

TEXAS BOARD OF WATER ENGINEERS

Durwood Manford, Chairman
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BULLETIN 5903

RECORDS OF WATER-LEVEL MEASUREMENTS IN
CROCKETT, GLASSCOCK, REAGAN, UPTON, AND
TERRELL COUNTIES, TEXAS
1937 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

March 1959

1911

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RECORDS OF WATER-LEVEL MEASUREMENTS IN CROCKETT, GLASSCOCK, REAGAN,
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INTRODUCTION

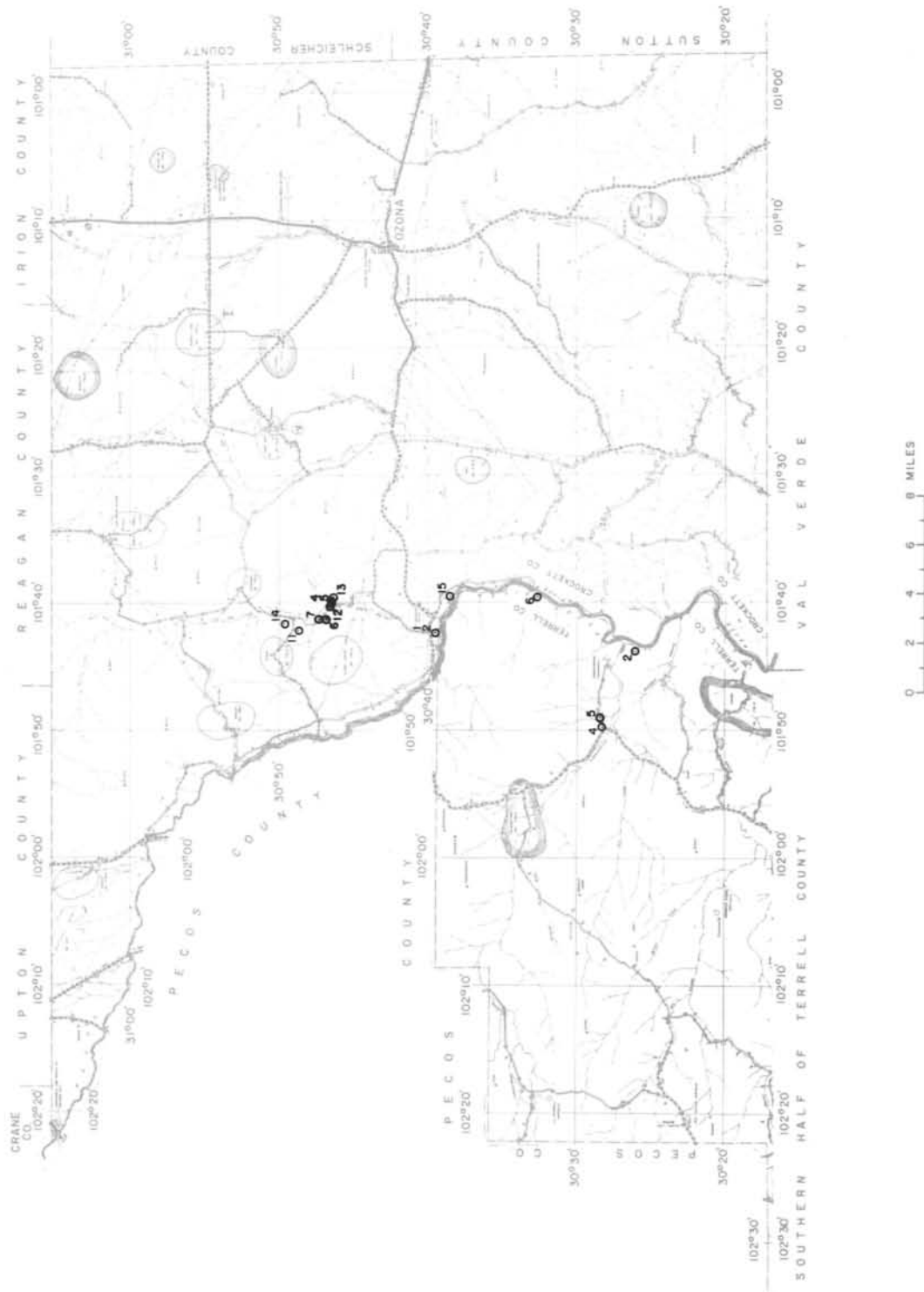
The Texas Board of Water Engineers is charged with making, independently or in cooperation with other State and Federal agencies, scientific investigations of the source, amount, and quality of ground-water supplies. To evaluate effects of ground-water development in relation to available supply, periodic 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 land-surface datum in 11 wells in Crockett County, 16 wells in Glasscock County, 11 wells in Reagan County, 4 wells in Terrell County, and 3 wells in Upton County. The composite period of record covers measurements made in observation wells from 1937 through 1957.

Observation well location maps precede the corresponding table of water-level measurements for each county. Hydrographs of water-level fluctuations in selected wells in Crockett, Glasscock, and Reagan Counties follow their associated table of water-level measurements. Annual precipitation charts for Ozona and Garden City are combined with their respective hydrographs.



CROCKETT COUNTY



BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

OBSERVATION WELLS IN CROCKETT AND TERRELL COUNTIES, TEXAS



WATER-LEVEL MEASUREMENTS IN CROCKETT COUNTY, TEXAS

1. Lat. 30°39', long. 101°42'. Diameter 72 to 20 inches, depth 80 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Jan. 30, 1953	40.48	Nov. 30, 1954	36.70	Dec. 16, 1956	38.77
Dec. 7	39.96	Jan. 26, 1955	36.45	Dec. 8, 1957	36.05
Jan. 26, 1954	39.45	Dec. 9	36.60		

2. Lat. 30°39', long. 101°42'. Diameter 60 to 20 inches, depth 40 feet.

Jan. 30, 1953	15.48	Jan. 26, 1954	15.36	Dec. 9, 1955	12.47
Dec. 7	15.88	Jan. 26, 1955	12.47	Dec. 8, 1957	10.91

4. Lat. 30°46', long. 101°39'.

Jan. 18, 1955	50.94	Dec. 16, 1956	52.99	Dec. 8, 1957	48.95
Dec. 9	50.71				

5. Lat. 30°46', long. 101°39'.

Dec. 7, 1953	51.30	Dec. 9, 1955	48.59	Dec. 8, 1957	46.82
Jan. 18, 1955	48.92	Dec. 16, 1956	50.81		

6. Lat. 30°46', long. 101°41'. Diameter 16 inches.

Dec. 7, 1953	92.05	Dec. 9, 1955	88.78	Dec. 8, 1957	87.17
Jan. 18, 1955	88.67	Dec. 16, 1956	90.46		

7. Lat. 30°47', long. 101°41'. Diameter 16 inches.

Dec. 7, 1953	102.48	Jan. 18, 1955	98.92	Dec. 16, 1956	100.93
Jan. 26, 1954	102.85	Dec. 9	98.73	Dec. 8, 1957	97.30

11. Lat. 30°48', long. 101°42'.

Dec. 9, 1955	150.59	Dec. 16, 1956	152.11		
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12. Lat. 30°46', long. 101°40'. Diameter 7 inches, depth 76 feet.

Jan. 26, 1954	49.69	Dec. 9, 1955	47.42	Dec. 8, 1957	45.53
Jan. 18, 1955	47.57				

WATER-LEVEL MEASUREMENTS IN CROCKETT COUNTY -- CONTINUED

13. Lat. 30°46', long. 101°39'. Diameter 7 inches, depth 80 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Jan. 26, 1954	62.08	Dec. 9, 1955	59.73	Dec. 8, 1957	58.03
Jan. 18, 1955	60.10	Dec. 16, 1956	61.95		

14. Lat. 30°49', long. 101°41'. Diameter 16 inches.

Jan. 26, 1954	144.64	Dec. 9, 1955	144.15	Dec. 16, 1956	156.05
Jan. 18, 1955	142.90				

15. Lat. 30°38', long. 101°39'. Diameter 18 inches, depth 101 feet. Casing slotted below 19 feet.

Dec. 9, 1955	23.13	Dec. 16, 1956	23.44	Dec. 8, 1957	22.82
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WATER-LEVEL MEASUREMENTS IN TERRELL COUNTY, TEXAS

2. Lat. $30^{\circ}25'$, long. $101^{\circ}44'$. Diameter 8 inches, depth 117 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Jan. 26, 1955	37.57	Dec. 16, 1956	37.81	Dec. 8, 1957	38.29
Dec. 9	37.80				

4. Lat. $30^{\circ}28'$, long. $101^{\circ}49'$. Diameter 6 inches, depth 72 feet.

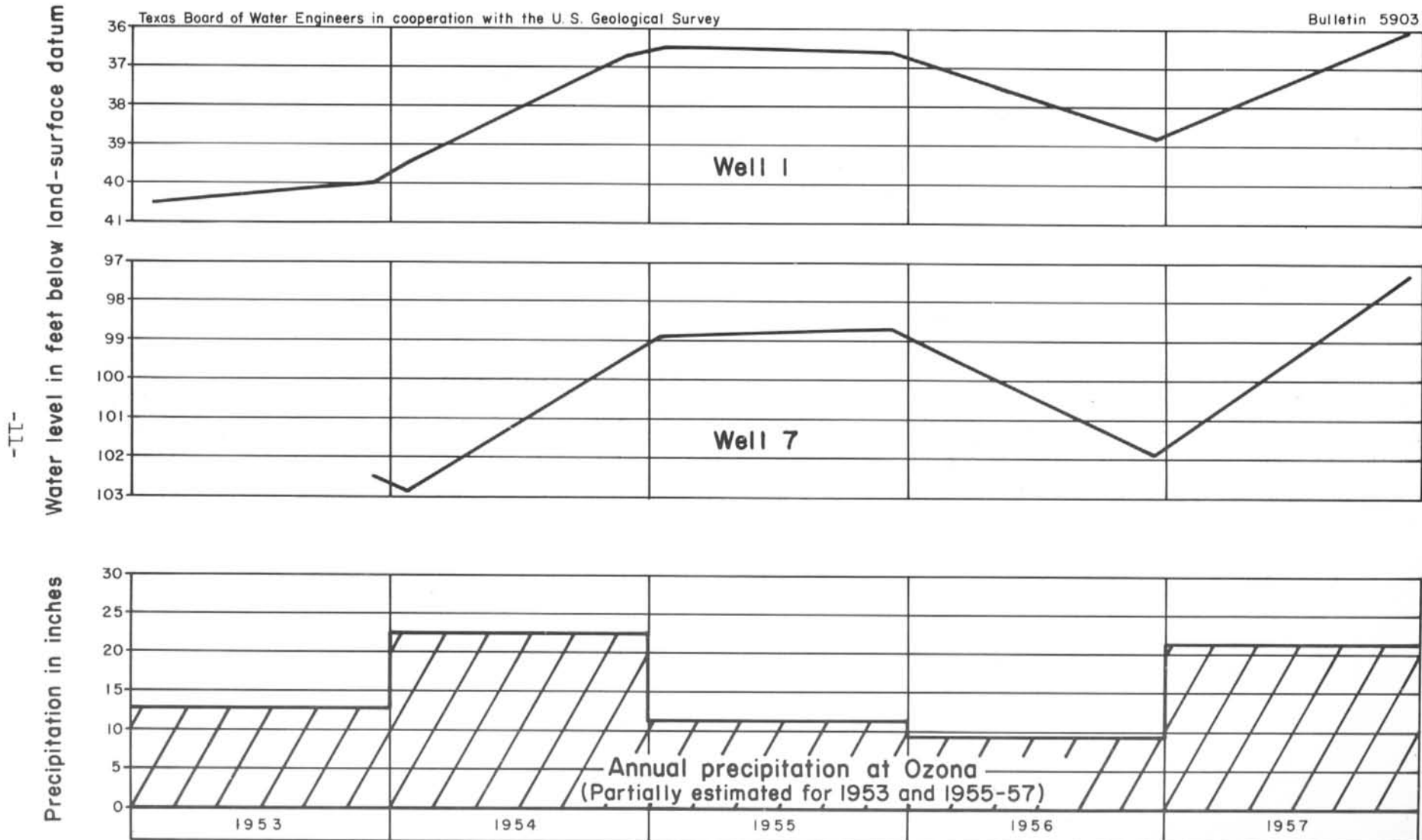
Jan. 26, 1955	37.79	Dec. 9, 1955	37.64	Dec. 8, 1957	36.97
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5. Lat. $30^{\circ}28'$, long. $101^{\circ}48'$. Diameter 10 inches, depth over 200 feet.

Jan. 26, 1955	75.28	Dec. 16, 1956	74.92	Dec. 8, 1957	73.26
Dec. 9, 1955	75.12				

6. Lat. $30^{\circ}32'$, long. $101^{\circ}39'$. Diameter 8 inches, depth 60 feet.
Casing slotted below 40 feet.

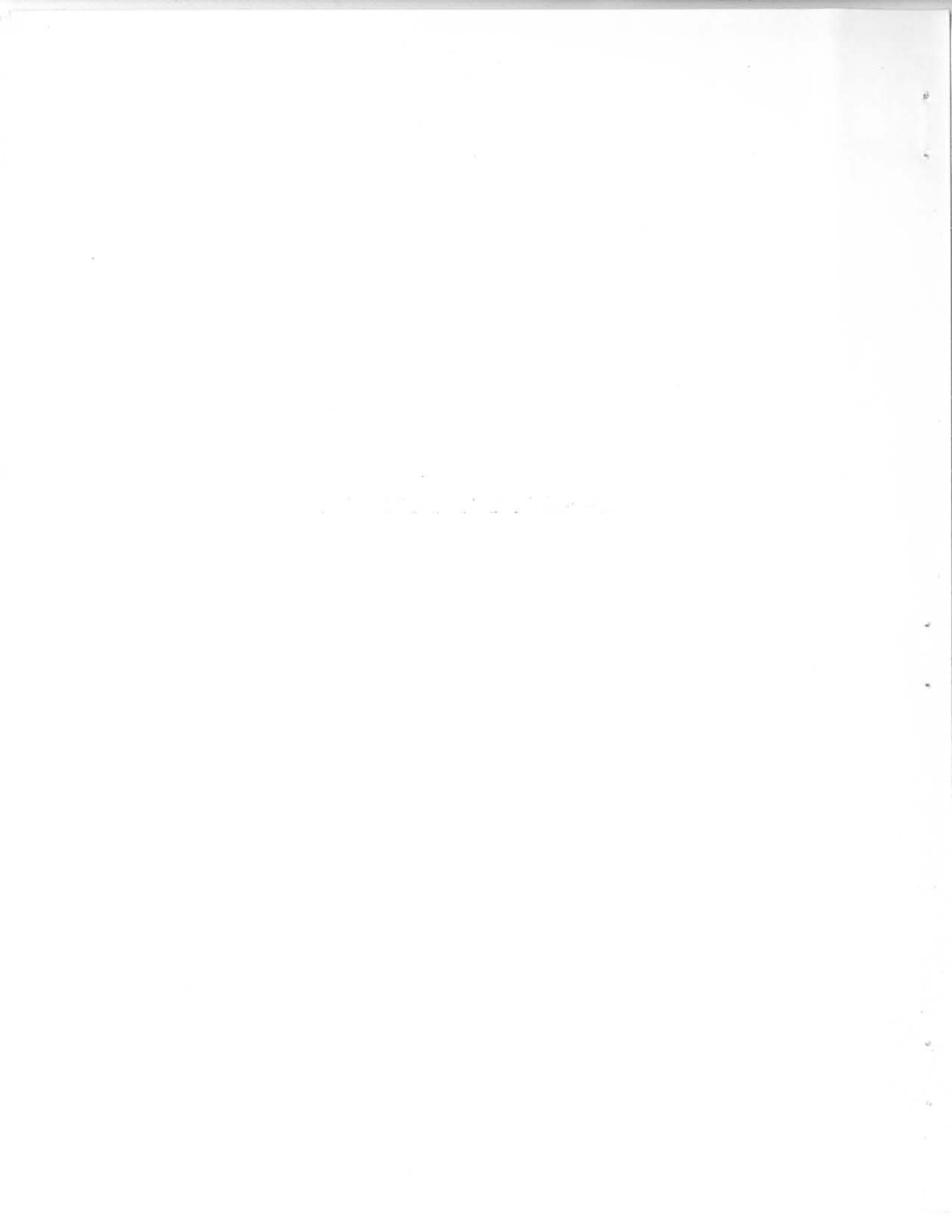
Jan. 26, 1955	31.67	Dec. 16, 1956	33.15	Dec. 8, 1957	32.05
Dec. 9, 1955	32.57				

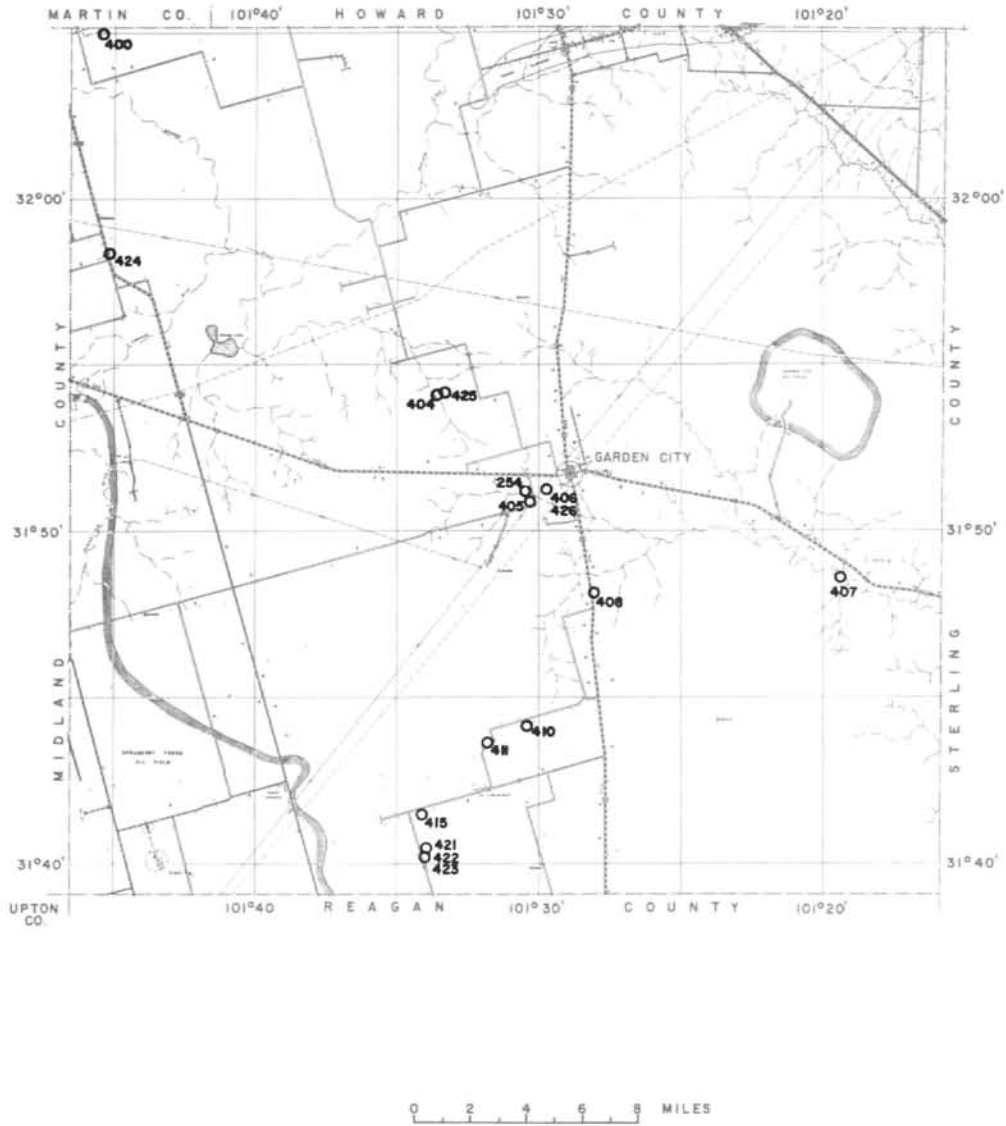


HYDROGRAPHS OF WATER LEVELS IN WELLS 1 AND 7, CROCKETT COUNTY, AND ANNUAL PRECIPITATION AT OZONA, TEXAS

-11-

GLASSCOCK COUNTY





BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

Feb. 1959 - DF

OBSERVATION WELLS IN GLASSCOCK COUNTY, TEXAS



WATER-LEVEL MEASUREMENTS IN GLASSCOCK COUNTY, TEXAS

254. Lat. 31°51', long. 101°30'. Diameter 4 inches, depth 95 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Apr. 28, 1937	60.4	Dec. 4, 1953	57.64	Dec. 3, 1955	56.72
Dec. 12, 1953	59.56	Dec. 7, 1954	59.34	Dec. 10, 1956	61.65

400. Lat. 32°05', long. 101°45'. Diameter 16 inches, depth 205 feet. Casing slotted from 145 to 205 feet.

Apr. 1950	g 102	Dec. 2, 1955	110.48	Dec. 6, 1957	128.34
Dec. 3, 1953	106.81	Dec. 10, 1956	114.85		

404. Lat. 31°54', long. 101°33'. Diameter 14 inches, depth 200 feet.

Apr. 11, 1950	g 56	Dec. 7, 1954	58.68	Dec. 7, 1957	59.02
Dec. 12, 1952	58.9	Dec. 3, 1955	58.88		
Dec. 3, 1953	58.97	Dec. 10, 1956	59.44		

405. Lat. 31°50', long. 101°30'. Diameter 14 to 12 inches, depth 220 feet. Cased to 15 feet.

Apr. 5, 1950	67.27	Dec. 7, 1954	52.28	Dec. 4, 1957	47.03
Dec. 12, 1952	52.70	Dec. 3, 1955	49.90		
Dec. 4, 1953	51.24	Dec. 10, 1956	53.83		

406. Lat. 31°51', long. 101°29'. Diameter 12 inches, depth 220 feet, cased to 15 feet.

Apr. 5, 1950	64.82	Dec. 4, 1953	58.7	Dec. 3, 1955	59.71
Dec. 12, 1952	47.3	Dec. 7, 1954	59.0	Dec. 4, 1957	60.72

407. Lat. 31°48', long. 101°19'. Diameter 10 inches.

Dec. 12, 1952	27.35	Dec. 3, 1955	27.72	Dec. 4, 1957	5.51
Dec. 4, 1953	31.66	Dec. 7, 1956	29.11	Dec. 4, 1959	2.86

408. Lat. 31°48', long. 101°28'. Diameter 16 inches, depth 216 feet.

Apr. 5, 1950	55.88	Dec. 8, 1954	55.73	Dec. 4, 1957	55.07
Dec. 9, 1952	55.36	Dec. 3, 1955	54.23		
Dec. 4, 1953	55.46	Dec. 7, 1956	56.20		

1-6-71 65.54
 12-18-71 61.63
 12-6-72 63.85
 12-6-73 65.65
 12-2-74 62.53

12-1-44 60.72
 12-5-46 59.58
 Dec 4 1959 59.17
 Dec 19 1960 59.27
 Dec 7 1961 59.57
 Dec 8 1962 60.37
 Dec 9 1963 60.71

12-1-44 58.22
 12-2-45 54.03
 Dec 7 1959 47.22
 Dec 19 1960 52.04
 Dec 7 1961 51.83
 Dec 8 1962 53.87
 Dec 4 1963 53.85

12-1-44 58.22
 12-2-45 54.03
 12-5-46 60.18
 12-11-47 63.30
 12-5-48 135.62
 12-1-49 132.92
 12-2-49 134.31

12-1-44 60.72
 12-5-46 59.58
 Dec 4 1959 59.17
 Dec 19 1960 59.27
 Dec 7 1961 59.57
 Dec 8 1962 60.37
 Dec 9 1963 60.71

12-1-44 58.22
 12-2-45 54.03
 12-5-46 62.55
 12-11-47 62.70
 Dec 7 1961 51.83
 Dec 8 1962 53.87
 Dec 4 1963 53.85

12-1-44 58.22
 12-2-45 54.03
 12-5-46 60.18
 12-11-47 63.30
 12-5-48 135.62
 12-1-49 132.92
 12-2-49 134.31

WATER-LEVEL MEASUREMENTS IN GLASSCOCK COUNTY -- CONTINUED

410. Lat. $31^{\circ}44'$, long. $101^{\circ}30'$. Diameter 12 inches, depth 192 feet. Cased to 12 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Apr. 7, 1950	128.87	Dec. 4, 1953	150.52	Dec. 7, 1954	154.11
Dec. 9, 1952	149.2				

411. Lat. $31^{\circ}43'$, long. $101^{\circ}31'$. Diameter 12 inches, depth 255 feet. Cased to 150 feet.

Apr. 7, 1950	83.56	Dec. 3, 1955	115.70	Dec. 4, 1957	128.44
Dec. 8, 1954	107.44	Dec. 7, 1956	130.08	<i>Dec. 4, 1957</i>	<i>130.74</i>

415. Lat. $31^{\circ}41'$, long. $101^{\circ}34'$. Diameter 10 inches, depth 214 feet. Cased to 20 feet.

Apr. 7, 1950	93.37	Dec. 8, 1954	122.84	Dec. 4, 1957	147.62
Dec. 9, 1952	118.85	Dec. 3, 1955	134.11		
Dec. 4, 1953	126.65	Dec. 7, 1956	149.72		

421. Lat. $31^{\circ}40'$, long. $101^{\circ}33'$.

Dec. 8, 1954	123.52	Dec. 3, 1955	141.84	Dec. 4, 1957	161.89
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422. Lat. $31^{\circ}40'$, long. $101^{\circ}33'$.

Dec. 7, 1956	158.82	Dec. 4, 1957	162.09		
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423. Lat. $31^{\circ}40'$, long. $101^{\circ}33'$.

Dec. 7, 1956	161.19	Dec. 4, 1957	165.81		
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424. Lat. $31^{\circ}58'$, long. $101^{\circ}45'$.

Dec. 7, 1954	52.39	Dec. 7, 1957	55.61		
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425. Lat. $31^{\circ}54'$, long. $101^{\circ}38'$.

Dec. 7, 1954	67.65	Dec. 3, 1955	67.77	Dec. 10, 1956	69.31
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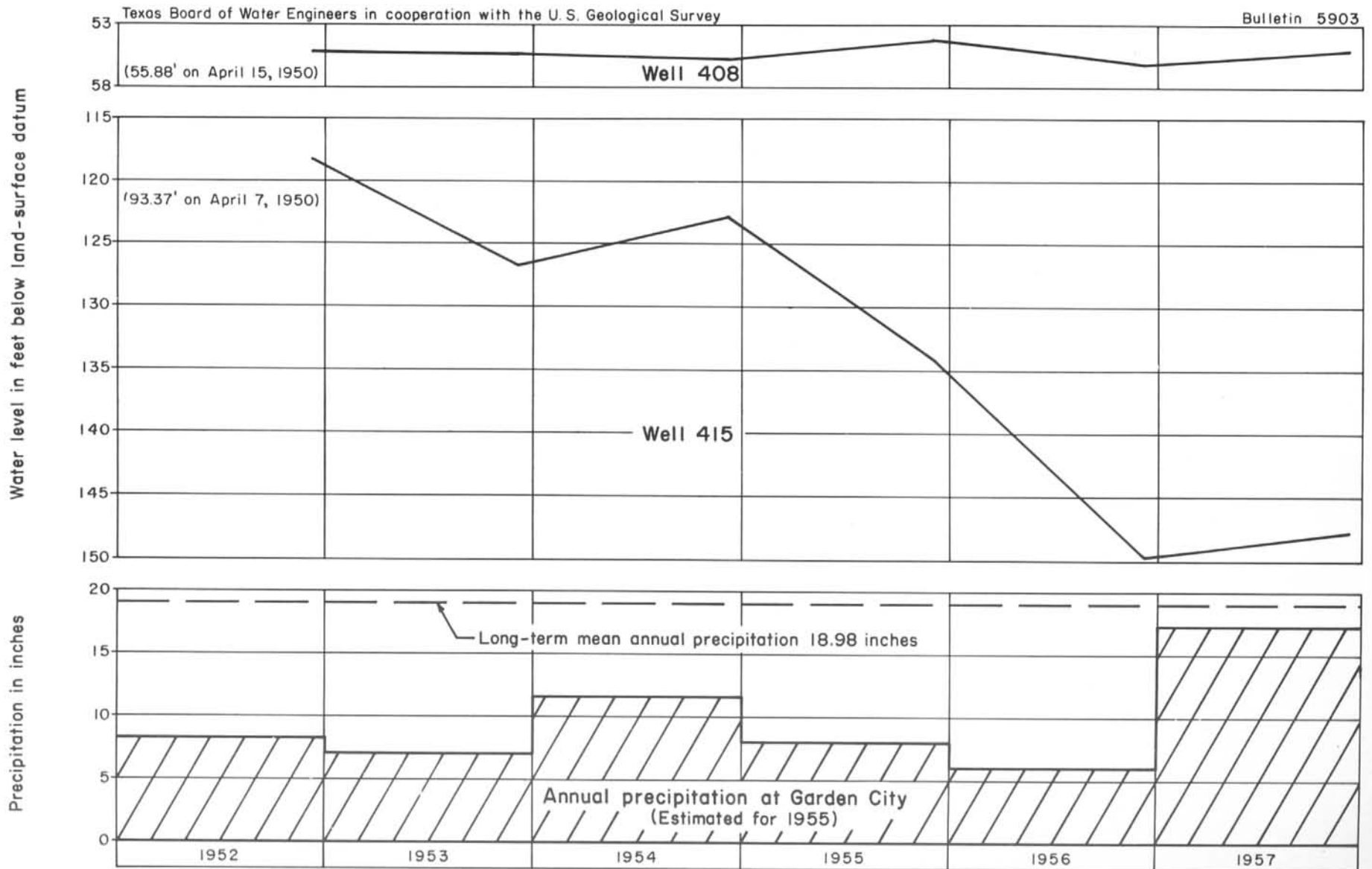
WATER-LEVEL MEASUREMENTS IN GLASSCOCK COUNTY -- CONTINUED

426. Lat. $31^{\circ}51'$, long. $101^{\circ}29'$.

Date	Water Level	Date	Water Level	Date	Water Level
Dec. 7, 1954	62.04	Dec. 10, 1956	67.23	Dec. 4, 1957	62.91
Dec. 3, 1955	61.34				

g Measured by outside agency or person.

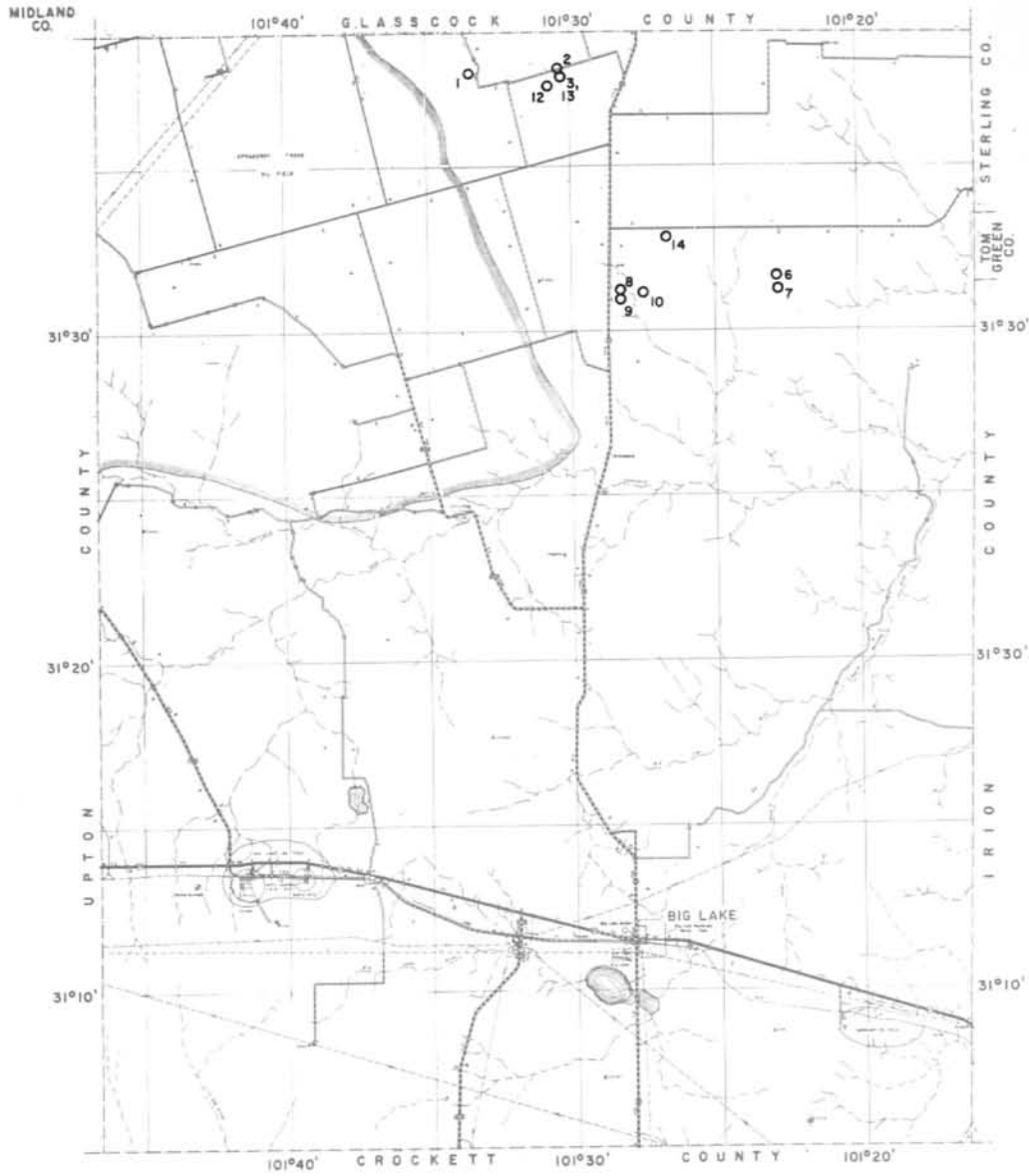




HYDROGRAPHS OF WATER LEVELS IN WELLS 408 AND 415, GLASSCOCK COUNTY, AND ANNUAL PRECIPITATION AT GARDEN CITY, TEXAS



REAGAN COUNTY



BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

Feb. 1959 - DF

OBSERVATION WELLS IN REAGAN COUNTY, TEXAS



WATER-LEVEL MEASUREMENTS IN REAGAN COUNTY, TEXAS

1. Lat. $31^{\circ}37'$, long. $101^{\circ}33'$. Diameter 15 to 12 inches, depth 320 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Apr. 10, 1950	87.6	Dec. 3, 1955	116.19	Dec. 7, 1957	149.62
Dec. 8, 1954	108.55	Dec. 14, 1956	142.40		

2. Lat. $31^{\circ}38'$, long. $101^{\circ}30'$. Diameter 14 inches, depth 340 feet. Cased to 14 feet.

Sept. 19, 1949	96.62	Dec. 4, 1953	110.48	Dec. 7, 1957	131.54
Apr. 10, 1950	104.53	Dec. 8, 1954	107.46		
Dec. 9, 1952	102.22	Dec. 3, 1955	110.75		

3. Lat. $31^{\circ}37'$, long. $101^{\circ}30'$. Diameter 12 inches, depth 312 feet. Cased to 12 feet.

Sept. 19, 1949	96.08	Dec. 4, 1953	109.00	Dec. 14, 1956	127.66
Apr. 10, 1950	104.1	Dec. 8, 1954	106.10	Dec. 7, 1957	128.83
Dec. 9, 1952	100.90	Dec. 3, 1955	109.07		

6. Lat. $31^{\circ}31'$, long. $101^{\circ}23'$. Diameter 12 inches, depth 263 feet.

Apr. 10, 1950	139.85	Dec. 8, 1954	142.27	Dec. 7, 1957	150.67
Dec. 9, 1952	139.96	Dec. 3, 1955	146.02		
Dec. 4, 1953	143.67	Dec. 15, 1956	148.16		

7. Lat. $31^{\circ}31'$, long. $101^{\circ}23'$. Diameter 12 inches, depth 291 feet.

Apr. 10, 1950	136.28	Dec. 4, 1953	141.68	Dec. 15, 1956	145.68
Dec. 9, 1952	141.96	Dec. 8, 1954	140.13	Dec. 7, 1957	148.23

8. Lat. $31^{\circ}31'$, long. $101^{\circ}28'$. Diameter 14 inches, depth 231 feet.

Sept. 17, 1949	84.48	Dec. 9, 1952	86.78	Dec. 15, 1956	89.65
Apr. 10, 1950	87.0	Dec. 4, 1953	87.80	Dec. 7, 1957	84.16

9. Lat. $31^{\circ}31'$, long. $101^{\circ}28'$. Diameter 12 inches, depth 225 feet.

Apr. 10, 1950	85.66	Dec. 4, 1953	86.20	Dec. 7, 1957	82.87
Dec. 9, 1952	85.28	Dec. 15, 1956	85.74		

WATER-LEVEL MEASUREMENTS IN REAGAN COUNTY -- CONTINUED

10. Lat. 31°31', long. 101°27'. Diameter 14 inches, depth 300 feet.
Cased to 10 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Sept. 17, 1949	85.89	Dec. 4, 1953	95.08	Dec. 7, 1957	84.92
Apr. 10, 1950	88.42	Dec. 8, 1954	96.18		
Dec. 9, 1952	86.61	Dec. 15, 1956	97.53		

12. Lat. 31°37', long. 101°30'. Diameter 10 inches, depth 300 feet.
Cased to 12 feet.

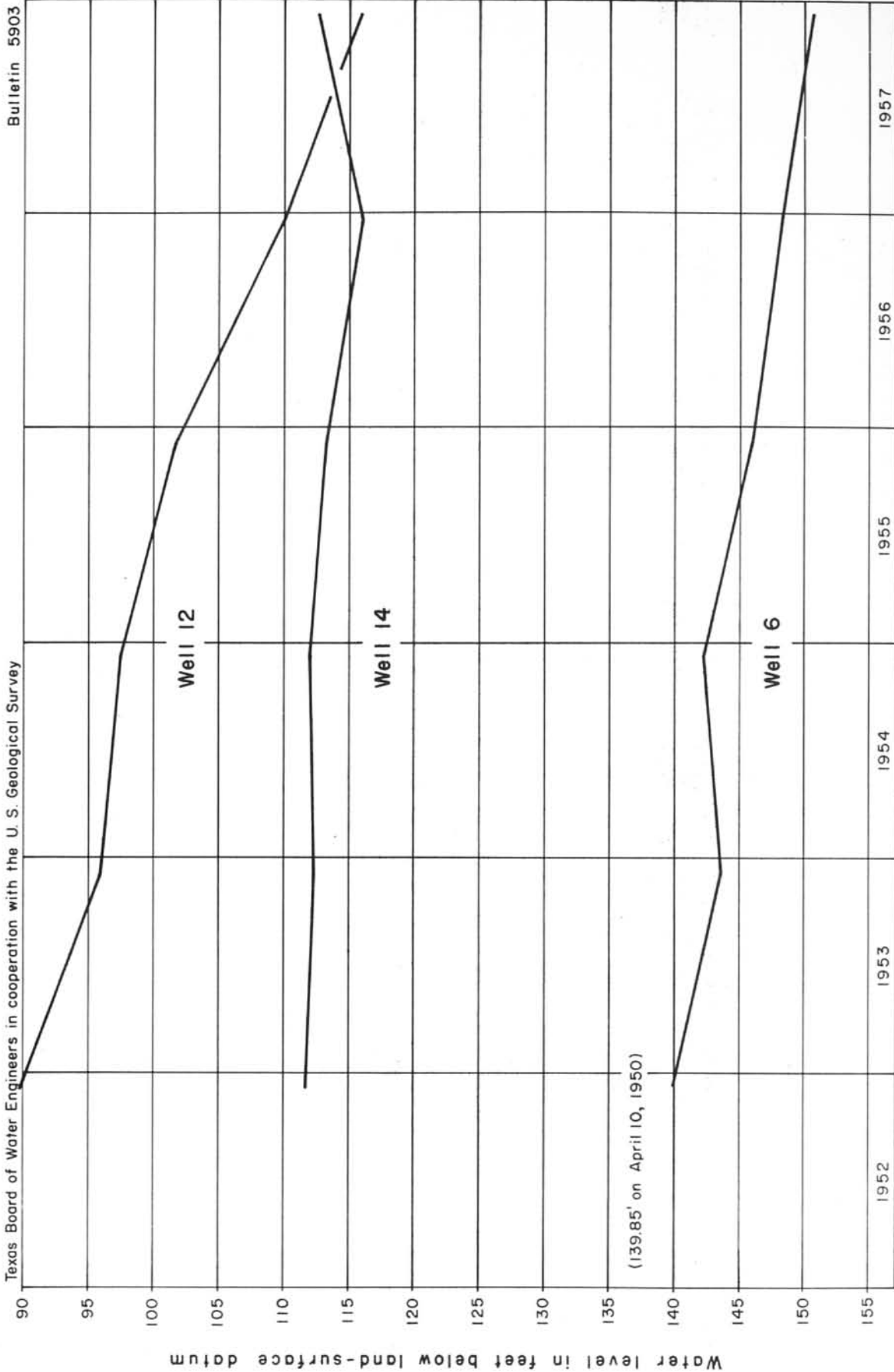
Dec. 9, 1952	89.71	Dec. 8, 1954	97.46	Dec. 14, 1956	110.04
Dec. 4, 1953	95.94	Dec. 3, 1955	101.64	Dec. 7, 1957	115.91

13. Lat. 31°37', long. 101°30'. Diameter 12 inches, depth 300 feet.

Dec. 9, 1952	95.78	Dec. 8, 1954	97.97	Dec. 14, 1956	111.19
Dec. 4, 1953	101.03	Dec. 3, 1955	103.26	Dec. 7, 1957	118.38

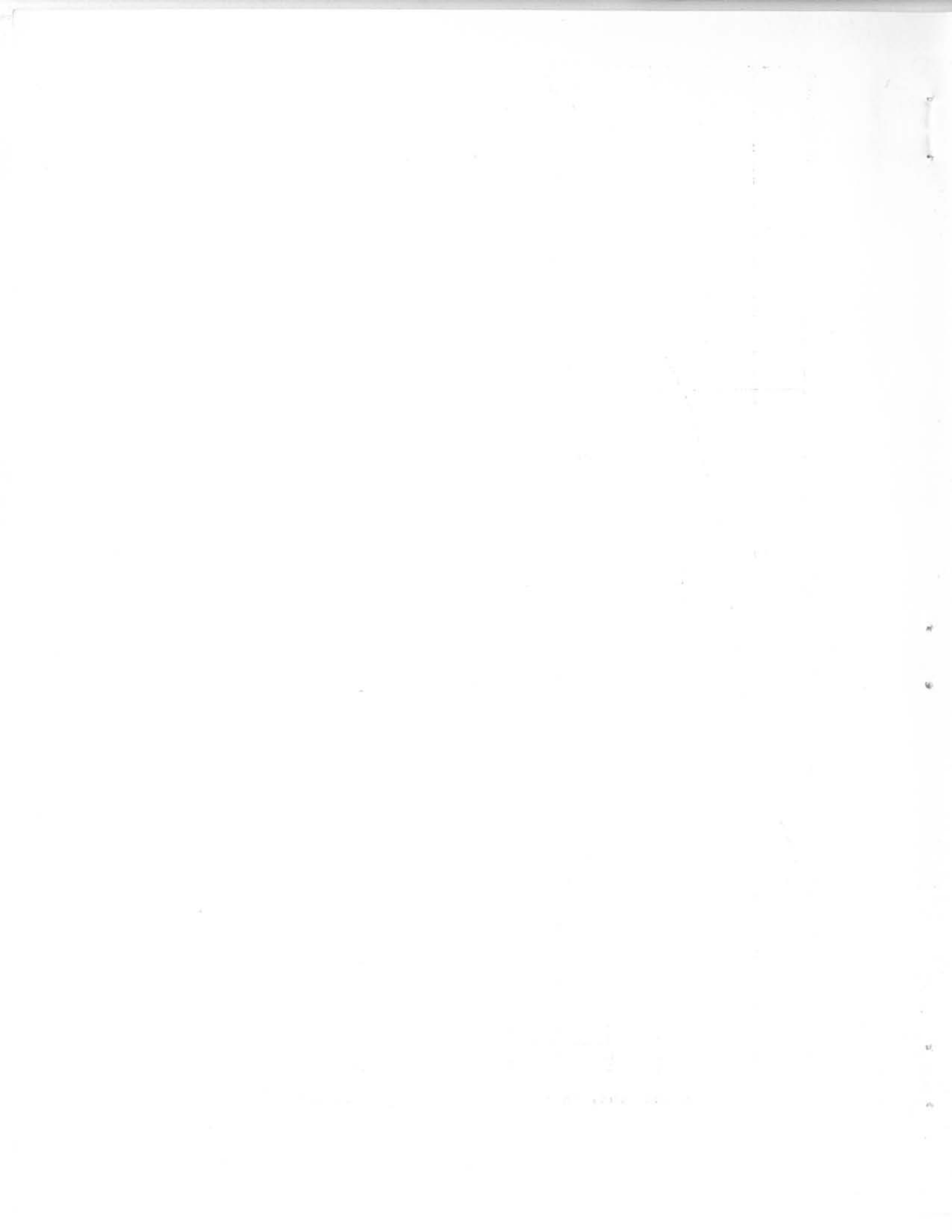
14. Lat. 31°32', long. 101°26'.

Dec. 9, 1952	111.65	Dec. 8, 1954	112.00	Dec. 15, 1956	116.12
Dec. 4, 1953	112.20	Dec. 3, 1955	113.18	Dec. 7, 1957	112.68



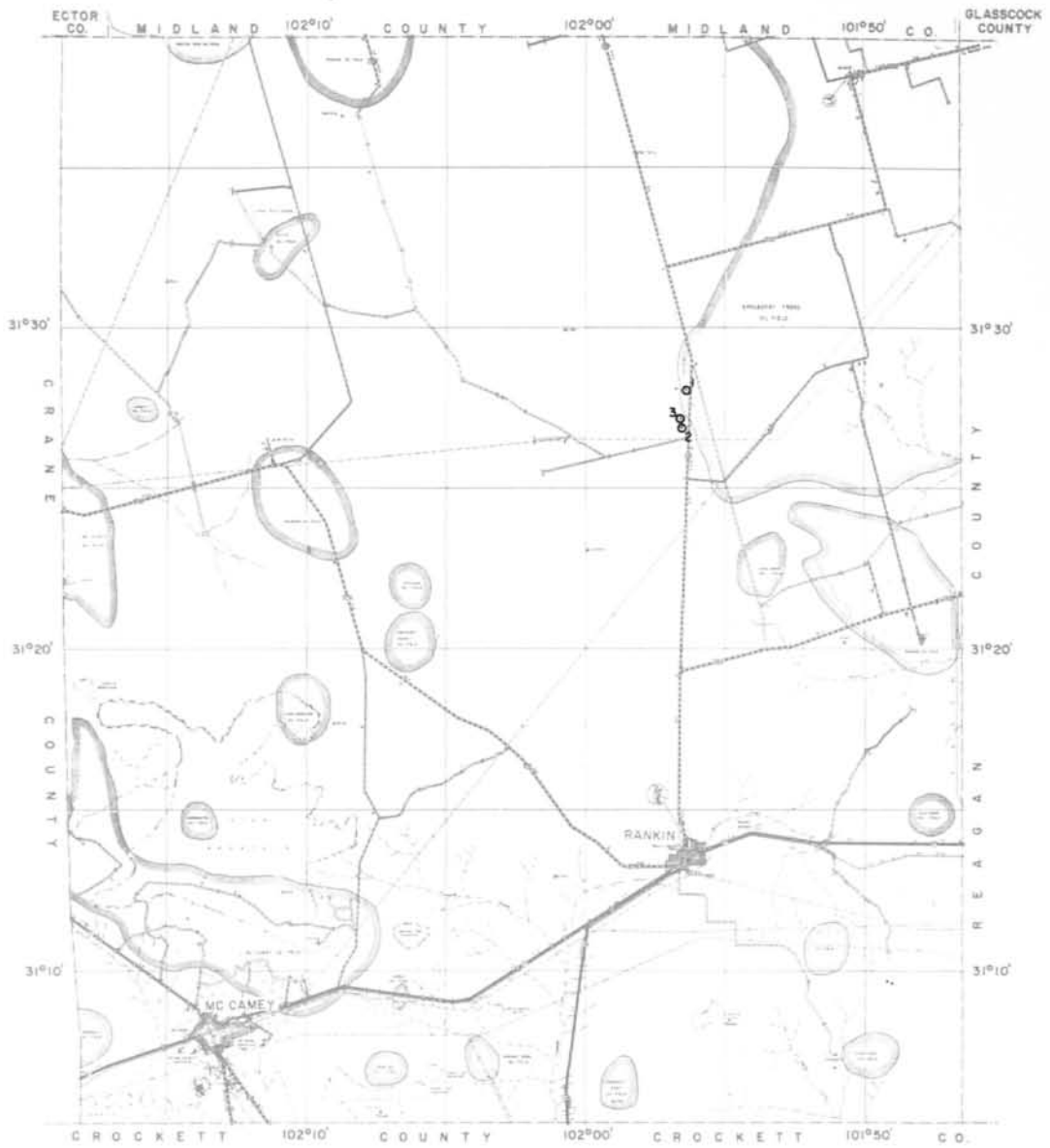
HYDROGRAPHS OF WATER LEVELS IN WELLS 12, 14, AND 6, REAGAN COUNTY, TEXAS

Jan. 1959 - F L O



UPTON COUNTY

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BASE MAP FROM TEXAS STATE HIGHWAY DEPARTMENT

Jan 1959 - FLO

OBSERVATION WELLS IN UPTON COUNTY, TEXAS

WATER-LEVEL MEASUREMENTS IN UPTON COUNTY, TEXAS

1. Lat. $31^{\circ}28'$, long. $101^{\circ}56'$. Diameter 18 inches, depth 175 feet.

Date	Water Level	Date	Water Level	Date	Water Level
Jan. 25, 1954	154.4	Dec. 15, 1956	159.52	Dec. 5, 1957	155.23

2. Lat. $31^{\circ}26'$, long. $101^{\circ}56'$. Diameter 13 inches, depth over 300 feet.

Jan. 25, 1954	162.63	Dec. 5, 1955	161.72	Dec. 5, 1957	162.74
Dec. 4	161.85	Dec. 15, 1956	163.95		

3. Lat. $31^{\circ}27'$, long. $101^{\circ}56'$. Diameter 13 inches, depth over 300 feet.

Jan. 25, 1954	160.64	Dec. 5, 1955	164.14	Dec. 5, 1957	160.66
Dec. 4	160.20	Dec. 15, 1956	161.80		

DATE: _____

TIME: _____

LOCATION: _____

INSTRUCTOR: _____

STUDENT: _____

TOPIC: _____

OBJECTIVES: _____

ACTIVITIES: _____

ASSESSMENT: _____

REFLECTION: _____

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2

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