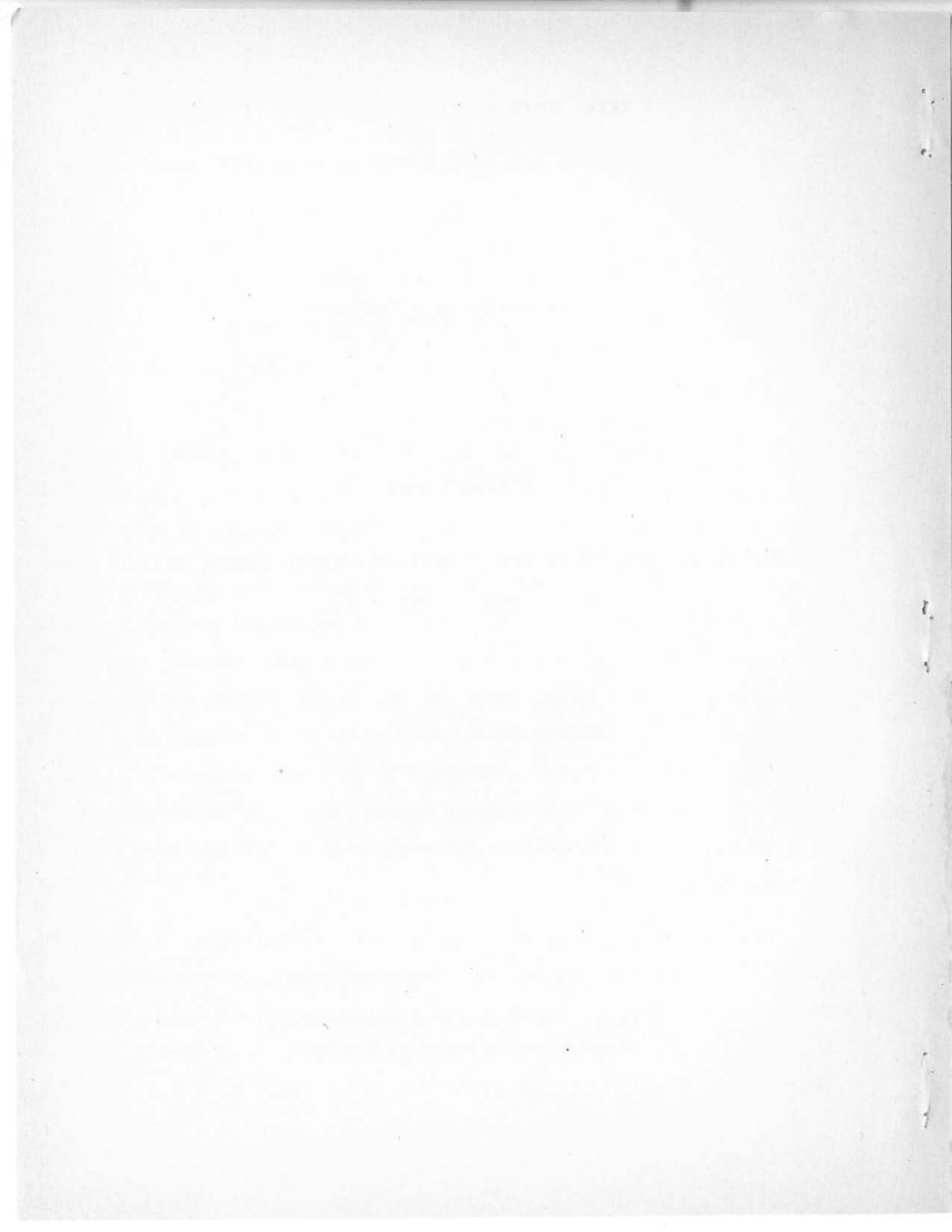
Compiled by

C. R. Follett, Engineer

Texas Board of Water Engineers

Prepared in cooperation with the Geological Survey,
United States Department of the Interior

April 1954



RECORDS OF WATER-LEVEL MEASUREMENTS IN MARTIN COUNTY, TEXAS

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This bulletin contains measurements of the depth-to-water below land-surface datum in 57 wells in Martin County, Texas. It is one of a series of publications which contain measurements of the water levels in selected observation wells.

In 1936 an inventory of water wells in Martin County, including depth-to-water measurements, was made cooperatively by the United States Geological Survey, the Texas Board of Water Engineers and the Work Project Administration. Observation wells selected in 1937 for water-level measurements were measured periodically through 1941. In 1951 measurements were resumed in some of these wells and additional observation wells were selected in the area of irrigation development. These measurements have been made as a part of a cooperative program of ground water investigations by the Geological Survey and the Texas Board of Water Engineers.

The accompanying map shows the location of the observation wells with the numbers assigned to them in the records. Hydrographs showing the fluctuations of the water level in two wells and the annual precipitation at Big Spring are shown on page 13. Records of water wells and geologic data are given in the following list of publications.

LIST OF PUBLICATIONS

BROADHURST, W. L., SUNDSTROM, R. W., and WEAVER, D. E., 1949, Public water supplies in Western Texas.

LANG, JOE W., 1936, Records of wells in Martin County.*

LIVINGSTON, PENN P., and BENNETT, R. R., 1944, Geology and ground-water resources of the Big Spring area, Texas, U. S. Geol. Survey Water-Supply Paper 913.

MEINZER, O. E., and WENZEL, L. K., 1938, Water levels and artesian pressure in wells in the United States in 1937, U. S. Geol. Survey Water-Supply Paper 840.

_____, 1939, Water levels and artesian pressure in wells in the United States in 1938, U. S. Geol. Survey Water-Supply Paper 845.

_____, 1940, Water levels and artesian pressure in wells in the United States in 1939, U. S. Geol. Survey Water-Supply Paper 886.

_____, 1941, Water levels and artesian pressure in wells in the United States in 1940, U. S. Geol. Survey Water-Supply Paper 909.

_____, 1943, Water levels and artesian pressure in wells in the United States in 1941, U. S. Geol. Survey Water-Supply Paper 939*.

* Out of print. Copies available for reference in some public libraries and at the Austin office of the United States Geological Survey.

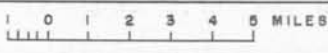
MARTIN COUNTY, TEXAS OBSERVATION WELLS

January 1954

Bulletin 5405
Texas Board of Water Engineers
in cooperation with
U. S. Geological Survey



Base map from Texas State Highway
Department



MARTIN COUNTY

130. Lat. 32°30', long. 101°44'. Depth 97 feet.

Date	Water level	Date	Water level	Date	Water level
Apr. 28, 1936	90.00	Jan. 27, 1939	90.21	Aug. 2, 1940	90.98
Apr. 29, 1938	90.58	Aug. 10	89.92	Nov. 25	89.76
July 19	90.27	Mar. 1, 1940	89.38	Dec. 18, 1941	90.00

241. Lat. 32°14', long. 101°55'. Depth 100± feet.

Mar. 23, 1936	80.2	July 20, 1938	80.20	Jan. 23, 1952	79.55
July 9	80.34	Aug. 11, 1939	79.83	Dec. 10	79.76
Feb. 16, 1937	80.1	Jan. 17, 1940	79.96	Dec. 3, 1953	79.23
June 17	80.27	Nov. 24	80.32		
Jan. 18, 1938	80.31	Dec. 17, 1941	79.80		

292a. Lat. 32°10', long. 101°54'. Depth 52 feet.

Mar. 24, 1936	30.2	July 20, 1938	30.84	Nov. 23, 1940	31.30
Jan. 30, 1937	30.75	Jan. 27, 1939	31.11	Dec. 17	30.81
June 17	30.88	Aug. 11	31.23	Jan. 23, 1952	30.65
Jan. 18, 1938	30.98	Jan. 17, 1940	31.11	Dec. 11	30.77
Apr. 28	31.09	Aug. 1	31.25	Dec. 2, 1953	31.03

326. Lat. 32°10', long. 101°53'. Depth 144 feet.

Feb. 17, 1936	66.5	Jan. 18, 1938	61.83	Dec. 11, 1952	65.05
July 8	64.3	Apr. 28	65.7	Dec. 3, 1953	67.59
Feb. 16, 1937	62.9	Dec. 17, 1941	57.17		
June 17	65.1	Jan. 23, 1952	64.42		

336. Lat. 32°09', long. 101°52'. Depth 55 feet.

Mar. 13, 1936	41.2	June 25, 1937	41.5	Jan. 27, 1939	41.71
July 7	40.1	Jan. 18, 1938	41.22	Jan. 17, 1940	42.05
Jan. 28, 1937	41.2	Apr. 28	41.86		

361. Lat. 32°09', long. 101°47'. Depth 54 feet.

Apr. 6, 1936	46.7	Jan. 17, 1938	46.79	Aug. 11, 1939	42.34
June 27	47.1	Apr. 28	47.26	Jan. 17, 1940	44.45
Feb. 2, 1937	43.8	July 19	44.28	Aug. 1	46.08
June 12	45.25	Jan. 27, 1939	39.21	Nov. 23	42.41

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362. Lat. 32°09', long. 101°47'. Depth 129 feet.

Date	Water level	Date	Water level	Date	Water level
Apr. 6, 1936	94.4	Feb. 2, 1937	93.6	Jan. 17, 1939	93.4
June 27	93.9	June 25	93.79		

363. Lat. 32°09', long. 101°49'. Depth 75 feet.

Mar. 10, 1936	65.2	Apr. 28, 1938	65.21	Aug. 1, 1940	64.43
July 8	65.1	July 20	65.03	Nov. 23	64.16
Jan. 28, 1937	65.5	Jan. 27, 1939	63.90	Dec. 17, 1941	60.26
June 25	67.20	Aug. 11	64.57	Jan. 24, 1952	61.91
Jan. 17, 1938	65.02	Jan. 17, 1940	63.90		

369. Lat. 32°09', long. 101°52'. Depth 51 feet.

Mar. 13, 1936	40.4	June 25, 1937	40.44	Jan. 17, 1940	40.28
July 7	40.1	Jan. 18, 1938	39.96	Nov. 23	40.79
Feb. 16, 1937	39.83	Jan. 27, 1939	40.09	Dec. 17, 1941	32.84

372. Lat. 32°08', long. 101°54'. Depth 65 feet.

Mar. 13, 1936	54.8	June 25, 1937	55.93	Dec. 11, 1952	63.46
July 7	54.8	Jan. 18, 1938	56.0	Dec. 3, 1953	75.62
Feb. 16, 1937	54.69	Jan. 23, 1952	56.45		

376. Lat. 32°08', long. 101°56'. Depth 10 feet.

Apr. 17, 1936	2.1	Apr. 28, 1938	1.72	Aug. 1, 1940	3.62
Jan. 30, 1937	1.4	Jan. 27, 1939	1.31	Nov. 24	1.84
June 17	2.5	Aug. 11	2.54	Dec. 17, 1941	.89
Jan. 18, 1938	1.6	Jan. 17, 1940	1.65		

384. Lat. 32°08', long. 101°52'. Depth 62 feet.

Feb. 19, 1936	43.2	June 12, 1937	41.53	Nov. 23, 1940	42.23
July 7	41.8	Jan. 18, 1938	41.52	Jan. 23, 1952	39.00
Jan. 28, 1937	41.6	Jan. 17, 1940	41.01	Dec. 11	40.41

MARTIN COUNTY

389. Lat. 32°08', long. 101°51'. Depth 33 feet.

Date	Water level	Date	Water level	Date	Water level
Jan. 15, 1936	22.8	Jan. 28, 1937	23.38	Jan. 27, 1939	23.82
Feb. 19	22.7	June 12	23.78	Aug. 11	24.36
July 7	23.1	Jan. 17, 1938	24.04		

401. Lat. 32°01', long. 101°48'. Depth 91 feet.

Jan. 14, 1936	78.5	Apr. 28, 1938	78.02	Jan. 17, 1940	78.38
Jan. 26, 1937	78.15	July 19	77.97	Dec. 17, 1941	77.67
June 12	78.05	Jan. 27, 1939	77.78		
Jan. 17, 1938	77.99	Aug. 11	77.80		

452a. Lat. 32°05', long. 101°53'.

Aug. 6, 1937	29.06	Jan. 27, 1939	26.43	Nov. 23, 1940	28.91
Jan. 24, 1938	29.25	Aug. 11	28.51	Dec. 17, 1941	22.74
Apr. 28	29.31	Jan. 17, 1940	28.22		
July 21	26.12	Aug. 1	28.73		

455. Lat. 32°05', long. 101°52'. Depth 45 feet.

Mar. 17, 1936	32.5	July 20, 1938	31.65	Dec. 17, 1941	26.39
July 8	32.7	Jan. 27, 1939	31.03	Jan. 24, 1952	35.98
Jan. 30, 1937	32.6	Aug. 11	31.63	Dec. 11	41.06
June 17,	32.54	Jan. 17, 1940	31.80		
Jan. 18, 1938	32.79	Aug. 1	32.25		

457. Lat. 32°06', long. 101°51'.

Mar. 17, 1936	41.1	June 17, 1937	41.3	Jan. 24, 1952	44.59
July 8	41.2	Jan. 18, 1938	41.21	Dec. 11	48.81
Jan. 30, 1937	41.0	Apr. 28	41.32		

467. Lat. 32°07', long. 101°47'. Depth 134 feet.

July 15, 1936	67.8	July 4, 1937	66.32	Jan. 18, 1938	65.87
Feb. 2, 1937	66.15				

MARTIN COUNTY

468. Lat. 32°07', long. 101°47'. Depth 85 feet.

Date	Water level	Date	Water level	Date	Water level
Mar. 27, 1936	62.5	Apr. 28, 1938	62.54	Aug. 1, 1940	62.42
Feb. 1, 1937	62.4	Jan. 27, 1939	62.07	Nov. 23	62.21
June 28	62.31	Aug. 11	62.29	Dec. 17, 1941	61.03
Jan. 18, 1938	62.41	Jan. 17, 1940	62.04		

471. Lat. 32°07', long. 101°46'. Depth 79 feet.

Apr. 1, 1936	72.7	Jan. 18, 1938	72.68	Aug. 11, 1939	72.98
Feb. 1, 1937	71.9	Apr. 28	72.71		
June 28	72.59	July 20	73.40		

494a. Lat. 32°05', long. 101°50'. Depth 115 feet.

Feb. 6, 1936	47.0	July 20, 1938	46.42	Jan. 24, 1952	51.66
Jan. 30, 1937	47.1	Jan. 27, 1939	45.81	Dec. 11	54.16
June 17	46.55	Aug. 11	46.60	Dec. 3, 1953	58.41
Jan. 18, 1938	46.66	Jan. 17, 1940	47.10		
Apr. 28	46.90	Aug. 1	46.67		

610. Lat. 32°18', long. 102°03'. Depth 37 feet.

May 20, 1936	22.4	Apr. 28, 1938	22.78	Aug. 1, 1940	22.92
July 9	22.6	July 20	22.60	Nov. 24	23.19
Jan. 30, 1937	21.9	Jan. 27, 1939	20.54	Dec. 17, 1941	21.73
June 17	22.21	Aug. 11	21.63		
Jan. 18, 1938	22.52	Jan. 17, 1940	22.28		

611. Lat. 32°18', long. 102°03'. Depth 48 feet.

May 20, 1936	33.10	Aug. 11, 1939	32.42	Nov. 24, 1940	34.42
July 9	33.50	Jan. 17, 1940	32.98	Dec. 17, 1941	27.43
Feb. 16, 1937	33.12	Aug. 1	34.03		

655. Lat. 32°17', long. 102°01'. Depth 41 feet.

Apr. 10, 1936	26.7	Apr. 28, 1938	28.11	Jan. 17, 1940	28.16
Jan. 30, 1937	27.8	July 20	28.0	Aug. 1	28.42
June 17	27.4	Jan. 27, 1939	27.70	Nov. 24	28.59
Jan. 18, 1938	27.73	Aug. 11	28.12	Dec. 17, 1941	27.10

MARTIN COUNTY

665. Lat. 32°16', long. 101°55'. Depth 88 feet.

Date	Water level	Date	Water level	Date	Water level
Mar. 23, 1936	57.5	Apr. 28, 1938	58.06	Jan. 17, 1940	57.28
Jan. 30, 1937	57.6	July 20	58.10	Aug. 1	57.53
June 17	57.92	Jan. 27, 1939	56.89	Nov. 24	57.66
Jan. 18, 1938	57.97	Aug. 11	57.32	Dec. 17, 1941	55.96

666. Lat. 32°16', long 101°55'. Depth 91 feet.

Mar. 23, 1936	69.9	Jan. 18, 1938	70.42	Dec. 3, 1953	68.33
Jan. 30, 1937	69.8	Jan. 23, 1952	68.40		
June 17	70.30	Dec. 10	68.78		

674. Lat. 32°14', long. 102°00'. Depth 37 feet.

May 22, 1936	21.2	Apr. 28, 1938	22.02	Jan. 17, 1940	22.68
Jan. 30, 1937	21.45	July 20	22.00	Aug. 1	23.13
June 17	21.56	Jan. 27, 1939	21.98	Nov. 24	23.36
Jan. 18, 1938	21.81	Aug. 11	22.54	Dec. 17, 1941	20.41

687. Lat. 32°11', long. 102°01'. Depth 44 feet.

May 27, 1936	22.1	Apr. 28, 1938	22.71	Dec. 17, 1941	19.86
Jan. 30, 1937	22.2	Jan. 27, 1939	22.61	Jan. 23, 1952	26.22
June 17	22.3	Jan. 17, 1940	23.71	Dec. 10	27.66
Jan. 18, 1938	22.69	Nov. 24	24.29	Dec. 2, 1953	29.85

690. Lat. 32°11', long. 102°00'. Depth 90 feet.

May 27, 1936	33.8	Apr. 28, 1938	35.01	Jan. 23, 1952	37.30
Jan. 30, 1937	34.3	Jan. 27, 1939	34.90	Dec. 11	37.96
June 17	34.29	Aug. 11	35.12	Dec. 2, 1953	39.07
Jan. 18, 1938	34.73	Jan. 17, 1940	35.35		

D-1. Lat. 32°19', long. 102°03'. Depth 190 feet.

Oct. 2, 1947	59.23	Jan. 21, 1952	67.84	Dec. 2, 1953	77.32
Jan. 19, 1951	95.50	Dec. 10	72.60		

MARTIN COUNTY

D-2. Lat. 32°19', long. 102°02'. Depth 178 feet.

Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1951	59.08	Dec. 10, 1952	70.15	Dec. 2, 1953	75.47
Jan. 21, 1952	63.39				

D-3. Lat. 32°19', long. 102°02'. Depth 190 feet.

Date	Water level	Date	Water level	Date	Water level
Oct. 13, 1947	63.10	Jan. 21, 1952	71.87	Dec. 2, 1953	82.94
Jan. 19, 1951	68.00	Dec. 10	78.44		

D-4. Lat. 32°19', long. 102°01'. Depth 145 feet.

Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1951	66.38	Dec. 10, 1952	69.66	Dec. 2, 1953	72.04
Jan. 22, 1952	67.75				

D-5. Lat. 32°19', long. 102°01'.

Date	Water level	Date	Water level	Date	Water level
Jan. 22, 1952	72.01	Dec. 10, 1952	73.39	Dec. 2, 1953	75.81

D-6. Lat. 32°17', long. 102°01'. Depth 90 feet.

Date	Water level	Date	Water level	Date	Water level
Oct. 13, 1947	32.19	Dec. 10, 1952	48.94	Dec. 2, 1953	50.24
Jan. 19, 1951	37.95				

D-7. Lat. 32°16', long. 102°01'. Depth 154.

Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1951	36.3	Dec. 10, 1952	54.08	Dec. 2, 1953	62.93
Jan. 22, 1952	43.40				

D-8. Lat. 32°16', long. 102°02'.

Date	Water level	Date	Water level	Date	Water level
Oct. 31, 1947	31.47	Jan. 22, 1952	46.94	Dec. 2, 1953	67.51
Jan. 19, 1951	40.2	Dec. 10	57.24		

D-9. Lat. 32°16', long. 102°01'. Depth 170 feet.

Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1951	36.48	Dec. 10, 1952	57.10	Dec. 2, 1953	64.67
Jan. 22, 1952	43.70				

MARTIN COUNTY

E-1. Lat. $32^{\circ}18'$, long. $101^{\circ}58'$. Depth 128 feet.

Date	Water Level	Date	Water level	Date	Water level
Oct. 31, 1947	57.24	Jan. 22, 1952	57.78	Dec. 2, 1953	61.60

G-1. Lat. $32^{\circ}12'$, long. $102^{\circ}03'$. Depth 82 feet.

Nov. 3, 1947	36.17	Dec. 10, 1952	36.45	Dec. 2, 1953	37.43
Jan. 22, 1952	35.48				

G-2. Lat. $32^{\circ}13'$, long. $102^{\circ}03'$. Depth 155 feet.

Nov. 3, 1947	37.41	Jan. 22, 1952	42.28	Dec. 10, 1952	43.27
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G-3. Lat. $32^{\circ}14'$, long. $102^{\circ}03'$. Depth 135 feet.

Nov. 3, 1947	35.57	Dec. 12, 1952	44.34	Dec. 2, 1953	46.09
Jan. 22, 1952	41.67				

G-4. Lat. $32^{\circ}14'$, long. $102^{\circ}02'$. Depth 154 feet.

Jan. 19, 1951	30.80	Dec. 10, 1952	42.55	Dec. 2, 1953	47.52
Jan. 22, 1952	39.91				

G-5. Lat. $32^{\circ}14'$, long. $102^{\circ}02'$. Depth 128 feet.

Jan. 19, 1951	28.11	Dec. 10, 1952	37.34	Dec. 2, 1953	41.78
Jan. 22, 1952	34.06				

G-6. Lat. $32^{\circ}13'$, long. $102^{\circ}02'$. Depth 162 feet.

Nov. 3, 1947	31.10	Jan. 22, 1952	42.01	Dec. 2, 1953	52.75
Jan. 19, 1951	33.73	Dec. 10	45.40		

G-7. Lat. $32^{\circ}13'$, long. $102^{\circ}02'$. Depth 142 feet.

Nov. 3, 1947	30.52	Jan. 22, 1952	41.36	Dec. 2, 1953	52.17
Mar. 23, 1950	35.0	Dec. 10	46.47		

MARTIN COUNTY

G-8. Lat. $32^{\circ}13'$, long. $102^{\circ}02'$. Depth 140 feet.

Date	Water level	Date	Water level	Date	Water level
Nov. 13, 1947	33.52	Jan. 22, 1952	44.32	Dec. 10, 1952	49.87
Jan. 19, 1951	37.94				

G-9. Lat. $32^{\circ}12'$, long. $102^{\circ}02'$. Depth 50 feet.

Mar. 23, 1950	32.6	Dec. 10, 1952	34.07	Dec. 2, 1953	36.60
Jan. 23, 1952	32.61				

H-1. Lat. $32^{\circ}09'$, long. $101^{\circ}58'$.

Dec. 11, 1952	30.85	Dec. 2, 1953	34.4		
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H-2. Lat. $32^{\circ}09'$, long. $101^{\circ}57'$. Depth 130 feet.

Jan. 19, 1951	29.07	Jan. 23, 1952	31.25		
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H-4. Lat. $32^{\circ}09'$, long. $101^{\circ}56'$. Depth 150 feet.

Jan. 19, 1951	27.45	Dec. 11, 1952	43.84	Dec. 2, 1953	62.58
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H-5. Lat. $32^{\circ}09'$, long. $101^{\circ}55'$. Depth 160 feet.

Jan. 19, 1951	38.54	Dec. 11, 1952	53.35	Dec. 2, 1953	71.65
Jan. 23, 1952	43.23				

H-6. Lat. $32^{\circ}09'$, long. $101^{\circ}54'$. Depth 145 feet.

Jan. 19, 1951	56.87	Dec. 11, 1952	69.93	Dec. 2, 1953	81.62
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H-7. Lat. $32^{\circ}06'$, long. $101^{\circ}53'$. Depth 154 feet.

Jan. 19, 1951	37.34	Jan. 24, 1952	41.06	Dec. 11, 1952	48.17
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MARTIN COUNTY

H-8. Lat. 32°06', long. 101°52'. Depth 144 feet.

Date	Water level	Date	Water level	Date	Water level
Jan. 19, 1951	41.32	Dec. 11, 1952	47.51	Dec. 3, 1953	54.33
Jan. 24, 1952	42.16				

H-9. Lat. 32°06', long. 101°56'. Depth 165 feet.

Jan. 19, 1951	54.33	Dec. 11, 1952	64.62	Dec. 3, 1953	68.47
Jan. 24, 1952	58.04				

H-10. Lat. 32°05', long. 101°52'. Depth 120 feet.

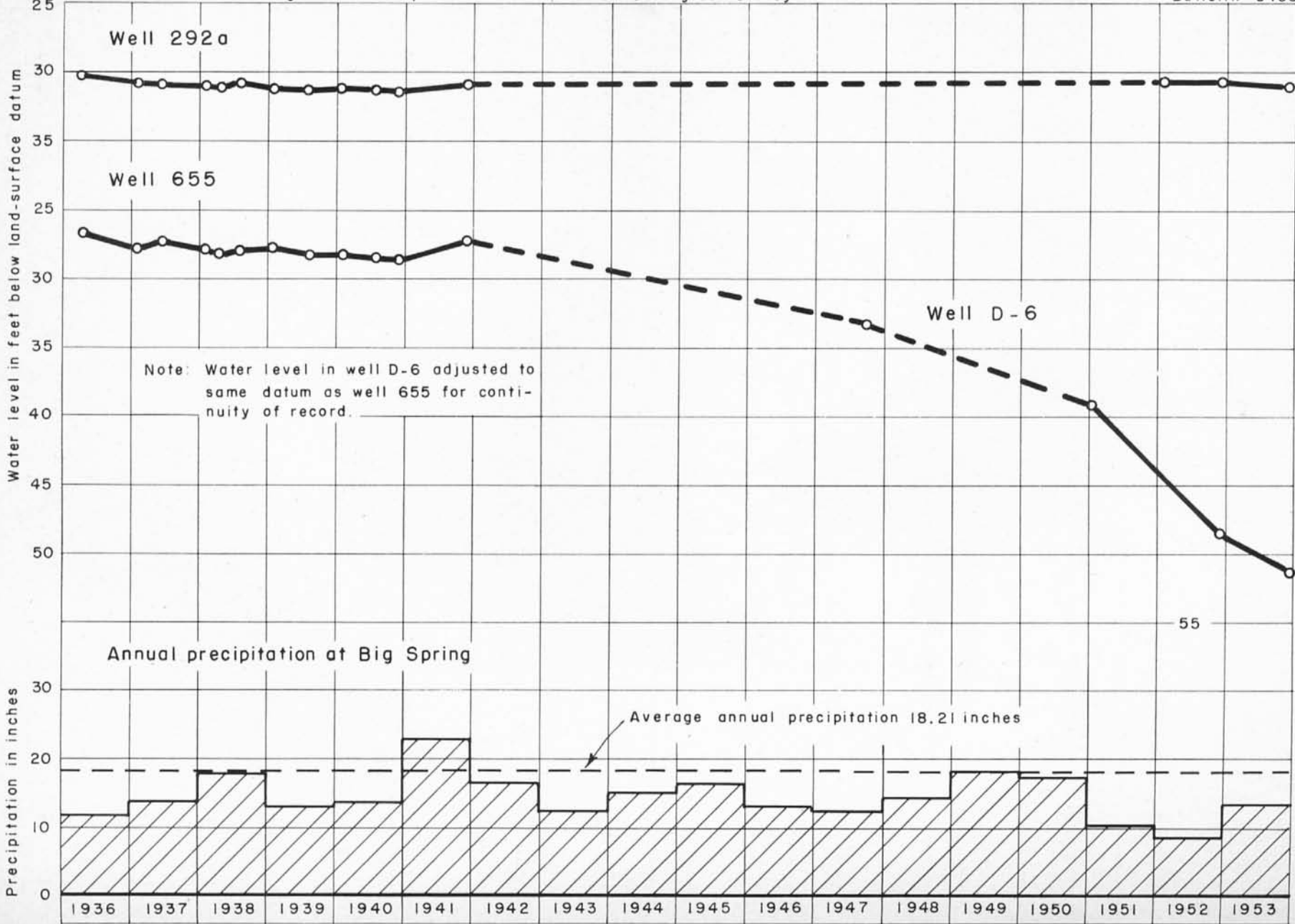
Jan. 18, 1951	33.34	Dec. 11, 1952	39.98	Dec. 3, 1953	45.90
Jan. 24, 1952	35.30				

H-11. Lat. 32°06', long. 101°51'. Depth 152 feet.

Jan. 19, 1951	56.24	Dec. 11, 1952	63.19	Dec. 3, 1953	68.39
Jan. 24, 1952	59.43				

H-12. Lat. 32°06', long. 101°50'. Depth 140 feet.

Jan. 19, 1951	71.42	Dec. 11, 1952	78.50	Dec. 3, 1953	84.11
Jan. 24, 1952	74.83				



Hydrographs showing fluctuation of water levels in Martin County wells and the annual precipitation at Big Spring, Tex.

