

TEXAS BOARD OF WATER ENGINEERS

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BULLETIN 5902

RECORDS OF WATER-LEVEL MEASUREMENTS IN BELL,
MCLENNAN, AND SOMERVELL COUNTIES, TEXAS
1930 THROUGH 1957

Compiled by

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Texas Board of Water Engineers

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

February 1959

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INTRODUCTION

The Texas Board of Water Engineers is charged with making independently or in cooperation with other State and Federal agencies, scientific investigations of the source, amount and quality of ground-water supplies. To evaluate effects of ground-water development in relation to available supply, periodic measurements of water levels are made in principal reservoirs of the State through an observation well program conducted cooperatively by the Texas Board of Water Engineers and the United States Geological Survey.

This bulletin contains measurements of the depth to water in feet below or above land-surface datum in 26 wells in Bell County, 8 wells in McLennan County and 15 wells in Somervell County. The period of record covers measurements made in observation wells from 1930 through 1957.

Observation well location maps precede the corresponding table of water-level measurements for each county. Hydrographs illustrating the fluctuation of water levels in selected wells in Bell, McLennan and Somervell Counties follow the associated table of water-level measurements. Annual precipitation charts for Temple, Waco and Rainbow are combined with their respective hydrographs.

BELL COUNTY



WATER-LEVEL MEASUREMENTS IN BELL COUNTY, TEXAS

B-1. Lat. 31°17', long. 97°27'. Diameter 8 inches, depth 505 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Sept. 27, 1950	8.56	May 8, 1952	12.19	Dec. 10, 1954	16.78
Dec. 13	12.73	Oct. 21	15.44	June 20, 1955	15.78
Apr. 26, 1951	9.32	July 29, 1953	46.63	Dec. 12, 1956	24.27
June 8	15.11	Nov. 19	17.58	Nov. 27, 1957	2.50
Feb. 19, 1952	33.68	May 19, 1954	35.19		

B-2. Lat. 31°17', long. 97°25'. Diameter 30 inches, depth 30 feet.

Sept. 27, 1950	16.2	Apr. 25, 1951	21.14	June 8, 1951	15.61
Dec. 12	20.18				

B-3. Lat. 31°16', long. 97°25'. Diameter 7 inches, depth approximately 125 feet.

Sept. 27, 1950	43.27	May 8, 1952	33.37	Dec. 10, 1954	43.67
Dec. 12	48.00	Oct. 21	42.37	June 20, 1955	29.02
Apr. 25, 1951	42.63	July 29, 1953	38.63	Dec. 12, 1956	38.82
June 8	38.34	Nov. 19	36.90	Nov. 27, 1957	3.66
Feb. 19, 1952	44.00	May 19, 1954	37.44		

B-4. Lat. 31°15', long. 97°26'. Depth 400 feet.

Sept. 27, 1950	63.93	Apr. 25, 1951	70.53	June 18, 1951	106.88
Dec. 13	76.80				

B-5. Lat. 31°15', long. 97°26'. Diameter 7 inches, depth 165 feet.

Sept. 27, 1950	65.01	May 8, 1952	7.33	Dec. 10, 1954	85.71
Dec. 13	78.75	Oct. 21	77.95	June 20, 1955	6.75
Apr. 25, 1951	34.77	July 29, 1953	61.26	Dec. 12, 1956	54.71
June 8	8.88	Nov. 19	7.49	Nov. 27, 1957	4.65
Feb. 19, 1952	78.47	May 19, 1954	42.11		

B-6. Lat. 31°14', long. 97°26'. Diameter 8 inches, depth 540 feet.

Sept. 27, 1950	21.6	June 8, 1951	69.26	Oct. 21, 1952	114.16
Dec. 13	62.4	May 8, 1952	84.32		

WATER-LEVEL MEASUREMENTS IN BELL COUNTY -- CONTINUED

B-14. Lat. 31°10', long. 97°26'. Diameter 6 inches, depth 190 feet.

Date	Water Level	Date	Water Level	Date	Water Level
May 10, 1950	102.68	May 8, 1952	81.66	Dec. 10, 1954	91.43
Dec. 12	91.35	Oct. 21	94.51	June 20, 1955	90.67
Apr. 25, 1951	109.58	July 30, 1953	81.30	Dec. 12, 1956	91.08
June 8	102.15	Nov. 19	92.80	Nov. 27, 1957	89.41
Feb. 19, 1952	114.60	May 19, 1954	95.43		

C-1. Lat. 31°16', long. 97°24'. Diameter 7 inches, depth 274 feet.

Sept. 27, 1950	60.14	Oct. 21, 1952	83.66	June 20, 1955	38.40
Dec. 13	97.65	July 29, 1953	137.75	Dec. 12, 1956	125.55
Apr. 25, 1951	71.83	Nov. 19	44.65	Nov. 27, 1957	96.97
June 8	51.37	May 19, 1954	95.49		
Feb. 19, 1952	106.25	Dec. 10	92.65		

C-2. Lat. 31°15', long. 97°24'. Diameter 8 inches, depth 600 feet.

Sept. 27, 1950	6.94	Dec. 13, 1950	61.01	Feb. 20, 1952	9.13
Dec. 12	b 95.6	Apr. 25, 1951	6.95		

E-1. Lat. 31°02', long. 97°45'.

June 7, 1951	128.11	Feb. 20, 1952	129.35		
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G-1. Lat. 31°08', long. 97°29'. Diameter 6 inches, depth 65 feet.

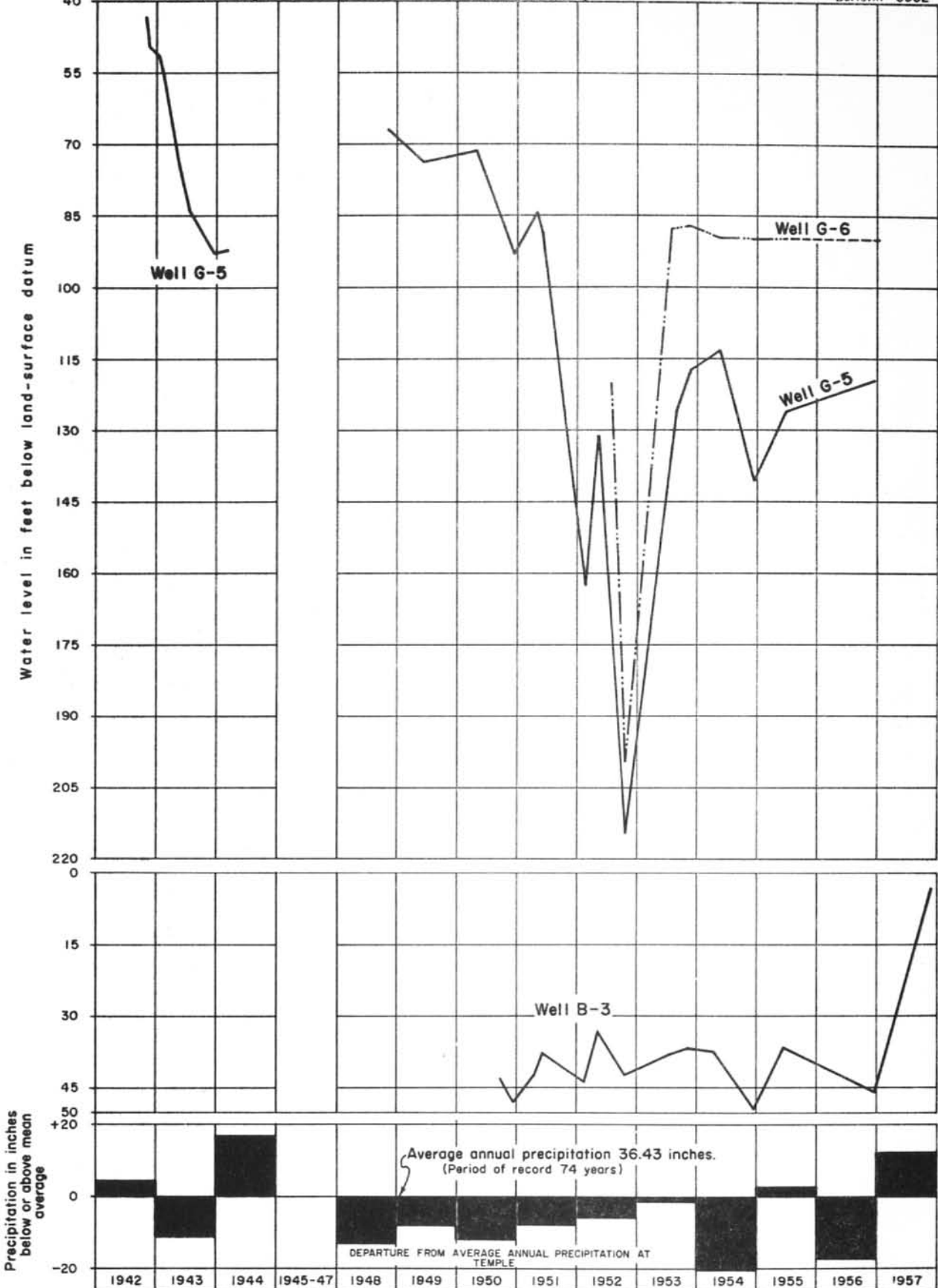
Nov. 19, 1952	38.14	Nov. 20, 1953	38.44	Dec. 10, 1954	38.89
July 30, 1953	38.57	May 20, 1954	38.74		

G-2. Lat. 31°07', long. 97°27'.

Nov. 19, 1952	58.38	July 30, 1953	58.80		
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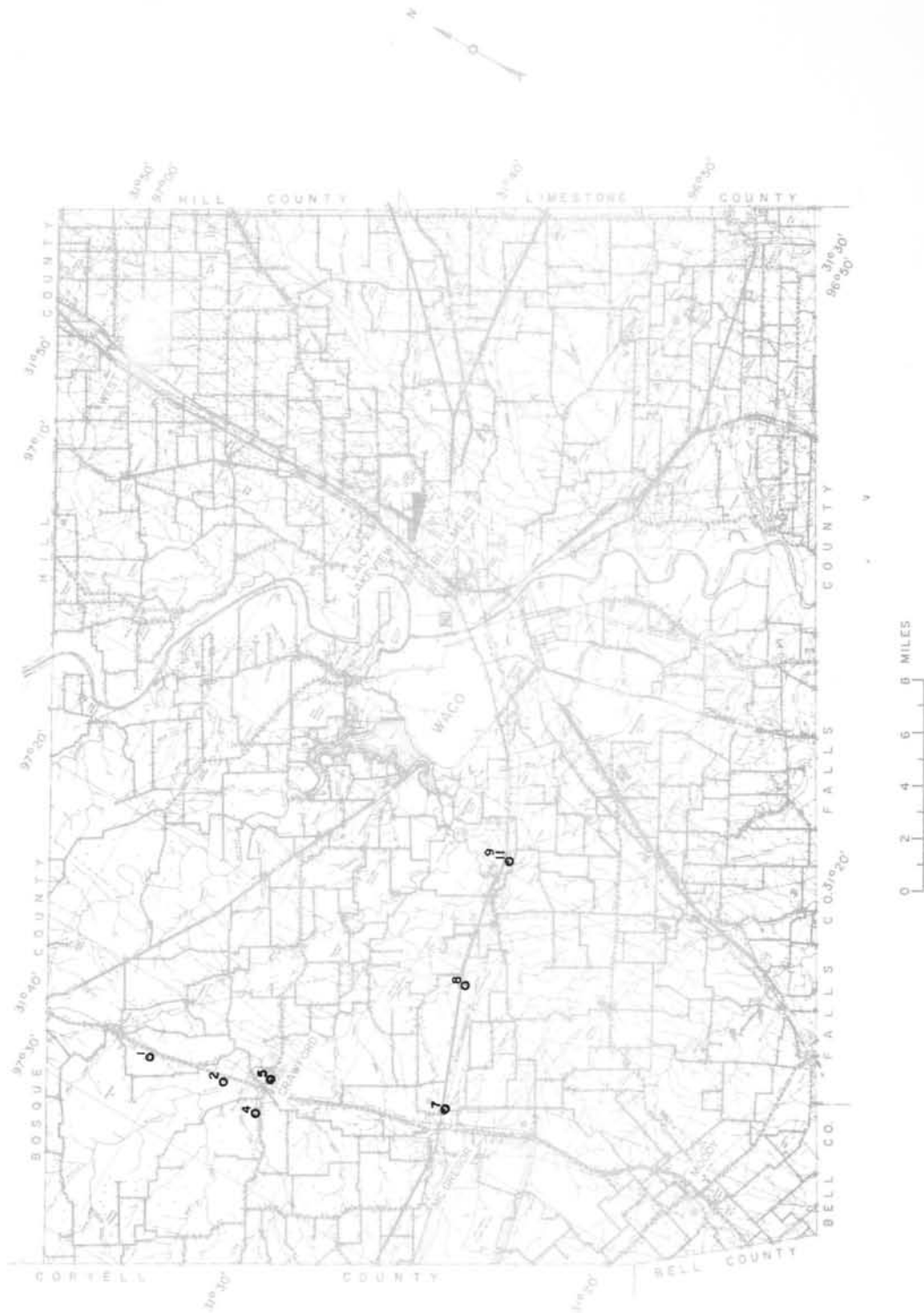
G-3. Lat. 31°06', long. 97°31'. Diameter 6 inches, depth 450 feet.

May 9, 1950	126.16	June 8, 1951	134.62	Oct. 22, 1952	144.0
Sept. 28	129.2	Feb. 20, 1952	140.22	July 30, 1953	126.0
Apr. 26, 1951	134.97	May 8	140.36	Nov. 20	139.0



HYDROGRAPHS OF WATER LEVELS IN WELL G-6, WELL G-5, AND WELL B-3, BELL COUNTY, AND ANNUAL PRECIPITATION AT TEMPLE, TEXAS

M C L E N N A N C O U N T Y



BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

OBSERVATION WELLS IN MCLENNAN COUNTY, TEXAS

WATER-LEVEL MEASUREMENTS IN MCLENNAN COUNTY, TEXAS

1. Lat. 31°35', long. 97°27'. Diameter 7 inches.

Date	Water Level	Date	Water Level	Date	Water Level
Apr. 25, 1950	144.99	Nov. 19, 1953	173.43	May 19, 1954	175.35

2. Lat. 31°33', long. 97°27'. Diameter 6 inches, depth 300 feet.

Apr. 25, 1950	12.86	July 29, 1953	21.51	Dec. 18, 1954	25.57
Feb. 18, 1952	18.05	May 19, 1954	22.55	Dec. 12, 1956	29.27

4. Lat. 31°31', long. 97°27'. Diameter 8 inches, depth 125 feet.

Apr. 25, 1950	52.70	July 29, 1953	52.84	May 19, 1954	53.67
Feb. 18, 1952	53.57	Nov. 19	52.95		

5. Lat. 31°32', long. 97°26'. Diameter 7 inches, depth 100 feet.

Apr. 25, 1950	12.32	Nov. 19, 1953	11.70	June 15, 1955	8.39
Feb. 18, 1952	14.75	May 19, 1954	14.93	Dec. 12, 1956	15.11
July 29, 1953	12.24	Dec. 9	12.88		

7. Lat. 31°26', long. 97°23'. Diameter 8 inches, depth 200 feet.

Apr. 25, 1950	30.77	May 19, 1954	19.54	Dec. 12, 1956	21.57
Feb. 18, 1952	32.48	Dec. 9	25.00		
July 29, 1953	33.23	June 15, 1955	19.70		

8. Lat. 31°28', long. 97°19'. Diameter 5 inches, depth 1,113 feet.

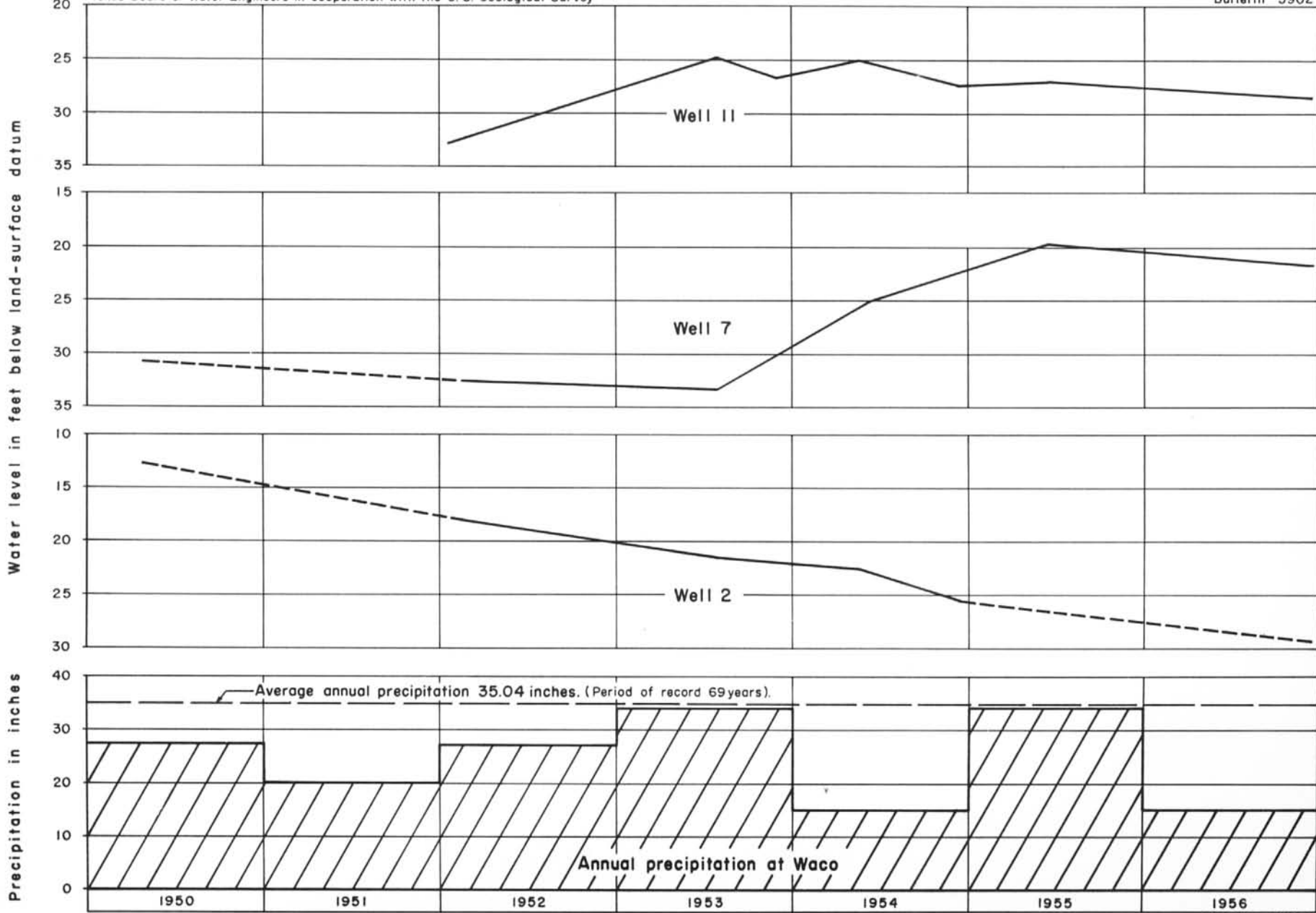
July 29, 1953	98.00	Nov. 19, 1953	98.95		
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9. Lat. 31°29', long. 97°14'. Diameter 7 inches, depth 1,715 feet.

Apr. 25, 1950	179.95	July 29, 1953	196.45	Nov. 19, 1953	194.53
Feb. 19, 1952	182.90				

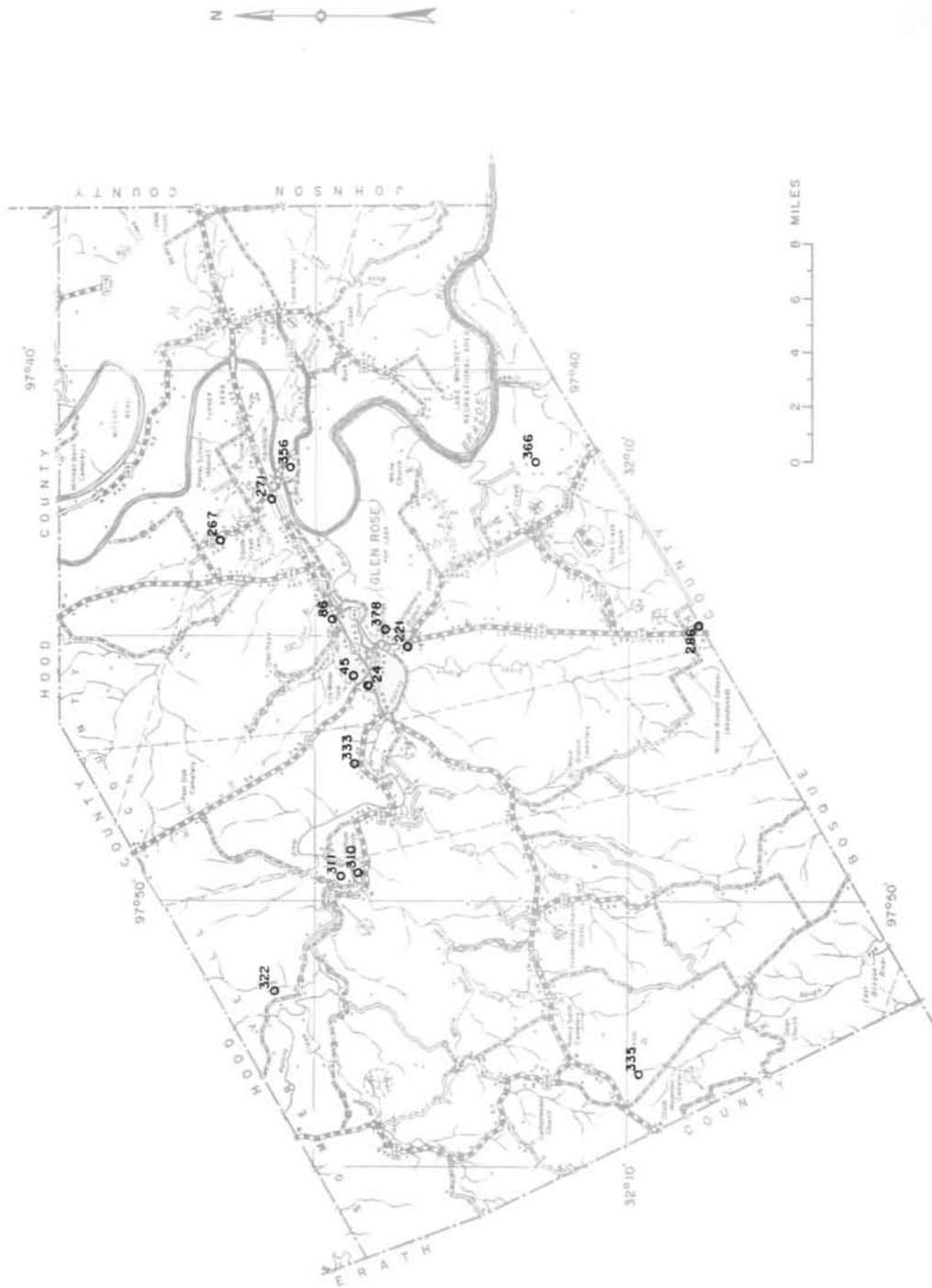
11. Lat. 31°29', long. 97°14'. Diameter 10 inches, depth 960 feet.

Feb. 19, 1952	32.83	May 19, 1954	24.99	Dec. 12, 1956	28.59
July 29, 1953	24.64	Dec. 9	27.30		
Nov. 19	26.45	June 15, 1955	27.04		



HYDROGRAPHS OF WATER LEVELS IN WELL 11, WELL 7, AND WELL 2, McLENNAN COUNTY, AND ANNUAL PRECIPITATION AT WACO, TEXAS

SOMERVELL COUNTY



BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

OBSERVATION WELLS IN SOMERVELL COUNTY, TEXAS

WATER-LEVEL MEASUREMENTS IN SOMERVELL COUNTY, TEXAS

24. Lat. 32°14', long. 97°45'. Diameter 4 inches, depth 177 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Aug. 28, 1950	13.20	May 12, 1953	11.29	Dec. 11, 1956	13.09
Nov. 20	11.30	Dec. 8, 1954	12.96	Nov. 21, 1957	7.61
Feb. 22, 1951	11.10	June 14, 1955	13.58		

45. Lat. 32°14', long. 97°45'. Diameter 6 inches, depth 186 feet.

Aug. 29, 1950	21.64	June 4, 1951	21.00	Dec. 11, 1956	22.64
Nov. 20	21.54	May 12, 1953	20.76	Nov. 21, 1957	16.78
Dec. 19	20.17	Dec. 8, 1954	22.41		
Feb. 22, 1951	20.33	June 14, 1955	22.85		

86. Lat. 32°14', long. 97°44'. Diameter 4 inches, depth 128 feet.

Sept. 5, 1950	19.10	Feb. 22, 1951	18.55	June 4, 1951	18.34
Nov. 20	23.69	May 1	18.57		

221. Lat. 32°13', long. 97°45'. Diameter 4 inches, depth 140 feet.

Sept. 4, 1950	13.6	June 4, 1951	16.22	June 14, 1955	19.95
Nov. 21	14.8	May 13, 1953	18.26	Dec. 11, 1956	19.48
Feb. 22, 1951	14.42	Dec. 8, 1954	19.05	Nov. 21, 1957	18.14

267. Lat. 32°16', long. 97°43'. Diameter 2 inches, depth 350 feet.

June 19, 1930	+8.9	June 4, 1951	6.47	Dec. 11, 1956	14.41
Aug. 11, 1950	5.35	May 13, 1953	7.29	Nov. 21, 1957	15.60
Nov. 22	5.04	Dec. 9, 1954	9.58		
Feb. 22, 1951	6.44	June 14, 1955	10.64		

271. Lat. 32°15', long. 97°42'. Diameter 4 inches, depth 200 feet.

Aug. 11, 1950	26.24	June 4, 1951	26.67	June 14, 1955	29.07
Nov. 22	26.27	May 13, 1953	27.88	Dec. 11, 1956	34.28
Feb. 22, 1951	26.43	Dec. 9, 1954	28.54	Nov. 21, 1957	34.96

286. Lat. 32°08', long. 97°44'. Diameter 4 inches, depth 119 feet.

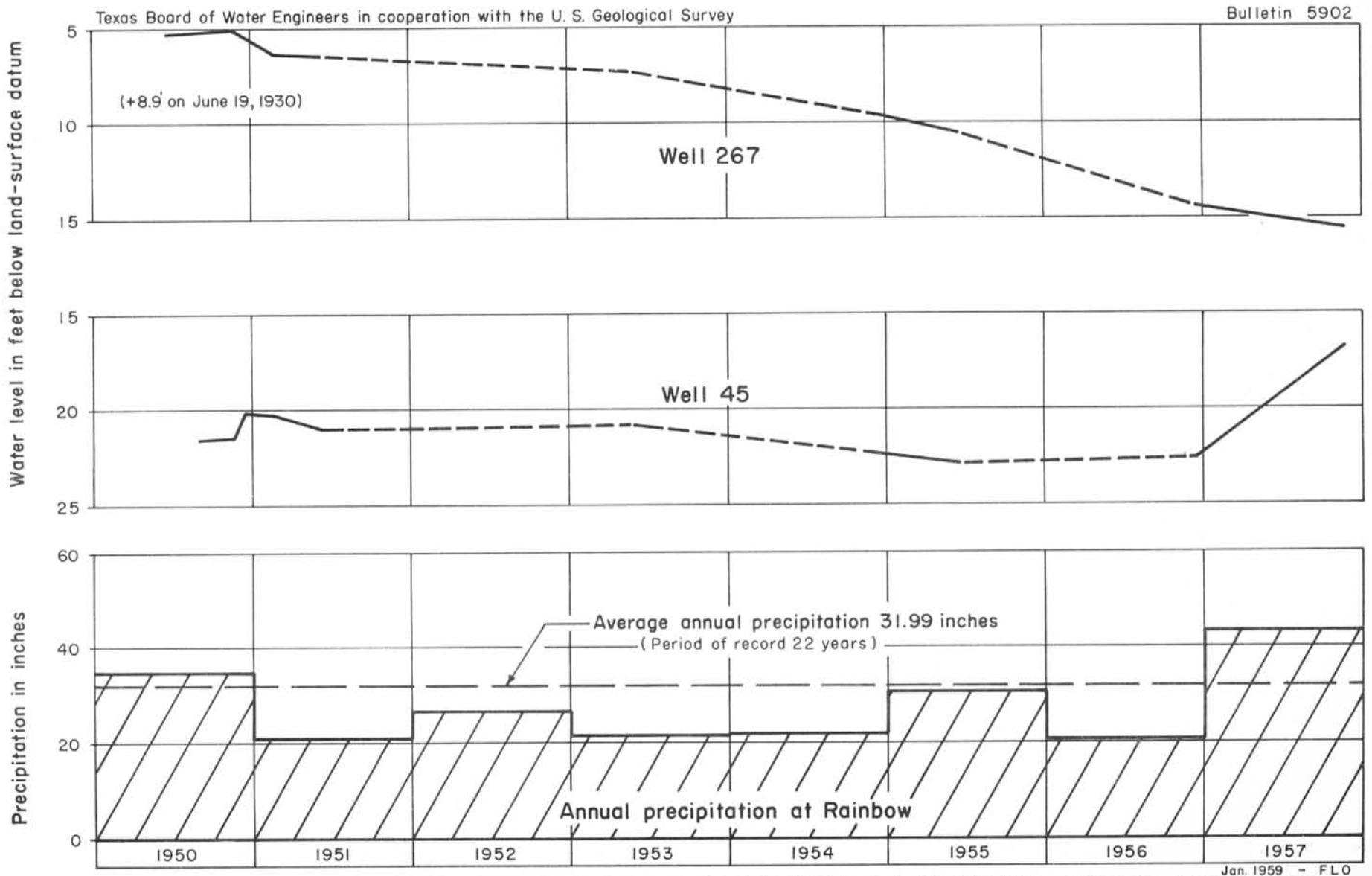
Aug. 11, 1950	91.50	June 4, 1951	89.9	June 14, 1955	91.74
Feb. 22, 1951	91.40	May 13, 1953	90.81	Dec. 11, 1956	92.21
May 1	90.11	Dec. 8, 1954	93.06	Nov. 21, 1957	92.08

WATER-LEVEL MEASUREMENTS IN SOMERVELL COUNTY -- CONTINUED

378. Lat. 32°13', long. 97°44'. Diameter 4 inches, depth 120 feet.

Sept. 6, 1950	27.12	June 4, 1951	31.74	Dec. 11, 1956	27.70
Nov. 21	25.47	May 12, 1953	34.02	Nov. 21, 1957	25.91
Feb. 22, 1951	23.85	Dec. 8, 1954	27.15		
May 1	26.50	June 14, 1955	32.24		

+ Indicates water-level, in well, above land-surface datum.



HYDROGRAPHS OF WATER LEVELS IN WELL 267 AND WELL 45, SOMERVILLE COUNTY, AND ANNUAL PRECIPITATION AT RAINBOW, TEXAS