

TEXAS BOARD OF WATER ENGINEERS

H. A. Beckwith, Chairman
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BULLETIN 5407

**RECORDS OF WATER-LEVEL MEASUREMENTS IN
COCHRAN, CROSBY, GAINES, HOCKLEY, LYNN, AND TERRY COUNTIES, TEXAS**

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

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RECORDS OF WATER-LEVEL MEASUREMENTS IN COCHRAN, CROSBY, GAINES
HOCKLEY, LYNN, AND TERRY COUNTIES, TEXAS

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This bulletin contains measurements of the depths-to-water below land-surface datum in wells in Cochran, Crosby, Gaines, Hockley, Lynn and Terry Counties in the Southern High Plains in Texas. It is one of a series of publications by the Texas Board of Water Engineers which contains measurements of the water levels in selected observation wells. The measurements cover a period from 1937 to January 1954.

Except in Cochran County, inventories of water wells have been made in all the counties mentioned above and the results published in mimeographed form. Water-level measurements made at the time of inventory are included in this bulletin. The water-level measurements were made as part of a cooperative program of ground-water investigations in Texas by the United States Geological Survey and the Texas Board of Water Engineers.

If more than one water-level measurement was made during a month, only the highest water level is given in this report. The accompanying maps show the locations of the observation wells. Hydrographs showing fluctuations of water levels and precipitation are given for each county. Records of water wells, geologic data, pumpage data, and discussion of water levels are given in the following list of publications.

LIST OF PUBLICATIONS

ALEXANDER, W. H., Jr., and BROADHURST, W. L., 1942, Progress report on ground water in the High Plains of Texas.*

ALEXANDER, W. H., Jr., and OTHERS, 1943, Progress report on ground water in the High Plains of Texas.*

ALEXANDER, W. H., Jr., and LANG, JOE W., 1945, Ground water in the High Plains of Texas, Progress report No. 5.*

BAKER, C. L., 1915, Geology and underground waters of the Northern Llano Estacado; University of Texas Bulletin 57.*

BARNES, J. R., and OTHERS, 1949, Geology and ground water in the irrigated region of the Southern High Plains in Texas, Progress report No. 7.

BROADHURST, W. L., and ALEXANDER, W. H., Jr., 1944, Progress report on ground water in the High Plains in Texas.

BROADHURST, W. L., 1947, Ground water in High Plains in Texas, Progress report No. 6.*

BROADHURST, W. L., SUNDSTROM, R. W., and WEAVER, D. E., 1949, Public water supplies in Western Texas, U. S. Geol. Survey Water-Supply Paper 1106.

BURLEIGH, H. P., and WELLS, H. M., 1936, Preliminary report on the underground water supply of Plainview and vicinity, Texas.*

CROMACK, G. H., 1944, Records of wells in Terry County.

_____, 1946, Records of wells in Gaines County.

HUGHES, WILLIAM F., 1951, Cost of pumping water for irrigation Texas High Plains.

JOHNSON, W. D., 1902, The High Plains and their utilizations, U. S. Geol. Survey, 21st Ann. Rept., pt. 4, Hydrology, pp. 609-741, 1901; 22nd Ann. Rept. pt. 4, Hydrology, pp. 637-669.*

LEGGAT, E. R., 1951, Development of wells for irrigation and fluctuation of water levels in the High Plains of Texas to January 1951, Bulletin 5104.

_____, 1952, Geology and ground-water resources of Lynn County, Texas, Bulletin 5207.

_____, 1954, Summary of ground-water development in the Southern High Plains of Texas, Bulletin 5402.

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.

LIST OF PUBLICATIONS

MEINZER, O. E., and WENZEL, L. K., 1939, Water levels and artesian pressure in observation wells in the United States in 1938, U. S. Geol. Survey Water-Supply Paper 845.

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

_____, 1941, Water levels and artesian pressure in observation wells in the United States in 1940, Part 4, U. S. Geol. Survey Water-Supply Paper 909.

_____, 1943, Water levels and artesian pressure in observation wells in the United States in 1941, Part 4, U. S. Geol. Survey Water-Supply Paper 939.

_____, 1944, Water levels and artesian pressure in observation wells in the United States in 1942, Part 4, U. S. Geol. Survey Water-Supply Paper 947.

_____, 1944, Water levels and artesian pressure in observation wells in the United States in 1943, Part 4, U. S. Geol. Survey Water-Supply Paper 989.

MUELLER, CARL B., 1939, Records of wells in Crosby County.

MUELLER, CARL B., LANG, JOE W., and BROADHURST, W. L., 1940, Records of wells in Hockley County.

SAYRE, A. N., and OTHERS, 1947, Water levels and artesian pressure in observation wells in the United States in 1944, Part 4, U. S. Geol. Survey Water-Supply Paper 1019.

_____, 1948, Water levels and artesian pressure in observation wells in the United States in 1945, Part 4, U. S. Geol. Survey Water-Supply Paper 1026.

_____, 1949, Water levels and artesian pressure in observation wells in the United States in 1946, Part 4, U. S. Geol. Survey Water-Supply Paper 1074.

_____, 1950, Water level and artesian pressure in observation wells in the United States in 1947, Part 4, U. S. Geol. Survey Water-Supply Paper 1099.

_____, 1951, Water level and artesian pressure in observation wells in the United States in 1948, Part 4, U. S. Geol. Survey Water-Supply Paper 1129.

LIST OF PUBLICATIONS

SAYRE, A. N., and OTHERS, 1951, Water levels and artesian pressure in observation wells in the United States in 1949, Part 4, U. S. Geol. Survey Water-Supply Paper 1159.

_____, 1953, Water levels and artesian pressure in observation wells in the United States in 1950, Part 4, U. S. Geol. Survey Water-Supply Paper 1168.

WHITE, W. N., and OTHERS, 1938, Ground water in the High Plains of Texas.

_____, 1940, Ground water in the High Plains of Texas.

_____, 1946, Ground water in the High Plains of Texas, 1940, U. S. Geol. Survey Water-Supply Paper 889-F.

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

КОЧРАН КОУНТИ

WYOMING

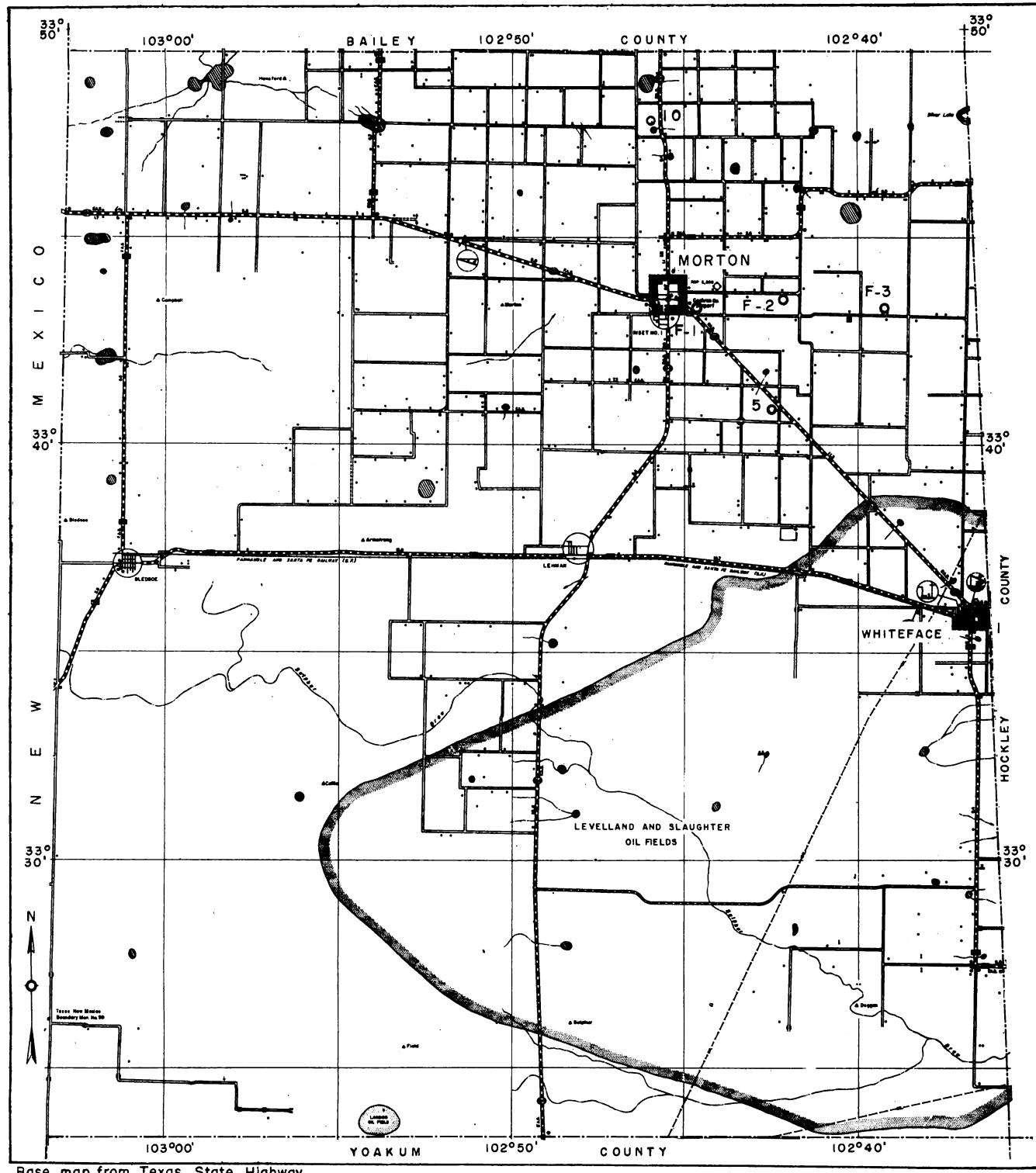
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COCHRAN COUNTY

**COCHRAN COUNTY, TEXAS
OBSERVATION WELLS**

January 1954

Bulletin 5407
Texas Board of Water Engineers
in cooperation with
U. S. Geological Survey



Base map from Texas State Highway Department

0 1 2 3 4 5 Miles

COCHRAN COUNTY

1. Lat. $33^{\circ}36'$, long. $102^{\circ}36'$.

Date	Water level	Date	Water level	Date	Water level
June 22, 1937	150.44	July 8, 1939	150.12	Feb. 28, 1946	149.38
July 30	150.21	Mar. 26, 1940	150.15	Mar. 5, 1947	152.66
Jan. 25, 1938	150.64	Mar. 21, 1941	150.33	Mar. 15, 1948	149.60
Apr. 11	150.48	July 29, 1942	149.85	Feb. 15, 1950	157.37
Feb. 6, 1939	150.14	Feb. 5, 1944	149.65	Jan. 17, 1951	149.20
Mar. 14,	150.19	Feb. 20, 1945	149.67		

5. Lat. $33^{\circ}40'$, long. $102^{\circ}42'$. Depth 146 feet.

June 22, 1937	126.32	Dec. 3, 1940	126.21	Mar. 9, 1949	125.55
July 30	126.32	Mar. 21, 1941	126.00	Feb. 15, 1950	124.16
Jan. 25, 1938	126.27	Feb. 5, 1944	126.65	Feb. 6, 1952	125.80
Apr. 11	126.28	Feb. 22, 1945	125.63	Jan. 14, 1953	126.74
July 8, 1939	126.38	Feb. 28, 1946	125.70	Jan. 14, 1954	127.38
Oct. 12	126.26	Mar. 5, 1947	125.59		
Mar. 26, 1940	126.42	Mar. 15, 1948	125.60		

10. Lat. $33^{\circ}47'$, long. $102^{\circ}45'$. Depth 101 feet.

June 22, 1937	95.45	Mar. 26, 1940	94.81	Mar. 5, 1947	94.03
Aug. 31	95.38	Dec. 3	95.02	Mar. 15, 1948	93.92
Jan. 11, 1938	95.29	Nov. 14, 1941	94.84	Mar. 9, 1949	93.82
Jan. 27, 1939	95.06	Feb. 5, 1944	94.20		
Oct. 12	95.02	Feb. 22, 1945	94.20		

F-1. Lat. $33^{\circ}43'$, long. $102^{\circ}44'$.

Mar. 15, 1948	103.76	Jan. 17, 1951	101.30	Jan. 14, 1954	110.90
Mar. 9, 1949	105.54	Jan. 14, 1958	109.65		

F-2. Lat. $33^{\circ}43'$, long. $102^{\circ}42'$.

Mar. 15, 1948	103.42	Jan. 17, 1951	107.22	Jan. 14, 1954	116.37
Mar. 9, 1949	104.84	Feb. 6, 1952	108.13		
Feb. 15, 1950	104.72	Jan. 14, 1953	112.49		

COCHRAN COUNTY

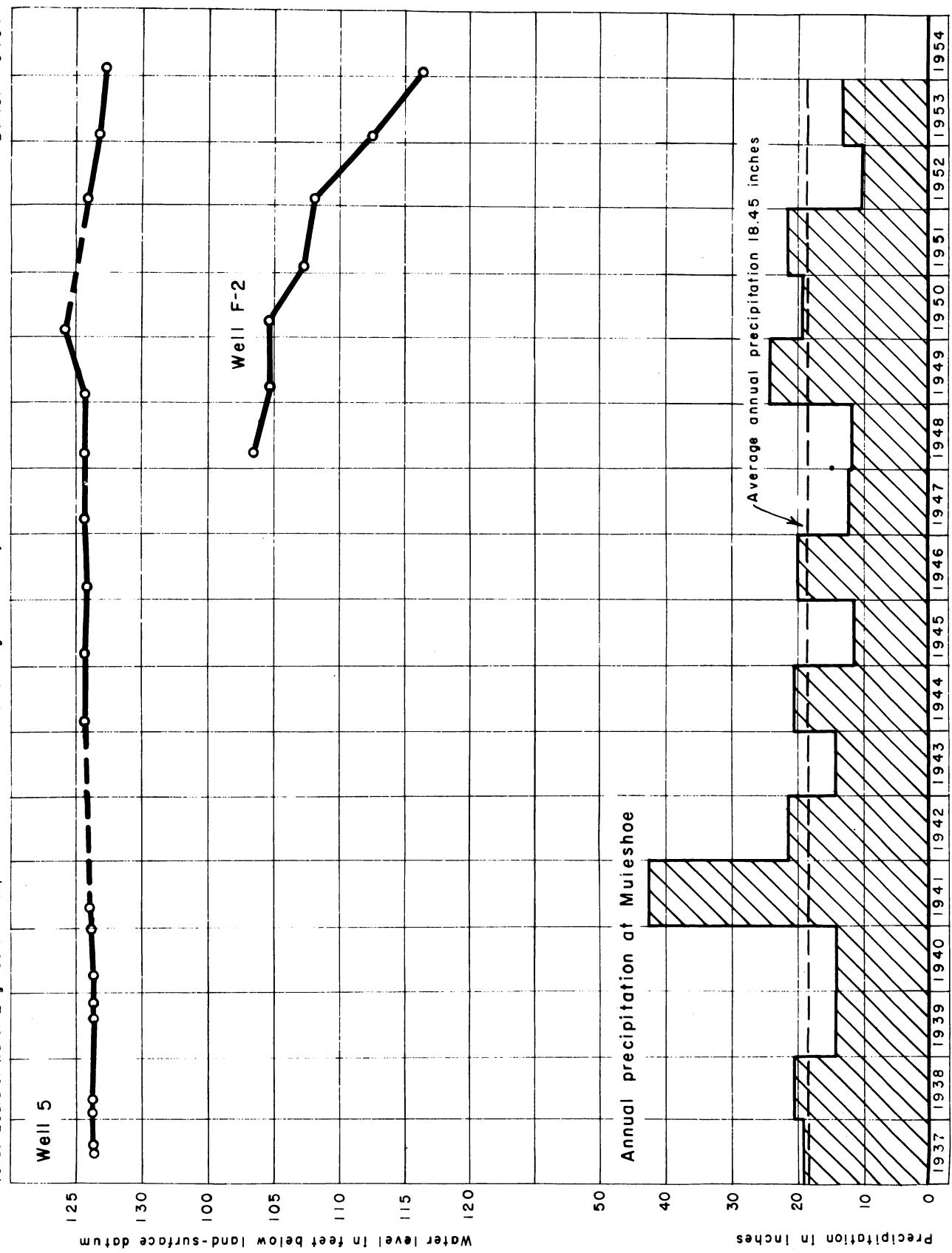
F-3. Lat. $33^{\circ}43'$, long. $102^{\circ}39'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 15, 1948	113.50	Feb. 15, 1950	116.80	Jan. 14, 1954	131.45
Mar. 9, 1949	114.93	Jan. 14, 1953	126.18		

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

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Hydrographs showing fluctuation of water levels in Cochran County and the annual precipitation at Muleshoe, Tex.

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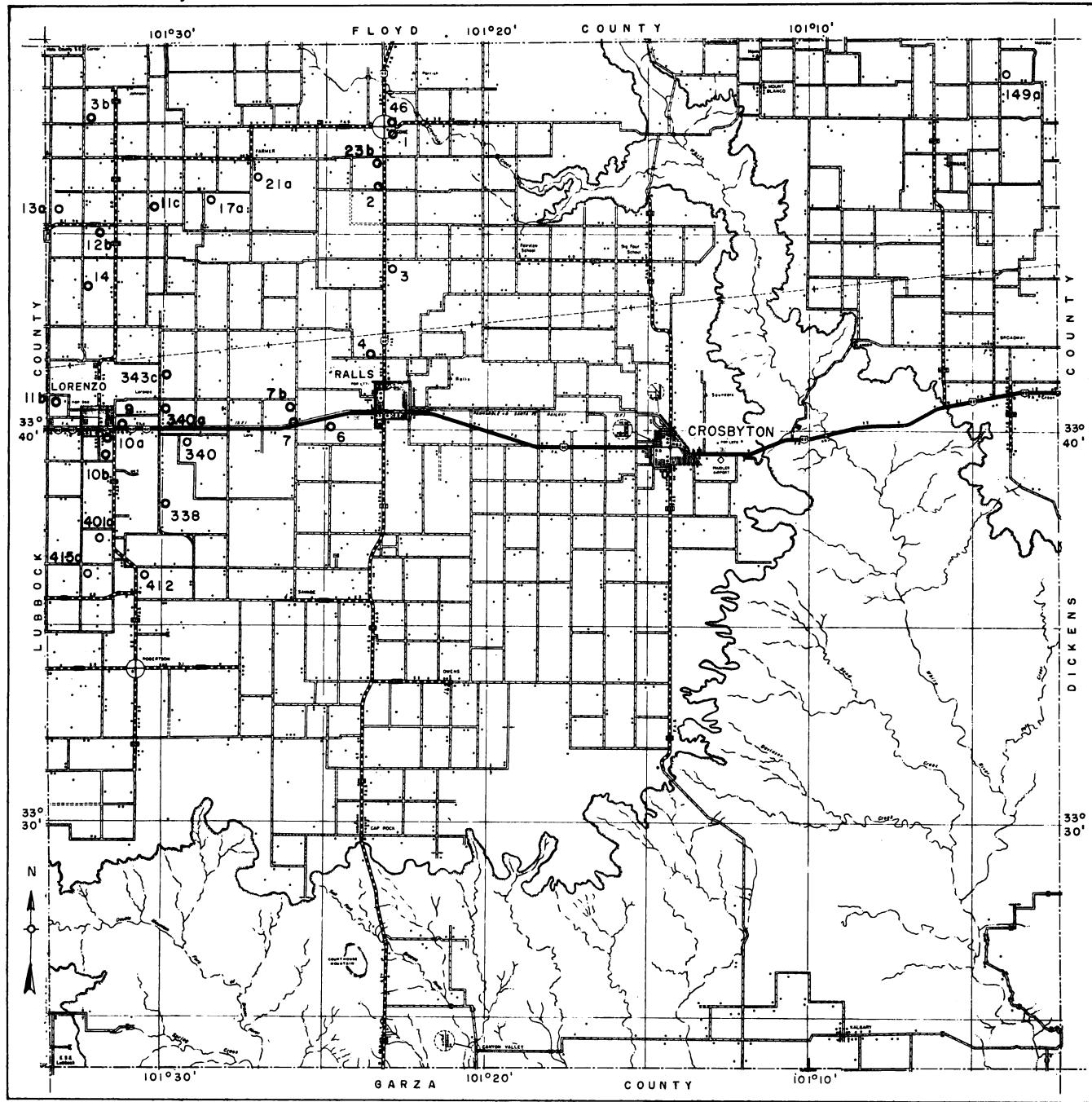
CROSBY COUNTY TEXAS
OBSERVATION MILES

CROSBY COUNTY

CROSBY COUNTY, TEXAS
OBSERVATION WELLS

January 1954

Bulletin 5407
Texas Board of Water Engineers
in cooperation with
U. S. Geological Survey



Base map from Texas State
Highway Department

1 0 1 2 3 4 5 MILES

CROSBY COUNTY

1. Lat. $33^{\circ}47'$, long. $101^{\circ}23'$. Depth 208 feet.

Date	Water level	Date	Water level	Date	Water level
June 16, 1937	113.48	Mar. 22, 1940	113.40	Mar. 11, 1949	115.70
July 28	114.28	Mar. 23, 1942	112.72	Feb. 18, 1950	117.95
Jan. 24, 1938	113.54	Jan. 28, 1943	112.53	Jan. 24, 1951	119.16
June 14	114.40	Feb. 8, 1944	112.57	Jan. 24, 1952	122.15
Feb. 6, 1939	113.54	Feb. 27, 1946	112.97	Jan. 6, 1953	129.63
Mar. 8	113.36	Jan. 17, 1947	113.70	Jan. 4, 1954	130.95
Sept. 30	113.49	Mar. 5	112.80		
Dec. 17	113.32	Feb. 17, 1948	114.71		

2. Lat. $33^{\circ}46'$, long. $101^{\circ}23'$. Depth 121 feet.

June 12, 1937	106.84	Dec. 17, 1939	106.60	Feb. 8, 1944	105.32
July 28	106.90	Mar. 22, 1940	106.77	Jan. 17, 1947	107.48
Jan. 24, 1938	106.77	Nov. 29	106.68	Mar. 5	107.58
Feb. 6, 1939	106.60	July 31, 1942	105.70	Feb. 17, 1948	107.85
Mar. 8	106.70	Oct. 22	105.47	Mar. 11, 1949	109.80
Sept. 30	106.80	Jan. 28, 1943	105.35	Feb. 19, 1950	111.36

3. Lat. $33^{\circ}44'$, long. $101^{\circ}23'$. Depth 173 feet.

June 16, 1937	135.90	Mar. 22, 1940	135.64	Mar. 5, 1948	137.21
July 28	135.82	Nov. 29	135.32	Feb. 17, 1948	139.24
Jan. 24, 1938	136.03	July 22, 1941	135.69	Mar. 11, 1949	142.00
Apr. 14	135.92	Feb. 8, 1944	135.10	Feb. 19, 1950	147.12
June 14	135.77	Mar. 6, 1945	134.80	Jan. 24, 1952	156.86
Sept. 30, 1939	136.06	Feb. 27, 1946	136.06		
Dec. 17, 1939	135.03	Jan. 17, 1947	137.90		

3b. Lat. $33^{\circ}48'$, long. $101^{\circ}32'$.

Mar. 5, 1947	82.07	Feb. 18, 1950	89.44	Jan. 6, 1953	111.94
Feb. 17, 1948	84.18	Jan. 24, 1951	91.28	Jan. 5, 1954	118.15
Mar. 22, 1949	88.05	Jan. 24, 1952	98.80		

CROSBY COUNTY

4. Lat. $33^{\circ}41'$, long. $101^{\circ}23'$.

Date	Water level	Date	Water level	Date	Water level
June 16, 1937	120.71	June 23, 1939	119.93	Feb. 8, 1944	120.90
July 28	120.80	Sept. 30	119.92	Mar. 6, 1945	119.60
Jan. 24, 1938	120.45	Dec. 17	119.60	Mar. 11, 1949	137.65
Apr. 14	119.98	Mar. 22, 1940	119.63	Feb. 19, 1950	145.30
June 14	120.19	Nov. 29	119.51	Jan. 24, 1951	149.04
Aug. 9	120.19	July 22, 1941	119.85	Jan. 24, 1952	155.00
Sept. 30	120.15	July 31, 1942	119.21	Jan. 7, 1953	174.22
Feb. 6, 1939	119.80	Oct. 22	118.77	Jan. 4, 1954	190.85
Mar. 8	119.87	Jan. 28, 1943	118.87		

6. Lat. $33^{\circ}40'$, long. $101^{\circ}25'$. Depth 166 feet.

June 17, 1937	118.95	Dec. 17, 1939	118.01	Jan. 24, 1951	125.48
Jan. 24, 1938	117.90	Mar. 22, 1940	121.41	Jan. 23, 1952	127.37
Apr. 14	117.72	Feb. 27, 1946	118.10		
Sept. 30, 1939	118.35	Mar. 11, 1949	122.95		

7. Lat. $33^{\circ}40'$, long. $101^{\circ}26'$. Depth 122 feet.

July 29, 1937	94.20	Sept. 30, 1939	94.46	Jan. 17, 1947	96.35
Jan. 24, 1938	93.82	Dec. 17	94.50	Mar. 4	95.41
Apr. 14	93.48	Mar. 22, 1940	94.46	Feb. 18, 1948	99.32
June 14	93.69	Nov. 29	94.98	Mar. 11, 1949	107.33
Aug. 9	93.88	July 29, 1941	95.10	Feb. 19, 1950	109.77
Sept. 30	93.93	Mar. 23, 1942	90.40	Jan. 23, 1952	115.60
Feb. 6, 1939	94.09	Feb. 8, 1944	88.98	Jan. 5, 1954	121.52
Mar. 9	94.22	Mar. 6, 1945	90.51		
June 23, 1939	94.46	Feb. 27, 1946	95.80		

7b. Lat. $33^{\circ}40'$, long. $101^{\circ}26'$.

Feb. --, 1946	80.0	Feb. 19, 1950	131.05	Jan. 24, 1952	128.05
Mar. 4, 1947	113.18	Jan. 24, 1951	128.00		

CROSBY COUNTY

9. Lat. $33^{\circ}40'$, long. $101^{\circ}31'$. Depth 101 feet.

Date	Water level	Date	Water level	Date	Water level
June 17, 1937	80.35	Sept. 30, 1939	80.46	Mar. 6, 1945	77.67
July 29	80.29	Dec. 17	80.33	Feb. 27, 1946	78.31
Jan. 24, 1938	79.78	Mar. 22, 1940	80.25	Jan. 17, 1947	81.59
Apr. 14	79.68	Nov. 29	81.44	Mar. 5	80.88
June 14	79.61	July 29, 1941	80.60	Feb. 18, 1948	82.68
Sept. 30	79.66	Mar. 23, 1942	78.90	Mar. 11, 1949	85.68
Feb. 6, 1939	79.58	July 31	78.50	Feb. 19, 1950	86.37
Mar. 9	79.61	Jan. 28, 1943	78.01		
June 23	80.76	Feb. 8, 1944	77.61		

10a. Lat. $33^{\circ}39'$, long. $101^{\circ}31'$.

Mar. 4, 1947	87.53	Mar. 11, 1949	91.90	Feb. 19, 1950	92.98
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10b. Lat. $33^{\circ}39'$, long. $101^{\circ}31'$.

Feb. 19, 1950	92.58	Jan. 24, 1952	101.43	Jan. 5, 1954	111.59
Jan. 24, 1951	96.80	Jan. 7, 1953	108.58		

11b. Lat. $33^{\circ}40'$, long. $101^{\circ}33'$.

Jan. --, 1946	78.10	Mar. 11, 1949	89.55	Jan. 6, 1953	102.95
Mar. 4, 1947	84.82	Feb. 18, 1950	90.46	Jan. 5, 1954	113.74
Feb. 18, 1948	86.90	Jan. 24, 1952	97.10		

11c. Lat. $33^{\circ}45'$, long. $101^{\circ}30'$.

Mar. 22, 1949	98.22	Jan. 24, 1951	113.96	Jan. 6, 1953	111.02
Feb. 18, 1950	104.34	Jan. 24, 1952	103.98	Jan. 5, 1954	122.3

CROSBY COUNTY

12b. Lat. $33^{\circ}45'$, long. $101^{\circ}31'$. Depth 135 feet.

Date	Water level	Date	Water level	Date	Water level
Mar. 4, 1947	92.14	Mar. 11, 1949	96.94	Jan. 24, 1952	105.50
Feb. 17, 1948	93.95	Jan. 24, 1951	103.09	Jan. 5, 1954	125.27

13a. Lat. $33^{\circ}45'$, long. $101^{\circ}33'$. Depth 286 feet.

Mar. 5, 1947	81.69	Jan. 24, 1951	92.86	Jan. 5, 1954	108.43
Feb. 17, 1948	83.59	Jan. 24, 1952	95.04		
Mar. 11, 1949	87.70	Jan. 6, 1953	98.92		

14. Lat. $33^{\circ}43'$, long. $101^{\circ}32'$.

Oct. 19, 1938	75.60	Feb. 18, 1950	91.62	Jan. 6, 1953	103.77
Mar. 22, 1949	87.12	Jan. 24, 1952	96.69	Jan. 5, 1954	113.5

17a. Lat. $33^{\circ}46'$, long. $101^{\circ}28'$.

Oct. 28, 1938	93.00	Mar. 11, 1949	103.65	Jan. 24, 1952	110.63
Mar. 4, 1947	98.08	Feb. 18, 1950	110.30	Jan. 6, 1953	115.39
Feb. 17, 1948	99.31	Jan. 24, 1951	112.40	Jan. 5, 1954	123.52

21a. Lat. $33^{\circ}46'$, long. $101^{\circ}27'$.

Mar. 5, 1947	102.06	Feb. 18, 1950	106.53	Jan. 6, 1953	117.13
Feb. 17, 1948	103.81	Jan. 19, 1951	108.01	Jan. 5, 1954	124.05
Mar. 11, 1949	105.94	Jan. 24, 1952	113.19		

23b. Lat. $33^{\circ}46'$, long. $101^{\circ}23'$.

Feb. 18, 1946	114.00	Jan. 24, 1951	126.15	Jan. 4, 1954	138.01
Mar. 3, 1947	120.15	Jan. 24, 1952	128.84		
Feb. 19, 1950	123.93	Jan. 6, 1953	132.47		

CROSBY COUNTY

46. Lat. $33^{\circ}47'$, long. $101^{\circ}23'$. Depth 137 feet.

Date	Water level	Date	Water level	Date	Water level
June 14, 1938	110.58	Mar. 8, 1939	110.18	Mar. 22, 1940	110.97
Aug. 9	110.73	June 23	110.90	Mar. 23, 1942	109.42
Oct. 18	110.77	Sept. 30	110.99	July 31	108.63
Feb. 6, 1939	110.90	Dec. 17	110.90	Oct. 22	108.58

149a. Lat. $33^{\circ}49'$, long. $101^{\circ}04'$.

Mar. 29, 1949	233.63	Jan. 25, 1951	234.13	Jan. 23, 1952	235.07
Feb. 19, 1950	234.33				

338. Lat. $33^{\circ}38'$, long. $101^{\circ}29'$. Depth 105 feet.

June 14, 1938	89.76	Mar. 9, 1939	89.71	Dec. 17, 1939	89.57
Sept. 30	89.70	June 23	89.62	Mar. 22, 1940	89.58
Feb. 6, 1939	89.68	Sept. 30	89.59	Nov. 29	89.57

340. Lat. $33^{\circ}39'$, long. $101^{\circ}29'$.

Feb. 18, 1948	90.66	Jan. 24, 1951	97.30	Jan. 5, 1954	111.61
Mar. 11, 1949	92.86	Jan. 24, 1952	100.09		
Feb. 19, 1950	95.05	Jan. 7, 1953	104.07		

340a. Lat. $33^{\circ}40'$, long. $101^{\circ}30'$.

Mar. 4, 1947	104.39	Jan. 24, 1951	115.85	Jan. 7, 1953	118.54
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343c. Lat. $33^{\circ}41'$, long. $101^{\circ}30'$. Depth 369 feet.

Mar. --, 1945	91.0	Feb. 19, 1950	103.30	Jan. 7, 1953	112.70
Mar. 4, 1947	95.33	Jan. 24, 1951	101.25	Jan. 5, 1954	120.13
Mar. 11, 1949	97.65	Jan. 24, 1952	105.94		

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CROSBY COUNTY

401a. Lat. $33^{\circ}37'$, long. $101^{\circ}32'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 4, 1947	78.10	Feb. 18, 1950	80.99	Jan. 24, 1951	84.28
Mar. 11, 1949	80.38				

412. Lat. $33^{\circ}36'$, long. $101^{\circ}30'$.

Mar. 4, 1947	113.74	Mar. 11, 1949	102.85	Jan. 24, 1951	109.00
Feb. 18, 1948	102.28	Feb. 19, 1950	104.22	Jan. 7, 1953	116.69

415a. Lat. $33^{\circ}36'$, long. $101^{\circ}32'$.

Mar. 1, 1947	72.30	Feb. 18, 1950	79.22	Jan. 7, 1953	81.80
Feb. 18, 1948	72.45	Jan. 24, 1951	85.47	Jan. 5, 1954	87.23
Mar. 11, 1949	74.15	Jan. 25, 1952	79.01		



Hydrographs showing fluctuation of water levels in Crosby County and the annual precipitation at Crosbyton, Tex.

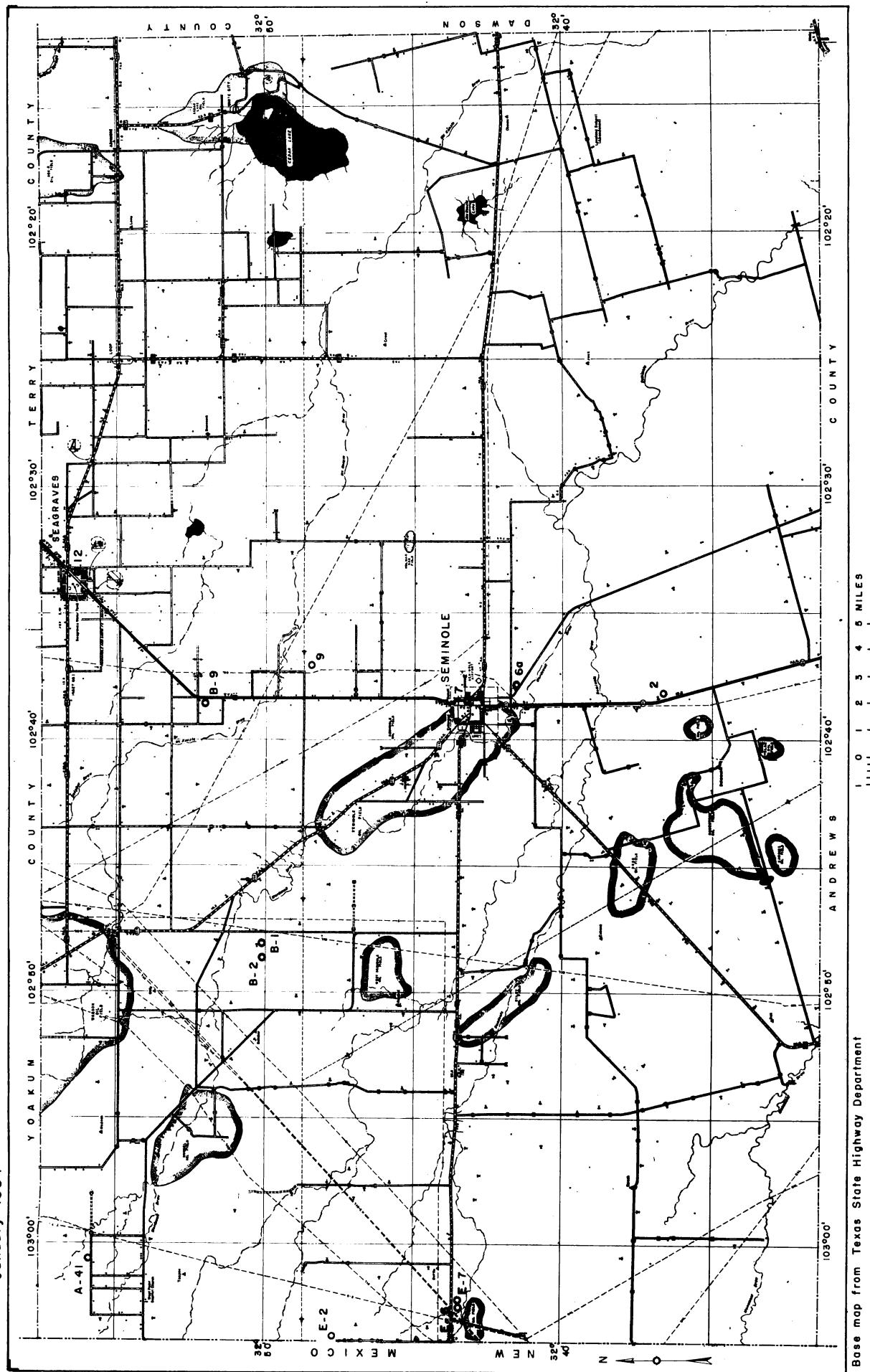
GAINES COUNTY

SAKELARAS
METRO

GAINES COUNTY, TEXAS
OBSERVATION WELLS
January 1954

Bulletin 5407
Texas Board of Water Engineers
in Cooperation with
U. S. Geological Survey

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GAINES COUNTY

2. Lat. $32^{\circ}36'$, long. $102^{\circ}38'$. Depth 100 feet.

Date	Water level	Date	Water level	Date	Water level
June 26, 1937	56.27	Nov. 22, 1940	56.19	Jan. 26, 1951	54.79
Aug. 3	56.26	Dec. 16, 1941	55.86	Feb. 5, 1952	54.81
Jan. 26, 1938	56.28	Feb. 17, 1943	55.55	Jan. 22, 1953	54.95
Apr. 27	56.55	Mar. 31, 1949	54.88	Jan. 13, 1954	55.62
July 31, 1940	56.20	Feb. 18, 1950	54.93		

6a. Lat. $32^{\circ}41'$, long. $102^{\circ}38'$. Depth 160 feet.

Apr. 27, 1938	40.67	July 31, 1940	41.11	Jan. 26, 1951	42.31
July 21	40.83	Nov. 22	42.13	Feb. 5, 1952	42.81
Jan. 26, 1939	41.01	Feb. 17, 1943	40.87	Jan. 22, 1953	42.80
Aug. 12	41.23	Mar. 31, 1949	42.26	Jan. 12, 1954	45.72
Jan. 16, 1940	41.46	Feb. 18, 1950	41.73		

7. Lat. $32^{\circ}43'$, long. $102^{\circ}38'$. Depth 98 feet.

June 25, 1937	43.69	Apr. 27, 1938	43.28	Aug. 12, 1939	43.52
Aug. 3	43.33	July 21	43.05	Jan. 16, 1940	43.41
Jan. 25, 1938	42.67	Jan. 26, 1939	42.77		

9. Lat. $32^{\circ}48'$, long. $102^{\circ}37'$. Depth 87 feet.

June 25, 1937	67.05	Apr. 27, 1938	66.16	Aug. 12, 1939	65.98
Aug. 2	66.43	July 21	66.14	Jan. 16, 1940	65.95
Jan. 25, 1938	66.29	Jan. 26, 1939	65.97	July 31	66.24

12. Lat. $32^{\circ}56'$, long. $102^{\circ}33'$. Depth 194 feet.

June 25, 1937	76.27	Apr. 27, 1938	75.92	Aug. 12, 1939	75.67
Aug. 2	76.17	July 21	75.82	Jan. 16, 1940	75.86
Jan. 25, 1938	76.03	Jan. 26, 1939	75.74	July 31	76.00

GAINES COUNTY

A-41. Lat. $34^{\circ}56'$, long. $103^{\circ}00'$.

Date	Water level	Date	Water level	Date	Water level
Jan. 21, 1953	45.7	Jan. 12, 1954	45.98		

B-1. Lat. $32^{\circ}50'$, long. $102^{\circ}48'$.

Apr. 4, 1951	68.12	Jan. 21, 1953	75.80		
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B-2. Lat. $32^{\circ}50'$, long. $102^{\circ}48'$.

Apr. 4, 1951	76.72	Jan. 21, 1953	82.36	Jan. 12, 1954	86.98
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B-9. Lat. $32^{\circ}52'$, long. $102^{\circ}38'$.

Apr. 17, 1951	98.73	Jan. 22, 1953	105.90	Jan. 12, 1954	106.19
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E-2. Lat. $32^{\circ}47'$, long. $103^{\circ}03'$.

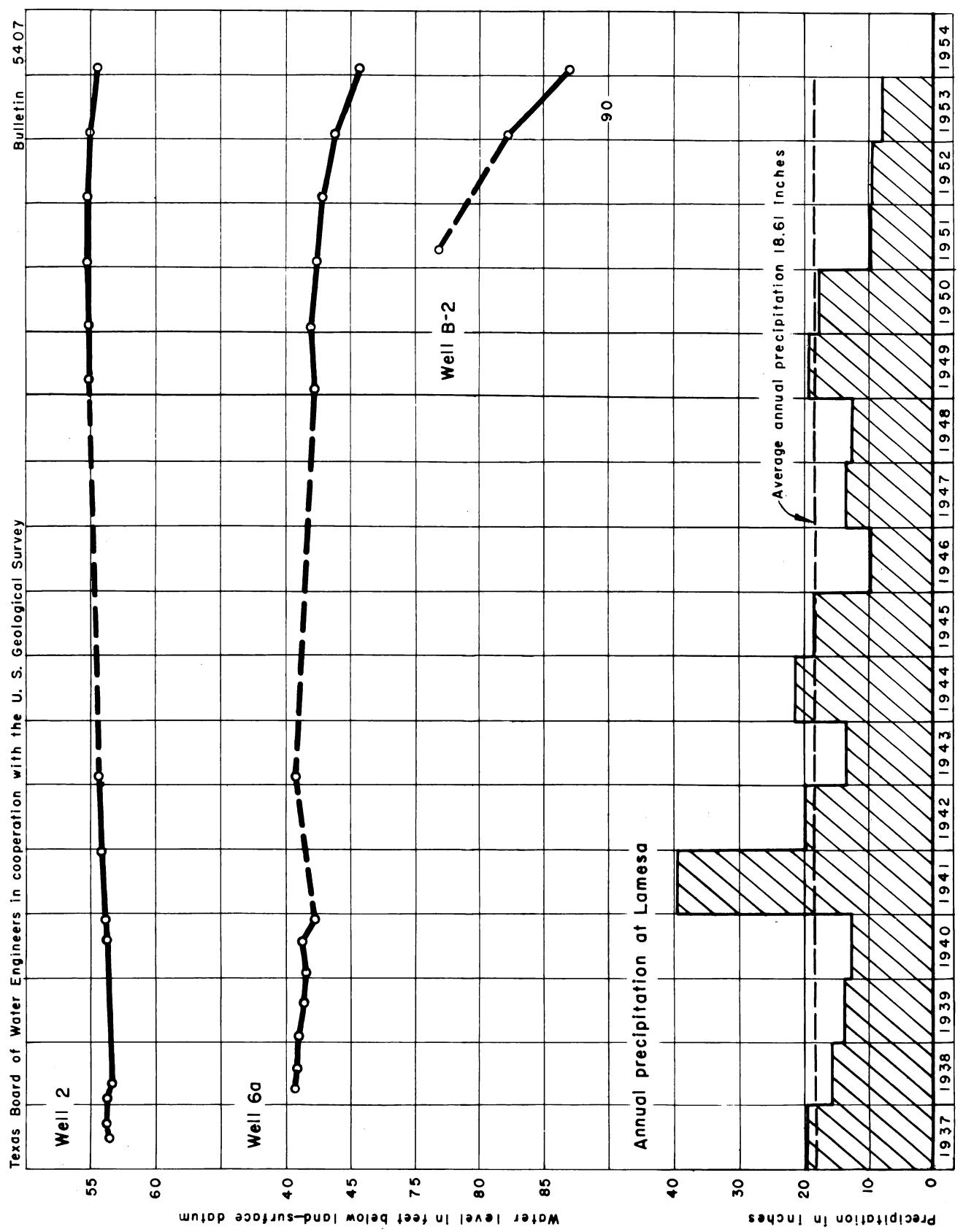
Feb. 8, 1951	79.15	Jan. 23, 1953	78.10	Jan. 12, 1954	79.20
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E-6. Lat. $32^{\circ}43'$, long. $103^{\circ}02'$.

Jan. 22, 1953	70.2	Jan. 12, 1954	72.03		
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E-7. Lat. $32^{\circ}43'$, long. $103^{\circ}03'$.

Feb. 28, 1951	69.30	Jan. 22, 1953	85.6		
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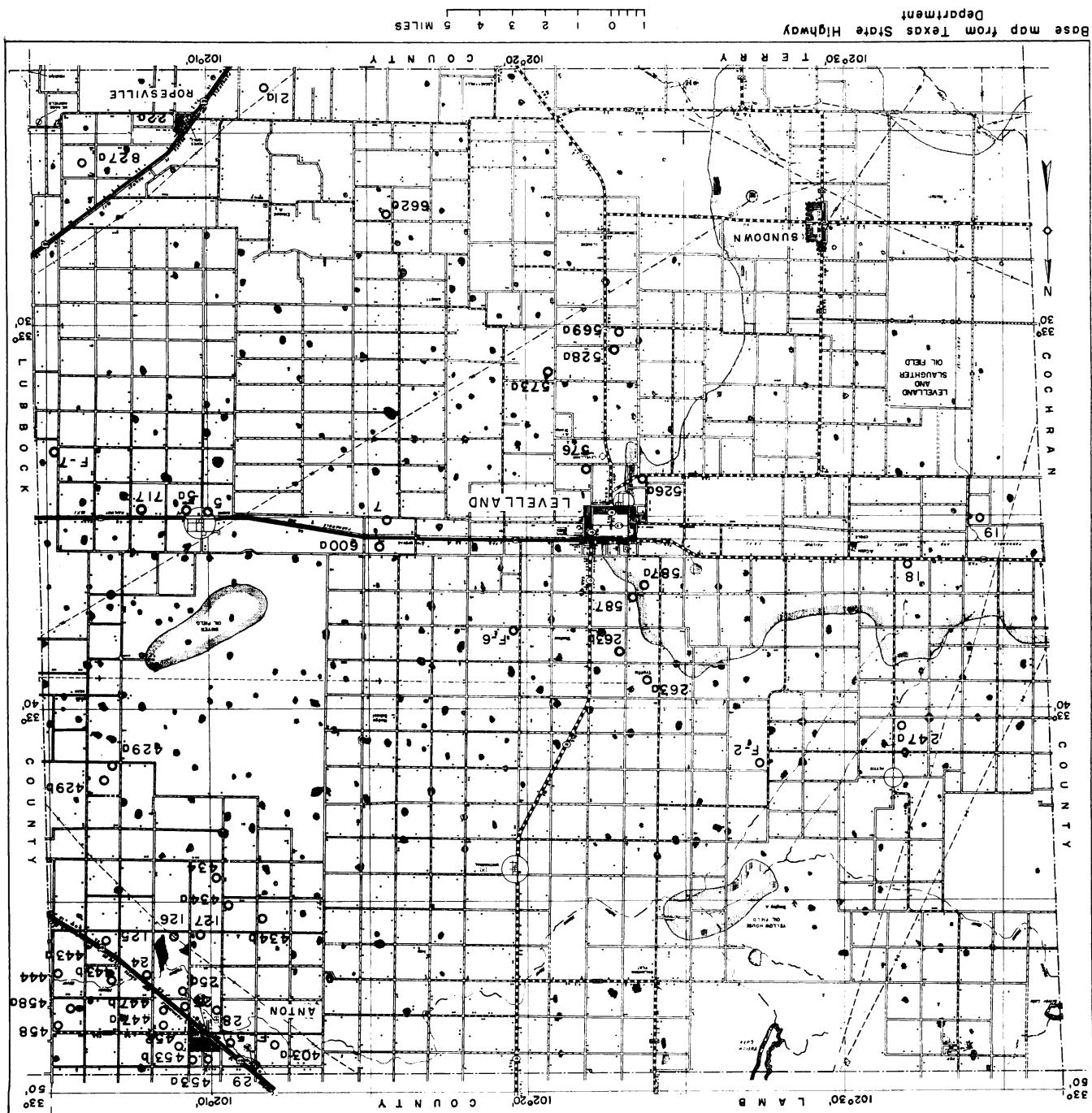
Hydrographs showing fluctuation of water levels in Gaines County wells and the annual precipitation at Lamesa, Tex.

HOCKLEY COUNTY, TEXAS
OBSERVATION MAPS
AUGUST 1942

HOCKLEY COUNTY

HOCKLEY COUNTY, TEXAS OBSERVATION WELLS

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



HOCKLEY COUNTY

5. Lat. $33^{\circ}35'$, long. $102^{\circ}09'$. Depth 122 feet.

Date	Water level	Date	Water level	Date	Water level
June 19, 1937	91.70	Nov. 14, 1941	88.80	Feb. 28, 1946	85.83
Oct. 12, 1939	90.64	Jan. 28, 1944	86.27	Jan. 16, 1947	85.58
Mar. 26, 1940	91.08	Mar. 5, 1945	85.88	Mar. 5	85.39

5a. Lat. $33^{\circ}34'$, long. $102^{\circ}09'$.

Feb. 18, 1950	87.41	Feb. 4, 1952	86.88	Jan. 9, 1954	91.5
Jan. 18, 1951	86.57				

7. Lat. $33^{\circ}35'$, long. $102^{\circ}15'$. Depth 100^+ feet.

July 30, 1937	88.10	Mar. 26, 1940	86.75	Jan. 16, 1947	83.45
July 7, 1939	87.22	Feb. 24, 1944	84.80	Mar. 5	83.32
Aug. 22	87.05	Mar. 5, 1945	84.45	Mar. 1, 1948	84.02
Oct. 12	86.96	Feb. 28, 1946	83.51		

18. Lat. $33^{\circ}36'$, long. $102^{\circ}30'$. Depth 140 feet.

June 19, 1937	133.19	Apr. 11, 1938	133.22	Mar. 26, 1940	133.00
July 30	133.26	Sept. 27	133.20	Dec. 3	133.04
Jan. 25, 1938	133.20	Oct. 12, 1939	133.03	Mar. 21, 1941	133.07

19. Lat. $33^{\circ}35'$, long. $102^{\circ}33'$. Depth 154 feet.

June 21, 1937	144.12	Apr. 11, 1938	144.01	Mar. 26, 1940	143.66
July 30	143.95	Sept. 27	143.87	Dec. 3	143.60
Jan. 25, 1938	144.16	Oct. 12, 1939	143.79	Mar. 21, 1941	143.68

21a. Lat. $33^{\circ}23'$, long. $102^{\circ}11'$. Depth 96 feet.

Apr. 26, 1938	68.27	Jan. 26, 1939	69.02	Nov. 18, 1941	62.13
July 22	68.53	Aug. 14	69.08	July 30, 1942	63.89

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HOCKLEY COUNTY

22a. Lat. $33^{\circ}24'$, long. $102^{\circ}09'$. Depth 114 feet.

Date	Water level	Date	Water level	Date	Water level
Apr. 26, 1938	98.18	Jan. 26, 1939	98.09	Nov. 18, 1941	97.93
July 22	98.28	Nov. 20, 1940	98.31	July 30, 1942	97.50

24. Lat. $33^{\circ}47'$, long. $102^{\circ}08'$. Depth 37 feet.

Aug. 16, 1937	28.19	Mar. 13, 1940	26.72	Mar. 1, 1946	24.04
Jan. 26, 1938	27.84	Dec. 16	27.98	Jan. 16, 1947	22.31
June 21	28.07	Mar. 20, 1941	28.12	Mar. 17	22.51
June 29	27.58	May 30	24.73	Mar. 3, 1948	24.39
Sept. 19	26.49	July 29	22.82	Mar. 8, 1949	24.69
Oct. 19	26.60	Nov. 18	21.39	Feb. 14, 1950	25.33
Jan. 16, 1939	26.88	Mar. 26, 1942	22.11	Jan. 19, 1951	27.59
Mar. 10	26.79	Feb. 1, 1943	17.85	Feb. 1, 1952	25.03
June 19	27.01	Jan. 28, 1944	20.30	Jan. 13, 1953	30.81
Aug. 15.	26.22	Mar. 6, 1945	22.27	Jan. 8, 1954	36.98

25. Lat. $33^{\circ}47'$, long. $102^{\circ}09'$. Depth 50 feet.

Aug. 16, 1937	28.69	Feb. 10, 1939	28.51	July 29, 1941	27.83
Sept. 22	28.41	June 19	28.70	Nov. 18	26.80
Jan. 26, 1938	28.60	Aug. 15	28.38	Mar. 26, 1942	26.50
Apr. 11	28.71	Oct. 13	28.48	July 28	26.29
June 29	28.70	Mar. 13, 1940	28.67	Feb. 1, 1943	24.04
Sept. 19	28.36	Dec. 16	29.80	Jan. 28, 1944	24.03
Oct. 19	28.38	Mar. 20, 1941	30.03	Mar. 6, 1945	25.70
Jan. 16, 1939	28.50	May 31	29.46		

25a. Lat. $33^{\circ}47'$, long. $102^{\circ}09'$. Depth 90 feet.

Mar. 15, 1947	24.45	Feb. 17, 1950	27.07	Jan. 8, 1954	36.56
Mar. 3, 1948	25.18	Feb. 1, 1952	26.62		
Mar. 8, 1949	26.38	Jan. 13, 1953	30.79		

HOCKLEY COUNTY

28. Lat. $33^{\circ}47'$, long. $102^{\circ}10'$. Depth 100 feet.

Date	Water level	Date	Water level	Date	Water level
Sept. 22, 1937	32.52	Dec. 16, 1940	34.09	Mar. 15, 1947	34.11
Jan. 26, 1938	32.18	Mar. 20, 1941	34.04	Jan. 8, 1948	33.88
Apr. 11	32.82	May 30	33.48	Mar. 3	34.01
June 29	32.76	Nov. 18	30.81	Mar. 8, 1949	35.71
Sept. 19	33.02	Mar. 26, 1942	30.04	Feb. 17, 1950	35.96
Oct. 19	32.63	Feb. 1, 1943	26.92	Jan. 19, 1951	38.60
Jan. 16, 1939	32.17	Jan. 28, 1944	27.23	Jan. 14, 1953	46.19
Mar. 10	32.20	Mar. 6, 1945	29.11	Jan. 8, 1954	54.84
Oct. 13	32.35	Mar. 1, 1946	32.83		
Mar. 13, 1940	32.22	Jan. 16, 1947	34.49		

29. Lat. $33^{\circ}49'$, long. $102^{\circ}11'$. Depth 38 feet.

Aug. 16, 1937	27.86	Oct. 13, 1939	28.55	Mar. 1, 1946	31.15
Jan. 26, 1938	28.53	Dec. 16, 1940	30.65	Jan. 16, 1947	33.72
Apr. 11	28.82	Mar. 20, 1941	31.05	Mar. 8, 1949	38.00
June 29	28.88	May 30	29.56	Feb. 17, 1950	39.91
Sept. 19	28.06	July 29	27.40	Jan. 19, 1951	41.13
Oct. 19	28.33	Nov. 18	26.31	Feb. 1, 1952	41.19
Jan. 16, 1939	28.78	Mar. 26, 1942	26.73	Jan. 13, 1953	46.40
Mar. 10	29.00	Feb. 1, 1943	24.71	Jan. 8, 1954	48.90
June 19	29.24	Jan. 28, 1944	24.55		
Aug. 15	28.23	Mar. 6, 1945	27.04		

125. Lat. $33^{\circ}46'$, long. $102^{\circ}06'$. Depth 100± feet.

May 5, 1938	65.72	June 19, 1939	65.90	Nov. 18, 1941	64.24
June 21	65.86	Aug. 15	65.70	Mar. 26, 1942	62.72
Sept. 19	66.18	Mar. 13, 1940	66.20	July 28	61.73
Jan. 16, 1939	65.75	Dec. 16	67.10		
Mar. 10	66.52	Mar. 20, 1941	66.80		

HOCKLEY COUNTY

126. Lat. $33^{\circ}45'$, long. $102^{\circ}08'$. Depth 105 feet.

Date	Water level	Date	Water level	Date	Water level
May 6, 1938	28.55	Mar. 13, 1940	27.49	Mar. 1, 1946	23.96
June 29	28.49	Dec. 16	28.17	Jan. 16, 1947	21.03
Sept. 19	27.11	Mar. 20, 1941	28.18	Mar. 17	20.64
Oct. 19	27.13	Nov. 18	22.62	Mar. 3, 1948	22.57
Jan. 16, 1939	27.29	Mar. 26, 1942	22.78	Mar. 8, 1949	23.34
Mar. 10	27.40	July 28	23.10	Feb. 17, 1950	20.11
June 19	27.71	Feb. 1, 1943	20.71	Jan. 14, 1951	22.41
Aug. 15	26.73	Jan. 28, 1944	22.00	Feb. 1, 1952	18.27
Oct. 13	26.87	Mar. 6, 1945	23.32		

127. Lat. $33^{\circ}35'$, long. $102^{\circ}09'$.

May 6, 1938	25.62	June 19, 1939	24.74	Mar. 26, 1942	17.04
June 29	25.61	Aug. 15	23.70	July 28	17.63
Sept. 19	24.41	Oct. 13	23.24	Feb. 1, 1943	12.79
Oct. 19	24.38	Mar. 13, 1940	24.09		
Jan. 16, 1939	24.38	Dec. 16	24.40		
Mar. 10	24.60	Mar. 20, 1941	24.55		

247a. Lat. $33^{\circ}40'$, long. $102^{\circ}31'$. Depth 230 feet.

Feb. 5, 1944	105.22	Mar. 1, 1948	104.93	Feb. 4, 1952	106.59
Mar. 6, 1945	105.00	Mar. 9, 1949	105.20	Jan. 14, 1953	108.65
Feb. 28, 1946	104.62	Feb. 18, 1950	105.57	Jan. 9, 1954	113.90
Mar. 17, 1947	105.13	Jan. 7, 1951	105.90		

263a. Lat. $33^{\circ}39'$, long. $102^{\circ}23'$.

Mar. 14, 1947	104.65	Feb. 18, 1950	108.37	Jan. 9, 1954	122.76
Mar. 1, 1948	105.51	Jan. 18, 1951	109.59		
Mar. 9, 1949	107.46	Feb. 4, 1952	111.96		

263b. Lat. $33^{\circ}35'$, long. $102^{\circ}23'$.

Mar. 1, 1948	109.87	Feb. 28, 1950	112.08	Jan. 14, 1953	121.10
Mar. 9, 1949	110.93	Feb. 4, 1952	116.05	Jan. 9, 1954	126.9

HOCKLEY COUNTY

403a. Lat. $33^{\circ}48'$, long. $102^{\circ}11'$. Depth 107 feet.

Date	Water level	Date	Water level	Date	Water level
Mar. 15, 1947	34.55	Jan. 19, 1951	44.35	Jan. 8, 1954	55.17
Mar. 3, 1948	34.86	Feb. 1, 1952	46.12		
Mar. 8, 1949	39.42	Jan. 13, 1953	51.42		

429a. Lat. $33^{\circ}41'$, long. $102^{\circ}06'$.

Mar. 15, 1947	122.01	Mar. 9, 1949	114.10	Jan. 19, 1951	121.30
Mar. 3, 1948	112.35	Feb. 18, 1950	116.88		

429b. Lat. $33^{\circ}41'$, long. $102^{\circ}06'$. Depth 190 feet.

Mar. 15, 1947	86.70	Feb. 18, 1950	93.64	Jan. 14, 1953	106.40
Mar. 3, 1948	88.67	Jan. 19, 1951	95.64	Jan. 8, 1954	113.49
Mar. 9, 1949	91.02	Feb. 1, 1952	101.79		

434. Lat. $33^{\circ}44'$, long. $102^{\circ}10'$. Depth 221 feet.

May 6, 1938	133.20	Jan. 16, 1947	130.54	Jan. 19, 1951	139.40
Jan. 28, 1944	130.65	Mar. 15	138.17	Feb. 1, 1952	143.77
Feb. 22	130.62	Mar. 3, 1948	131.42	Jan. 14, 1953	149.55
Mar. 6, 1945	130.58	Mar. 8, 1949	135.01	Jan. 8, 1954	156.23
Mar. 1, 1946	130.24	Feb. 17, 1950	131.48		

434a. Lat. $33^{\circ}45'$, long. $102^{\circ}10'$.

Mar. 15, 1947	119.13	Feb. 17, 1950	123.94	Jan. 14, 1953	136.96
Mar. 3, 1948	120.22	Jan. 19, 1951	127.74	Jan. 8, 1954	143.70
Mar. 8, 1949	124.88	Feb. 1, 1952	130.95		

434b. Lat. $33^{\circ}45'$, long. $102^{\circ}11'$.

Mar. 15, 1947	85.80	Feb. 17, 1950	89.90	Jan. 14, 1953	102.15
Mar. 3, 1948	86.44	Jan. 19, 1951	93.63	Jan. 8, 1954	107.60
Mar. 8, 1949	88.33	Feb. 1, 1952	96.25		

HOCKLEY COUNTY

443a. Lat. $33^{\circ}45'$, long. $102^{\circ}06'$.

Date	Water level	Date	Water level	Date	Water level
Jan. 28, 1944	71.00	Mar. 3, 1948	75.86	Feb. 1, 1952	79.40
Feb. 22	70.95	Mar. 8, 1949	77.70	Jan. 14, 1953	83.55
Mar. 6	71.64	Feb. 17, 1950	76.27	Jan. 8, 1954	90.35
Mar. 17, 1947	76.22	Jan. 19, 1951	77.17		

443b. Lat. $33^{\circ}46'$, long. $102^{\circ}06'$.

Mar. 15, 1947	24.66	Feb. 17, 1950	37.66	Jan. 13, 1953	42.02
Mar. 3, 1948	36.02	Jan. 19, 1951	39.95	Jan. 8, 1954	48.13
Mar. 8, 1949	41.43	Feb. 1, 1952	37.14		

444. Lat. $33^{\circ}46'$, long. $102^{\circ}05'$. Depth 140 feet.

Mar. 17, 1947	56.23	Feb. 1, 1952	58.86	Jan. 8, 1954	69.45
Jan. 19, 1951	71.62	Jan. 13, 1953	64.01		

447a. Lat. $33^{\circ}48'$, long. $102^{\circ}08'$.

Mar. 3, 1948	44.98	Jan. 19, 1951	51.78	Jan. 13, 1953	57.19
Mar. 8, 1949	47.42	Feb. 1, 1952	52.84	Jan. 8, 1954	62.9

447b. Lat. $33^{\circ}47'$, long. $102^{\circ}08'$.

Mar. 3, 1948	30.42	Feb. 17, 1950	33.16	Feb. 1, 1952	35.60
Mar. 8, 1949	32.41	Jan. 19, 1951	35.29		

452. Lat. $33^{\circ}48'$, long. $102^{\circ}09'$. Depth 135 feet.

Mar. 17, 1947	70.15	Feb. 17, 1950	67.70	Jan. 13, 1953	76.86
Mar. 3, 1948	64.24	Jan. 19, 1951	70.58	Jan. 8, 1954	82.13
Mar. 8, 1949	66.45	Feb. 1, 1952	72.36		

HOCKLEY COUNTY

453a. Lat. $33^{\circ}49'$, long. $102^{\circ}09'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 17, 1947	55.20	Feb. 17, 1950	60.09	Jan. 13, 1953	70.19
Mar. 3, 1948	56.24	Jan. 19, 1951	61.75	Jan. 8, 1954	74.67
Mar. 8, 1949	57.78	Feb. 1, 1952	63.57		

453b. Lat. $33^{\circ}49'$, long. $102^{\circ}09'$.

Mar. 17, 1947	64.89	Jan. 19, 1951	72.59	Jan. 8, 1954	80.37
Mar. 8, 1949	67.84	Feb. 1, 1952	73.74		
Feb. 17, 1950	69.42	Jan. 13, 1953	76.50		

458. Lat. $33^{\circ}48'$, long. $102^{\circ}05'$. Depth 150 feet.

May 5, 1938	82.66	Mar. 8, 1949	85.93	Jan. 13, 1953	91.02
Mar. 17, 1947	80.98	Jan. 19, 1951	86.63	Jan. 8, 1954	97.50
Mar. 3, 1948	83.11	Feb. 1, 1952	87.88		

458a. Lat. $33^{\circ}47'$, long. $102^{\circ}05'$.

Mar. 17, 1947	60.44	Feb. 17, 1950	63.72	Jan. 13, 1953	68.31
Mar. 3, 1948	62.07	Jan. 19, 1951	63.74	Jan. 8, 1954	74.29
Mar. 8, 1949	63.19	Feb. 1, 1952	65.35		

526a. Lat. $33^{\circ}34'$, long. $102^{\circ}23'$.

Mar. 14, 1947	89.14	Feb. 18, 1950	94.92	Jan. 9, 1954	105.46
Mar. 1, 1948	89.74	Jan. 18, 1951	96.79		
Mar. 9, 1949	91.87	Feb. 14, 1952	97.29		

528a. Lat. $35^{\circ}30'$, long. $102^{\circ}23'$.

Mar. 1, 1948	132.35	Jan. 18, 1951	135.79	Jan. 9, 1954	150.64
Mar. 9, 1949	133.32	Feb. 4, 1952	137.48		
Feb. 28, 1950	134.40	Jan. 14, 1953	142.19		

HOCKLEY COUNTY

569a. Lat. $35^{\circ}30'$, long. $102^{\circ}23'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 14, 1947	130.35	Feb. 28, 1950	126.21	Jan. 9, 1954	152.70
Mar. 1, 1948	125.11	Jan. 18, 1951	126.82		
Mar. 9, 1949	128.32	Feb. 4, 1952	128.10		

573a. Lat. $33^{\circ}31'$, long. $102^{\circ}20'$.

Mar. 14, 1947	131.29	Jan. 18, 1951	112.85	Feb. 4, 1952	114.55
Mar. 9, 1949	110.38				

576. Lat. $33^{\circ}33'$, long. $102^{\circ}21'$. Depth 172 feet.

Jan. 29, 1944	87.65	Mar. 9, 1949	89.88	Jan. 14, 1953	94.38
Feb. 28, 1946	87.71	Feb. 18, 1950	89.92	Jan. 9, 1954	99.61
Mar. 5, 1947	88.04	Jan. 18, 1951	89.35		
Mar. 1, 1948	88.46				

587. Lat. $33^{\circ}37'$, long. $102^{\circ}23'$. Depth 105 feet.

Mar. 24, 1939	92.70	Jan. 29, 1944	90.85	Mar. 1, 1948	94.49
Dec. 3, 1940	93.00	Mar. 5, 1945	90.63	Mar. 9, 1949	95.87
Oct. 29, 1941	91.17	Jan. 16, 1947	92.59	Feb. 18, 1950	95.70
July 29, 1942	90.90	Mar. 5	93.30	Feb. 4, 1952	101.02

587a. Lat. $33^{\circ}36'$, long. $102^{\circ}23'$.

Mar. 1, 1948	105.86	Jan. 18, 1951	108.70	Jan. 14, 1953	121.03
Mar. 9, 1949	107.62	Feb. 4, 1952	113.75		

600a. Lat. $33^{\circ}35'$, long. $102^{\circ}15'$.

Mar. 14, 1947	81.70	Mar. 9, 1949	81.36	Jan. 18, 1951	80.36
Mar. 1, 1948	81.10				

HOCKLEY COUNTY

662a. Lat. $33^{\circ}27'$, long. $102^{\circ}15'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 1, 1948	93.67	Jan. 18, 1951	104.84	Jan. 9, 1954	103.62
Mar. 9, 1949	97.33	Feb. 5, 1952	99.48		
Feb. 28, 1950	98.75	Jan. 14, 1953	100.60		

717. Lat. $33^{\circ}34'$, long. $102^{\circ}07'$.

Mar. 14, 1939	103.92	Sept. 1, 1950	97.19	Sept. 2, 1951	99.50
July 22	103.18	Oct. 16	97.14	Oct. 2	98.70
Aug. 22	103.15	Nov. 10	97.13	Nov. 6	98.43
Mar. 5, 1945	99.41	Dec. 4	97.04	Dec. 3	98.18
Mar. 1, 1948	98.03	Jan. 4, 1951	97.10	Jan. 7, 1952	97.94
Nov. 30	97.72	Feb. 4	97.63	Feb. 4	100.19
Feb. 28, 1949	97.54	Mar. 2	97.68	May 7	103.72
Feb. 28, 1950	97.27	Apr. 3	98.82	June 16	103.81
Apr. 10	97.30	May 1	99.22	Aug. 19	105.14
May 1	97.19	June 8	98.60	Jan. 15, 1953	101.80
June 30	97.15	July 2	98.32	Jan. 9, 1954	104.00
Aug. 7	97.20	Aug. 2	99.37		

827a. Lat. $33^{\circ}25'$, long. $102^{\circ}06'$.

Jan. 29, 1944	89.42	Mar. 1, 1948	93.55	Jan. 18, 1951	102.86
Mar. 5, 1945	88.62	Mar. 9, 1949	96.96		
Mar. 1, 1946	98.15	Feb. 28, 1950	99.25		

F-2. Lat. $33^{\circ}41'$, long. $102^{\circ}27'$.

Mar. 1, 1948	107.75	Feb. 18, 1951	108.69	Jan. 9, 1954	121.42
Mar. 9, 1949	108.82	Feb. 4, 1952	110.15		
Feb. 28, 1950	108.61	Jan. 14, 1953	112.82		

F-5. Lat. $33^{\circ}48'$, long. $102^{\circ}10'$.

Mar. 3, 1948	34.87	Feb. 1, 1952	40.96	Jan. 7, 1954	50.64
Mar. 8, 1949	36.10	Jan. 14, 1953	45.98		

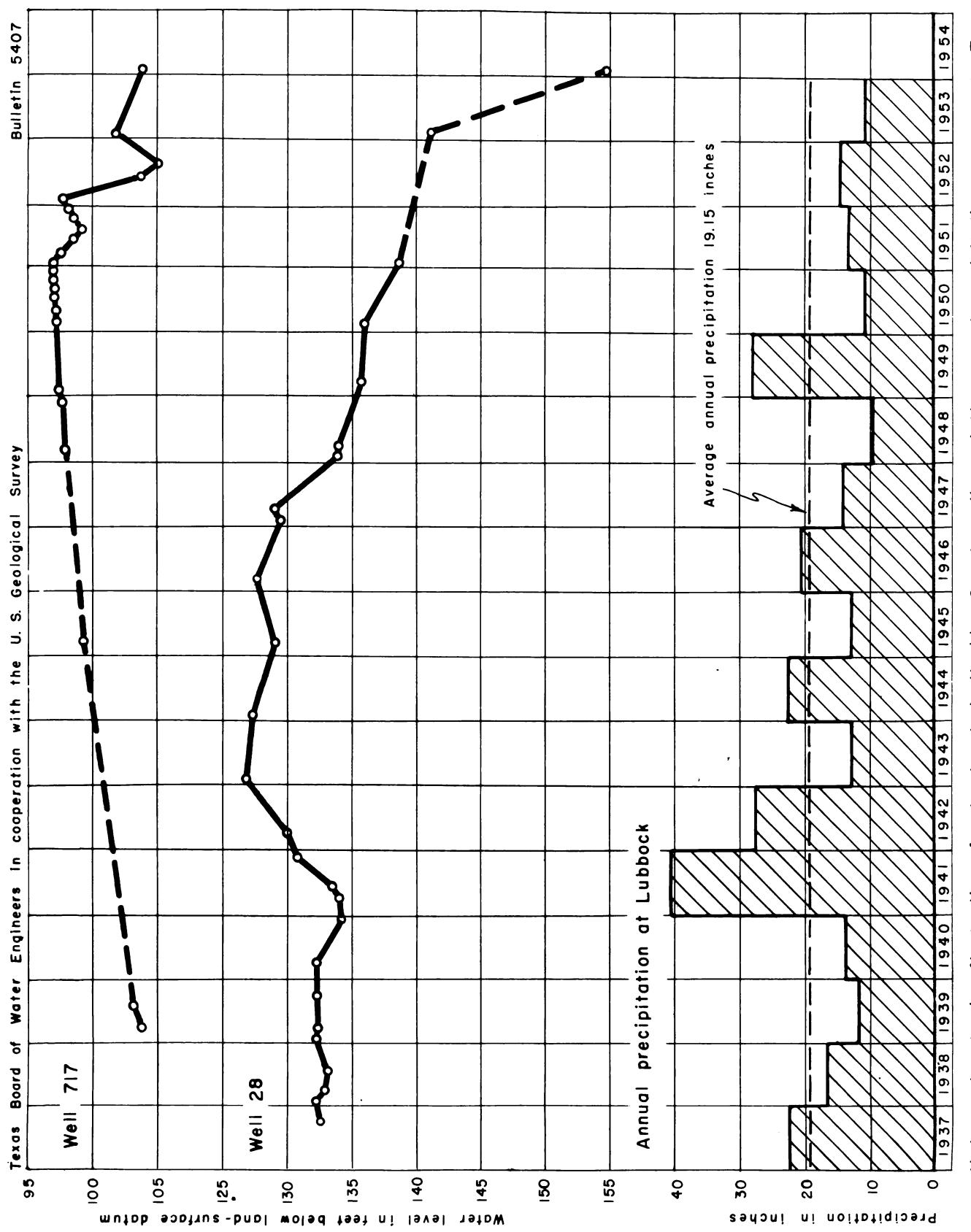
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HOCKLEY COUNTY

F-6. Lat. $33^{\circ}37'$, long. $102^{\circ}19'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 15, 1948	82.79	Jan. 18, 1951	83.32	Jan. 14, 1953	85.95
Mar. 9, 1949	82.88	Feb. 4, 1952	84.44	Jan. 9, 1954	87.11

F-7. Lat. $33^{\circ}33'$, long. $102^{\circ}05'$.

Mar. 15, 1948	88.71	Jan. 18, 1951	78.17	Jan. 15, 1953	79.95
Mar. 9, 1949	78.46	Feb. 4, 1952	78.17	Jan. 8, 1954	82.15



Hydrographs showing fluctuation of water levels in Hockley County wells and the annual precipitation at Lubbock, Tex.

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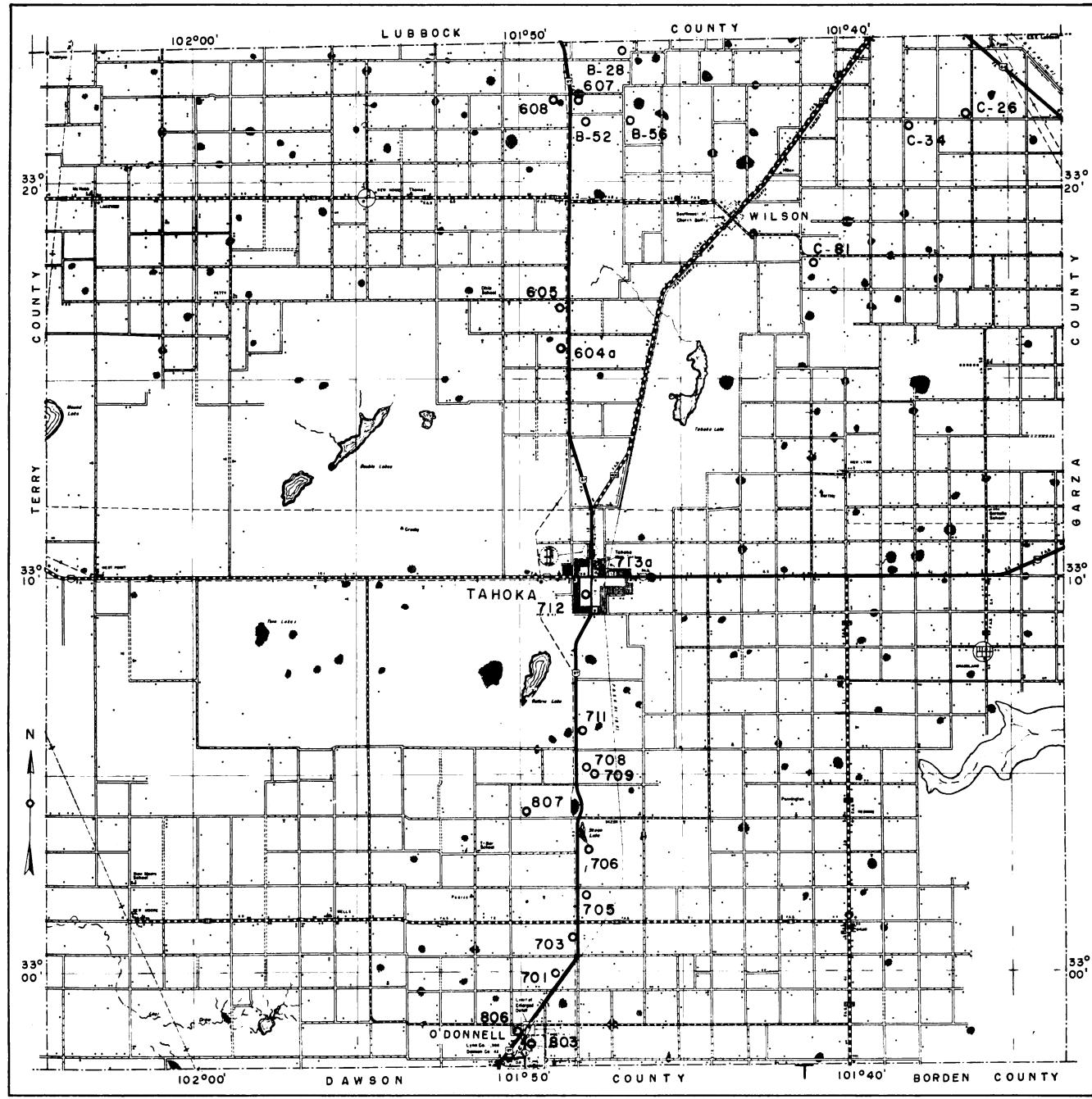
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YUIN COUNTY TEXAS
ROBEE AVAITION MEETS
MARCH 1943

LYNN COUNTY

**LYNN COUNTY, TEXAS
OBSERVATION WELLS**
January 1954

Bulletin 5407
Texas Board of Water Engineers
in cooperation with
U. S. Geological Survey



Base map from Texas State
Highway Department

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LYNN COUNTY

604a. Lat. $33^{\circ}15'$, long. $101^{\circ}48'$. Depth 67 feet.

Date	Water level	Date	Water level	Date	Water level
July 22, 1938	53.50	Mar. 1, 1940	53.76	Feb. 24, 1944	44.99
Jan. 23, 1939	53.59	Aug. 2	53.88		
Aug. 10	53.57	Aug. 7	46.00		

605. Lat. $33^{\circ}16'$, long. $101^{\circ}48'$. Depth 79 feet.

July 7, 1937	64.18	Jan. 23, 1939	63.41	Feb. 24, 1944	54.28
Aug. 8	64.10	Aug. 10	63.38	Mar. 28, 1949	52.05
Sept. 28	63.97	Mar. 1, 1940	62.26	Feb. 3, 1951	51.52
Jan. 21, 1938	63.82	Aug. 2	63.42	Feb. 2, 1952	49.75
Apr. 30	63.50	Aug. 7, 1942	60.40		
July 22	62.57	Feb. 16, 1943	58.65		

607. Lat. $33^{\circ}22'$, long. $101^{\circ}48'$. Depth 117 feet.

July 7, 1937	109.10	Apr. 30, 1938	107.65	Mar. 8, 1939	108.61
Aug. 8	109.70	July 22	107.47	Oct. 11	108.66
Sept. 28	109.04	Oct. 26	108.62	Mar. 1, 1940	108.63
Jan. 21, 1938	108.68	Dec. 12	108.60		

608. Lat. $33^{\circ}22'$, long. $101^{\circ}48'$. Depth 109 feet.

July 7, 1937	99.08	Oct. 26, 1938	99.60	Aug. 2, 1940	99.20
Aug. 8	99.69	Dec. 12	99.62	Aug. 7, 1942	98.54
Sept. 28	100.22	Mar. 8, 1939	99.47	Feb. 16, 1943	97.97
Jan. 21, 1938	99.48	June 30	99.52	Feb. 24, 1944	97.87
Apr. 30	99.46	Oct. 11	99.42		
July 22	99.50	Mar. 1, 1940	99.58		

LYNN COUNTY

701. Lat. 33°00', long. 101°48'.

Date	Water level	Date	Water level	Date	Water level
July 15, 1937	66.35	July 22, 1938	66.27	Mar. 30, 1949	63.35
Aug. 7	66.32	Jan. 23, 1939	66.10	Feb. 19, 1950	63.42
Sept. 24	66.48	Aug. 10	65.78	Feb. 7, 1951	63.56
Jan. 20, 1938	66.17	Aug. 6, 1942	64.83	Feb. 2, 1952	62.72
Apr. 29	66.16	Feb. 24, 1944	64.30		

703. Lat. 33°00', long. 101°48'. Depth 75 feet.

July 12, 1937	64.38	Aug. 10, 1939	63.88	Feb. 7, 1951	62.55
Jan. 20, 1938	64.20	Mar. 1, 1940	64.00	Feb. 2, 1952	61.14
July 22	64.12	Mar. 30, 1949	62.10		
Jan. 23, 1939	64.08	Feb. 19, 1950	63.59		

705. Lat. 33°01', long. 101°47'. Depth 95 feet.

July 12, 1937	84.90	Jan. 20, 1938	84.82	Jan. 23, 1939	84.74
Aug. 7	84.90	Apr. 29	84.77		
Sept. 23	84.92	July 22	84.88		

706. Lat. 33°02', long. 101°47'.

July 12, 1937	9.42	Mar. 3, 1938	15.05	Feb. 2, 1952	18.00
Aug. 7,	11.24	Feb. 19, 1949	12.11	Jan. 16, 1953	16.90
Sept. 28	9.95	May 17	17.90		
Jan. 20, 1938	15.05	Feb. 7, 1951	15.66		

708.. Lat. 33°05', long. 101°48'.

July 12, 1937	5.39	Aug. 2, 1940	14.84	Feb. 2, 1952	2.89
Aug. 7	15.02	Mar. 30, 1949	21.95	Jan. 16, 1953	23.17
Jan. 23, 1939	5.91	Feb. 19, 1950	20.90		
Mar. 1, 1940	14.90	Feb. 7, 1951	2.08		

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709. Lat. $33^{\circ}05'$, long. $101^{\circ}47'$. Depth 24 feet.

Date	Water level	Date	Water level	Water level
July 12, 1937	3.36	Mar. 1, 1940	16.88	Feb. 7, 1951
Aug. 7	5.58	Aug. 2	17.95	Feb. 2, 1952
Jan. 23, 1938	5.90	Mar. 30, 1949	22.42	Jan. 16, 1953
Aug. 10, 1939	14.40	Feb. 19, 1950	21.43	20.74

711. Lat. $33^{\circ}06'$, long. $101^{\circ}48'$. Depth 24 feet.

July 12, 1937	13.91	Mar. 30, 1949	18.83	Feb. 2, 1952
Sept. 23	7.20	Feb. 19, 1950	17.40	Jan. 16, 1953
Jan. 20, 1938	10.40	Feb. 7, 1951	17.22	18.02

712. Lat. $33^{\circ}09'$, long. $101^{\circ}47'$. Depth 60 feet.

July 12, 1937	54.89	Jan. 20, 1938	53.98	Jan. 23, 1939	54.00
Aug. 7	54.88	Apr. 29	54.10	Aug. 8	54.37
Sept. 28	54.77	July 22	54.24	Mar. 1, 1940	54.75

713a. Lat. $33^{\circ}10'$, long. $101^{\circ}47'$. Depth 105 feet.

July 22, 1938	80.26	Mar. 1, 1940	78.49	Feb. 16, 1943	74.05
Jan. 23, 1939	79.72	Aug. 2	78.22	Feb. 24, 1944	72.94
Aug. 8	79.02	Aug. 6, 1942	74.88	Mar. 30, 1949	69.88

803. Lat. $32^{\circ}58'$, long. $101^{\circ}49'$. Depth 92 feet.

July 15, 1937	73.15	Jan. 20, 1938	73.79	Jan. 23, 1939	72.18
Aug. 7	73.33	Apr. 29	72.88	Aug. 10	71.80
Sept. 24	73.69	July 22	73.30	Mar. 1, 1940	69.25

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806. Lat. $32^{\circ}58'$, long. $101^{\circ}50'$. Depth 77 feet.

Date	Water level	Date	Water level	Date	Water level
July 15, 1937	39.16	Apr. 29, 1938	38.68	Aug. 2, 1940	34.40
Aug. 7	39.06	Jan. 23, 1939	38.50	Aug. 6, 1942	33.00
Sept. 24	39.04	Aug. 10	35.63	Feb. 16, 1943	33.30
Jan. 20, 1938	38.75	Mar. 1, 1940	32.24	Feb. 24, 1944	35.81

807. Lat. $33^{\circ}04'$, long. $101^{\circ}49'$. Depth 67 feet.

July 12, 1937	34.00	Jan. 20, 1938	29.97	Jan. 23, 1939	29.93
Aug. 7	31.05	July 22	30.11	May 17, 1950	30.18

B-28. Lat. $33^{\circ}23'$, long. $101^{\circ}00'$. Depth 199 feet.

Mar. 10, 1947	92.05	Mar. 9, 1949	97.64	Jan. 24, 1951	100.14
Mar. 2, 1948	94.22	Feb. 15, 1950	98.04	Jan. 29, 1952	105.09

B-52. Lat. $33^{\circ}22'$, long. $102^{\circ}01'$. Depth 135 feet.

Mar. 28, 1949	102.33	Feb. 18, 1950	102.40	Jan. 12, 1954	111.98
June 14	103.00	Feb. 7, 1951	103.16		

B-56. Lat. $33^{\circ}21'$, long. $102^{\circ}00'$. Depth 156 feet.

Mar. 28, 1949	86.11	Feb. 7, 1951	81.60	Feb. 2, 1952	83.26
June 7	87.02				

C-26. Lat. $33^{\circ}40'$, long. $102^{\circ}04'$.

Mar. 28, 1949	49.57	Feb. 18, 1950	49.82	Feb. 2, 1952	50.36
June 21	49.64	Feb. 7, 1951	48.98	Jan. 16, 1953	51.49

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C-34. Lat. $33^{\circ}40'$, long. $102^{\circ}40'$.

Date	Water level	Date	Water level	Date	Water level
Mar. 28, 1949	26.24	Feb. 18, 1950	26.97	Jan. 16, 1953	32.34
June 21	26.42	Feb. 7, 1951	28.16		
Jan. 24, 1950	26.91	Feb. 2, 1952	30.90		

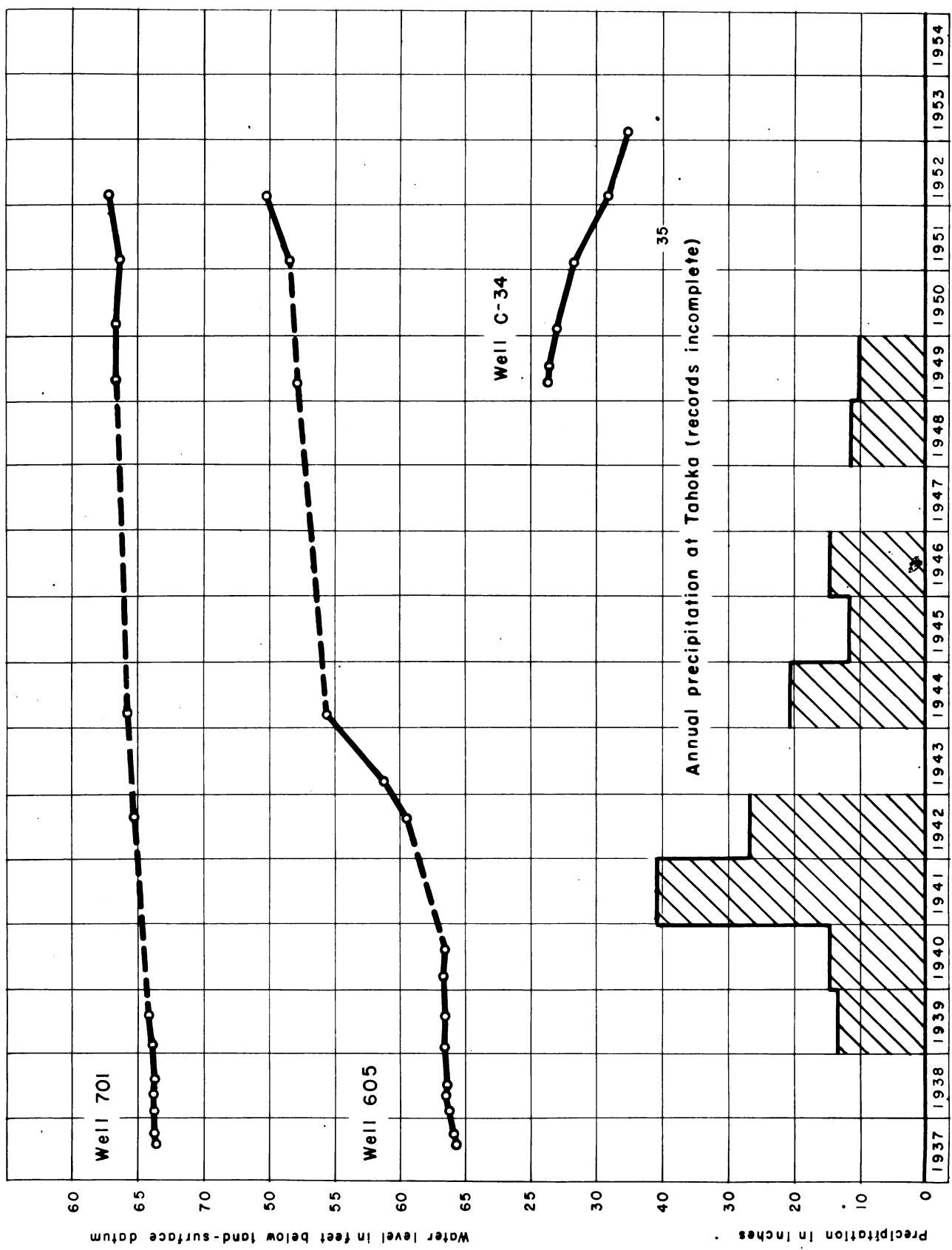
C-81. Lat. $33^{\circ}21'$, long. $102^{\circ}04'$. Depth 133 feet.

Mar. 28, 1949	66.18	Feb. 18, 1950	66.42	Jan. 16, 1953	70.25
July 5	66.70	Feb. 7, 1951	66.75		

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

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Hydrographs showing fluctuation of water levels in Lynn County wells and the annual precipitation at Tahoka, Tex.

TERRY COUNTY

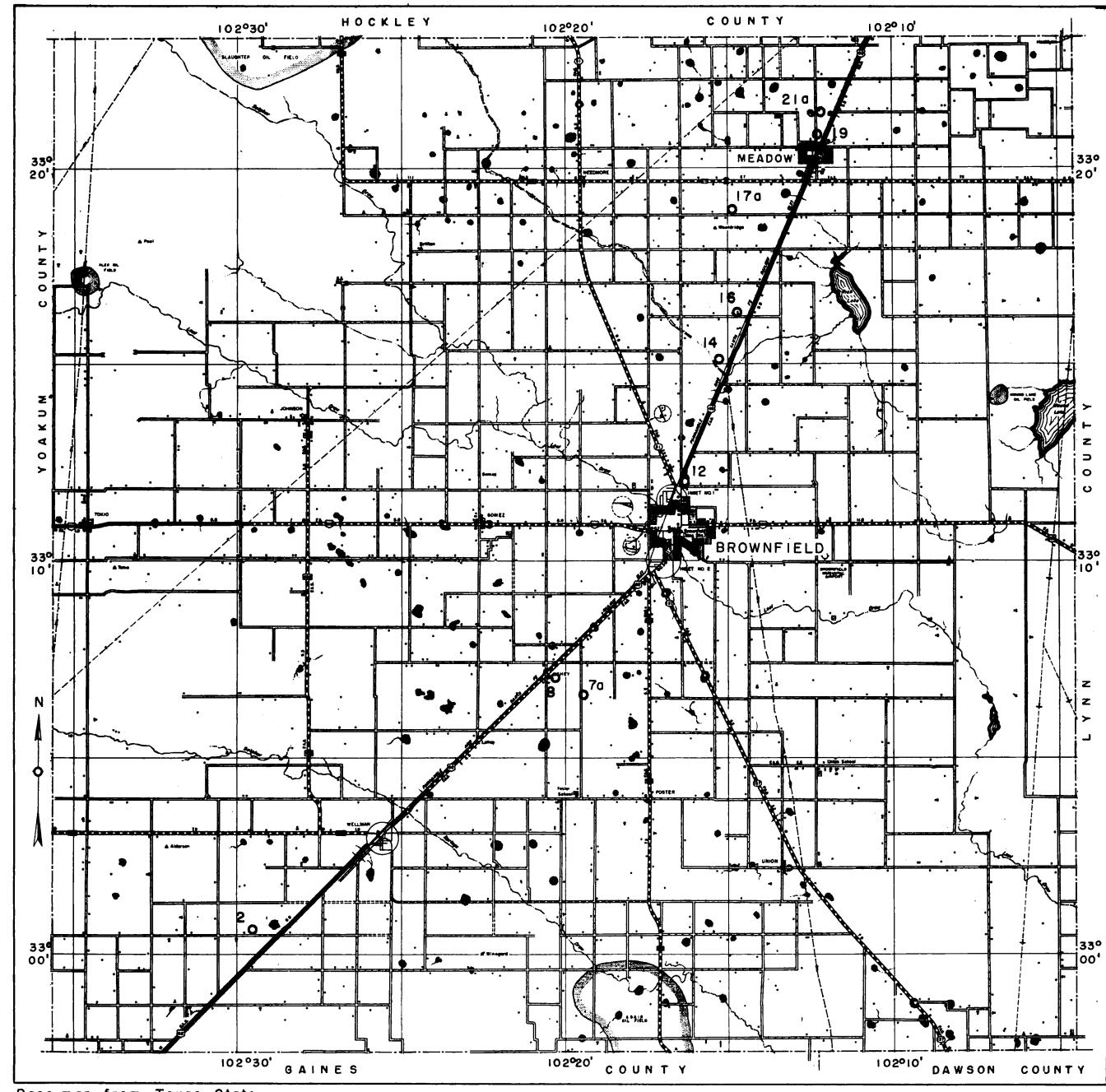
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**TERRY COUNTY, TEXAS
OBSERVATION WELLS**

January 1954

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Base map from Texas State
Highway Department

1 0 1 2 3 4 5 MILES

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2. Lat. $33^{\circ}00'$, long. $102^{\circ}29'$. Depth 120 feet.

Date	Water level	Date	Water level	Date	Water level
June 25, 1937	105.58	Jan. 26, 1939	104.12	Feb. 17, 1943	102.10
Aug. 2	105.48	Aug. 12	103.83	Feb. 25, 1944	101.37
Jan. 25, 1938	105.02	Jan. 16, 1940	103.78	Jan. 21, 1953	98.15
Apr. 27	104.86	July 31	103.62	Jan. 12, 1954	99.12
July 21	104.61	Nov. 20	103.62		

7a. Lat. $33^{\circ}06'$, long. $102^{\circ}19'$. Depth 107 feet.

Jan. 26, 1939	96.81	July 31, 1940	95.88	July 30, 1942	92.85
Aug. 12	96.70	Nov. 20	95.85	Feb. 17, 1943	91.30
Jan. 16, 1940	96.14	Dec. 15, 1941	95.04	Feb. 25, 1944	89.60

8. Lat. $33^{\circ}07'$, long. $102^{\circ}20'$. Depth 125 feet.

June 24, 1937	97.62	Apr. 27, 1938	97.12	Aug. 12, 1939	96.30
Aug. 2	97.55	July 21	96.92		
Jan. 25, 1938	97.23	Jan. 26, 1939	96.60		

12. Lat. $33^{\circ}00'$, long. $102^{\circ}11'$. Depth 106 feet.

June 24, 1937	85.48	Jan. 25, 1938	84.68	July 22, 1938	83.77
Aug. 2	85.28	Apr. 27	84.22	Jan. 26, 1939	83.11

14. Lat. $33^{\circ}14'$, long. $102^{\circ}15'$. Depth 102 feet.

June 23, 1937	87.23	Jan. 26, 1939	86.72	Feb. 4, 1952	71.69
Aug. 2	87.07	Aug. 14	85.43	Jan. 21, 1953	75.25
Jan. 25, 1938	86.65	Nov. 20, 1940	85.44	Jan. 12, 1954	72.42
July 21	86.18	Feb. 18, 1950	74.15		

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16. Lat. $33^{\circ}16'$, long. $102^{\circ}14'$. Depth $11\frac{1}{4}$ feet.

Date	Water level	Date	Water level	Date	Water level
June 23, 1937	97.39	July 31, 1940	96.18	Mar. 31, 1949	87.00
July 19	97.32	Nov. 20	96.23	Feb. 18, 1950	86.41
Jan. 25, 1938	97.17	Dec. 15	91.60	Jan. 26, 1951	85.38
July 21	96.68	July 30, 1942	91.36	Feb. 5, 1952	84.31
Jan. 26, 1939	96.48	Feb. 18, 1943	91.02	Jan. 21, 1953	83.57
Aug. 14	96.32	Feb. 25, 1944	89.97	Jan. 12, 1954	84.53

17a. Lat. $33^{\circ}13'$, long. $102^{\circ}14'$. Depth 90 feet.

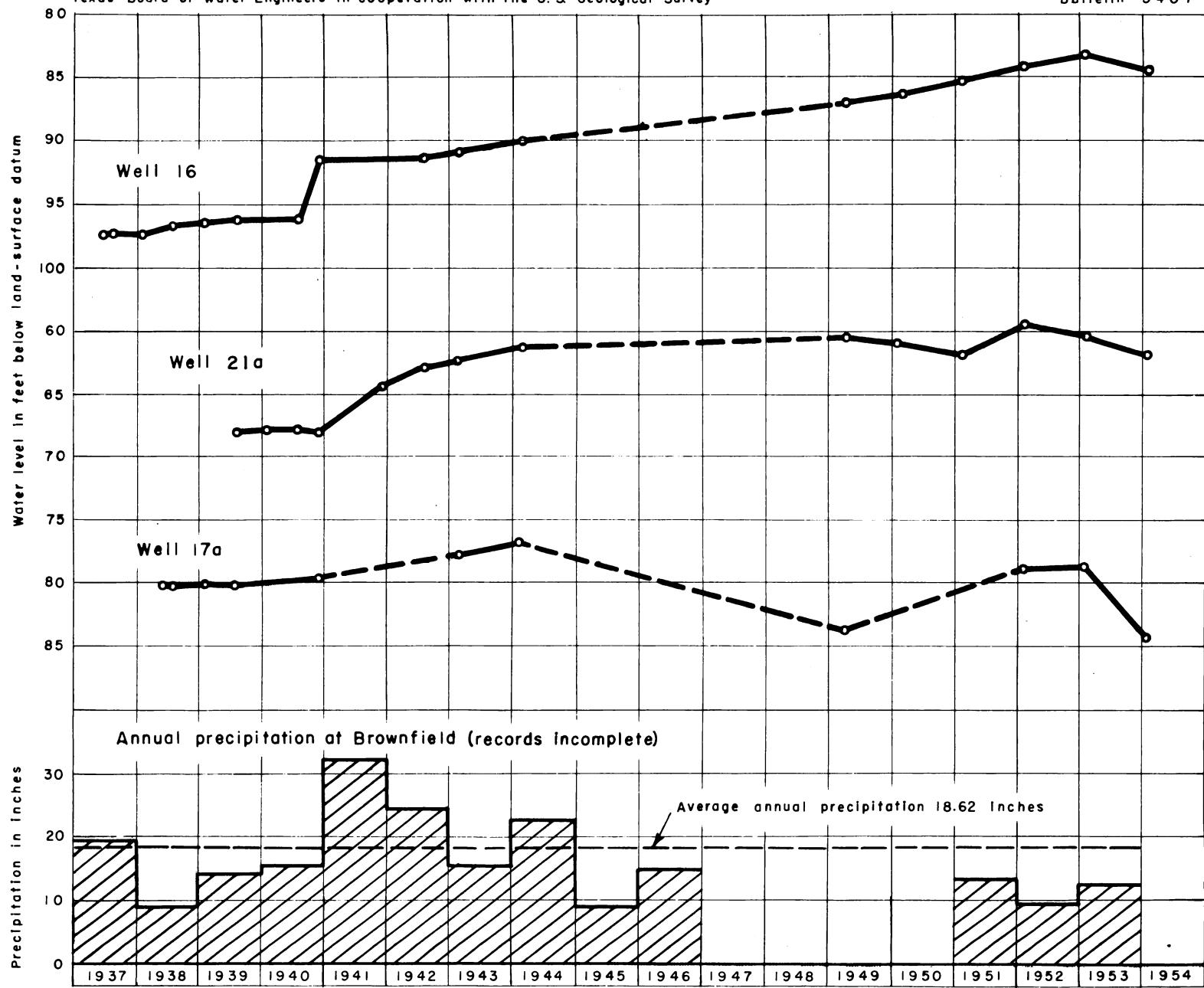
May 18, 1938	80.44	Nov. 20, 1940	79.75	Feb. 5, 1952	79.00
July 22	80.42	Feb. 18, 1943	77.80	Jan. 21, 1953	78.90
Jan. 26, 1939	80.21	Feb. 25, 1944	76.78	Jan. 12, 1954	84.41
Aug. 14	80.27	Mar. 31, 1949	83.82		

19. Lat. $33^{\circ}20'$, long. $102^{\circ}12'$. Depth 89 feet.

June 23, 1937	67.52	Jan. 25, 1938	67.33	Jan. 26, 1939	66.84
July 19	67.38	May 20	67.19		
Aug. 2	67.38	July 22	67.12		

21a. Lat. $33^{\circ}21'$, long. $102^{\circ}12'$. Depth 88 feet.

Aug. 14, 1939	67.99	July 30, 1942	62.80	Jan. 26, 1951	61.90
Jan. 14, 1940	67.91	Feb. 18, 1943	62.40	Feb. 5, 1952	59.50
July 31	67.87	Feb. 15, 1944	61.27	Jan. 21, 1953	60.52
Nov. 20	68.09	Mar. 31, 1949	60.52	Jan. 12, 1954	61.94
Dec. 15, 1941	64.40	Feb. 18, 1950	60.86		



Hydrographs showing fluctuation of water levels in Terry County wells and the annual precipitation at Brownfield, Tex.

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