

PLANNING FILES  
HYDROLOGY

# Water Levels and Artesian Pressure in Observation Wells in the United States in 1947

## Part 4. South-Central States

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GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1099

*Prepared in cooperation with the States  
of Arkansas, Louisiana, Oklahoma, and  
Texas, and other agencies*



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*Prepared under the direction of C. G. PAULSEN, Chief Hydraulic Engineer*

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**UNITED STATES DEPARTMENT OF THE INTERIOR**

**Oscar L. Chapman, *Secretary***

**GEOLOGICAL SURVEY**

**W. E. Wrather, *Director***

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## PREFACE

This report was prepared by the Geological Survey in cooperation with the States of Arkansas, Louisiana, Oklahoma, and Texas, and other agencies, by personnel of the Water Resources Division under the direction of:

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# WATER LEVELS AND ARTESIAN PRESSURE IN OBSERVATION WELLS IN THE UNITED STATES IN 1947

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## Part 4. SOUTH-CENTRAL STATES

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### INTRODUCTION

By A. N. Sayre and others

#### Significance of records of water level and artesian pressure

The rock formations of the earth are great natural reservoirs in which a part of the water derived from rain and snow is stored to supply wells and springs and to maintain the flow of streams during periods of fair weather. Water levels in wells register the stages of these natural reservoirs; they show the extent to which water supplies are depleted by drought or by heavy pumping, whether for public water works, irrigation, or industrial uses, and the extent to which they are replenished in seasons of abundant rainfall or melting snow. The changes in pressure recorded on flowing wells indicate depletion or replenishment of the artesian reservoirs.

#### Annual publication of records by Geological Survey

The regular publication of records of water level and artesian pressure in the United States was begun by the Geological Survey in 1935 and has continued yearly since. The records for the entire country were published in a single volume each year through 1939. Beginning with 1940 the records have been published in six volumes, covering the northeastern, southeastern, north-central, south-central, northwestern, and southwestern sections of the country. Hawaii is included in the southwestern section. (See fig. 1.) The following table gives the numbers of these reports. This series of water-supply papers is in a sense an inventory, year by year, of the groundwater supplies in such parts of the country as have been covered.

## Water-supply papers on water levels and artesian pressure in observation wells in the United States

Year	North-eastern States	South-eastern States	North-central States	South-central States	North-western States	South-western States and Hawaii
1935	777	777	777	777	777	777
1936	817	817	817	817	817	817
1937	840	840	840	840	840	840
1938	845	845	845	845	845	845
1939	886	886	886	886	886	886
1940	906	907	908	909	910	911
1941	936	937	938	939	940	941
1942	944	945	946	947	948	949
1943	986	987	988	989	990	991
1944	1016	1017	1018	1019	1020	1021
1945	1023	1024	1025	1026	1027	1028
1946	1071	1072	1073	1074	1075	1076
1947	1096	1097	1098	1099	1100	1101

## Scope of present volume

The present volume covers the south-central States and gives records of water level and artesian pressure in about 1,415 observation wells of the Geological Survey and cooperating agencies in Arkansas, Louisiana, Oklahoma, and Texas. Of these wells, 45 are equipped with automatic water-stage recorders. For some wells not previously reported complete records of water level are given. For wells whose previous records have been published this volume gives only the current records. If a complete description of a well has been published in a previous report, only the well number and a brief identifying description are given in this report. The numbers in parentheses immediately following a well number are those of the water-supply papers in which earlier records of that well are given and the pages on which they appear. An asterisk indicates that a description of the well is given in the paper whose number is so marked. This report includes about 5,900 individual determinations of water level and artesian pressure.

## Land-surface datum

Before 1943, in Geological Survey reports, the water levels and artesian pressures for some wells were given in feet above or below the measuring points and for other wells in feet above or below sea level or above or below various assumed datum planes. It had been considered inadvisable to adopt a standard procedure in expressing water levels and artesian heads until after a period of trial with datum planes of different kinds. In



1943, however, it was decided that uniform practice should be adopted. Accordingly, precise datum planes were established approximating the land surface at each well. The water levels and artesian heads for all wells listed in this report are given in reference to land-surface datum planes.

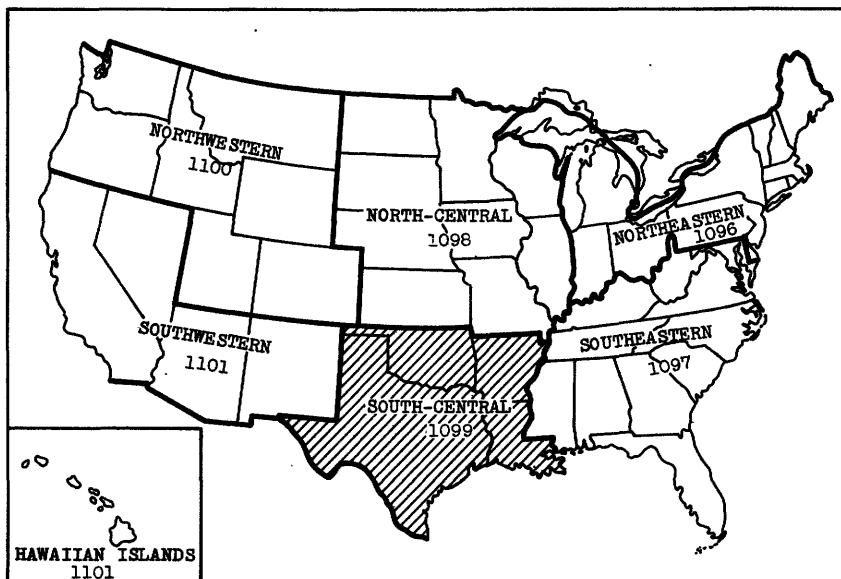


Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1947. The shaded section represents the part of the country covered by this volume.

If the water levels or artesian heads are referred to land-surface datum for the first time, a conversion factor is given in the descriptive matter preceding them in order to facilitate comparison of the older and newer records. Wherever the conversion factor is given in earlier reports it is not repeated in this report. New data as to the positions of the measuring point and of the bench marks, in feet above or below land-surface datum planes, will be published in succeeding annual reports.

#### Network of key observation wells

During 1942 the Geological Survey established a network of key observation wells in order to make available current information on general ground-water conditions over the country. These wells were selected because the fluctuations of water level in them are believed to be typical and they

represent the general fluctuations that occur in the parts of the country in which the wells are situated. At the end of 1947 the network included about 160 wells in 45 States. About 40 of the wells were established expressly for the network in 1942 and about 20 were established in 1943; the other 100 were selected from wells measured regularly in connection with cooperative ground-water investigations. The coverage of the country is still far from adequate, and it is expected that some wells not now included will be added to the network from time to time.

Changes in ground-water level in 1947 in the south-central part of the  
United States

Precipitation in all four of the States in the south-central section of the country was below normal during 1947. The fluctuations of both water level and artesian pressure in wells depend, however, on many factors besides the amount of precipitation. In certain of the observation wells there are fluctuations caused by differences in the rate of pumping or artesian flow from other wells in the area, but most of the observation wells are not noticeably affected by pumping or artesian flow. A summary of the changes in ground-water level is given in the chapter for each State.

Acknowledgments

Acknowledgments for effective services in the preparation of this water-supply paper are due Mrs. Frances Dowell, Mrs. Nauvoo Ragland, and Misses Beulah Brunson, and Dorothy M. Ireland. Miss Ireland had general charge of the assembling of the several reports and did the editing; Mr. Hart prepared the illustrations; and Mrs. Dowell, Mrs. Ragland, and Miss Brunson did the offset typing.

## ARKANSAS

### GRAND PRAIRIE REGION

By J. H. Criner

#### PROGRAM OF WORK

Measurements of depth to water levels in wells of the Grand Prairie region were made in April 1947 in cooperation with the State Agricultural Experiment Station and the Federal Land Bank of St. Louis. The measurements were made by Professor Kyle Engler and F. A. Hewitt. These measurements have been made annually for the past 21 years, the first measurement having been made in September 1927 in cooperation with the Arkansas Geological Survey.

The Grand Prairie region of Arkansas comprises Arkansas County, large parts of Lonoke and Prairie Counties, and small parts of Jefferson and Monroe Counties. Rice is extensively cultivated in the region. A large proportion of the water used for rice irrigation is taken from wells, most of which tap water-bearing material of Quaternary age. A discussion of the conditions affecting the ground-water resources of the region, and an account of the early pumping operations and their effect on the general ground-water level are given in an earlier report.<sup>1/</sup> Later reports bring these records up to date and include the records of other wells as measurements in them are begun. In June 1945 a comprehensive report summarizing all of the work done in the cooperative investigations was published by the University of Arkansas.<sup>2/</sup>

#### FLUCTUATIONS OF WATER LEVEL

The fluctuations of water level in the wells in the region are caused, in part, by differences in natural recharge and discharge from the aquifer. The water levels in nearly all wells in the region fluctuate as a result

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<sup>1/</sup> Water levels and artesian pressure in observation wells in the United States in 1935, with statements concerning previous work and results: U. S. Geol. Survey Water-Supply Paper 777, pp. 5-8, 1936.

<sup>2/</sup> Engler, Kyle, Thompson, D. G., and Kazmann, R. G., Ground-water supplies for rice irrigation in the Grand Prairie region, Ark.: University of Arkansas, College of Agriculture Bull. 457, 56 pp., June 1945.

of changes in atmospheric pressure; this may be as much as 0.8 foot in 24 hours and 1 foot in a few days. Corrections for changes in atmospheric pressure can be made and are necessary to make accurate comparisons of water levels at different times. Measurements given in this paper have not been corrected for atmospheric changes. In the extreme southeastern portion of the region some fluctuation of water levels is probably caused by differences in the stage of the White River.

Changes in water levels are also caused by pumping. The water levels tend to stand highest in the spring just before the irrigation pumping commences, then decline during the period of pumping, the rate of decline being fairly large at first, then decreasing. Local differences in water level are caused by differences in pumping. After pumping ceases the water levels rise, fairly rapidly at first, then at a decreasing rate and, by spring, tend to stand near the levels of the previous spring. The trend of water level or artesian head from year to year may be determined by annual measurements made in the spring as late as possible before pumping for irrigation is begun. In some years measurements of water level were made in the fall but then the general trend of water levels may be masked by local irregularities due to differences in pumping. Water levels were not measured in the fall of 1947.

Well 280, in the Grand Prairie region, is equipped with an automatic water-stage recorder, and measurements of the water level are given at the times the recorder charts were changed, which was generally once a week. A continuous record of water-level fluctuations in this well has been obtained since August 1928.

#### Ashley County

A program of annual spring water-level measurements in rice-land irrigation wells in Ashley County was started in 1946. The program was continued in 1947 in cooperation with the city of Crossett and the University of Arkansas, Bureau of Research. The rice land irrigated with ground water increased from 200 acres in 1942, using water from 1 well, to 1,800 acres in 1946, using water from 9 wells, and then to 5,400 acres in 1947, using water from 20 wells.

There are three areas in Ashley County devoted chiefly to growing rice. The largest area is in Pine Prairie, about 8 miles northeast of Hamburg. Another area is about 4.5 miles southwest of Hamburg, and the other extends northwest from Hamburg for about 5 miles.

## WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Arkansas County

280 (\*777, pp. 13-14; 817, pp. 4-5; 840, p. 14; 845, pp. 8-9; 886, p. 11; 909, p. 10; 939, pp. 6-7; 947, p. 9; \*989, p. 7; \*1019, p. 7; 1026, pp. 6-7; 1074, p. 7). Fred Hederich. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 3 S., R. 5 W., about 0.5 mile south and 1 mile east of Stuttgart. Equipped with automatic water-stage recorder. Comparison of the record for 1947 with the records for previous years may be made by reference to a graph showing the lowest water level reached each day from August 1928, when the recorder was installed, to the end of 1937 (see Water-Supply Paper 840, p. 9).

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	95.56	Apr. 5	94.49	June 28	98.69	Sept. 20	96.30
11	94.76	12	95.01	July 5	97.15	27	97.72
18	95.11	20	94.70	13	98.67	Oct. 5	97.28
25	94.78	28	94.82	19	98.42	12	97.19
Feb. 1	95.57	May 4	94.52	26	98.85	20	97.05
16	94.85	11	95.02	Aug. 3	99.15	Nov. 1	96.67
22	94.92	21	94.90	9	99.09	9	97.02
Mar. 1	94.83	24	94.91	16	100.27	15	96.71
8	95.03	31	96.58	23	100.03	22	96.95
16	95.00	June 8	97.55	30	100.25	Dec. 13	96.72
23	94.42	15	98.28	Sept. 6	98.20	20	96.71
29	94.98	21	98.33	13	97.98		

The following table gives the highest and lowest water levels reached during the period 1938-47 in feet below land-surface datum. The high stages are due, in part, to the extremely low atmospheric pressure. Water levels given in this table have not been corrected for barometric fluctuations.

Year	Date	Lowest level	Date	Highest level
1938	Sept. 4	93.90	Feb. 18	87.71
1939	Aug. 21	94.86	Jan. 29	88.00
1940	Aug. 6	94.69	Apr. 17	89.12
1941	Aug. 17	94.90	Apr. 21	89.58
1942	Aug. 3	94.72	Apr. 9	90.10
1943	Aug. 27	96.92	May 24	90.84
1944	Aug. 20	97.62	Apr. 11	91.61
1945	Aug. 27	97.39	Mar. 1	92.20
1946	Aug. 31	98.90	Mar. 15	93.00
1947	Aug. 18	100.42	Jan. 29	94.20

205 (\*777, p. 12; 817, p. 5; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 9; \*989, p. 8; 1019, p. 7; 1026, p. 7; 1074, p. 7). D. F. Fowler. Near NW. corner sec. 4, T. 2 S., R. 5 W. No measurements made in 1947.

210 (#845, p. 10; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 9; #989, p. 8; 1019, p. 8; 1026, p. 7; 1074, p. 8). W. H. Kornbaum.  
SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 2 S., R. 5 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 99.06.

245 (#909, p. 11; 939, p. 7; 947, p. 9; #989, p. 8; 1019, p. 8; 1026, p. 7; 1074, p. 8). J. W. Darrough. Near NW. corner sec. 22, T. 2 S., R. 4 W. No measurements made in 1947.

261 (#777, p. 13; 817, p. 5; 886, p. 11; 939, p. 7; 947, p. 9; #989, p. 8; 1019, p. 8; 1026, p. 7; 1074, p. 8). W. M. Trice. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 2 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 65.59.

274 (#909, p. 12; 939, p. 7; 947, p. 9; #989, p. 8; 1019, p. 8; 1026, p. 7; 1074, p. 8). W. W. Crum. NW $\frac{1}{4}$  sec. 29, T. 3 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 6, 30.35.

293 (#845, p. 10; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 9; #989, p. 9; 1019, p. 8; 1026, p. 7; 1074, p. 8). J. C. Gleason.  
SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 3 S., R. 5 W., a short distance south of railroad. No measurements made in 1947.

305 (#909, p. 12; 939, p. 7; 947, p. 9; 989, p. 9; 1019, p. 8; 1026, p. 7; 1074, p. 8). Pearl Clow. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 3 S., R. 5 W. No measurements made in 1947.

311 (#840, p. 18; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 9; #989, p. 9; 1019, p. 8; 1026, p. 7; 1074, p. 8). W. J. Schrock. NW $\frac{1}{4}$  sec. 5, T. 3 S., R. 4 W. No measurements made in 1947.

318 (#777, p. 15; 817, p. 5; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 9; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). University of Arkansas. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, T. 3 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 7, 89.10.

344 (#840, p. 18; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). F. T. Hill.  
NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 3 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 8, -96.12.

353 (#840, p. 19; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). R. L. Mitchell. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 3 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 8, 80.96.

355 (#909, p. 13; 939, p. 7; 947, p. 10; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). W. A. Fehrenbaker. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 3 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 11, 75.89.

362 (#909, p. 13; 939, p. 7; 947, p. 10; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). H. Bothe Estate. NW $\frac{1}{4}$  sec. 22, T. 3 S., R. 2 W. No measurements made in 1947.

364 (#909, p. 13; 939, p. 7; 947, p. 10; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). J. T. McWilliams. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 35, T. 3 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 19, 55.28.

374A (#886, p. 12; 947, p. 10; 989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). Charles W. McDougall. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 4 S., R. 5 W. Water level, in feet below land-surface datum, 1947: Apr. 9, 43.60.

378 (#886, p. 13; 939, p. 7; 947, p. 10; #989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). Yeske. Near SE. corner sec. 13, T. 4 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 9, 90.57.

392A (\*777, p. 15; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). Fred E. Hillman. SW $\frac{1}{4}$  sec. 1, T. 4 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 8, 84.89.

412 (\*840, p. 19; 845, p. 12; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; \*989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 8). Fred Dupslaff. NW $\frac{1}{4}$  sec. 5, T. 4 S., R. 2 W. No measurements made in 1947.

414 (\*840, p. 19; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 9; 1019, p. 8; 1026, p. 8; 1074, p. 9). J. T. McWilliams. Near NE. corner sec. 11, T. 4 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 19, 60.44.

415 (\*909, p. 14; 939, p. 7; 947, p. 10; \*989, p. 9; 1019, p. 9; 1026, p. 8; 1074, p. 9). J. W. Watkins. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 19, T. 4 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 19, 69.45.

437 (\*886, p. 13; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 9; 1019, p. 9; 1026, p. 8; 1074, p. 9). B. L. Williams. Near SW. corner sec. 7, T. 5 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 20, 76.67.

440 (\*845, p. 11; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; \*989, p. 9; 1019, p. 9; 1026, p. 8; 1074, p. 9). American Southern Trust Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 5 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 10, 89.31.

456 (\*777, p. 15; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 8; 1074, p. 9). E. W. McCuskey. Near NW. corner NE $\frac{1}{4}$  sec. 16, T. 5 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 10, 87.00.

457A (\*909, p. 15; \*939, p. 8; 947, p. 9; 1019, p. 9; 1026, p. 8; 1074, p. 9). Missouri State Insurance Co. (?) SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 5 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 10, 74.92.

461 (\*886, p. 13; 909, p. 11; 939, p. 7; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). Dewitt Bank & Trust Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 34, T. 5 S., R. 2 W. No measurements made in 1947.

475 (\*840, p. 20; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). Ben Lowe. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 21, T. 6 S., R. 3 W. No measurements made in 1947.

491 (\*909, p. 16; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). Cunningham & Felt. Spanish grant 2358, equivalent to sec. 24, T. 7 S., R. 4 W. No measurements made in 1947.

492 (\*909, p. 16; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). A. M. Lowe. SE. corner sec. 3, T. 7 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 10, 45.21.

499 (\*777, p. 16; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). Quandt & Lowe. Spanish grant 2300, equivalent to sec. 27, or 34, T. 7 S., R. 3 W. Water level, in feet below land-surface datum, 1947: Apr. 10, 38.21.

501 (\*777, p. 16; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). W. J. Bohnert. SW $\frac{1}{4}$ (?) sec. 32, T. 7 S., R. 3 W. No measurements made in 1947.

506 (\*840, p. 22; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; 989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). J. M. Satchfield. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, T. 7 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 8, 41.32.

507 (\*777, p. 17; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 11; 909, p. 11; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). J. M. Satchfield. Near SW. corner sec. 16, T. 7 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 8, 39.53.

514 (\*909, p. 17; 939, p. 7; 947, p. 10; 989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). J. M. Satchfield. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 33, T. 7 S., R. 2 W. Water level, in feet below land-surface datum, 1947: Apr. 8, 36.76.

B87 (\*909, p. 17; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 9). W. E. Boyd. Center north side sec. 31, T. 2 S., R. 5 W. No measurements made in 1947.

B91 (\*909, p. 17; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 10). Enders. SE $\frac{1}{4}$  sec. 10, T. 2 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 86.54.

B110 (\*909, p. 17; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 10). N $\frac{1}{2}$  sec. 20, T. 3 S., R. 5 W. No measurements made in 1947.

B133 (\*909, p. 17; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 9; 1026, p. 9; 1074, p. 10). Snow Wilson (Goetz). SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 4 S., R. 5 W. Water level, in feet below land-surface datum, 1947: Apr. 7, 71.64.

B171 (\*909, p. 17; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 10; 1026, p. 9; 1074, p. 10). South side sec. 13, T. 5 S., R. 3 W. No measurements made in 1947.

B189 (\*909, p. 18; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 10; 1026, p. 9; 1074, p. 10). W. J. Bohnert. NW $\frac{1}{4}$  sec. 32, T. 7 S., R. 3 W., on State Highway 1. Water level, in feet below land-surface datum, 1947: Apr. 10, 28.50.

B192 (\*909, p. 18; 939, p. 7; 947, p. 10; \*989, p. 10; 1019, p. 10; 1026, p. 9; 1074, p. 10). Sec. 5, T. 8 S., R. 3 W. No measurements made in 1947.

#### Ashley County

3 (\*1074, p. 10). F. Harbinson. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 16, T. 16 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 16, 70.57.

4. F. Harbinson. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 15, T. 16 S., R. 6 W. Used drilled irrigation well, diameter 18 inches, depth 138 feet. Equipped with turbine pump. Measuring point, top of casing, 0.8 foot above land-surface datum. Water level, in feet below land-surface datum, 1947: Apr. 16, 69.02.

5 (\*1074, p. 10). F. Harbinson. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 16 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 16, 68.92.

11 (\*1074, p. 10). Herbert Davis. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 33, T. 16 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 16, 59.64.

16 (\*1074, p. 10). Fred Blank. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 7, T. 17 S., R. 7 W. Water level, in feet below land-surface datum, 1947: Apr. 16, 69.02.

17 (\*1074, p. 10). Fred Blank. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 10, T. 17 S., R. 7 W. Water level, in feet below land-surface datum, 1947: Apr. 16, 68.51.



24 (\*1074, p. 10). Miller & Harris. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 17 S.,  
R. 8 W. Water level, in feet below land-surface datum, 1947: Apr. 16,  
71.44.

33 (\*1074, p. 10). Miller & Harris. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 18 S.,  
R. 8 W. Water level, in feet below land-surface datum, 1947: Apr. 16,  
71.08.

34 (\*1074, p. 10). Miller & Harris. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 1, T. 18 S.,  
R. 8 W. No measurements made in 1947.

#### Jefferson County

270 (\*840, p. 17; 845, p. 9; 886, p. 14; 909, p. 18; 939, p. 9; 947,  
p. 10; 989, p. 11; 1019, p. 10; 1026, p. 9; 1074, p. 11). V. D.  
Harlan. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 24, T. 3 S., R. 7 W. No measurements made in 1947.

#### Lonoke County

1 (\*840, p. 15; 845, p. 9; 886, p. 14; 909, p. 18; 939, p. 9; 947,  
p. 10; 989, p. 11; 1019, p. 10; 1026, p. 10; 1074, p. 11). NW. corner  
sec. 11, T. 2 N., R. 9 W. No measurements made in 1947.

5 (\*909, p. 18; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10; 1026,  
p. 10; 1074, p. 11). Carl Lilly. SE. corner SW $\frac{1}{4}$  sec. 31, T. 3 N.,  
R. 7 W. Water level, in feet below land-surface datum, 1947: May 7,  
66.20.

8 (\*840, p. 16; 845, p. 9; 886, p. 14; 909, p. 18; 939, p. 9; 947,  
p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10; 1074, p. 11). Owner  
unknown. Near NW. corner sec. 4, T. 2 N., R. 8 W. Water level, in feet  
below land-surface datum, 1947: May 7, 56.29.

10 (\*777, p. 8; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 14; 909,  
p. 18; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10;  
1074, p. 11). G. G. Fitch. Near NW. corner NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 2 N.,  
R. 8 W. No measurements made in 1947.

19 (\*909, p. 19; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10;  
1026, p. 10; 1074, p. 11). Charles G. Miller. SW $\frac{1}{4}$  sec. 26, T. 2 N.,  
R. 8 W. Water level, in feet below land-surface datum, 1947: May 7, 58.35.

27 (\*909, p. 19; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10;  
1026, p. 10; 1074, p. 11). NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 2 N., R. 7 W. Water  
level, in feet below land-surface datum, 1947: May 6, 69.63.

28 (\*840, p. 16; 845, p. 9; 886, p. 14; 909, p. 18; 939, p. 9; 947,  
p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10; 1074, p. 11). G. Koch.  
SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 2 N., R. 7 W. Water level, in feet below land-surface  
datum, 1947: May 7, 74.82.

37 (\*909, p. 19; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10;  
1026, p. 10; 1074, p. 11). SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 2 N., R. 7 W. Water  
level, in feet below land-surface datum, 1947: May 7, 62.47.

61 (\*886, p. 14; 909, p. 18; 939, p. 9; 947, p. 10; \*989, p. 11;  
1019, p. 10; 1026, p. 10; 1074, p. 11). Lonoke County Bank, Bishop  
Farm. 15 miles north of SW. corner SW $\frac{1}{4}$  sec. 4, T. 1 N., R. 8 W. Water  
level, in feet below land-surface datum, 1947: May 7, 53.37.

126 (\*777, p. 10; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 14; 909,  
p. 18; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10;  
1074, p. 11). Vennum & Patterson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 1 S., R. 7 W.  
Water level, in feet below land-surface datum, 1947: May 7, 42.80.

127 (\*840, p. 17; 845, p. 9; 886, p. 14; 909, p. 18; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10; 1074, p. 11). Vennum & Patterson. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 1 S., R. 7 W. Water level, in feet below land-surface datum, 1947: May 7, 38.80.

#### Monroe County

178 (\*909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 11; 1019, p. 10; 1026, p. 10; 1074, p. 11). Kreimeir Estate. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 1 S., R. 4 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 75.64.

193 (\*886, p. 15; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 10; 1074, p. 11). Hugh H. Burns. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 19, T. 1 S., R. 3 W. No measurements made in 1947.

#### Prairie County

45 (\*909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 10; 1074, p. 12). Frank Dvorak. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 2 N., R. 6 W. No measurements made in 1947.

55 (\*777, p. 9; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). George Jensen (?). Near SW. corner sec. 13, T. 2 N., R. 5 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 64.99.

88 (\*886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). Herman Hardke. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 8, T. 1 N., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 22, 66.06.

97 (\*909, p. 21; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). J. A. Papan. SW. corner sec. 20, T. 1 N., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 22, 65.27.

100 (\*840, p. 16; 845, p. 9; 886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). George Ballo. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 1 N., R. 6 W. No measurements made in 1947.

110 (\*909, p. 21; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). F. W. Sickel. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 1 N., R. 5 W. Water level, in feet below land-surface datum, 1947: Apr. 21, 85.56.

122 (\*886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). George Randall. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 1 N., R. 4 W. No measurements made in 1947.

135 (\*777, p. 11; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). C. D. Hohe. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 1 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Apr. 22, 49.00.

144 (\*777, p. 11; 817, p. 5; 840, p. 15; 845, p. 9; 886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). Powell. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 8, T. 1 S., R. 5 W. No measurements made in 1947.

201 (\*845, p. 10; 886, p. 16; 909, p. 20; 939, p. 9; 947, p. 10; \*989, p. 12; 1019, p. 11; 1026, p. 11; 1074, p. 12). N $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 2 S., R. 6 W., a short distance south of old railroad grade. Water level, in feet below land-surface datum, 1947: Apr. 22, 51.10.

## LOUISIANA

By A. N. Turcan, Jr., I. W. Thrasher, and A. B. Jones

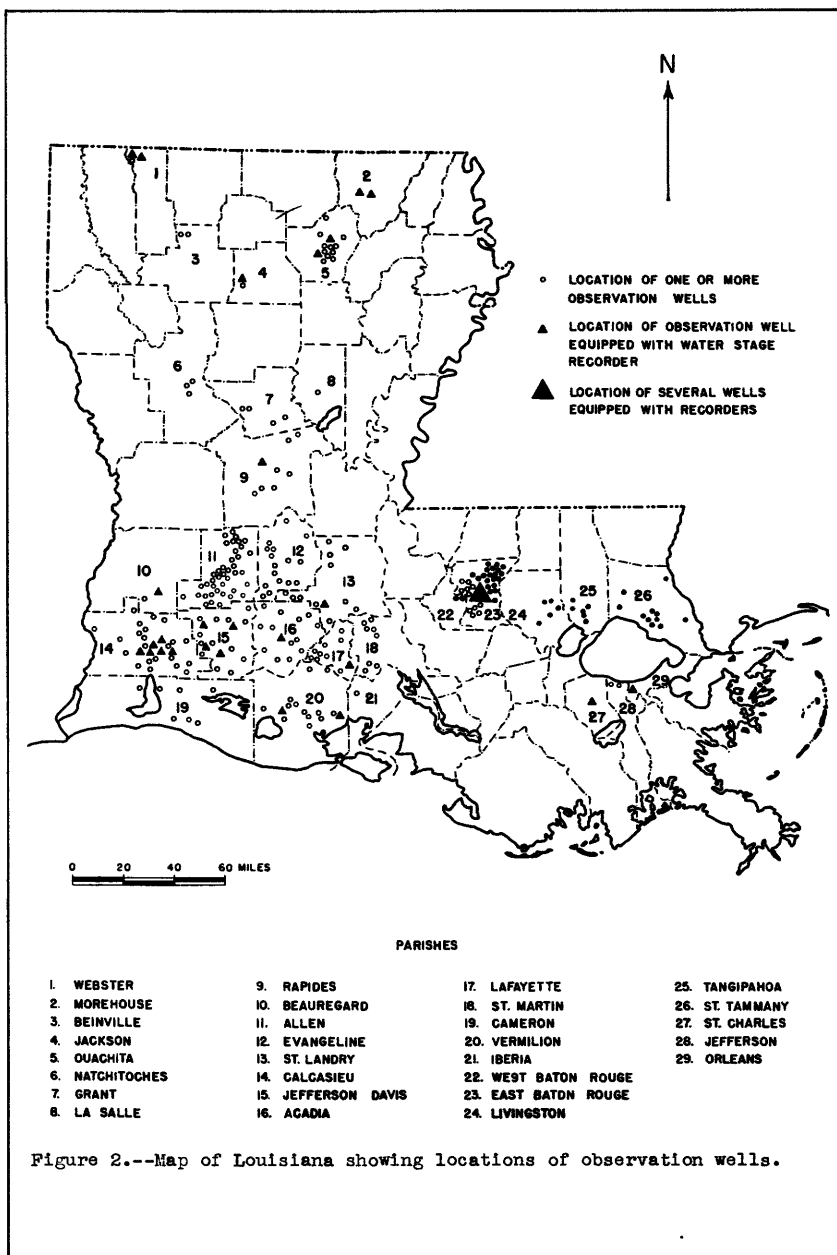
### PROGRAM OF WORK

A State-wide program of ground-water investigations in Louisiana was begun in May 1938 in cooperation with the Louisiana Department of Conservation. An expansion of the program was made possible in 1943 when the Louisiana Department of Public Works also entered into cooperation with the Geological Survey. The observation of water levels in selected wells is an important part of this program.

Observations of water level were made in 280 key wells in 29 parishes in 1947. Automatic water-stage recorders were in operation on 37 of these wells for at least a part of the year, enabling more reliable interpretation of measured water-level fluctuations. Of the recorders operated on key wells, 22 were of the weekly type and 15 of the continuous type. A total of 1,856 individual measurements was made in those wells not equipped with recorders.

Measurements were made at quarterly intervals in 123 wells, at monthly intervals in 26 wells, at weekly intervals in 8 wells, and in the remainder at irregular intervals. All measurements were made by members of the technical staff of the Federal Geological Survey with the exception of those for well Sc-6, at Norco, which are obtained through the cooperation of the officials of the Shell Oil Company.

During the early part of the year the investigational program was directed toward the solution of the public water-supply problem at Oakdale. During the summer the focus of investigations shifted to the rice-farming area of southwestern Louisiana. A report on the ground-water conditions in the Monroe area was published in July by the Louisiana Department of Conservation as Geological Bulletin 24.



## FLUCTUATIONS OF WATER LEVEL

Northern Louisiana.--In order to keep an accurate record of the fluctuations of water level in the vicinity of Monroe, automatic water-stage recorders were placed in operation on 2 unused wells and periodic measurements of water level were made on 12 other wells. The record indicates little change in the water level from previous years. Investigations of water-supply problems and observations of water levels were continued in the Bastrop area, in Morehouse Parish, and in the Springhill area, in Webster Parish. Indications are that the ground-water conditions are not improving and the problem continues to be very critical in both areas. The heavy withdrawals of water from the deeper sands (890 feet) at Bastrop caused a steady decline of water level in a period of 1 year from 147 feet to 154 feet below land surface in well Mo-9.

Observations of water level in an unused well of the Southern Advance Bag and Paper Company, at Hodge, in Jackson Parish, where more than 5 million gallons of water are pumped from wells each day, were made through use of a continuous automatic water-stage recorder. Because of the heavy pumping of a nearby well, water level has not recovered to the level of previous years, as shown by the hydrograph, figure 4.

Central Louisiana.--During 1947 a total of 92 measurements of water level was made in Grant, LaSalle, Natchitoches, and Rapides Parishes. Water levels in wells in the Alexandria area, in Rapides Parish, which tap the "1,100-foot " sand, the principal aquifer, showed a steady decline in the summer months and later in the year a marked recovery, as indicated by the hydrograph, figure 3. As a result of the deactivation of nearby army camps, which resulted in decreased municipal water demands, the water level in this aquifer has not declined to the low stage reached in the war years. Records for an observation well at Colfax, in Grant Parish, showed that the piezometric surface of water in a Miocene sand, which is tapped by a municipal well, has recovered gradually during the year from 76 feet to 71 feet below land surface.

Observations of water level in a well in the Natchitoches area, which taps a Wilcox sand supplying about one-third of the public water supply of that city, indicate that the artesian pressure head has dropped from a low of 21.2 feet in 1946 to a low of 20.6 feet in 1947.

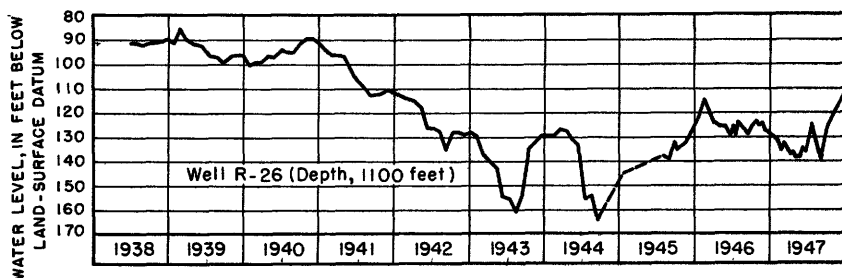


Figure 3.--Graph showing fluctuations of water level in well R-26, in Alexandria, La., 1938-47.

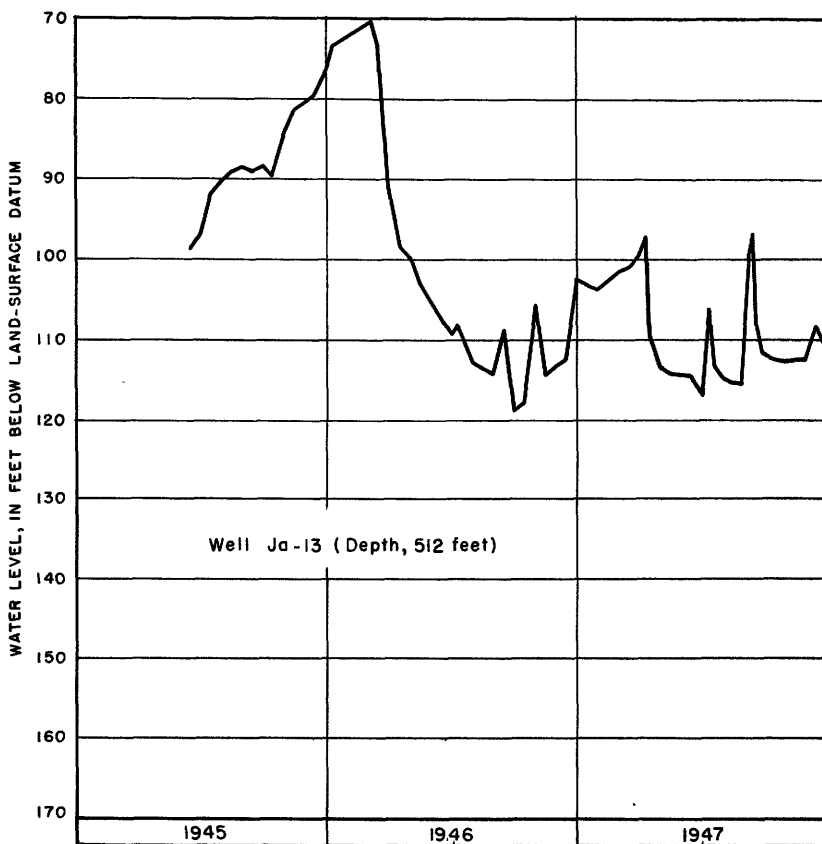


Figure 4.--Graph showing fluctuations of water level in well Ja-13, at Hodge, in Jackson Parish, La.

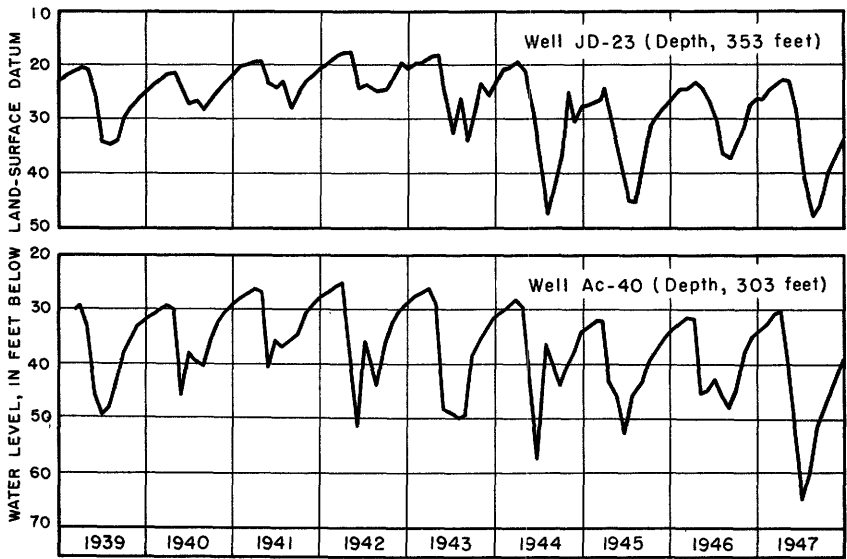


Figure 5.--Graphs showing fluctuations of water levels in two wells in the rice-farming area of southwestern Louisiana.

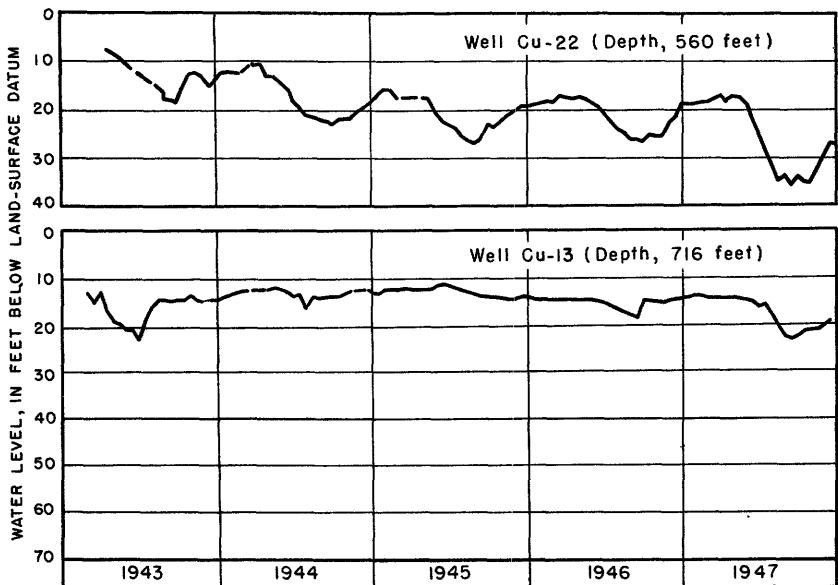


Figure 6.--Graphs showing fluctuations of water levels in two wells in the Lake Charles industrial area, Calcasieu Parish, La.

Southwestern Louisiana.--During 1947, 1,407 measurements were made in 169 wells in 12 parishes in southwestern Louisiana. The observation-well program in this area continued on a broad scale to enable preparation of piezometric maps of water in the Pleistocene sands and gravels tapped by wells which, in 1947, pumped about 480,000 acre-feet of water. Wells irrigate about 44 percent of the rice acreage in this area. Water levels in key wells showed a sharp decline during the pumping season and reached the lowest point on record, as indicated by the hydrograph, figure 5.

Water levels in wells which tap the "500-foot" sand in the Lake Charles industrial area showed a marked decline in the summer months and dropped to the lowest level on record. Declines were the result of heavy withdrawal from wells at the Cities Service Company refinery and Butadene plant, the Firestone Tire and Rubber Company plant, the Continental Oil Company refinery, the Mathieson Alkali Plant, and the Southern Alkali Company plant, and also from wells in nearby rice-irrigation areas. The water levels in the "700-foot" sand, which is tapped by fewer industrial wells but supplies the entire municipal needs of the city of Lake Charles, showed a sharp decline in the latter part of the summer and failed to recover completely later in the year. In previous years it has recovered fully, as shown on hydrograph, figure 6.

Southeastern Louisiana.--The observation-well program in southeastern Louisiana continued on a limited scale during 1947. A total of 267 measurements was made in 66 wells in 8 parishes, and automatic water-stage recorders were operated in 10 wells in East Baton Rouge Parish, 1 well in St. Charles Parish and 1 well in Orleans Parish during the year.

Although the water levels in key wells tapping the A-1 ("400-foot") and A-2 ("600-foot") sands in the Baton Rouge area did not recover to the levels reached in the spring of 1946, the decline of water levels in the summer and fall months was not as pronounced. This is shown on the composite of hydrographs, figure 7.

Officials of the industrial plants at Baton Rouge indicated in 1945 that attempts might be made to tap the sands and gravels of Recent age which underlie the flood plain of the Mississippi River. Records for existing wells both east and west of the river at Baton Rouge show the aquifer to be highly permeable, and the water temperature, 67 degrees



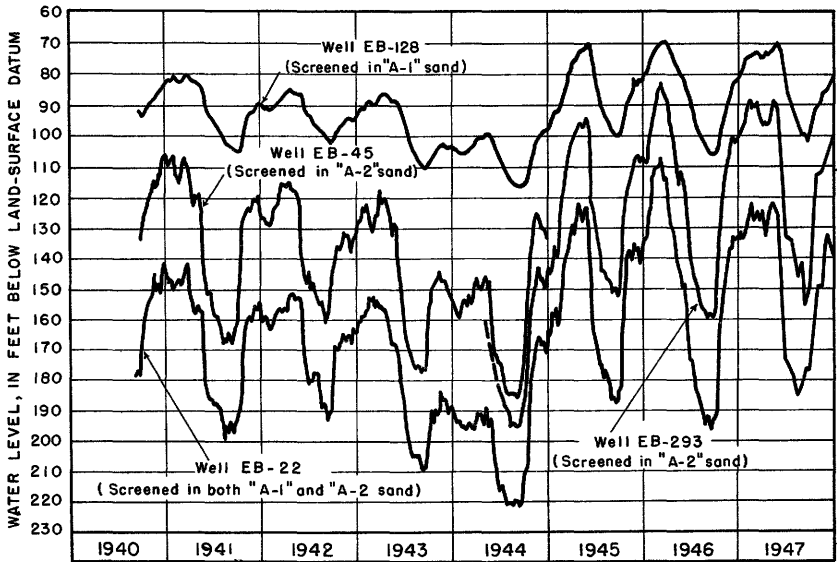


Figure 7.--Graphs showing the influence of pumpage on water levels in four wells which tap the "shallow" aquifers at Baton Rouge, La.

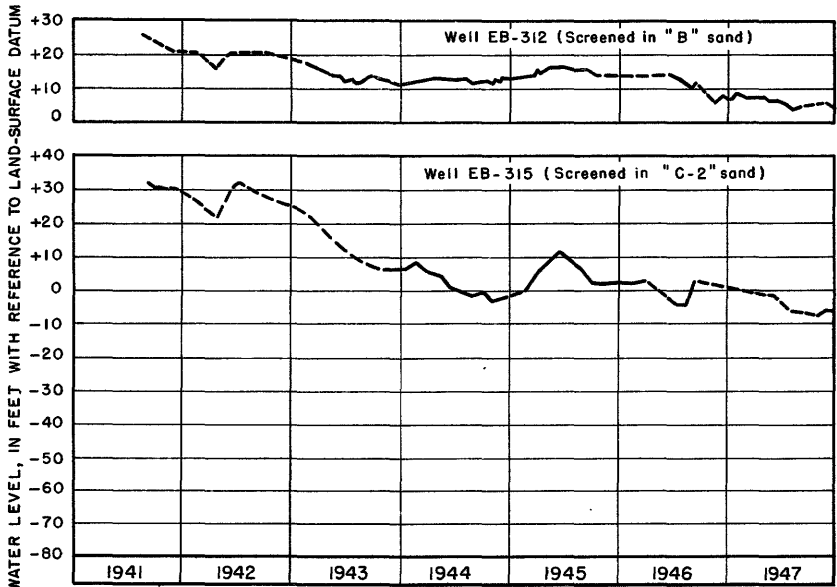


Figure 8.--Graphs showing fluctuations of water levels in two wells which tap the "deep" aquifers at Baton Rouge, La.

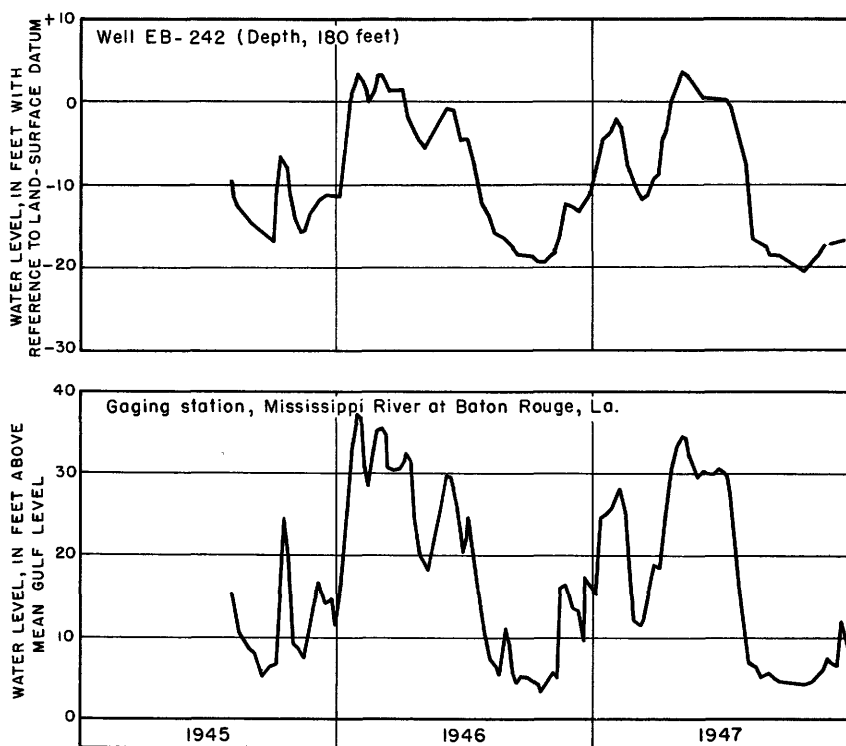


Figure 9.--Graphs showing the relationships between fluctuations of water level in well EB-242, near Baton Rouge, La., and the gage height of the Mississippi River at Baton Rouge, La.

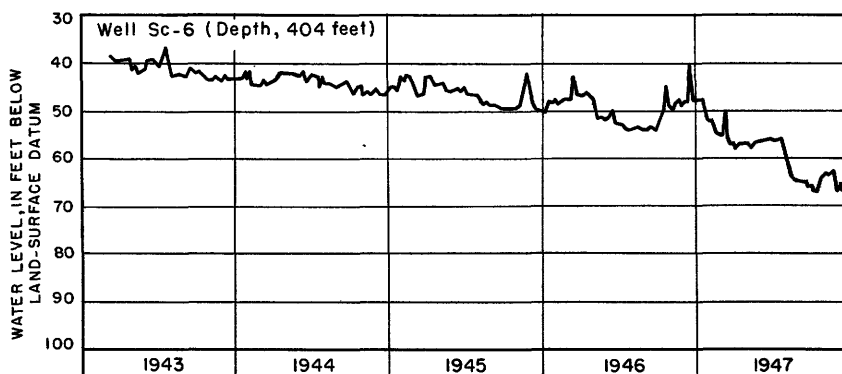


Figure 10.--Graph showing fluctuations of water level in well Sc-6, at Norco, in Lake Charles Parish, La.

Fahrenheit, makes the water ideal for cooling purposes where quality is not too important. Observations of water level were begun in one well, EB-242, to determine the fluctuation which occurs in wells which tap this aquifer. The hydrographs, figure 9, show that the fluctuations in wells bear a close relationship to the stage of the Mississippi River.

An average daily withdrawal of about 16 million gallons of water from wells at the Shell Oil refinery at Norco, in St. Charles Parish, has resulted in an accelerated decline in water levels. Records for well Sc-6 indicate an average decline of about  $2\frac{1}{2}$  feet a year from 1943 through 1946, and a decline of about 12 feet in 1947. The hydrograph, figure 10, illustrates this condition.

Artesian pressures of key flowing wells in southeastern Louisiana showed small declines in 1947, probably due to a prolonged dry period during the spring and summer, which resulted in greater withdrawals for irrigation of the truck crops grown in the area.

#### WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

##### Acadia Parish

Ac-7 (\*886, p. 233; 909, p. 28; 947, p. 20; \*989, p. 22; 1019, p. 20; 1026, p. 20; 1074, p. 19). Lozen Leger. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 10 S., R. 2 E.

##### Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 7	30.57	Mar. 11	27.71	Sept. 9	43.48
Feb. 4	29.67	Apr. 15	48.88	Nov. 4	33.98

Ac-22 (\*886, p. 233; 909, p. 28; 939, p. 16; 947, p. 20; \*989, p. 22; 1019, p. 22; 1026, p. 21; 1074, p. 20). Harry Frey. S $\frac{1}{2}$  sec. 19, T. 7 S., R. 1 E.

##### Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	47.52	Mar. 11	44.70	Sept. 11	68.26	Nov. 6	60.01
Feb. 5	46.18	May 5	63.50	Oct. 9	64.10		

Ac-34 (\*886, p. 233; 909, p. 29; 939, p. 16; 947, p. 20; \*989, p. 22; 1019, p. 22; 1026, p. 21; 1074, p. 20). F. N. Hayes. SW $\frac{1}{4}$  sec. 10, T. 7 S., R. 2 W. Water levels, in feet below land-surface datum, 1947: Jan. 9, 44.09; Nov. 15, 48.28.

Ac-35 (\*886, p. 233; 909, p. 29; 939, p. 16; 947, p. 20; \*989, p. 23; 1019, p. 23; 1026, p. 21; 1074, p. 20). Onezime Doucet. NW $\frac{1}{4}$  sec. 22, T. 8 S., R. 2 W.

##### Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 9	41.36	Mar. 13	38.51	Oct. 9	54.94
Feb. 6	40.08	May 21	43.33	Nov. 5	51.89

Ac-40 (\*886, p. 233; 909, p. 29; 939, p. 16; 947, p. 20; \*989, p. 23; 1019, p. 22; 1026, p. 21; 1074, p. 20). H. A. Kerr. NE $\frac{1}{4}$  sec. 1, T. 9 S., R. 1 W. Automatic water-stage recorder installed Feb. 5, 1947. Measuring point, floor of recorder house, at land-surface datum.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	31.8	30.5	.....	.....	65.2	53.8	48.2	44.3	.....
2	.....	.....	31.8	30.2	.....	.....	65.2	.....	48.4	44.2	.....
3	.....	.....	31.7	30.5	.....	.....	64.2	.....	48.0	44.1	.....
4	.....	.....	31.6	30.4	.....	.....	63.8	.....	47.8	43.0	.....
5	.....	32.4	31.7	30.4	.....	.....	64.1	.....	47.6	43.8	.....
6	.....	32.4	31.6	30.4	.....	.....	64.0	.....	47.4	43.8	.....
7	.....	32.4	31.6	30.4	.....	.....	64.6	.....	47.3	43.6	.....
8	.....	32.4	31.6	30.3	.....	.....	65.2	.....	47.2	43.6	.....
9	a33.60	32.4	31.5	30.2	.....	.....	64.4	.....	47.1	43.5	.....
10	.....	32.4	31.4	30.2	.....	.....	63.6	54.4	47.0	43.3	40.4
11	.....	32.3	31.4	30.2	.....	.....	62.7	53.3	46.8	.....	40.3
12	.....	32.3	31.3	30.2	.....	.....	61.9	53.5	46.7	.....	40.3
13	.....	32.3	31.3	.....	.....	.....	61.3	52.8	46.6	.....	40.1
14	.....	32.2	30.9	.....	.....	.....	60.8	52.5	46.5	.....	40.1
15	.....	32.2	30.8	.....	.....	.....	60.4	52.1	46.4	.....	39.8
16	.....	32.2	30.8	.....	.....	.....	59.9	51.8	46.4	.....	39.9
17	.....	32.1	30.8	.....	.....	64.6	59.3	51.5	46.2	.....	39.9
18	.....	32.1	30.9	.....	.....	65.6	58.7	51.2	46.1	.....	39.8
19	.....	32.1	30.8	.....	.....	65.9	58.1	50.8	46.0	.....	39.8
20	.....	32.0	30.8	.....	.....	63.4	57.7	50.4	45.8	.....	39.7
21	.....	31.9	30.8	.....	42.0	63.1	57.3	50.2	45.7	.....	39.7
22	.....	31.9	30.8	.....	42.5	65.5	56.9	50.0	45.6	.....	39.6
23	.....	32.0	30.8	.....	42.0	65.8	56.5	49.8	45.4	.....	39.6
24	.....	31.9	30.7	.....	41.6	66.5	56.1	49.5	45.4	.....	39.5
25	.....	31.9	30.7	.....	.....	66.1	55.8	49.3	45.3	.....	39.5
26	.....	31.9	30.7	.....	.....	66.7	55.4	49.2	45.3	.....	39.4
27	.....	31.9	30.7	.....	.....	64.1	55.6	49.0	45.1	.....	39.4
28	.....	31.9	30.7	.....	.....	65.2	54.7	48.8	45.0	.....	39.3
29	.....	.....	30.7	.....	.....	66.0	54.8	48.6	44.8	.....	39.2
30	.....	.....	30.5	.....	.....	66.2	54.4	48.4	44.6	.....	39.1
31	.....	.....	30.6	.....	.....	66.5	53.9	44.5	44.5	.....	39.0

a Tape measurement at odd hour.

Ac-56 (\*886, p. 234; 909, p. 29; 939, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 23; 1026, p. 22; 1074, p. 21). Henry Bieber. NW $\frac{1}{4}$  sec. 36, T. 7 S., R. 1 E. Water levels, in feet below land-surface datum, 1947: Mar. 12, 47.18; Oct. 9, 64.22; Nov. 5, 58.68.

Ac-103. H. L. Habetz. NE $\frac{1}{4}$  sec. 10, T. 9 S., R. 1 E. Used drilled irrigation well, depth 350 feet. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 2.37 feet. Water level, in feet below land-surface datum, 1947: May 27, 46.60.

Ac-104 (\*886, p. 234; \*1019, p. 25; 1026, p. 22; 1074, p. 21). Hanle Hartwell. SW $\frac{1}{4}$  sec. 2, T. 9 S., R. 1 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 9	37.91	May 21	51.08	Nov. 6	47.22
Feb. 6	26.66	Oct. 10	50.55		

Ac-115 (\*1019, p. 25; 1026, p. 22; 1074, p. 21). C. A. Savoy. South corner of irregular sec. 77, T. 8 S., R. 2 E.

Water level, in feet below land-surface datum, 1947

Jan. 8	49.20	Mar. 12	47.53	Oct. 9	60.38
Feb. 5	48.39	Sept. 10	63.49	Nov. 5	58.76

Ac-147 (\*886, p. 235; 1019, p. 27; 1026, p. 23; 1074, p. 22). Ed Faulk. SW $\frac{1}{4}$  sec. 34, T. 10 S., R. 1 E.

## Ac-147--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	18.42	Mar. 13	16.19	Sept. 11	30.41	Nov. 6	25.46
Feb. 7	17.38	May 21	22.44	Oct. 10	27.29		

Ac-152 (\*886, p. 235; \*1019, p. 27; 1026, p. 23; 1074, p. 22).  
L. W. Hoyt. NW $\frac{1}{4}$  sec. 4, T. 11 S., R. 1 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	17.56	May 21	18.12	Aug. 7	32.50	Oct. 10	27.00
Feb. 7	16.88	July 17	28.74	Sept. 11	29.77	Nov. 6	25.10
Mar. 13	15.18						

Ac-175 (\*886, p. 235; 909, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 28; 1026, p. 24; 1074, p. 23). Leon P. Lapleau. North line sec. 46, T. 10 S., R. 2 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	14.38	Mar. 13	9.81	July 17	11.59	Sept. 11	27.46
Feb. 6	11.67	May 21	9.97	Aug. 7	36.95	Oct. 10	24.42

Ac-179 (\*886, p. 235; 909, p. 30; 939, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 28; 1026, p. 24; 1074, p. 23). Dr. F. N. Hayes. NW $\frac{1}{4}$  sec. 34, T. 8 S., R. 1 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	36.20	Mar. 13	33.89	July 16	61.35	Oct. 9	51.32
Feb. 6	35.31	May 21	44.00	Sept. 10	62.65	Nov. 5	48.18

Ac-188 (\*1019, p. 29; 1026, p. 24; 1074, p. 23). Jules Baronet.  
SE $\frac{1}{4}$  sec. 9, T. 10 S., R. 1 E.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	24.50	Mar. 13	22.10	Aug. 7	46.82	Nov. 6	32.70
Feb. 6	23.38	May 21	30.61	Sept. 11	39.06		

## Allen Parish

Al-7 (\*909, p. 30; 939, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 30; 1026, p. 25; 1074, p. 24). M. Carroll. NW $\frac{1}{4}$  sec. 36, T. 4 S., R. 4 W.  
Water levels, in feet below land-surface datum, 1947: Jan. 6, 46.69;  
Feb. 3, 46.47; Mar. 12, 46.20; May 12, 46.05.

Al-11 (\*1019, p. 30; 1026, p. 25; 1074, p. 24). Onezie Vincent.  
SE $\frac{1}{4}$  sec. 8, T. 5 S., R. 3 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 6	50.10	Mar. 12	49.73	Oct. 9	51.91
Feb. 3	49.75	Sept. 8	53.02	Nov. 3	51.64

Al-15 (\*1019, p. 30; 1026, p. 25; 1074, p. 24). Ben Daigle. SW $\frac{1}{4}$  sec. 27, T. 5 S., R. 3 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	52.37	Mar. 12	53.10	Sept. 8	55.47	Nov. 3	54.87
Feb. 3	53.26	May 15	51.97	Oct. 9	54.95		

Al-16 (\*909, p. 31; 939, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 30; 1026, p. 25; 1074, p. 24). Mr. Lausanne. SE $\frac{1}{4}$  sec. 22, T. 5 S., R. 4 W.

## Water level, in feet below land-surface datum, 1946

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	38.63	Mar. 12	38.22	July 15	39.77	Oct. 10	40.08
Feb. 3	38.44	May 12	38.21	Sept. 8	40.30	Nov. 3	39.97

Al-17 (\*909, p. 31; 939, p. 17; 947, p. 21; \*989, p. 23; 1019, p. 30; 1026, p. 25; 1074, p. 24). Town of Kinder. Near south wall of water works building in Kinder. Water levels, in feet below land-surface datum, 1947: Jan. 6, 33.80; Feb. 7, 32.65; Mar. 28, 32.40.

Al-18 (\*1019, p. 30; 1026, p. 25; 1074, p. 24). Fred Rostrum. NE $\frac{1}{4}$  sec. 6, T. 6 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	29.27	May 12	28.57	Aug. 6	30.70	Oct. 10	30.70
Feb. 3	28.76	July 15	30.20	Sept. 8	30.79	Nov. 3	30.76
Mar. 12	28.72						

Al-20 (\*1019, p. 31; 1026, p. 25; 1074, p. 25). C. I. Kuntz. SW $\frac{1}{4}$  sec. 14, T. 7 S., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	36.90	May 12	34.73	Aug. 4	41.08	Oct. 7	41.32
Feb. 3	35.86	July 18	39.76	Sept. 8	41.57	Nov. 4	41.20
Mar. 12	35.25						

Al-21 (\*1019, p. 31; 1026, p. 25; 1074, p. 25). Frank Odom. NE $\frac{1}{4}$  sec. 28, T. 6 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	37.29	Mar. 12	36.36	Sept. 8	40.01	Nov. 3	39.59
Feb. 3	36.80	May 12	37.01	Oct. 9	39.69		

Al-22 (\*1019, p. 31; 1026, p. 25; 1074, p. 25). Frank Odom. SW $\frac{1}{4}$  sec. 20, T. 6 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	32.34	Feb. 7	31.40	Mar. 12	31.34	Sept. 8	34.72
10	32.10	14	31.57	Apr. 25	30.65	Oct. 9	34.44
24	31.65	24	31.57	May 12	31.97	Nov. 13	34.42
Feb. 1	31.66						

Al-25 (\*1074, p. 25). R. R. McClelland. SE $\frac{1}{4}$  sec. 30, T. 6 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	51.67	Mar. 10	50.76	Sept. 8	55.52	Nov. 3	55.31
Feb. 3	50.83	May 12	49.69	Oct. 9	55.31		

Al-29 (\*909, p. 31; 939, p. 17; 947, p. 21; 989, p. 24; 1019, p. 31; 1026, p. 25; 1074, p. 25). Calcasieu Sulphate Paper Co. In Elizabeth, east of paper mill.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	35.47	Mar. 27	39.49	Sept. 24	35.03	Nov. 11	30.67
24	32.65	Apr. 10	40.32	Oct. 13	33.33	25	29.82
Feb. 27	37.62	July 21	44.09	28	32.61	Dec. 11	29.76
Mar. 13	38.73	Aug. 11	44.49				

Al-33. M. Carroll. NE $\frac{1}{4}$  sec. 35, T. 4 S., R. 4 W. Used drilled irrigation well, diameter 8 inches, depth 297 feet. Equipped with turbine pump. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.74 feet.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	39.21	Apr. 25	38.66	Sept. 24	41.41	Nov. 3	41.00
Mar. 12	38.96	May 3	38.60	Oct. 7	41.22	10	40.93
27	38.79	Aug. 6	42.12	13	41.31	Dec. 11	40.84
Apr. 10	38.61	Sept. 8	42.39	27	41.10		

Al-40 (\*1026, p. 26; 1074, p. 26). Industrial Lumber Co. NW $\frac{1}{4}$  sec. 8, T. 3 S., R. 3 W.

## Al-40--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	3.28	Mar. 27	3.37	Sept. 24	10.50	Nov. 11	11.11
24	1.68	Apr. 10	3.46	Oct. 13	11.15	25	9.96
Feb. 27	5.35	July 21	7.40	28	10.68	Dec. 11	9.06
Mar. 13	2.15	Aug. 11	8.42				

Al-41 (\*1026, p. 27; 1074, p. 26). Lucindy Rodriguez. NE $\frac{1}{4}$  sec. 20, T. 2 S., R. 3 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	1.63	Mar. 27	2.75	Sept. 24	8.45	Nov. 11	8.37
24	1.44	Apr. 10	2.88	Oct. 13	8.87	25	4.66
Feb. 27	4.43	July 21	7.38	28	8.99	Dec. 11	2.15
Mar. 13	1.52	Aug. 11	7.12				

Al-42 (\*1026, p. 27; 1074, p. 26). Oak Hill Church. NW $\frac{1}{4}$  sec. 20, T. 2 S., R. 3 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	7.34	Mar. 27	6.33	Sept. 24	13.71	Nov. 11	14.19
24	4.87	Apr. 10	7.27	Oct. 13	14.07	25	12.53
Feb. 27	9.68	July 21	11.47	28	14.32	Dec. 11	10.49
Mar. 13	3.89	Aug. 11	12.48				

Al-43 (\*1026, p. 27; 1074, p. 26). S. P. McDaniel. NE $\frac{1}{4}$  sec. 32, T. 2 S., R. 4 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	23.65	Mar. 27	23.65	Sept. 24	25.22	Nov. 11	25.13
24	23.13	Apr. 10	23.36	Oct. 13	25.40	25	25.27
Feb. 27	24.42	July 21	24.75	28	25.23	Dec. 11	25.04
Mar. 13	22.23	Aug. 11	24.67				

Al-54 (\*1026, p. 27; 1074, p. 27). Kinder Canal Co. SE $\frac{1}{4}$  sec. 19, T. 5 S., R. 4 W. Water levels, in feet below land-surface datum, 1947: Sept. 8, 28.20; Oct. 10, 27.87; Nov. 3, 27.96.

Al-59 (\*1026, p. 28; 1074, p. 27). Soileau Corporation. NW $\frac{1}{4}$  sec. 36, T. 5 S., R. 3 W. Measurements discontinued.

Al-65 (\*1026, p. 28; 1074, p. 27). Matt Johnson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 6 S., R. 6 W. Water level, in feet below land-surface datum, 1947: Sept. 13, 12.08.

Al-75 (\*1074, p. 28). Olin McGee. NE $\frac{1}{4}$  sec. 34, T. 6 S., R. 5 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	30.43	Mar. 14	29.37	Aug. 11	32.83	Nov. 10	33.63
24	29.11	27	29.08	Sept. 24	33.80	25	33.59
Feb. 13	29.92	Apr. 10	29.16	Oct. 13	33.68	Dec. 12	33.49
27	30.08	July 21	31.85				

Al-86 (\*1074, p. 28). Olin McGee. NW $\frac{1}{4}$  sec. 34, T. 6 S., R. 5 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	30.78	Mar. 14	29.43	Aug. 11	33.02	Nov. 10	34.35
24	28.62	27	28.81	Sept. 24	33.87	25	34.22
Feb. 13	29.73	Apr. 10	28.84	Oct. 13	34.41	Dec. 12	33.71
27	30.09	July 21	32.31	27	34.31		

Al-87 (\*1074, p. 28). D. S. Kingrey. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 6 S., R. 5 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	8.85	Mar. 14	7.57	Aug. 11	11.45	Nov. 10	13.21
24	7.59	27	8.29	Sept. 24	13.21	25	13.58
Feb. 13	8.66	Apr. 10	12.60	Oct. 13	13.24	Dec. 12	12.44
27	9.04	July 21	11.61	27	14.33		

Al-88 (\*1074, p. 28). Amos Ceaser. SW $\frac{1}{4}$  sec. 29, T. 6 S., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	21.62	Mar. 14	21.30	Sept. 24	25.86	Nov. 10	26.12
24	18.59	27	20.57	Oct. 13	26.17	25	24.70
Feb. 13	21.96	July 21	24.23	27	26.29	Dec. 12	24.19
27	21.37	Aug. 11	25.17				

Al-90 (\*1074, p. 29). Randolph Hutcheson. NW $\frac{1}{4}$  sec. 25, T. 6 S., R. 6 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	14.24	Mar. 12	11.46	Aug. 11	19.25	Nov. 10	19.37
24	9.06	27	9.81	Sept. 24	18.97	25	17.38
Feb. 13	12.38	Apr. 10	10.83	Oct. 13	19.97	Dec. 12	16.97
27	13.80	July 21	18.62	27	20.01		

Al-91 (\*1074, p. 29). J. M. Ritchie. NE $\frac{1}{4}$  sec. 26, T. 6 S., R. 6 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	2.83	Mar. 12	2.50	Aug. 11	21.61	Nov. 10	21.20
24	2.31	27	2.82	Sept. 24	20.86	25	10.20
Feb. 13	4.56	Apr. 10	3.05	Oct. 13	23.37	Dec. 12	3.68
27	4.99	July 21	20.12	27	23.82		

Al-92 (\*1074, p. 29). J. A. Rohrer. NW $\frac{1}{4}$  sec. 21, T. 3 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	14.72	Mar. 13	13.18	Aug. 11	15.96	Nov. 10	18.69
27	13.29	27	12.85	Sept. 25	17.49	25	18.78
Feb. 13	13.47	Apr. 10	12.55	Oct. 13	18.02	Dec. 13	18.90
27	13.86	July 21	15.05	27	18.43		

Al-93 (\*1074, p. 29). Mrs. J. E. Hollingsworth. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 3 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	13.59	Mar. 13	11.68	Aug. 11	14.04	Nov. 10	16.57
27	12.22	27	11.70	Sept. 25	15.39	25	16.75
Feb. 13	12.35	Apr. 10	11.22	Oct. 13	15.97	Dec. 13	16.87
27	12.65	July 21	13.40	27	16.33		

Al-94 (\*1074, p. 29). Clyde Whitley. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 3 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	5.09	Mar. 27	11.71	Sept. 25	22.87	Nov. 10	24.59
27	16.10	Apr. 10	12.47	Oct. 13	24.41	25	24.47
Feb. 13	14.78	July 21	22.35	27	24.14	Dec. 13	20.47
27	14.43	Aug. 11	22.58				

Al-95 (\*1074, p. 30). Clyde Whitley. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, T. 4 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	8.92	Mar. 13	7.05	Aug. 11	11.38	Nov. 10	13.35
27	16.35	27	7.56	Sept. 25	12.67	25	12.90
Feb. 13	8.56	Apr. 10	7.45	Oct. 13	12.95	Dec. 13	12.61
27	8.78	July 21	10.58	27	13.13		

Al-96 (\*1074, p. 30). Clarise McGee. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 4 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 8	23.64	Mar. 13	22.63	Aug. 11	24.18	Nov. 10	26.23
27	23.23	27	22.67	Sept. 25	25.45	25	26.59
Feb. 13	23.14	Apr. 10	22.37	Oct. 13	26.20	Dec. 13	25.66
27	23.27	July 21	23.21	27	26.63		



Al-97 (\*1074, p. 30). Horace Reed. NE $\frac{1}{4}$  sec. 13, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	19.89	Mar. 13	18.55	Aug. 11	18.80	Nov. 10	21.36
27	18.75	27	18.04	Sept. 25	20.13	25	21.63
Feb. 13	18.41	Apr. 10	17.64	Oct. 13	20.61	Dec. 13	22.04
27	18.49	July 21	18.19	27	20.98		

Al-98 (\*1074, p. 30). Alcín Veronie. SE $\frac{1}{4}$  sec. 13, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	9.45	Mar. 13	3.61	Aug. 11	16.09	Nov. 10	13.41
27	8.42	27	11.13	Sept. 25	13.02	25	13.65
Feb. 13	2.66	Apr. 10	10.49	Oct. 13	15.22	Dec. 13	12.96
27	13.08	July 21	13.96	27	13.35		

Al-100 (\*1074, p. 30). A. C. Easterling. NW $\frac{1}{4}$  sec. 26, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	23.85	Mar. 13	26.54	Aug. 11	31.50	Nov. 10	31.95
27	19.34	27	26.54	Sept. 25	31.95	25	31.96
Feb. 13	30.33	Apr. 10	27.65	Oct. 13	32.22	Dec. 13	27.73
27	13.78	July 21	31.17	27	32.45		

Al-101 (\*1074, p. 30). Jerome Sonnier. SW $\frac{1}{4}$  sec. 26, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	37.97	Mar. 13	33.68	Aug. 11	40.25	Nov. 10	39.21
27	36.67	27	38.59	Sept. 25	43.34	25	39.84
Feb. 13	38.87	Apr. 10	38.16	Oct. 13	42.98	Dec. 13	36.11
27	39.24	July 21	40.77	27	40.38		

Al-102 (\*1074, p. 31). L. S. Sonnier. NW $\frac{1}{4}$  sec. 34, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1946

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	21.40	Mar. 13	20.58	Aug. 11	22.51	Nov. 10	23.57
27	20.43	27	20.29	Sept. 25	23.25	25	23.33
Feb. 13	20.71	Apr. 10	20.20	Oct. 13	23.38	Dec. 13	23.27
27	20.85	July 21	21.64	27	23.41		

Al-103 (\*1074, p. 31). Mrs. S. L. Carpenter. SW $\frac{1}{4}$  sec. 5, T. 5 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	21.40	Apr. 10	21.00	Sept. 25	21.67	Nov. 10	22.29
Mar. 13	21.36	July 21	20.93	Oct. 13	22.05	25	22.48
27	21.22	Aug. 11	21.84	27	22.38	Dec. 13	22.70

Al-104 (\*1074, p. 31). Louis Durio. SE $\frac{1}{4}$  sec. 32, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	11.64	Mar. 13	9.55	Aug. 11	11.00	Nov. 10	13.15
27	9.49	27	8.94	Sept. 25	12.19	25	13.39
Feb. 13	10.02	Apr. 10	8.50	Oct. 13	12.69	Dec. 13	14.46
27	10.31	July 21	10.14	27	13.94		

Al-105 (\*1074, p. 31). Walter Henry. SW $\frac{1}{4}$  sec. 33, T. 4 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	15.26	Mar. 13	14.36	Aug. 11	14.36	Nov. 10	15.52
27	14.47	27	14.36	Sept. 25	14.98	25	15.69
Feb. 13	14.36	Apr. 10	14.22	Oct. 13	15.20	Dec. 13	15.86
27	14.51	July 21	14.05	27	15.33		

Al-106 (\*1074, p. 31). King Corporation. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 7 S., R. 5 W. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 5.28 feet; (2) since May 12, 1947, top of casing, at land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 13	30.09	Aug. 4	35.10	Nov. 4	35.02	Dec. 1	34.61
May 12	28.53	Sept. 8	35.52	15	34.79	15	34.06
July 18	34.26	Oct. 7	35.28	24	34.70		

Al-124. Pierre Nevils. Sec. 11, T. 7 S., R. 5 E. Unused drilled domestic well, diameter 4 inches, depth 140 feet. Measuring point, top of 4-inch collar on well casing, 1.10 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 21	24.70	Oct. 13	26.67	Nov. 10	26.43	Dec. 12	24.67
Aug. 11	25.90	27	26.72	25	24.97	26	23.42
Sept. 24	26.44						

Al-125. M. D. Hargrove. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 3 S., R. 3 W. Unused drilled irrigation well, diameter 4 inches, depth 150 feet. Measuring point, top of 4-inch well casing, 3.22 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	30.58	Mar. 27	30.74	Sept. 25	32.63	Nov. 25	32.91
Feb. 15	31.10	Apr. 10	30.62	Oct. 13	32.83	Dec. 13	32.76
27	31.51	July 21	31.76	27	32.96	26	32.28
Mar. 13	31.03	Aug. 11	32.15	Nov. 10	32.88		

Al-127. State of Louisiana, Bel Fire Tower. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 6 S., R. 7 W. Unused drilled domestic well, diameter 4 inches, depth 67 feet. Measuring point, top of 4-inch casing, 0.18 foot above concrete well curbing and 0.40 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 25	47.99	Aug. 8	48.03	Sept. 26	48.46	Nov. 14	48.94
May 2	48.00	22	48.14	Oct. 24	48.74	Dec. 15	49.15
July 15	47.89						

#### Beauregard Parish

Be-2 (\*989, p. 24; 1019, p. 31; 1026, p. 29; 1074, p. 32). Southern Pacific Railway. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 6 S., R. 8 W.

Water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	42.3	42.1	42.1	42.3	43.2	45.0	45.2	44.9	44.5	44.4
2	.....	.....	42.5	42.1	42.2	42.3	43.3	45.0	45.2	44.9	44.5	44.4
3	.....	.....	42.5	42.1	42.2	42.3	43.3	45.1	45.2	44.8	44.6	44.4
4	.....	44.95	42.5	42.1	42.2	42.4	43.3	45.2	45.2	44.8	44.6	44.4
5	.....	.....	42.4	42.0	42.1	42.4	43.4	45.1	45.2	44.8	44.6	44.4
6	.....	.....	42.4	42.2	42.1	42.5	43.5	45.2	45.1	44.7	44.6	44.4
7	.....	.....	42.3	42.3	42.1	42.5	43.6	45.2	45.2	44.7	44.5	44.3
8	.....	.....	42.4	42.2	42.2	42.5	43.7	45.3	45.2	44.6	44.6	44.3
9	45.34	.....	42.5	42.1	42.2	.....	43.8	45.3	45.1	44.6	44.6	44.4
10	.....	.....	42.5	42.1	42.2	.....	43.8	45.3	45.1	44.6	44.5	44.3
11	.....	.....	42.5	42.0	42.2	.....	43.9	45.4	45.0	44.6	44.5	44.4
12	.....	.....	42.4	42.0	42.2	.....	44.0	45.4	45.0	44.6	44.3	44.4
13	.....	.....	42.2	42.0	42.2	.....	44.0	45.5	45.1	44.7	44.4	44.4
14	.....	.....	42.4	42.0	42.2	.....	44.0	45.5	45.1	44.6	44.4	44.4
15	.....	.....	42.4	42.0	42.2	.....	44.0	45.5	45.1	44.5	44.3	44.3
16	.....	.....	42.5	42.0	42.2	.....	44.1	45.5	45.1	44.5	44.4	.....
17	.....	.....	42.4	42.2	42.2	.....	44.2	45.5	45.2	44.5	44.4	.....
18	.....	.....	42.3	42.2	42.1	.....	44.2	45.4	45.2	44.5	44.4	.....
19	.....	.....	42.2	42.1	42.2	.....	44.3	45.3	45.2	44.5	44.4	.....
20	.....	.....	42.3	42.0	42.1	.....	44.4	45.3	45.0	44.6	44.5	.....

a Tape measurement at odd hour.

Be-2--Continued.

Water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	.....	.....	....	42.0	42.1	....	44.4	45.3	45.0	44.6	44.5	....
22	.....	.....	....	42.1	42.3	....	44.5	45.3	45.0	44.5	44.5	....
23	.....	.....	....	42.1	42.3	....	44.6	45.2	45.0	44.5	44.4	....
24	.....	.....	....	42.0	42.2	....	44.7	45.1	44.9	44.6	44.4	....
25	.....	.....	....	42.1	42.2	....	44.7	45.0	44.9	44.6	44.4	....
26	.....	.....	....	42.2	42.3	....	44.8	45.0	44.9	44.6	44.4	....
27	.....	.....	....	42.2	42.2	....	44.8	44.9	44.9	44.6	44.4	....
28	.....	42.4	42.4	42.2	42.1	....	44.7	44.9	44.9	44.6	44.5	....
29	.....	.....	42.3	42.2	42.1	43.2	44.8	45.0	45.0	44.6	44.5	....
30	.....	.....	42.2	42.1	42.2	43.2	44.9	45.1	45.0	44.6	44.5	....
31	.....	.....	42.2	.....	42.3	.....	45.0	45.1	.....	44.5	.....	....

Be-17 (\*1019, p. 31; 1026, p. 30; 1074, p. 32). N. Knight. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 7 S., R. 9 W. Water level, in feet below land-surface datum, 1947: Jan. 9, 42.06. Measurements were discontinued; well plugged.

Bienville Parish

Bi-2 (\*909, p. 32; 939, p. 18). Town of Gibsland. In Gibsland, behind water plant. Measuring point, top of airline, 3.80 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 23	45.71	Mar. 17	43.82	Sept. 16	49.22	Nov. 19	48.74
Feb. 17	45.55	Apr. 16	43.94	Oct. 16	50.02		

Bi-18. Woodward-Walker Lumber Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 18 N., R. 8 W., at Ada. Unused drilled industrial well, diameter 4 inches, depth 347 feet. Measuring point, top of 4-inch casing, 2.50 feet above land-surface datum.

Water level, in feet below land-surface datum, 1946-47

Date	Water level	Date	Water level	Date	Water level
July 25, 1946	43.85	Mar. 17, 1947	41.90	Sept. 16, 1947	48.33
Jan. 23, 1947	32.20	Apr. 16	42.54	Oct. 16	48.81
Feb. 17	43.18	June 17	45.24	Nov. 19	48.99

Calcasieu Parish

Cu-13 (\*989, p. 24; 1019, p. 30; 1026, p. 30; 1074, p. 32). Magnolia Petroleum Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 4, T. 10 S., R. 9 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	14.2	....	14.2	14.3	14.0	14.6	16.0	17.7	22.5	22.3	21.1	20.1
2	14.2	13.8	14.2	14.3	14.0	14.7	16.1	17.8	22.6	22.2	21.0	20.0
3	14.2	13.8	14.2	14.3	14.0	14.7	16.1	18.0	22.7	22.1	21.0	19.9
4	14.2	13.8	14.3	14.3	14.1	14.7	16.2	18.2	22.8	22.0	21.0	19.9
5	14.2	13.8	14.3	14.3	14.1	14.8	16.3	18.4	22.8	21.9	21.0	19.8
6	14.2	13.8	14.3	14.2	14.1	14.8	....	18.6	22.9	21.8	21.0	19.7
7	14.2	13.8	14.3	14.2	14.1	14.8	....	18.8	22.9	21.6	21.0	19.7
8	14.2	13.8	14.3	14.2	14.1	14.9	....	19.0	23.0	21.2	21.0	19.7
9	14.2	13.8	14.3	14.2	14.2	....	15.2	19.2	22.9	20.8	21.0	19.6
10	14.2	13.8	14.3	14.2	14.2	....	15.2	19.4	23.0	20.8	21.0	19.6
11	14.1	13.8	14.3	14.1	14.2	....	15.3	19.7	23.0	20.8	21.0	19.6
12	14.1	13.8	14.4	14.1	14.2	....	15.4	19.9	22.9	20.9	21.0	19.5
13	14.1	13.8	14.3	14.1	14.3	....	15.6	20.3	22.9	21.0	21.0	19.5
14	14.1	13.8	14.3	14.1	14.3	....	15.6	20.3	22.9	21.1	21.0	19.5
15	14.0	13.8	14.3	14.1	14.3	....	15.7	20.5	22.8	21.2	21.0	19.4
16	14.0	13.8	14.3	14.1	14.3	....	15.8	20.6	22.9	21.2	21.0	19.4

## Cu-13--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	14.0	13.8	14.3	14.1	14.4	....	16.0	20.8	22.9	21.2	20.9	19.4
18	14.0	13.9	14.3	14.0	14.4	....	16.1	21.0	23.0	21.2	20.8	19.4
19	13.9	13.9	14.3	14.0	14.4	....	16.2	21.1	23.0	21.2	20.8	19.3
20	13.9	13.9	14.3	14.0	14.4	....	16.3	21.4	22.9	21.2	20.7	19.3
21	13.9	14.0	14.3	14.0	14.4	....	16.4	21.5	22.8	21.2	20.7	19.3
22	13.9	14.0	14.3	14.0	14.5	....	16.5	21.6	22.8	21.1	20.6	19.3
23	13.9	14.0	14.3	14.0	14.5	....	16.5	21.7	22.7	21.1	20.6	....
24	13.9	14.1	14.3	14.0	14.5	....	16.6	21.9	22.7	21.1	20.5	....
25	13.9	14.1	14.3	14.0	14.4	....	16.8	22.0	22.6	21.1	20.5	....
26	13.8	14.1	14.3	14.0	14.4	....	16.9	22.1	22.5	21.1	20.4	....
27	13.8	14.2	14.3	14.0	14.5	....	17.0	22.2	22.4	21.1	20.3	....
28	13.8	14.2	14.3	14.0	14.5	....	17.1	22.3	22.4	21.1	20.3	....
29	13.8		14.3	14.0	14.5	....	17.3	22.3	22.3	21.1	20.2	....
30	13.7		14.3	14.0	14.5	....	17.4	22.3	22.3	21.1	20.1	....
31	13.7		14.3		14.6		17.6	22.4		21.1		....

Cu-19 (\*989, p. 25; 1019, p. 32; 1026, p. 30; 1074, p. 33). Bell Estate. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 10, T. 10 S., R. 10 W. Measuring points: (1) Top of casing, 0.80 foot above land-surface datum; (2) since Sept. 29, 1947, floor of recorder house, 1.75 feet above land-surface datum.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.	Oct.	Nov.	Dec.
1	18.3	17.8	17.5	16.6	16.3	17.2	21.6	....	....	28.4	26.7
2	18.0	17.8	17.5	16.6	16.3	17.3	21.9	....	....	28.4	26.5
3	18.1	17.8	17.5	16.6	16.4	17.4	22.2	....	....	28.4	26.4
4	18.1	17.8	17.5	16.6	16.4	17.5	....	....	28.4	28.4	26.3
5	18.1	17.8	17.4	16.6	16.4	17.7	....	....	28.4	28.4	26.1
6	18.1	17.8	17.4	16.6	16.4	18.0	....	....	28.3	28.4	26.0
7	18.1	17.8	17.4	16.7	16.4	18.2	....	....	28.3	28.3	25.8
8	18.2	17.4	17.4	16.7	16.5	....	....	....	28.3	28.3	25.6
9	18.2	17.9	17.9	16.7	16.6	....	....	....	28.3	28.3	25.5
10	18.2	17.9	17.9	16.7	16.6	....	....	....	28.3	28.3	25.3
11	18.3	17.9	17.9	16.6	16.6	....	....	....	28.3	28.2	26.2
12	18.3	17.9	17.9	16.6	16.6	....	....	....	28.3	28.2	26.2
13	18.3	17.8	17.8	16.6	16.6	....	....	....	28.3	28.1	26.1
14	18.2	17.8	17.8	16.7	16.6	....	....	....	28.3	28.0	26.7
15	18.2	17.8	17.0	16.8	16.5	....	....	....	28.4	27.9	25.9
16	18.2	17.7	17.0	16.8	16.6	....	....	....	28.4	27.8	25.8
17	18.2	17.7	17.0	16.8	16.6	....	....	....	28.4	27.8	25.8
18	18.3	17.7	17.0	16.7	16.8	....	....	....	28.4	27.7	25.7
19	18.3	17.7	16.9	16.5	16.9	....	....	....	28.4	27.7	25.7
20	18.3	17.6	16.9	16.4	17.1	....	....	....	28.4	27.6	25.6
21	18.3	17.6	16.9	16.3	17.0	....	....	....	28.5	27.5	25.6
22	18.3	17.6	16.9	16.2	17.0	....	....	....	28.5	27.5	25.3
23	18.4	17.6	16.9	16.2	17.0	....	....	....	28.5	27.4	24.5
24	18.4	17.6	16.8	16.1	17.0	....	....	....	28.5	27.3	24.5
25	18.3	17.6	16.8	16.1	17.1	....	....	....	28.5	27.3	24.5
26	18.1	17.6	16.8	16.2	17.1	....	....	....	28.5	27.2	24.5
27	18.1	17.6	16.8	16.2	17.1	....	....	....	28.5	27.2	24.5
28	18.0	17.6	16.8	16.2	17.1	....	....	....	28.5	27.1	24.4
29	17.9		16.8	16.3	17.1	....	....	28.2	28.5	27.0	24.4
30	17.9		16.7	16.3	17.1	21.4	....	....	28.5	26.8	24.3
31	17.8		16.7		17.1		....		28.5		24.3

Cu-21 (\*1026, p. 31; 1074, p. 33). Continental Oil Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 10 S., R. 9 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Jan. Water level	Date	Water level	Date	Water level
Jan. 3	32.65	Mar. 27	31.05	Aug. 8	33.11	Oct. 17	35.10
10	32.40	Apr. 4	30.59	22	33.22	24	34.79
Feb. 1	31.53	11	30.64	29	33.76	31	34.95
14	31.54	18	30.86	Sept. 5	33.95	Nov. 7	35.04
21	31.59	25	30.81	12	34.19	14	35.25
28	31.01	May 9	30.42	20	33.89	24	35.46
Mar. 7	30.80	June 29	31.46	26	34.33	Dec. 1	35.74
14	30.74	July 23	34.21	Oct. 2	34.66	15	34.89
21	30.82	Aug. 1	32.76	10	34.88		

Cu-22 (\*989, p. 25; 1019, p. 32; 1026, p. 31; \*1074, p. 34). Magnolia Petroleum Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, T. 10 S., R. 9 W.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	18.6	....	18.3	17.0	17.1	19.0	25.8	31.9	33.7	34.0	35.1	29.7
2	18.3	18.9	18.4	17.0	17.1	19.2	26.5	32.2	33.7	34.0	35.1	29.5
3	18.4	18.7	18.3	17.2	17.0	19.6	26.8	32.6	33.8	33.9	34.8	29.2
4	18.5	18.8	18.2	17.1	17.1	19.9	26.5	33.0	34.0	33.8	34.4	28.7
5	18.8	18.9	18.2	17.3	17.1	20.3	26.2	33.4	34.2	34.0	34.3	28.5
6	18.8	18.7	18.3	17.6	17.3	20.5	26.4	33.7	34.4	34.1	34.1	28.3
7	18.7	18.9	18.2	17.6	17.4	20.9	26.6	33.9	34.7	34.2	34.1	27.9
8	18.7	19.0	18.2	17.5	17.4	21.2	27.0	34.2	34.8	34.5	34.2	27.9
9	19.0	19.0	18.0	17.4	17.4	....	27.6	34.4	35.0	34.8	34.0	28.0
10	19.1	19.0	18.9	17.3	17.4	....	28.0	34.6	35.0	34.9	33.6	28.0
11	18.9	18.9	18.9	17.3	17.2	....	28.3	34.7	35.2	34.8	33.6	28.0
12	18.7	18.7	17.7	17.7	17.1	....	28.6	34.8	35.2	34.9	33.5	28.0
13	18.5	18.7	17.5	18.0	17.1	....	28.9	34.8	35.4	34.9	33.4	28.0
14	18.7	18.7	17.5	18.1	17.2	....	29.0	34.9	35.6	34.9	33.0	27.8
15	18.9	18.7	17.5	17.9	17.1	....	29.0	34.9	35.6	35.0	33.0	27.2
16	19.0	18.8	17.5	17.4	17.4	....	29.0	35.0	35.6	35.0	32.9	27.6
17	19.0	18.7	17.4	17.1	17.7	....	29.2	35.0	35.4	35.0	32.8	27.5
18	19.0	18.7	17.4	16.9	18.0	....	29.4	34.9	35.4	35.0	32.5	27.5
19	18.9	18.6	17.2	16.6	18.1	....	29.6	34.8	35.3	35.1	32.5	27.4
20	18.8	18.6	17.3	16.3	18.2	....	29.8	34.5	35.0	35.1	32.3	27.4
21	19.1	18.6	17.3	16.5	18.4	....	29.9	34.2	34.8	35.1	32.1	27.5
22	19.0	18.5	17.4	16.5	18.6	....	30.1	34.0	34.9	35.1	32.0	27.6
23	18.7	18.5	17.2	16.5	18.7	....	30.2	33.9	34.9	35.0	31.8	27.7
24	18.6	18.6	17.1	16.6	18.7	....	30.2	33.8	34.6	35.1	31.7	27.8
25	18.6	18.6	17.4	16.6	18.8	....	30.4	34.0	34.5	35.0	31.7	27.9
26	18.6	18.6	17.3	17.1	18.8	....	30.6	34.1	34.6	35.0	31.5	27.8
27	18.6	18.6	17.2	17.1	18.9	....	30.7	34.1	34.6	35.0	30.8	27.8
28	18.6	18.4	17.4	17.1	18.9	....	31.0	33.9	34.6	35.0	30.4	27.7
29	18.6		17.1	17.2	18.8	....	31.2	33.9	34.4	35.0	30.1	27.5
30	18.7		16.9	17.2	19.0	25.1	31.4	33.8	34.2	35.0	29.8	27.5
31	18.9		17.1		19.0		31.7	33.8		35.0		27.5

Cu-25 (\*1019, p. 33; 1026, p. 32; 1074, p. 34). Lake Charles Country Club. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 10 S., R. 9 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	19.25	May 22	12.53	Aug. 5	14.30	Oct. 8	21.81
Feb. 4	16.20	July 17	12.47	Sept. 10	18.62	Nov. 5	14.22
Mar. 11	15.06						

Cu-34 (\*1026, p. 32; 1074, p. 34). Gulf States Utilities. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 9 S., R. 8 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	....	....	12.0	11.8	11.5	....	24.1	....	28.2	29.1	23.1
2	....	....	12.9	11.8	11.5	....	25.5	....	29.2	26.6	23.1
3	12.9	....	12.4	11.7	12.1	....	26.2	....	29.4	27.1	23.0
4	13.1	....	12.5	11.2	12.9	....	26.2	....	29.5	26.9	22.9
5	13.2	....	12.3	11.0	12.1	....	26.6	28.9	28.5	26.9	23.0
6	13.0	....	....	....	11.7	....	27.4	29.3	29.4	28.1	23.2
7	12.9	12.2	....	....	11.9	....	27.8	29.0	29.6	27.2	21.2
8	....	12.4	....	....	12.8	....	26.4	29.1	29.7	26.4	22.1
9	....	12.5	....	....	12.7	....	26.7	28.4	29.9	25.5	22.3
10	12.4	12.5	....	....	11.9	....	26.2	29.5	30.2	25.9	22.3
11	12.6	12.4	....	11.2	11.7	....	27.5	29.6	29.9	25.1	22.3
12	13.2	12.5	....	10.6	11.5	....	27.4	30.2	29.5	26.9	22.2
13	13.3	12.6	....	11.0	11.5	....	27.6	30.0	29.8	26.7	21.7
14	....	12.2	....	10.3	11.4	....	27.6	29.4	30.2	26.1	21.9
15	....	12.1	....	10.4	14.1	....	28.0	30.2	30.1	26.7	22.0
16	....	12.2	....	10.4	12.1	....	27.5	29.9	29.9	25.0	22.5
17	12.2	12.1	....	10.8	....	....	26.2	30.2	29.9	26.3	22.4
18	12.3	12.3	....	12.6	....	....	27.3	30.2	29.7	26.2	22.3
19	12.3	12.2	....	11.7	....	....	28.3	30.3	28.1	25.9	22.3
20	12.2	12.2	....	12.4	....	....	28.1	27.7	29.9	25.6	22.4
21	12.0	12.3	12.4	11.7	....	....	27.5	27.5	30.1	25.4	21.9
22	11.8	12.5	....	10.8	....	....	27.3	28.3	29.8	25.4	22.6
23	11.3	12.9	....	11.3	....	a22.50	28.0	27.8	30.1	25.5	22.4
24	11.1	12.5	....	12.3	....	....	26.3	28.2	29.6	23.2	22.7
25	11.2	12.5	....	12.0	a11.90	....	27.9	29.1	30.5	23.0	22.7
26	11.2	....	....	11.8	....	....	27.8	29.3	28.6	22.8	22.5
27	11.4	....	....	11.6	....	....	26.5	29.3	30.1	23.0	22.5
28	11.5	12.6	12.7	11.7	....	....	....	29.0	30.3	23.6	22.0
29	11.5	....	11.7	11.5	....	....	28.3	29.5	29.8	24.6	21.5
30	11.7	....	12.7	11.6	....	....	....	29.7	29.8	24.3	20.4
31	10.9	....	11.8	....	....	....	....	....	29.6	....	21.0

a Tape measurement at odd hour.

Cu-42 (\*1019, p. 33; 1026, p. 32; 1074, p. 35). Long-Bell Lumber Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 9 S., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 6	20.78	Mar. 10	18.95	Sept. 11	36.75
Feb. 4	19.88	Aug. 4	34.72		

Cu-47 (\*1074, p. 35). Missouri Pacific Railroad. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 10 S., R. 8 W. Measurements discontinued.

Cu-59 (\*989, p. 25; 1019, p. 33; 1026, p. 32; 1074, p. 35). Thomas Simmons. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 27, T. 9 S., R. 9 W. Measurements discontinued.

Cu-109 (\*1074, p. 36). Vinton Petroleum Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 10 S., R. 12 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	1.12	May 22 a	0.06	Aug. 5	4.10	Oct. 9	4.78
Feb. 4	.62	July 17	2.39	Sept. 11	4.64	Nov. 6	4.94
Mar. 11	.48						

a Above land-surface datum.

Cu-115 (\*1019, p. 33; 1026, p. 32; 1074, p. 36). Krause & Managan.  
SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, T. 9 S., R. 10 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 9	4.39	May 26	2.72	Aug. 6	3.57
Feb. 4	4.24	July 16	2.10	Sept. 13	4.77
Mar. 11	3.91			Oct. 9	5.57
				Nov. 6	6.15

Cu-120 (\*989, p. 25; 1019, p. 34; 1026, p. 32; 1074, p. 36).  
Mathieson Alkali Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 36, T. 11 S., R. 10 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 7	10.05	May 22	7.30	Aug. 5	16.72
Feb. 5	9.59	July 16	13.06	Sept. 11	17.80
Mar. 11	8.86			Oct. 8	17.76
				Nov. 5	17.25

Cu-125 (\*1019, p. 34; 1026, p. 33; 1074, p. 36). Cooper Patterson.  
NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 10 S., R. 10 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 7	20.58	Mar. 11	19.40	Oct. 8	30.54
Feb. 5	20.35	May 22	19.37		

Cu-128 (\*1019, p. 34; 1026, p. 33; 1074, p. 36). W. D. Jones.  
NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, T. 9 S., R. 8 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 6	16.13	May 26	13.48	Aug. 4	24.24
Feb. 3	14.91	July 15	22.95	Sept. 11	29.72
Mar. 10	14.10			Oct. 7	28.98
				Nov. 5	27.15

Cu-161 (\*1019, p. 34; 1026, p. 33; 1074, p. 36). Calcasieu-Marine  
National Bank. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 11 S., R. 7 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 7	15.93	Mar. 10	12.88	July 16	23.97
Feb. 5	13.82	May 22	12.05	Sept. 10	39.69
				Nov. 4	26.66

Cu-163 (\*1019, p. 34; 1026, p. 33; 1074, p. 36). Stanolind Oil &  
Gas Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, T. 11 S., R. 7 W. Measurements discontinued.

Cu-173 (\*1074, p. 36). Charles Linkswiler. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26,  
T. 10 S., R. 8 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 7	30.73	Mar. 10	28.79	Oct. 7	44.82
Feb. 4	29.60	May 22	29.25	Nov. 4	42.04

Cu-205 (\*1019, p. 35; 1026, p. 33; 1074, p. 37). Frank Gibson.  
SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 8 S., R. 8 W.

Water level, in feet below land-surface datum, 1947					
Date	Water level	Date	Water level	Date	Water level
Jan. 9	19.15	May 26	17.18	Aug. 4	28.20
Feb. 4	18.49	July 25	24.66	Sept. 12	29.44
Mar. 11	17.91			Oct. 8	27.90
				Nov. 6	26.86

Cu-208 (\*1074, p. 37). W. L. Caldwell. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 8 S., R. 8 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	24.46	Mar. 11	23.22	Sept. 12	33.76	Nov. 6	28.75
Feb. 4	23.65	May 26	23.10	Oct. 8	30.59		

Cu-209 (\*1074, p. 37). J. P. Tucker. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 14, T. 9 S., R. 9 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	43.63	May 26	40.77	Aug. 6	43.52	Oct. 9	45.05
Feb. 4	42.20	July 16	41.95	Sept. 10	44.62	Nov. 6	45.05
Mar. 11	40.60						

Cu-219 (\*1074, p. 37). Humble Oil Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 7 S., R. 10 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	30.20	Mar. 11	28.74	July 16	29.84	Sept. 13	32.86
Feb. 4	29.14	May 26	28.18	Aug. 6	31.21		

Cu-222 (\*989, p. 26; 1019, p. 35; 1026, p. 33; 1074, p. 37). Hardy Johnson. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, T. 9 S., R. 13 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	5.30	Mar. 11	5.22	Aug. 5	8.91	Oct. 9	8.90
Feb. 4	5.77	May 22	4.80	Sept. 11	9.08	Nov. 6	8.59

Cu-228 (\*1019, p. 35; 1026, p. 34; 1074, p. 37). R. Boyer. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 9 S., R. 12 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	14.50	May 22	13.48	Sept. 11	21.67	Nov. 6	19.05
Mar. 11	14.01	July 17	21.74	Oct. 9	18.62		

Cu-240 (\*1019, p. 35; 1026, p. 34; 1074, p. 37). Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, T. 9 S., R. 11 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	12.28	May 22	10.93	Aug. 4	17.25	Oct. 9	17.22
Feb. 4	11.85	July 17	15.30	Sept. 11	17.47	Nov. 6	17.04
Mar. 11	11.42						

Cu-245 (\*1026, p. 34; 1074, p. 37). W. R. Keever. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 8 S., R. 10 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	7.15	Mar. 4	6.83	July 16	7.57	Sept. 13	10.13
Feb. 4	6.81	May 26	6.44	Aug. 6	8.83	Nov. 6	11.40

Cu-262 (\*1019, p. 38; 1026, p. 34; 1074, p. 38). Calcasieu Parish School Board. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 11 S., R. 10 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	10.40	May 22	9.07	Aug. 5	16.40	Oct. 9	16.52
Feb. 5	9.90	July 17	13.64	Sept. 11	16.99	Nov. 6	16.37
Mar. 11	9.49						

Cu-267 (\*1019, p. 35; 1026, p. 34; 1074, p. 38). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 11 S., R. 8 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.09	May 22	15.55	Aug. 4	18.69	Oct. 8	21.63
Feb. 5	8.47	July 16	17.09	Sept. 10	20.65	Nov. 5	21.70
Mar. 10	14.15						



Cu-347 (\*1074, p. 38). Amy Wait Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 9 S., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 6	23.56	Mar. 10	20.75	July 16	35.07
Feb. 5	21.89	Apr. 12	21.35	Nov. 5	36.09

Cu-440 (\*1019, p. 35; 1026, p. 34; 1074, p. 38). Department of Defense. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 10 S., R. 8 W., 100 yards south of U. S. Highway 90, west of east road to Lake Charles Air Base. Water levels, in feet below land-surface datum, 1947: Sept. 10, 34.81; Oct. 7, 33.58; Nov. 5, 31.57.

Cu-445 (\*1026, p. 34; 1074, p. 38). U. S. Dept. of Commerce, War Assets Administration. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, T. 10 S., R. 9 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	32.1	35.2	35.1	32.2	32.2	36.2	45.3	48.3	49.8	48.6	50.9	43.7
2	32.0	35.2	34.9	32.7	31.7	36.7	46.0	48.8	49.7	50.2	50.9	43.1
3	31.9	35.4	35.0	33.5	31.5	37.3	46.1	48.9	50.3	49.7	50.6	42.2
4	32.6	35.5	35.1	32.8	31.7	37.4	43.2	49.4	50.8	50.3	50.2	41.3
5	34.9	35.5	35.3	34.0	32.2	37.9	40.9	49.8	51.2	50.4	50.3	41.0
6	34.5	35.4	35.4	34.4	33.9	38.3	42.1	50.5	51.9	50.9	49.9	40.5
7	35.0	35.9	34.7	34.2	34.2	39.0	....	49.7	52.2	50.9	49.8	40.5
8	34.9	35.8	34.5	34.0	34.2	38.7	....	....	52.6	51.1	49.9	41.5
9	36.0	35.7	34.2	34.1	34.2	....	44.8	51.3	52.4	51.1	49.3	42.0
10	37.1	....	34.2	33.5	33.7	....	....	51.7	52.4	50.9	49.0	41.9
11	35.8	....	34.2	33.8	33.3	....	....	52.0	52.0	50.5	48.7	41.9
12	35.3	....	34.1	36.1	33.2	....	....	51.9	51.9	50.5	48.6	41.9
13	35.0	....	33.9	36.2	33.4	....	....	51.9	51.9	50.4	48.7	41.8
14	36.7	....	33.8	35.9	33.4	....	....	51.9	52.5	50.7	48.4	41.6
15	36.9	35.3	33.9	34.4	33.2	....	....	51.8	52.6	51.2	48.2	41.2
16	37.0	35.2	34.0	32.1	35.1	....	44.7	52.0	52.6	50.9	48.3	41.5
17	36.8	35.2	33.9	32.0	35.5	....	45.9	51.1	52.4	51.0	48.2	42.2
18	36.8	35.1	34.1	31.4	35.7	....	46.0	51.2	52.0	51.1	47.9	41.8
19	37.0	35.2	33.8	30.9	36.0	....	46.6	51.2	52.1	50.9	47.9	41.2
20	36.8	35.3	34.0	30.9	36.0	....	46.8	50.9	51.6	50.9	47.8	41.6
21	37.0	35.4	34.0	31.0	36.7	....	46.7	51.3	51.2	50.9	47.8	41.5
22	36.6	35.2	34.3	31.2	36.2	....	46.6	50.8	51.4	51.0	47.9	41.6
23	35.6	35.1	33.9	31.5	36.3	....	46.2	50.1	50.8	51.0	47.7	41.5
24	35.4	35.2	33.8	31.6	36.1	....	46.1	50.2	50.6	50.9	47.8	41.4
25	35.2	35.1	33.8	31.7	35.6	....	46.1	52.4	50.6	50.7	47.8	41.1
26	35.1	35.3	33.7	33.0	35.6	....	46.3	52.5	50.7	50.7	46.2	40.8
27	35.1	35.6	33.7	32.9	35.7	....	46.3	50.0	50.6	50.4	44.0	41.1
28	35.1	35.0	34.1	33.7	35.8	....	47.3	50.1	50.6	50.6	43.8	40.6
29	35.1	....	32.0	34.0	35.4	42.8	47.3	50.1	49.7	50.9	43.2	40.8
30	35.0	....	31.7	34.1	35.6	42.9	47.7	50.2	48.8	51.1	42.9	41.1
31	35.3	....	33.4	....	35.7	....	47.9	49.9	....	50.8	....	41.5

Cu-446 (\*1026, p. 35; 1074, p. 39). U. S. Dept. of Commerce, War Assets Administration. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 48, T. 10 S., R. 9 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	30.3	26.1	25.5	27.9	27.6	27.0	33.5	39.6	39.8	40.4	41.3	37.0
2	30.3	26.2	25.6	28.2	28.5	27.2	34.1	40.0	39.8	38.1	41.3	36.7
3	31.4	26.0	25.5	28.4	28.7	26.5	35.3	39.9	39.8	40.5	41.1	34.2
4	31.5	26.2	25.6	27.8	27.7	26.8	36.5	40.0	39.9	39.6	40.9	33.6
5	28.4	26.2	25.6	26.2	27.9	27.1	36.9	40.3	40.3	39.8	40.3	33.5
6	27.9	26.0	25.5	26.1	26.2	27.4	37.1	41.0	40.1	39.6	40.2	33.1
7	27.6	26.3	25.4	26.0	25.8	27.8	36.3	41.1	40.2	39.7	40.1	32.7
8	27.6	26.3	25.4	26.0	25.7	28.9	36.3	41.2	40.3	39.9	40.1	32.4
9	27.7	26.3	25.3	25.8	25.6	....	36.3	41.7	40.4	39.4	40.0	32.8
10	27.7	26.3	25.1	25.7	25.5	....	36.1	41.9	40.4	40.5	39.7	34.7
11	26.6	26.1	25.2	25.6	25.4	....	36.2	42.0	42.4	42.2	39.6	34.8

Cu-446--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	26.5	26.1	25.0	25.8	25.3	....	36.4	41.6	44.2	42.3	39.6	34.8
13	26.2	26.2	24.7	26.0	25.3	....	36.5	41.1	42.5	42.2	39.4	34.8
14	26.2	26.2	24.8	26.0	25.4	....	36.7	41.3	41.2	42.1	39.2	34.7
15	26.4	26.1	24.9	23.3	25.4	....	36.8	41.8	41.0	41.7	39.1	34.3
16	26.4	26.1	25.0	22.8	25.5	....	37.0	41.2	41.0	41.7	39.1	34.6
17	26.5	26.0	25.5	22.5	25.7	....	37.1	42.5	42.4	41.8	39.0	34.7
18	26.4	26.0	24.9	23.5	25.8	....	37.2	41.2	42.4	41.8	38.8	34.6
19	26.3	25.9	24.7	25.7	26.3	....	37.2	41.2	42.4	41.8	38.8	35.5
20	26.3	25.9	24.8	25.9	26.2	....	37.2	41.0	42.3	41.8	38.7	34.7
21	26.5	25.9	24.8	26.4	26.2	....	37.3	40.8	42.1	41.8	38.5	34.5
22	26.5	25.8	24.8	26.4	26.3	....	37.4	40.6	42.2	41.7	38.4	34.5
23	26.3	25.8	24.7	26.5	26.4	....	37.2	40.5	41.7	41.6	38.2	34.5
24	26.2	25.9	24.7	26.6	26.7	....	38.3	40.3	41.1	41.6	38.2	34.6
25	26.1	25.9	24.8	26.9	26.6	....	38.6	40.2	40.9	41.6	38.1	34.6
26	26.1	25.8	24.8	25.8	23.8	....	38.8	40.3	40.8	41.6	38.6	34.6
27	26.1	25.7	24.7	25.6	26.2	....	38.3	40.0	40.5	41.6	37.6	34.5
28	26.1	25.5	25.8	25.6	26.9	....	37.4	39.7	39.2	41.6	37.5	34.4
29	26.0		28.2	24.6	27.0	32.5	37.2	39.6	38.4	41.4	37.4	34.3
30	26.0		28.4	24.6	27.0	32.7	37.4	39.8	38.1	41.3	37.1	34.3
31	26.1		26.0		....		38.7	39.8		41.2		34.3

Cu-448 (#1026, p. 35; 1074, p. 39). Town of Maplewood. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 9 S., R. 9 W. Measuring points: (1) Top inside edge of  $\frac{3}{8}$ -inch nipple in base of plate pump, 2.80 feet above land-surface datum; (2) since Aug. 29, 1947, 2.80 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	26.03	Mar. 27	24.02	Aug. 29	39.30	Oct. 31	40.56
10	25.41	Apr. 4	23.65	Sept. 5	39.59	Nov. 7	39.78
Feb. 1	25.86	11	24.30	12	39.64	14	38.81
7	25.43	18	23.95	20	39.50	24	41.16
14	25.66	May 9	24.09	26	40.06	Dec. 1	36.33
21	25.56	July 23	35.88	Oct. 3	39.64	8	35.28
28	24.93	Aug. 1	36.75	10	40.06	15	34.70
Mar. 7	24.96	8	39.17	17	41.03	22	34.31
14	23.28	22	38.93	24	41.16	29	34.48
21	24.72						

Cu-449. Mathieson Alkali Co. Sec. 34, T. 9 S., R. 9 W. Used drilled industrial well, diameter 18 inches, depth 517 feet. Equipped with turbine pump. Measuring point, base plate of pump, 2.25 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	31.52	Mar. 14	32.08	Aug. 8	59.71	Oct. 10	62.38
Feb. 7	35.61	July 17	54.18	Sept. 10	65.37	Nov. 6	60.58

Cu-451 (#1074, p. 39). Stanolind Oil & Gas Co. SW $\frac{1}{4}$  sec. 3, T. 11 S., R. 7 W. Water levels, in feet below land-surface datum, 1947: Mar. 10, 25.71; May 22, 25.08; Oct. 7, 45.67; Nov. 4, 41.27.

Cameron Parish

Cn-4 (#1026, p. 35; 1074, p. 39). Union Sulphur Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 36, T. 12 S., R. 10 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.48	Mar. 11	7.28	Aug. 5	8.12	Oct. 8	7.36
Feb. 5	9.99	July 22	6.48	Sept. 11	6.92	Nov. 5	3.88

Cn-8 (\*989, p. 26; 1019, p. 35; 1026, p. 35; 1074, p. 40).  
Broussard Estate. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 12 S., R. 9 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	5.45	May 22	3.23	Aug. 5	11.96	Oct. 8	12.86
Feb. 5	4.86	July 17	8.52	Sept. 10	12.76	Nov. 5	12.07
Mar. 11	4.27						

Cn-10 (\*1026, p. 35; 1074, p. 40). Hebert, Helms & Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, T. 12 S., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	8.50	Mar. 11	8.99	July 17	13.35	Nov. 5	17.40
Feb. 5	7.55	May 22	5.94	Oct. 8	20.02		

Cn-16 (\*1074, p. 40). Maple Hughes. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 12 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	7.85	May 21	5.59	Aug. 4	13.01	Oct. 8	15.33
Feb. 6	6.92	July 16	10.73	Sept. 9	16.40	Nov. 4	14.26
Mar. 10	6.38						

Cn-17 (\*1074, p. 40). John Predia. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 4, T. 15 S., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.70	May 22	2.54	Aug. 5	3.26	Oct. 8	4.97
Feb. 5	3.90	July 17	2.98	Sept. 10	4.34	Nov. 5	5.44
Mar. 11	3.18						

Cn-18 (\*1074, p. 40). Rutherford. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 14 S., R. 7 W. Measurements discontinued.

Cn-19 (\*1074, p. 40). Warren Miller. NW $\frac{1}{4}$  sec. 32, T. 14 S., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.10	May 22	1.84	Aug. 5	2.86	Oct. 8	5.01
Feb. 5	2.94	July 17	2.42	Sept. 10	4.30	Nov. 5	5.36
Mar. 11	2.67						

Cn-20 (\*1074, p. 40). Julian East. SE $\frac{1}{4}$ SE $\frac{1}{4}$  irregular sec. 40, T. 14 S., R. 6 W. Measuring points: (1) Top of 1 $\frac{1}{4}$ -inch pipe above tee, 2.00 feet above land-surface datum; (2) since July 17, 1947, top of 2-inch pipe, 1.10 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	7.33	May 22	6.49	Aug. 5	6.76	Oct. 8	7.12
Feb. 5	7.22	July 17	6.79	Sept. 10	7.03	Nov. 5	7.61
Mar. 11	7.34						

#### East Baton Rouge Parish

EB-4 (\*1019, p. 35; 1026, p. 36; 1074, p. 41). Standard Oil Co. of New Jersey, Louisiana Division. N $\frac{1}{2}$  irregular sec. 44, T. 7 S., R. 1 W. Water-stage recorder installed Oct. 9, 1947.

Water level, in feet below land-surface datum, 1947

(Daily noon water level, from recorder charts, beginning Oct. 9)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	131.00	Mar. 10	115.63	July 3	170.60	Sept. 4	191.60
14	126.95	17	121.10	10	177.11	11	196.50
21	124.23	24	127.90	17	177.82	18	198.50
28	122.65	31	125.20	24	181.20	25	193.12
Feb. 3	116.55	Apr. 7	126.50	31	186.80	Oct. 2	186.40
4	122.08	14	129.10	Aug. 7	190.45	9	157.8
10	115.95	21	127.60	14	193.14	10	147.4
17	122.33	May 5	122.43	21	191.50	11	147.6
24	117.02	23	115.58	28	187.60	12	145.1

EB-4--Continued.

Water level, in feet below land-surface datum, 1947  
(Daily noon water level, from recorder charts, beginning Oct. 9)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 13	144.6	Oct. 31	146.5	Nov. 24	139.3	Dec. 12	147.2
14	146.3	Nov. 1	150.1	25	137.1	13	147.5
15	146.4	2	150.9	26	139.1	14	145.6
16	153.5	3	148.6	27	138.5	15	140.1
17	153.5	4	150.1	28	139.0	16	138.6
18	149.4	5	150.0	29	139.0	17	137.7
19	148.4	6	149.6	30	140.0	18	137.4
20	147.4	7	149.2	Dec. 1	140.2	19	137.2
21	146.1	8	150.0	2	140.6	20	139.6
22	145.6	9	152.2	3	141.6	21	141.3
23	145.6	10	153.5	4	142.7	23	129.1
24	147.6	11	151.8	5	143.7	24	129.8
25	148.6	13	142.4	6	146.2	25	130.8
26	149.7	14	142.0	7	145.3	26	131.1
27	149.5	15	142.5	8	139.6	27	129.0
28	148.9	21	140.6	9	140.6	28	131.0
29	148.9	22	137.9	10	145.4	29	129.4
30	145.6	23	136.8	11	146.7	30	128.3

EB-10 (#1019, p. 36). Standard Oil Co. of New Jersey, Louisiana Division. N $\frac{1}{2}$  irregular sec. 44, T. 7 S., R. 1 W. Water level, in feet below land-surface datum, 1947: May 9, 177.44.

EB-15 (#909, p. 32; 939, p. 19; 947, p. 23; 989, p. 26; 1019, p. 37; 1026, p. 36; 1074, p. 41). Standard Oil Co. of New Jersey, Louisiana Division. At Baton Rouge refinery, southeast of tank 67.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	138.9	132.3	127.1	127.9	129.3	126.9	174.3	181.9	181.4	193.7	156.4	148.4
2	139.6	131.8	126.6	127.6	129.7	127.9	172.8	182.2	182.3	190.0	155.5	145.7
3	140.0	131.8	127.3	127.9	129.6	128.0	172.1	182.6	185.1	183.8	155.4	146.1
4	140.3	129.3	127.4	128.6	128.6	130.7	174.0	182.4	186.0	181.7	155.9	144.8
5	139.9	129.5	127.4	130.5	129.7	133.6	172.7	183.3	186.8	178.8	157.6	145.4
6	139.6	130.0	126.5	130.8	128.4	137.8	172.5	183.2	186.6	176.1	159.3	145.7
7	139.6	130.7	127.3	130.8	129.0	140.2	172.7	184.3	185.4	172.7	158.4	144.2
8	138.1	129.7	125.8	130.1	129.3	140.5	173.1	183.2	187.0	171.6	159.6	146.3
9	138.1	130.5	125.8	130.1	129.4	142.1	173.2	185.0	188.5	169.7	158.6	142.3
10	139.1	127.7	125.9	130.3	127.9	144.2	173.7	184.6	190.9	168.1	158.1	144.4
11	138.4	127.9	126.4	130.9	127.6	144.1	173.7	185.2	191.8	167.3	156.6	143.6
12	138.0	128.2	127.4	133.0	126.8	143.5	175.4	186.1	192.3	165.9	156.4	144.3
13	137.3	128.2	125.7	134.2	127.2	148.2	173.9	186.2	191.5	164.4	155.2	144.3
14	135.3	129.2	126.0	135.0	126.6	149.9	176.0	186.2	190.8	163.4	154.7	143.1
15	136.1	128.1	126.5	133.1	127.1	152.4	174.5	186.3	190.0	162.8	153.1	145.6
16	136.3	127.8	127.8	132.7	126.6	154.6	174.2	185.6	190.6	163.2	152.9	146.8
17	134.8	128.9	127.2	132.1	126.1	157.9	174.2	184.8	191.1	162.2	154.0	147.5
18	134.6	128.8	127.1	132.0	124.7	159.8	174.4	184.6	191.3	161.8	153.4	147.1
19	134.1	126.9	126.8	131.7	124.6	161.8	177.4	186.2	191.4	160.5	152.9	146.4
20	135.0	127.1	128.5	131.6	123.9	163.1	177.2	185.2	189.9	159.2	151.4	145.3
21	134.6	128.2	130.2	131.4	123.8	164.3	178.1	186.4	190.5	158.8	149.0	144.1
22	135.1	125.8	130.8	131.2	124.4	164.9	176.9	186.8	190.2	158.3	151.3	142.8
23	134.9	125.1	130.6	130.9	125.4	167.5	176.7	186.8	189.7	156.7	151.4	143.4
24	134.1	126.3	131.4	131.0	127.3	168.0	177.4	185.6	189.5	156.2	150.4	142.7
25	133.7	125.1	132.2	130.8	125.7	168.1	177.7	186.4	189.2	157.4	150.6	142.6
26	133.6	128.6	130.4	129.7	126.0	169.3	179.1	186.8	194.7	155.7	150.0	143.1
27	132.7	125.3	129.6	129.1	127.4	171.9	179.4	186.1	192.3	154.2	149.5	143.0
28	132.7	127.3	129.9	128.8	128.3	171.9	177.9	183.4	193.5	154.6	149.4	143.8
29	133.3		129.5	128.6	127.4	173.1	177.4	183.1	194.0	155.9	148.5	143.6
30	133.5		128.5	129.2	126.4	172.5	180.0	183.0	194.5	156.5	147.6	144.5
31	132.7		128.1		126.6		180.7	182.5		156.1		144.3

EB-20 (\*1019, p. 37; 1026, p. 37; 1074, p. 42). Standard Oil Co. of New Jersey, Louisiana Division. Irregular sec. 43, T. 7 S., R. 1 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	131.7	129.3	120.9	126.8	123.8	125.6	185.8	192.2	189.8	193.5	146.8	139.3
2	131.5	127.8	119.9	126.1	129.8	126.5	183.6	192.8	190.3	186.9	145.9	136.5
3	131.7	126.9	120.2	125.8	128.9	124.7	182.0	193.1	193.9	176.3	144.7	133.8
4	131.7	126.9	121.0	126.1	125.7	129.4	183.5	193.5	194.4	174.1	147.3	132.4
5	132.0	.....	121.5	129.2	125.6	136.0	182.6	194.0	194.0	170.9	152.4	133.7
6	132.8	.....	118.8	129.3	126.5	139.6	182.2	194.7	195.2	167.5	154.5	136.1
7	132.0	.....	120.4	128.8	127.3	142.5	182.3	195.0	194.4	164.0	154.2	137.1
8	131.9	.....	119.9	127.3	127.9	143.0	182.9	194.7	194.7	162.5	153.8	134.5
9	132.5	.....	119.6	126.9	126.2	144.4	182.9	195.7	197.0	160.6	150.5	138.0
10	132.7	123.0	119.6	126.7	124.6	146.7	183.4	196.0	198.4	158.5	146.5	139.2
11	131.8	122.7	120.5	127.9	123.9	146.1	184.6	196.6	199.0	157.4	150.8	139.5
12	131.4	123.4	123.1	130.6	122.7	148.1	184.9	196.9	199.6	155.8	148.7	139.3
13	130.8	123.4	122.7	131.9	122.6	152.4	183.0	196.6	198.6	154.5	145.1	135.9
14	128.5	124.1	121.6	132.2	122.5	159.2	185.1	196.7	198.7	155.6	145.0	136.1
15	130.3	123.3	122.9	129.9	124.5	162.2	185.1	195.7	198.2	155.3	144.4	139.5
16	130.8	124.1	124.6	128.8	123.3	164.1	184.6	195.0	198.7	153.7	143.1	140.8
17	132.0	124.9	124.5	127.9	122.9	167.6	184.8	194.1	199.2	154.4	143.8	141.5
18	131.2	.....	.....	127.9	120.9	169.8	184.8	193.1	199.9	153.7	144.4	141.9
19	130.4	.....	.....	129.6	120.3	170.8	187.5	195.2	200.3	152.3	144.4	141.9
20	131.9	.....	.....	130.4	120.2	174.4	185.4	194.5	197.8	152.0	143.4	140.6
21	130.8	.....	.....	130.2	120.3	175.5	188.4	195.1	198.7	149.9	140.3	139.3
22	131.2	.....	.....	130.6	120.5	176.2	186.8	195.7	197.4	148.4	141.4	136.8
23	130.5	.....	.....	130.5	121.0	178.4	186.6	194.8	196.5	147.7	141.8	133.5
24	130.0	120.3	128.7	130.6	124.2	178.6	186.6	193.2	196.4	146.7	141.1	133.1
25	129.4	121.4	.....	132.3	123.0	178.1	186.6	195.2	195.5	146.5	140.7	132.6
26	129.4	121.0	.....	130.8	122.6	180.2	187.2	195.7	194.4	145.5	141.0	132.4
27	128.3	119.5	.....	129.7	123.5	183.2	187.0	193.3	192.6	144.2	140.9	132.6
28	128.2	121.9	.....	129.1	125.8	183.6	186.2	188.7	193.2	146.6	140.7	132.6
29	128.9	.....	.....	129.0	124.1	184.3	187.6	189.3	193.2	146.6	140.6	132.0
30	130.0	.....	.....	128.8	124.4	183.9	190.1	189.3	193.7	146.5	139.5	133.6
31	129.9	.....	126.8	.....	123.6	.....	191.9	190.0	.....	149.7	.....	134.1

EB-22 (\*909, p. 33; 939, p. 19; 947, p. 23; \*989, p. 26; 1019, p. 38; 1026, p. 38; 1074, p. 43). Standard Oil Co. of New Jersey, Louisiana Division. At Baton Rouge refinery, southwest of tank 784.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	132.0	130.0	126.5	124.1	125.1	125.3	173.1	177.3	181.8	176.1	148.6	137.7
2	132.3	129.1	126.4	124.0	125.3	125.8	172.5	177.1	183.6	172.6	148.4	139.0
3	133.0	128.8	125.0	123.7	125.5	127.0	172.0	177.2	184.4	167.3	148.4	138.0
4	133.7	126.6	124.7	124.7	124.6	129.1	171.8	175.6	185.6	163.4	.....	137.6
5	133.6	128.4	124.9	125.3	124.8	134.2	171.9	176.1	186.5	161.5	.....	135.2
6	133.2	126.8	126.0	125.2	125.2	138.9	172.0	178.5	186.6	160.0	155.1	137.0
7	132.6	127.8	126.0	125.0	125.7	139.2	171.7	179.3	186.8	157.1	153.5	138.0
8	130.2	127.3	126.1	125.7	126.0	142.4	173.0	183.4	185.3	155.1	154.0	135.4
9	130.4	128.0	126.2	125.8	125.3	143.9	173.1	183.0	185.6	153.6	153.7	138.9
10	131.0	125.5	126.3	127.3	124.2	145.1	174.0	184.1	184.7	154.1	153.4	140.1
11	132.4	126.5	125.5	128.8	124.0	146.6	173.9	182.4	175.2	154.1	153.9	140.4
12	132.4	126.5	122.9	125.9	123.1	147.7	173.6	184.5	175.1	.....	153.3	140.2
13	131.9	127.7	123.5	133.9	122.7	150.0	172.9	184.5	174.4	.....	149.7	138.6
14	131.4	127.7	124.9	134.6	122.9	151.6	174.0	184.5	174.3	.....	147.9	138.2
15	130.8	126.4	124.0	132.5	121.9	152.9	173.9	184.9	175.7	.....	147.1	131.9
16	131.1	123.5	123.5	132.5	121.2	155.3	173.7	184.5	177.3	.....	146.5	131.5
17	131.4	121.0	125.5	128.8	120.3	157.3	174.8	184.3	177.9	154.4	146.3	131.5
18	131.5	120.5	124.8	128.6	123.5	158.7	174.8	184.4	178.1	152.9	142.1	131.4
19	131.5	121.7	125.1	126.6	121.2	160.5	176.0	185.0	178.2	153.1	140.6	132.1
20	132.4	121.3	126.4	125.8	120.8	162.4	175.2	185.0	176.3	152.4	139.5	132.5
21	131.9	122.5	126.9	125.4	121.5	163.9	176.4	184.1	176.3	150.7	137.8	132.1
22	132.0	123.8	126.9	124.3	121.8	164.5	174.3	184.9	175.4	148.3	138.0	135.5
23	131.1	123.7	126.2	124.0	121.6	165.9	173.6	185.4	174.7	148.5	138.1	137.9
24	131.2	123.7	126.5	124.1	122.8	166.7	174.3	185.0	174.2	146.7	139.6	138.9
25	131.4	123.7	125.7	125.2	122.5	167.0	174.3	184.4	174.1	146.7	139.3	138.9

EB-22--Continued.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	131.1	124.1	126.8	124.3	123.1	170.0	175.2	182.7	172.7	146.8	140.9	138.9
27	130.2	124.9	126.5	123.8	123.1	171.2	175.5	182.8	172.4	145.2	139.3	139.2
28	130.6	126.7	127.0	123.5	124.4	170.7	180.2	181.4	174.7	150.0	137.6	139.3
29	130.4		126.0	123.0	123.1	171.1	181.4	179.1	176.1	151.1	138.5	139.7
30	130.7		126.0	123.1	122.5	172.0	182.4	178.8	176.4	151.9	138.2	138.9
31	130.2		125.0		127.0		185.2	179.5		147.1		139.2

EB-28 (\*1019, p. 39; 1026, p. 38; 1074, p. 43). Standard Oil Co. of New Jersey, Louisiana Division. At Baton Rouge refinery, southwest of tank 177.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.1	13.8	14.4	14.0	13.4	14.3	15.4	17.2	17.9	17.8	17.3	17.0
2	15.1	13.8	14.4	13.9	13.8	14.1	15.2	17.2	17.9	17.8	17.3	17.0
3	15.2	13.9	14.4	13.9	13.7	14.3	15.2	17.3	17.9	17.9	17.3	17.0
4	15.3	13.7	14.4	14.1	13.9	14.5	15.1	17.2	18.0	17.8	17.2	17.1
5	15.5	13.9	14.3	13.9	13.7	14.6	15.0	17.5	18.0	17.8	17.1	17.1
6	15.5	13.8	14.2	13.9	14.1	14.6	14.9	17.7	18.0	17.8	16.9	17.2
7	15.4	13.7	14.2	13.9	14.5	14.8	14.8	17.7	18.1	17.7	16.7	17.0
8	15.4	13.8	14.2	13.8	14.7	14.9	14.9	17.7	18.0	17.6	16.6	16.8
9	15.4	13.9	14.3	14.1	14.6	14.6	14.9	17.5	18.0	17.6	16.5	16.7
10	15.3	14.0	14.3	13.9	14.4	15.1	14.9	17.3	18.1	17.7	....	16.6
11	15.1	14.0	14.3	14.0	14.2	15.5	15.0	17.3	18.1	17.7	....	16.8
12	....	14.0	14.5	13.4	14.2	15.7	15.1	17.4	18.2	17.7	....	16.9
13	....	14.0	14.4	14.0	14.4	15.8	15.2	17.4	18.2	17.7	....	16.9
14	13.9	14.0	14.2	12.7	14.7	15.9	15.1	17.5	18.3	17.6	16.4	16.8
15	13.8	14.1	14.1	12.9	14.8	16.1	15.2	17.6	18.3	17.4	16.2	16.7
16	13.8	14.1	14.1	13.0	15.2	15.8	15.1	17.3	18.7	17.3	16.5	16.8
17	13.9	14.2	14.0	13.1	15.2	16.0	15.8	17.3	19.0	17.3	16.6	16.8
18	13.9	14.2	14.0	13.1	15.5	16.2	16.4	17.2	19.4	17.3	16.5	16.8
19	13.7	14.3	13.9	13.2	15.1	16.1	15.9	17.1	19.3	17.3	16.6	16.8
20	13.7	14.2	13.9	13.1	15.4	15.9	15.7	17.0	....	17.2	16.6	16.8
21	13.9	14.4	13.9	13.1	15.1	15.6	15.7	17.1	....	17.3	16.6	16.8
22	14.0	14.5	14.2	13.3	15.1	15.4	16.0	17.3	....	17.4	16.5	16.7
23	14.0	14.4	14.5	13.3	14.9	15.2	16.5	17.4	....	17.5	16.5	16.7
24	14.0	14.5	14.1	13.3	14.7	15.6	17.0	17.6	....	17.5	16.6	16.7
25	13.9	14.5	14.0	13.2	14.2	15.6	17.4	17.5	18.4	17.5	16.7	16.6
26	13.9	14.6	14.0	13.3	13.9	15.5	17.5	17.6	18.3	17.5	16.8	16.6
27	13.8	14.6	13.9	13.3	14.0	15.5	17.3	17.7	18.2	17.5	16.9	16.5
28	13.8	14.5	14.0	13.3	14.1	15.6	17.1	17.8	18.1	17.5	17.0	16.4
29	13.7		14.0	13.5	14.3	15.8	17.4	17.8	17.9	17.4	17.0	16.3
30	13.6		13.9	13.4	14.6	15.3	17.7	17.8	17.9	17.5	17.0	16.3
31	13.8		14.0		14.5		17.3	17.9		17.4		16.3

EB-45 (\*909, p. 33; 939, p. 20; 947, p. 24; \*989, p. 27; 1019, p. 39; 1026, p. 39; 1074, p. 44). Standard Oil Co. of New Jersey, Louisiana Division. At Baton Rouge refinery, east well on dock approach.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	85.10	Feb. 10	70.30	Mar. 17	75.55	Apr. 21	83.90
14	82.30	17	77.10	24	30.80	28	79.25
21	79.98	24	73.75	31	79.18	May 9	77.83
28	66.35	Mar. 3	72.38	Apr. 7	79.40	23	69.78
Feb. 4	75.33	10	70.40	14	81.20	June 13	96.09

EB-83 (\*989, p. 28; 1019, p. 39; 1026, p. 39; 1074, p. 44). Gulf States Utilities. In Baton Rouge, at power house on Government Street, about 20 feet west of west building and 50 feet from street curb. Water-stage recorder temporarily removed Apr. 28, 1947, and reinstalled Aug. 19, 1947.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.9	20.0	20.5	19.2	.....	.....	.....	.....	29.8	31.7	29.6	26.4
2	17.1	19.0	20.7	18.9	.....	.....	.....	.....	30.6	31.7	29.2	27.2
3	17.5	18.9	20.7	19.0	.....	.....	a27.10	.....	31.1	31.8	.....	27.2
4	18.6	19.5	20.4	19.8	.....	.....	.....	.....	31.9	31.8	.....	27.4
5	18.9	19.9	21.7	19.9	.....	.....	.....	.....	32.0	30.9	.....	27.4
6	19.5	20.0	21.2	19.6	.....	a25.03	.....	.....	31.7	31.2	31.3	27.3
7	19.9	19.8	20.8	18.2	.....	.....	.....	a32.00	50.8	31.5	31.1	27.3
8	20.4	19.9	20.5	20.0	.....	.....	.....	.....	31.0	31.8	31.1	27.5
9	20.3	19.7	20.7	19.9	.....	.....	.....	.....	31.2	31.9	30.2	27.8
10	20.6	18.9	19.7	20.6	.....	.....	a28.39	.....	31.7	32.0	30.4	28.0
11	20.5	20.7	22.7	20.2	.....	.....	.....	.....	31.5	30.9	31.1	26.6
12	19.4	20.7	22.6	20.1	.....	.....	.....	.....	31.9	28.8	31.0	26.6
13	19.2	20.8	22.8	18.7	.....	a25.41	.....	.....	31.9	.....	31.0	26.4
14	19.8	20.9	21.7	18.2	.....	.....	.....	.....	31.4	.....	30.7	25.9
15	20.8	20.8	21.7	19.5	.....	.....	.....	.....	31.9	.....	30.8	26.0
16	20.9	20.2	20.8	19.3	.....	.....	.....	.....	32.1	33.7	30.1	26.7
17	21.0	19.8	19.5	20.1	.....	.....	.....	.....	31.5	33.8	30.7	27.1
18	20.5	21.1	22.0	20.0	.....	.....	.....	.....	31.8	33.9	30.6	27.0
19	18.8	20.8	22.0	20.0	.....	.....	.....	30.0	31.5	32.1	30.4	27.0
20	18.9	20.9	21.7	19.2	.....	a25.37	.....	29.8	31.1	31.0	30.7	26.8
21	19.7	21.1	21.4	18.7	.....	.....	.....	30.0	29.6	.....	29.8	26.1
22	20.3	20.9	20.5	19.9	.....	.....	.....	.....	29.8	.....	29.3	26.2
23	20.3	20.4	19.3	19.9	a24.29	.....	.....	.....	30.3	.....	28.7	26.3
24	20.3	19.6	18.4	19.9	.....	.....	a30.85	.....	30.7	31.6	29.0	26.2
25	19.7	21.2	20.0	20.2	.....	.....	.....	.....	30.9	31.7	29.1	25.5
26	18.5	21.5	19.8	20.4	.....	.....	.....	.....	30.8	31.1	29.3	25.0
27	18.3	21.2	19.6	19.1	.....	a24.62	.....	30.8	31.2	31.5	28.4	25.1
28	18.5	20.8	19.4	18.5	.....	.....	.....	30.9	30.7	31.9	27.3	24.8
29	19.4	.....	19.6	.....	.....	.....	.....	31.0	31.0	30.7	27.5	24.8
30	19.5	.....	19.1	.....	.....	.....	.....	31.2	31.5	31.0	26.1	24.5
31	20.8	.....	18.3	.....	a26.56	.....	a31.65	30.3	.....	31.0	.....	23.8

a Tape measurement at odd hour.

EB-89 (\*989, p. 30; 1019, p. 40; 1026, p. 40; 1074, p. 45). Baton Rouge Water Works Co. well 3. At Lula Avenue pump station. Water-stage recorder installed Nov. 18, 1947. New measuring point, floor of recorder house, 4.80 feet above land-surface datum.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18	9.3	Nov. 29	9.3	Dec. 12	23.5	Dec. 22	23.5
19	9.4	30	9.3	13	23.4	23	23.4
20	9.3	Dec. 1	9.3	14	23.4	24	23.5
21	9.4	2	9.3	15	23.3	25	23.4
22	9.5	3	9.3	16	23.5	26	23.4
23	9.6	4	9.4	17	23.6	27	23.3
24	9.7	5	9.4	18	23.5	28	23.1
25	10.0	6	9.4	19	23.6	29	23.1
26	10.1	7	9.3	20	23.6	30	23.1
27	10.2	8	9.3	21	23.5	31	23.1
28	9.3	9	9.3				

EB-90 (\*989, p. 30; 1019, p. 40; 1026, p. 40; 1074, p. 45). Baton Rouge Water Works Co. well 8. At Lula Avenue pump station. New measuring point, floor of recorder house, 4.25 feet above land-surface datum. Water-stage recorder installed Oct. 4, 1947.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 18	a 26.85	Oct. 24	26.0	Nov. 17	26.0	Dec. 10	25.0
25	a 26.10	25	25.8	18	26.1	11	25.1
Oct. 2	a 26.95	26	25.7	19	26.1	12	25.0
4	27.0	27	25.8	20	26.2	13	25.0
5	27.1	28	25.7	21	26.2	14	24.9
6	27.6	29	25.6	22	26.1	15	24.5
7	27.4	31	27.3	23	25.8	16	24.8
8	27.2	Nov. 1	27.2	24	24.7	17	25.1
9	27.1	2	27.0	25	24.9	18	25.1
10	26.9	3	26.5	26	24.7	19	25.1
11	26.7	4	26.6	27	24.8	20	25.1
12	25.6	5	26.5	28	24.9	21	24.8
13	25.7	6	26.6	29	25.0	22	24.3
14	25.6	7	26.5	30	24.8	23	24.6
15	25.5	8	26.8	Dec. 1	24.6	24	24.7
16	25.4	9	26.7	2	25.1	25	24.4
17	25.2	10	26.1	3	25.2	26	23.7
18	25.1	11	26.2	4	25.2	27	23.7
19	25.2	12	26.4	5	25.3	28	23.4
20	25.6	13	26.4	6	25.4	29	23.1
21	25.8	14	26.3	7	25.1	30	23.1
22	26.3	15	26.4	8	24.7	31	23.2
23	26.3	16	26.4	9	24.6		

a Tape measurement at odd hour.

EB-123. City of Baton Rouge. At City Park swimming pool. Used public-supply well, diameter 12 inches, depth 729 feet. Equipped with turbine pump. Measuring point, base plate of well, 1.31 feet above land-surface datum. Water level, in feet below land-surface datum, 1947: Nov. 17, 95.09.

EB-125 (\*909, p. 34; 939, p. 21; 947, p. 25; \*989, p. 31; 1019, p. 41; 1026, p. 40; 1074, p. 45). Peoples Ice & Fuel Co. In Baton Rouge, at 1931 Railroad Avenue. Water levels, in feet below land-surface datum, 1947: Jan. 21, 71.58; Jan. 28, 68.85; June 6, 101.09.

EB-128 (\*909, p. 34; 939, p. 21; 947, p. 25; \*989, p. 31; 1019, p. 41; 1026, p. 41; 1074, p. 46). Ice Service, Inc. In Baton Rouge, at 135 S. 15th Street.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	81.1	76.3	73.6	....	73.4	70.8	....	90.9	97.1	101.1	90.8	85.4
2	81.0	76.1	73.5	....	73.3	70.7	....	91.3	97.1	101.2	90.6	85.2
3	81.0	75.9	73.4	....	73.3	70.8	....	91.6	....	101.2	90.5	85.2
4	80.9	75.7	73.3	....	73.1	70.9	....	91.9	....	101.1	90.2	85.1
5	80.8	75.6	73.3	....	73.2	70.9	....	91.9	97.4	100.9	89.9	85.1
6	80.7	75.4	73.2	....	73.1	71.1	....	92.0	97.5	100.7	89.8	85.1
7	80.5	75.2	73.2	74.5	73.1	71.1	84.7	92.3	97.7	100.6	89.5	84.9
8	80.4	74.1	73.2	....	73.0	71.4	84.9	92.5	97.8	100.2	89.5	84.7
9	80.3	73.9	73.1	....	73.0	71.5	....	92.8	97.9	99.9	89.4	84.5
10	80.0	74.8	73.1	....	72.9	71.8	85.6	93.0	98.1	99.5	89.1	84.2
11	79.7	74.6	73.0	....	72.9	72.0	85.9	93.2	98.3	99.2	88.9	84.2
12	79.5	74.4	73.0	....	72.8	72.5	....	93.5	99.6	99.8	88.8	84.1
13	79.2	74.3	....	....	72.7	72.9	....	93.9	....	98.5	88.7	....
14	79.0	74.2	....	73.9	72.6	....	....	94.0	....	98.4	88.5	....
15	78.9	74.0	....	73.9	72.6	....	....	94.2	....	97.0	88.3	....
16	78.8	73.8	....	73.7	72.6	....	....	94.5	....	96.5	88.2	....
17	78.8	73.7	72.9	73.6	....	....	87.5	94.8	....	96.2	88.0	....
18	78.7	73.7	73.0	73.3	....	....	87.7	94.9	99.6	95.7	87.7	....



EB-128--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	78.4	73.6	73.0	73.2	....	....	87.8	95.0	99.6	95.3	87.6	....
20	78.3	73.6	73.1	73.1	....	....	87.9	95.2	99.7	94.9	87.5	83.1
21	78.4	73.7	73.2	73.1	....	....	88.1	95.4	99.8	94.6	87.0	83.1
22	78.2	73.7	73.2	73.2	....	....	88.3	95.6	100.0	94.2	86.9	83.1
23	78.1	73.6	73.3	73.2	....	....	88.6	95.8	100.0	93.8	86.7	83.1
24	77.9	73.7	73.4	73.3	71.8	....	88.9	96.0	100.1	93.6	86.4	83.0
25	78.6	73.8	73.5	73.4	71.6	....	89.2	96.1	100.2	93.3	86.3	82.9
26	77.4	73.8	73.5	73.4	71.4	....	89.5	96.3	101.1	92.9	86.1	82.8
27	77.3	73.8	73.6	73.4	71.3	....	89.7	96.5	101.1	92.5	86.0	82.6
28	77.0	73.7	73.9	73.4	71.1	....	89.9	96.7	101.2	92.1	85.8	82.4
29	76.8		74.0	73.4	71.0	....	90.3	96.9	101.1	91.8	85.7	82.1
30	76.6		74.1	73.4	70.9	....	90.4	97.0	101.1	91.5	85.6	82.1
31	76.5		74.1		70.8		90.6	97.1		91.2		81.9

EB-165 (\*1074, p. 46). W. T. Baker Co. Sec. 74, T. 6 S., R. 1 E.  
New measuring point, top side of 1 inch coupling, 0.48 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 24	8.3	June 6	6.9	July 31	3.9	Sept. 16	5.6
Mar. 21	7.8	July 9	6.5	Sept. 4	4.9	Dec. 17	5.9
May 4	7.9						

EB-242 (\*1026, p. 41; 1074, p. 46). Louisiana State University.  
Sec. 74, T. 8 S., R. 1 W., under tree in farmyard, 0.6 mile south of Arlington.

Water level, in feet below land-surface datum, 1947

Jan. 14	7.40	Mar. 7	11.11	Apr. 16	4.55	Aug. 1	7.65
20	4.93	10	11.70	21	3.40	14	16.77
27	4.42	14	11.58	25 a	.12	Sept. 5	17.90
31	3.32	17	11.50	May 4 a	2.21	12	18.30
Feb. 6	2.00	19	11.35	9 a	2.86	25	18.60
10	1.80	21	11.04	19 a	2.54	Oct. 31	20.15
17	3.00	24	10.40	June 13 a	.86	Nov. 3	20.00
24	7.38	26	9.84	27 a	.55	14	19.02
26	8.80	28	9.05	July 7 a	.40	21	18.23
28	9.80	31	8.00	15	.23	23	17.50
Mar. 3	10.60	Apr. 7	7.62				

a Above land-surface datum.

EB-282 (\*989, p. 32; 1019, p. 42; 1026, p. 42; 1074, p. 47). Town of Zachary. N $\frac{1}{2}$  sec. 40, T. 5 S., R. 1 E. No measurements made in 1947.EB-283 (\*989, p. 32; 1019, p. 42; 1026, p. 42; 1074, p. 47). Town of Zachary. N $\frac{1}{2}$  sec. 40, T. 5 S., R. 1 E. Water level, in feet above land-surface datum, 1947: Aug. 20, 16.7.

EB-293 (\*1019, p. 43; 1026, p. 42; 1074, p. 47). Consolidated Chemical Industries, Inc. Sec. 37, T. 6 S., R. 1 W., in pumphouse at plant.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	100.2	92.0	89.8	95.7	95.1	90.8	132.9	141.3	142.4	147.1	112.7	107.7
2	99.8	91.7	89.6	95.4	94.8	91.0	132.8	140.7	142.8	145.3	112.2	107.1
3	99.5	91.4	89.5	95.1	94.7	91.6	132.1	141.1	143.7	142.3	111.8	106.2
4	99.3	91.3	89.6	95.3	94.0	91.9	132.0	141.7	144.2	139.0	113.4	105.4
5	99.0	90.6	90.0	95.8	93.4	93.4	132.1	142.2	145.3	136.6	115.3	105.0
6	99.1	89.9	90.1	96.3	93.2	95.0	132.0	142.8	148.2	134.5	117.0	104.9
7	99.0	89.1	89.7	96.4	93.2	97.5	132.1	144.7	149.2	133.2	118.8	104.5
8	98.8	88.8	89.6	96.3	93.1	99.8	132.4	145.4	149.8	132.0	119.5	104.4
9	98.8	88.3	89.3	95.9	92.6	101.4	132.6	147.8	150.5	131.1	119.0	104.8

EB-293--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	98.8	88.6	89.2	95.6	91.0	102.0	132.9	149.0	151.3	128.7	118.0	104.7
11	98.6	88.5	89.1	95.4	90.5	102.5	133.2	149.8	152.5	127.4	117.5	104.4
12	98.4	88.1	89.5	96.0	89.7	103.1	133.5	146.8	153.6	126.3	117.0	104.1
13	98.0	87.9	89.8	96.5	89.1	104.2	133.1	145.8	154.0	125.3	114.7	103.7
14	97.5	87.9	90.3	96.9	88.8	107.6	133.3	145.4	154.2	125.5	113.4	103.5
15	97.2	88.5	90.7	96.8	88.8	110.6	133.6	145.3	154.2	124.1	112.6	103.5
16	97.2	89.0	91.3	96.3	88.9	112.8	133.8	145.2	154.5	122.5	111.8	104.3
17	97.0	89.5	92.0	95.7	89.9	115.0	133.9	144.8	154.7	121.8	111.2	104.8
18	96.5	90.0	92.0	95.8	89.7	117.3	134.1	144.5	154.9	121.5	111.0	105.2
19	95.9	90.8	91.7	95.9	89.2	119.5	134.4	144.7	155.2	121.1	110.8	105.6
20	96.3	90.7	92.5	95.9	89.0	121.6	134.8	144.6	152.3	120.4	110.5	105.7
21	96.0	90.8	93.3	96.1	88.0	123.2	135.1	144.6	151.7	119.6	109.8	105.5
22	95.6	90.8	93.8	96.3	87.4	124.3	135.8	144.8	151.3	118.7	109.3	105.1
23	95.3	90.6	94.2	96.4	86.9	125.7	136.0	145.1	150.6	117.5	109.1	104.0
24	95.0	90.2	94.4	96.6	87.2	.....	135.6	144.8	150.1	116.3	109.0	103.9
25	94.6	90.3	95.1	96.9	87.6	.....	135.8	144.9	149.4	115.3	108.7	102.1
26	94.3	90.4	95.5	96.9	87.6	.....	136.4	145.2	148.8	114.3	109.1	101.5
27	94.4	90.4	96.0	96.4	87.6	129.9	136.9	144.9	148.1	113.4	108.4	101.2
28	93.0	89.9	96.4	96.9	87.9	130.7	136.8	143.1	147.6	113.2	108.3	100.9
29	92.5		96.6	96.5	88.2	131.5	137.2	142.6	147.3	113.4	108.2	100.5
30	92.3		96.1	96.3	88.2	132.2	138.9	142.4	147.2	113.1	107.9	100.5
31	92.3		95.9		89.2		140.6	142.8		113.0		100.6

EB-299 (#989, p. 32; 1019, p. 43; 1026, p. 42; 1074, p. 47).  
Staring & Kirby. In Baton Rouge, at the corner of Istrouma Avenue and  
Haber Street, Capitol Heights. Water levels, in feet above land-surface  
datum, 1947: Jan. 31, 5.1; July 9, 6.4; Dec. 16, 5.7.

EB-301 (#989, p. 32; 1019, p. 44; 1026, p. 43; 1074, p. 47). H. B.  
Witter. At Baton Rouge, on W $\frac{1}{2}$  sec. 91, T. 7 S., R. 1 E., behind barn at  
Cedar Lane Plantation on Jefferson Highway. Water levels, in feet above  
land-surface datum, 1947: Jan. 31, 5.4; July 9, 5.9.

EB-302 (#989, p. 33; 1019, p. 44; 1026, p. 43; 1074, p. 47). H. A.  
Bozeman. NW corner sec. 3, T. 7 S., R. 2 E., 3.5 miles east of inter-  
section of U. S. Highways 61 and 190, on south side of Highway 190. Water  
levels, in feet above land-surface datum, 1947: Jan. 31, 23.0; July 9,  
19.4; Dec. 16, 20.1.

EB-303 (#989, p. 33; 1019, p. 44; 1026, p. 43; 1074, p. 48).  
Greenwell Springs Sanitarium well 1. E $\frac{1}{2}$  sec. 49, T. 5 S., R. 2 E. Measure-  
ments discontinued.

EB-304 (#989, p. 33; 1019, p. 44; 1026, p. 43; 1074, p. 48).  
Greenwell Springs Sanitarium well 2. E $\frac{1}{2}$  sec. 49, T. 5 S., R. 2 E. Measure-  
ments discontinued.

EB-305 (#989, p. 33; 1019, p. 44). Dr. I. M. Lee. SW corner sec. 66,  
T. 6 S., R. 1 E., on south side of Greenwell Springs road behind house.  
Water level, in feet above land-surface datum, 1947: Jan. 31, 10.0.

EB-306 (#989, p. 33; 1019, p. 44; 1026, p. 43; 1074, p. 48). A.  
Wickenstad. NW $\frac{1}{4}$  sec. 66, T. 6 S., R. 1 E. Water levels, in feet above  
land-surface datum, 1947: Jan. 31, 10.2; July 9, 9.8; Dec. 16, 8.4.

EB-307 (#989, p. 34; 1019, p. 44; 1026, p. 43; 1074, p. 48). W. W.  
Bynum. Center of sec. 48, T. 6 S., R. 1 E. Water levels, in feet above  
land-surface datum, 1947: Jan. 31, 16.0; July 9, 15.0; Dec. 16, 13.8.

EB-311 (#989, p. 34; 1019, p. 45; 1026, p. 43; 1074, p. 48).  
Suburban Water Co. well 2. In Baton Rouge, in sec. 42, T. 6 S., R. 1 W.  
Measurements discontinued.

EB-312 (\*989, p. 34; 1019, p. 45; 1026, p. 43; 1074, p. 48). Baton Rouge Water Works Co. North Highlands subdivision, Baton Rouge.

Water level, in feet above land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	7.6	Jan. 31	8.1	June 6	6.1	Sept. 16	4.1
10	7.6	Mar. 5	7.4	July 9	5.4	Nov. 23	5.2
20	8.0	May 4	7.1	31	5.9	Dec. 17	4.9
24	7.7	9	6.1	Sept. 4	4.5		

EB-314 (\*989, p. 35; 1019, p. 45; 1026, p. 43; 1074, p. 48). A. A. Morvant. N $\frac{1}{2}$  sec. 54, T. 5 S., R. 1 E., on south side of Lavy Lane, 1.3 miles west of Plank Road. Water levels, in feet above land-surface datum, 1947: Feb. 3, 9.5; Aug. 20, 5.9; Dec. 17, 5.9.

EB-315 (\*989, p. 35; 1019, p. 45; 1026, p. 43; 1074, p. 48). E. J. Morgan. Center of sec. 93, T. 6 S., R. 1 E., at Zion City. Measuring point, beginning Aug. 10, 1947, top of 3-inch tee, 1.37 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Mar. 5	0.83	Oct. 23	7.44	Nov. 13	7.56	Dec. 15	6.51
June 6	1.59	30	7.91	20	7.36	23	6.16
Aug. 10	6.55	Nov. 6	7.74	28	6.66		

EB-316 (\*989, p. 35; 1019, p. 45; 1026, p. 43; 1074, p. 48). East Baton Rouge Parish School Board. S $\frac{1}{2}$  sec. 5, T. 6 S., R. 2 E., at Central High School, on State Highway 270 about 3 miles southwest of Greenwell Springs. Water level, in feet above land-surface datum, 1947: Jan. 31, 14.0.

EB-317 (\*989, p. 35; 1019, p. 45; 1026, p. 43; 1074, p. 48). H. H. Edwards. SW $\frac{1}{4}$  sec. 6, T. 6 S., R. 2 E., on east side of Joor road, 0.25 mile north of Comite River. Water levels, in feet above land-surface datum, 1947: Jan. 31, 15.7; Dec. 17, 13.8.

EB-321 (\*989, p. 36; 1019, p. 46; 1026, p. 44; 1074, p. 48). J. B. Carney. On east side of sec. 89, T. 5 S., R. 1 W. Water level, in feet above land-surface datum, 1947: Feb. 3, 7.8.

EB-322 (\*989, p. 36; 1019, p. 46; 1026, p. 44; 1074, p. 49). T. E. Charlton. SE $\frac{1}{4}$  sec. 29, T. 5 S., R. 1 E. Water levels, in feet above land-surface datum, 1947: Feb. 3, 44.2; Dec. 17, 44.7.

EB-323 (\*989, p. 36; 1019, p. 46; 1026, p. 44; 1074, p. 49). Standard Ice Box Co. On west side of sec. 42, T. 7 S., R. 1 W., between Third Street extension and Illinois Central Railroad.

Water level, in feet below land-surface datum, 1947

Jan. 7	6.82	Mar. 24	6.38	June 27	6.45	Sept. 18	10.69
14	5.80	31	6.42	July 17	7.75	25	9.75
21	6.32	Apr. 7	6.70	24	7.80	Oct. 2	9.70
28	7.05	14	4.45	31	8.79	16	10.05
Feb. 4	6.20	21	5.20	Aug. 7	9.00	23	9.90
10	6.50	May 5	5.55	14	9.16	30	10.10
17	6.94	9	5.67	21	9.15	Nov. 6	10.68
24	7.70	31	5.49	28	9.90	13	9.93
Mar. 3	7.20	June 6	5.98	Sept. 4	7.37	20	10.15
10	7.28	21	6.43	11	10.42	28	10.00
17	6.80						

EB-345 (\*1019, p. 46; 1026, p. 44; 1074, p. 49). Leland College. Sec. 39, T. 5 S., R. 1 W. Water level, in feet above land-surface datum, 1947: Feb. 3, 34.1.

EB-376 (\*1026, p. 44; 1074, p. 49). J. E. Butler. S $\frac{1}{2}$  sec. 75, T. 6 S., R. 1 W. Measurements discontinued.

EB-384. McVay Dairy. Sec. 76, T. 5 S., R. 1 W., 0.70 mile north of State Highway 880, east side of Bayou Sara road. Used drilled domestic well, diameter 6 inches, depth 1,919 feet. Measuring point, top of 2-inch line from well, 2.55 feet above land-surface datum. Water levels, in feet above land-surface datum, 1947: Feb. 6, 31.6; July 11, 25.2.

EB-432. Negro Industrial School. SW $\frac{1}{4}$  sec. 86, T. 5 S., R. 1 W. Used drilled public-supply well, diameter 8 inches, depth 1,940 feet. Measuring point, top of plug in 1 $\frac{1}{2}$ -inch tee, about 2 feet above land-surface datum, at hydrant about 200 feet northwest of well. Water levels, in feet above land-surface datum, 1947: Feb. 6, 47.1; July 11, 40.2.

EB-445. Baton Rouge Country Club. Irregular sec. 40, T. 7 S., R. 1 E., at intersection of State Highway 887 and U. S. Highways 61 and 65. Used drilled irrigation well, diameter 8 inches, depth 540 feet. Measuring point, top of 8-inch casing, 1.00 foot above land-surface datum. Water levels, in feet below land-surface datum, 1947: Jan. 17, 12.11; Jan. 23, 12.00.

EB-446. McVay Dairy. Irregular sec. 76, T. 5 S., R. 1 W., 0.70 mile north of State Highway 880, east side of U. S. Highway 65. Used drilled stock well. Measuring point, top of 2-inch tee, 2.00 feet above land-surface datum. Water level, in feet below land-surface datum, 1947: Feb. 6, 10.37.

EB-454. Consolidated Chemical Industries. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 37, T. 6 S., R. 1 W. Used drilled industrial well, diameter 10 inches, depth 2,300 feet. Measuring point, top of 10-inch casing, 1.00 foot above land-surface datum. Water level, in feet below land-surface datum, 1947: June 13, 32.06.

EB-455. Fortune Water Co. Irregular sec. 90, T. 6 S., R. 1 E., in Zion City. Used drilled public-supply well, diameter 8 inches, depth 1,165 feet. Equipped with centrifugal pump. Measuring point, top of 1 $\frac{1}{2}$ -inch brass valve on 8-inch tee, 2.00 feet above land-surface datum. Water level, in feet below land-surface datum, 1947: Aug. 10, 6.65.

EB-461. Granberry Nursery. Irregular sec. 97, T. 6 S., R. 1 E. Used drilled irrigation well, diameter 4 inches, depth 331 feet. Measuring point, top of 4-inch collar on casing, 2.75 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Nov. 13	73.55	Nov. 28	72.35	Dec. 23	70.05
20	73.33	Dec. 5	71.75		

EB-462. Jennings Stock Yard Co. Sec. 39, T. 6 S., R. 1 E. Used drilled industrial well, diameter 4 inches, depth 340 feet. Measuring point, top of 4-inch collar on casing, 0.50 foot above land-surface datum. Water levels, in feet below land-surface datum, 1947: Nov. 6, 97.68; Nov. 13, 98.15.

#### Evangeline Parish

Ev-1 (\*886, p. 236; 909, p. 34; 939, p. 22; 947, p. 26; 989, p. 37; 1019, p. 46; 1026, p. 44; 1074, p. 49). John LaHaye. SW $\frac{1}{4}$  sec. 20, T. 4 S., R. 1 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	54.78	Mar. 13	49.94	Sept. 10	82.07	Nov. 5	66.63
Feb. 5	51.34	Apr. 24	49.61	Oct. 9	71.78		

Ev-2 (\*886, p. 236; 909, p. 34; 939, p. 22; 947, p. 26; 989, p. 37; 1019, p. 47; 1026, p. 44; 1074, p. 49). Dorestant Ardoin. North line Sec. 37, T. 6 S., R. 1 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	53.89	Mar. 12	55.59	Oct. 10	81.06
Feb. 5	57.20	May 15	85.51	Nov. 6	74.51

Ev-3 (\*1019, p. 47; 1026, p. 44; 1074, p. 49). Civilian Conservation Corps Camp 1427 (abandoned). SE $\frac{1}{4}$  sec. 33, T. 2 S., R. 2 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	31.45	Apr. 24	30.96	Aug. 3	31.77	Nov. 2	32.76
Feb. 3	31.16	May 13	31.15	Sept. 7	32.25	Dec. 11	32.61
Mar. 9	31.18	July 18	31.54	Oct. 5	32.45		

Ev-4 (\*909, p. 35; 939, p. 22; 947, p. 26; 989, p. 37; 1019, p. 47; 1026, p. 45; 1074, p. 49). Rock Island Railway. SW $\frac{1}{4}$  sec. 31, T. 1 S., R. 1 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	30.40	Apr. 24	30.35	Aug. 3	32.01	Nov. 5	38.72
Feb. 3	30.16	May 13	29.60	Sept. 7	35.32	Dec. 11	29.82
Mar. 9	30.76	July 18	31.10	Oct. 5	35.36		

Ev-14 (\*1019, p. 47; 1026, p. 45; 1074, p. 49). J. Perrodin. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 34, T. 6 S., R. 2 W., 2.0 miles east of Basile, on north side of U. S. Highway 190.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 9	46.08	Mar. 13	43.38	Sept. 10	67.87
Feb. 6	44.90	May 19	52.94	Oct. 9	62.97

Ev-18 (\*1019, p. 47; 1026, p. 45; 1074, p. 50). Alphonse LeFleur. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 6 S., R. 2 W. Measuring points: (1) Bottom edge of inclined discharge pipe, 3.10 feet above land-surface datum; (2) since Aug. 6, 1947, 3.52 feet along inclined discharge pipe.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 9	40.56	May 9	54.63	Oct. 9	58.36
Feb. 6	39.76	Sept. 10	64.76	Nov. 5	53.82

Ev-23 (\*1074, p. 50). Mrs. A. Swallow. Sec. 26, T. 5 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	40.47	Mar. 13	37.94	Aug. 6	72.84	Oct. 9	64.93
Feb. 6	39.63	May 19	55.84	Sept. 10	60.90	Nov. 5	50.90

Ev-31 (\*1019, p. 47; 1026, p. 45; 1074, p. 50). Eddie Manuel. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 20, T. 5 S., R. 1 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	41.79	Mar. 13	39.26	Aug. 11	74.16	Oct. 9	66.26
Feb. 6	40.95	May 19	57.16	Sept. 10	62.22	Nov. 5	52.22

Ev-37 (\*1026, p. 45; 1074, p. 50). Gordon Micks. SW $\frac{1}{4}$  sec. 15, T. 3 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	27.12	Mar. 13	26.15	Aug. 11	28.26	Nov. 10	28.66
27	25.96	27	25.98	Sept. 24	28.13	25	29.00
Feb. 15	26.43	Apr. 10	25.66	Oct. 13	28.46	Dec. 11	28.84
27	25.98	July 21	26.81	27	28.82	26	28.41

Ev-39 (#1026, p. 45; 1074, p. 50). P. E. Fontenot. SE $\frac{1}{4}$  sec. 23, T. 3 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	19.04	Mar. 13	17.10	Aug. 11	19.20	Nov. 10	20.28
27	17.58	27	17.71	Sept. 24	19.87	25	20.63
Feb. 15	18.25	Apr. 10	16.82	Oct. 13	20.48	Dec. 11	20.70
27	18.47	July 21	18.52	27	20.38	26	20.40

Ev-41 (#1026, p. 45; 1074, p. 50). Harvey Vidrine. NE $\frac{1}{4}$  sec. 14, T. 3 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Jan. 9	18.07	Mar. 13	17.30	Aug. 11	17.98	Nov. 10	18.78
27	17.54	27	17.51	Sept. 25	18.38	25	18.80
Feb. 15	17.81	Apr. 10	17.27	Oct. 13	18.52	Dec. 11	18.82
27	17.89	July 21	17.68	27	18.74	26	18.86

Ev-46 (#1026, p. 45; 1074, p. 50). Gordon Micks. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 15, T. 3 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Jan. 27	28.01	Mar. 27	28.01	Sept. 24	29.82	Nov. 25	30.50
Feb. 15	28.59	Apr. 10	27.67	Oct. 13	30.16	Dec. 11	30.49
27	28.65	July 21	28.71	27	30.31	26	30.12
Mar. 13	27.85	Aug. 11	28.10	Nov. 10	30.29		

Ev-51 (#1026, p. 45; 1074, p. 51). Eugenie Guillory. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 3 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Jan. 9	3.16	Mar. 13	0.33	Aug. 11	17.27	Nov. 10	16.67
27	10.33	27	15.92	Sept. 24	17.66	25	17.89
Feb. 15	16.85	Apr. 10	14.69	Oct. 13	17.92	Dec. 11	14.56
27	16.82	July 21	16.96	27	18.05	26	18.04

Ev-70. C. Guillory. Center line sec. 1, T. 6 S., R. 1 E. Used drilled irrigation well, diameter 9 inches, depth about 200 feet. Measuring point, bottom edge of inclined discharge pipe, 4.99 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	69.17	Mar. 12	54.85	Nov. 5	71.56
Feb. 5	67.81	Oct. 9	75.43		

Ev-76. W. Vidrine, Irregular sec. 59, T. 5 S., R. 2 E. Used drilled irrigation well, diameter 10.26 inches, depth about 200 feet. Measuring point, bottom edge of inclined discharge pipe, 3.02 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Jan. 8	58.20	Sept. 10	68.60	Nov. 5	65.14
Feb. 5	57.87	Oct. 9	66.34		

Ev-90. Haas Estate. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 36, T. 4 S., R. 1 W. Used drilled irrigation well, diameter 12 inches, depth 210 feet. Measuring point, bottom edge of inclined discharge pipe, 2.43 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Jan. 9	38.09	Mar. 13	33.94	Oct. 9	56.44
Feb. 5	38.83	Sept. 10	68.53	Nov. 5	48.86

Grant Parish

G-21 (\*845, p. 146; 909, p. 36; 939, p. 23; 947, p. 26; 989, p. 37; 1019, p. 47; 1026, p. 46; 1074, p. 51). U. S. Dept. of Agriculture. In Pollock, at Catahoula Fire Tower. Water level, in feet below land-surface datum, 1947: Sept. 23, 133.94.

G-27 (\*845, p. 146; 909, p. 36; 939, p. 23; 947, p. 26; 989, p. 37; 1019, p. 47; 1026, p. 46; 1074, p. 51). 4-H Club Camp. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 6 N., R. 1 E. Water levels, in feet above land-surface datum, 1947: Jan. 27, 3.2; Apr. 12, 2.0; Dec. 31, 2.8.

G-112 (\*1026, p. 46; 1074, p. 51). Town of Colfax. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 6 N., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	76.70	Mar. 24	73.25	Aug. 25	71.06	Oct. 16	71.92
Mar. 3	75.41	Apr. 12	71.83	Sept. 23	72.19		

G-113. Town of Colfax. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 6 N., R. 3 W. Drilled public-supply well, diameter 12 inches, depth 230 feet. Measuring points: (1) Top of 6-inch casing extension, 5.15 feet above land-surface datum; (2) since Nov. 29, 1945, top of pump support flange, 2.40 feet above land-surface datum. Water levels, in feet below land-surface datum: Nov. 27, 1945, 89.23; Nov. 29, 1945, 89.37; Apr. 12, 1947, 100.60.

G-121. John Humberlin. Boyce. Used dug stock well, diameter 36 inches, depth 16 feet. Measuring point, top of board curbing, 0.25 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	0.08	Mar. 25	0.38	Sept. 23	8.11	Dec. 31	3.19
Mar. 3	2.49	Apr. 12	0.07	Oct. 16	9.32		

Iberia Parish

I-19 (\*1019, p. 48; 1026, p. 46; 1074, p. 51). Jefferson Island Planting Co. Irregular sec. 59, T. 12 S., R. 5 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 4	4.64	Apr. 14	4.84	Nov. 4	7.59
Mar. 11	4.15	Oct. 8	7.44		

Jackson Parish

Ja-12 (\*1074, p. 51). Southern Advance Bag & Paper Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 15 N., R. 4 W. Water levels, in feet below land-surface datum, 1947: Sept. 16, 135.60; Oct. 15, 146.12; Nov. 17, 145.32.

Ja-13 (\*1074, p. 51). Southern Advance Bag & Paper Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 15 N., R. 4 W.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	102.6	103.6	101.3	99.8	113.2	.....	117.0	114.6	115.4	112.1	112.9	112.4
2	102.8	103.6	101.2	100.4	113.3	.....	117.1	114.7	112.4	112.1	112.9	112.4
3	102.9	103.7	101.1	101.6	113.4	.....	117.2	114.8	99.9	112.2	112.8	112.4
4	102.9	103.6	101.0	102.9	113.5	.....	117.4	114.9	107.0	112.2	112.8	112.4
5	102.9	103.6	100.9	104.0	113.5	.....	114.7	114.9	104.9	112.3	112.8	112.4
6	103.0	103.5	100.8	102.6	113.4	.....	110.0	115.0	102.0	112.4	112.8	112.4
7	103.1	103.4	100.8	98.5	113.4	.....	107.2	115.0	100.4	112.4	112.8	112.3
8	103.1	103.3	101.2	97.3	113.3	.....	108.7	115.1	98.3	112.4	112.7	112.3
9	103.1	103.2	102.1	....	113.2	.....	110.5	115.1	97.0	112.5	112.7	112.3

## Ja-13--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	103.1	103.2	102.2	....	113.3	.....	111.7	115.1	98.9	112.5	112.7	111.7
11	103.1	103.1	102.1	....	113.5	.....	111.7	115.1	103.7	112.5	112.6	110.6
12	103.1	103.0	101.9	....	113.7	.....	111.0	115.2	116.5	112.5	112.6	109.3
13	103.1	102.9	101.6	.....	113.8	.....	112.8	115.2	107.0	112.6	112.5	108.3
14	103.1	102.8	101.3	.....	114.0	.....	113.6	115.2	108.1	112.6	112.5	108.5
15	103.1	102.7	101.0	109.6	114.1	.....	113.3	115.2	108.9	112.6	112.5	108.9
16	103.1	102.6	100.8	110.1	114.2	.....	114.9	115.3	109.5	112.6	112.4	119.4
17	103.1	102.5	105.7	110.6	114.3	114.4	115.4	115.3	109.9	112.6	112.4	119.8
18	99.6	102.4	100.7	111.0	114.4	114.6	115.8	115.3	110.3	112.6	112.4	110.3
19	98.8	102.3	100.6	111.2	114.5	114.9	115.9	115.3	110.5	112.6	112.4	110.6
20	100.0	102.2	100.5	111.4	114.6	115.1	115.2	115.4	110.7	112.7	112.4	110.9
21	101.0	102.0	100.5	111.5	114.5	115.4	114.4	115.4	110.8	112.7	112.4	111.2
22	101.8	101.9	100.4	111.8	114.5	115.6	113.6	115.4	111.0	112.7	112.4	111.4
23	102.4	101.7	100.3	112.1	114.6	115.8	113.3	115.4	111.1	112.8	112.4	111.5
24	102.7	101.7	100.2	112.3	114.8	116.1	113.4	115.4	111.2	112.8	112.4	111.6
25	103.0	101.6	100.2	112.5	114.9	116.2	113.7	115.4	111.4	112.8	112.3	109.6
26	103.1	101.5	100.1	112.7	114.9	116.4	114.0	115.4	111.4	112.8	112.3	106.0
27	103.2	101.5	100.1	112.9	114.2	116.5	114.1	115.4	111.5	112.9	112.3	117.8
28	103.2	101.4	100.0	113.0	.....	116.7	114.3	115.4	111.8	112.9	112.3	118.9
29	103.3		100.0	113.1	.....	116.8	114.4	115.4	111.8	112.9	112.4	109.9
30	103.4		99.9	113.2	.....	116.9	114.5	115.4	111.9	112.9	112.4	110.7
31	103.5		99.9	.....	.....	.....	114.5	115.4	.....	112.9	.....	111.5

Jefferson Parish

Jf-8. Gretna Ice Service, Inc. Sec. 5, T. 13 S., R. 24 E. Abandoned drilled industrial well, diameter 6 inches, depth 825 feet. Measuring point, top of 6-inch casing, at land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	62.85	Apr. 29	63.67	Aug. 27	80.61	Dec. 21	71.65
Apr. 8	62.28	July 2	82.24	Nov. 11	78.82		

Jf-12 (\*947, p. 26; \*989, p. 37; 1019, p. 48; 1026, p. 47; 1074, p. 52). Fourth Jefferson drainage district. At New Orleans pumping station 1, about 1.25 miles west of parish line, on Lake Pontchartrain. Measuring points: (1) Top inside edge of 1-inch union, 2.32 feet above land-surface datum; (2) since Apr. 8, 1947, top of 1-inch nipple, 1.0 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 27	19.98	July 2	22.85	Nov. 11	27.89
Apr. 8	19.76	Aug. 27	26.04		

Jefferson Davis ParishJD-6 (\*886, p. 238; 909, p. 37; 939, p. 24; 947, p. 27; 989, p. 37; 1019, p. 48; 1026, p. 47; 1074, p. 52). Latreille Estate. NW $\frac{1}{4}$  sec. 22, T. 8 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	45.31	Feb. 7	43.46	Mar. 21	42.04	May 25	46.84
8	45.00	14	43.38	28	41.90	Nov. 24	53.86
10	44.91	21	43.10	Apr. 4	41.47	Dec. 1	53.02
17	44.46	27	42.78	11	41.28	15	51.67
24	44.15	Mar. 7	42.27	18	41.35	22	51.37
Feb. 6	43.53	14	42.10	May 9	42.77	29	50.92



JD-8 (\*845, p. 147; 886, p. 238; 1019, p. 48; 1026, p. 47; 1074, p. 53). William Koll. SW $\frac{1}{4}$  sec. 3, T. 9 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	35.87	Mar. 10	33.33	Oct. 7	49.87
Feb. 6	34.48	May 26	37.78	Nov. 4	46.58

JD-9 (\*845, p. 147; 886, p. 238; 909, p. 37; 939, p. 24; 947, p. 27; 989, p. 37; 1019, p. 48; 1026, p. 47; 1074, p. 53). Calcasieu-Marine National Bank. NW $\frac{1}{4}$  sec. 34, T. 9 S., R. 4 W. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.55 feet.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	27.85	May 12	31.25	July 16	57.49	Sept. 9	53.79
Feb. 6	26.18	May 26	31.25	25	64.12	Oct. 7	45.89
Mar. 14	24.80	June 29	51.41	Aug. 4	65.18	Nov. 4	41.18
May 3	26.18						

JD-11 (\*845; p. 147; 886, p. 238; 909, p. 38; 939, p. 24; 947, p. 27; 989, p. 38; 1019, p. 49; 1026, p. 47; 1074, p. 53). Mrs. T. L. Linscomb. NE $\frac{1}{4}$  sec. 28, T. 7 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	47.25	Mar. 10	45.31	July 16	62.63	Oct. 7	57.48
Feb. 6	46.06	May 12	45.96	Sept. 9	60.35	Nov. 4	55.54

JD-14 (\*845, p. 147; 886, p. 239; 1019, p. 49; 1074, p. 53). Calcasieu-Marine National Bank. NE $\frac{1}{4}$  sec. 21, T. 7 S., R. 4 W. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.43 feet.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	44.57	Mar. 10	43.06	Nov. 4	50.64
Feb. 6	42.56	Sept. 8	53.37		

JD-23 (\*845, p. 148; 886, p. 240; 909, p. 38; 939, p. 24; 947, p. 27; 989, p. 38; 1019, p. 49; 1074, p. 53). Calcasieu-Marine National Bank. NE $\frac{1}{4}$  sec. 4, T. 10 S., R. 6 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.1	25.5	24.5	23.4	22.8	25.7	36.3	46.2	46.2	42.7	38.6	35.7
2	27.0	25.5	24.5	23.4	22.8	25.8	36.9	46.5	46.2	42.5	38.5	35.6
3	27.0	25.4	24.5	23.4	22.8	25.9	37.3	46.6	46.2	42.3	38.4	35.5
4	26.9	25.4	24.4	23.3	22.8	26.1	37.7	46.8	46.2	42.1	38.3	35.4
5	26.9	25.4	24.4	23.3	22.8	26.3	37.9	47.0	46.2	42.0	38.2	...
6	26.9	25.3	24.3	23.3	22.8	26.8	38.1	47.1	46.5	41.8	38.1	...
7	26.8	25.2	24.2	23.3	22.8	27.4	...	47.2	46.6	41.7	38.0	38.0
8	26.8	25.2	24.2	23.3	22.8	28.0	...	47.4	46.6	41.5	37.9	...
9	26.7	25.2	24.2	23.2	22.8	...	40.0	47.6	46.6	41.3	37.8	...
10	26.7	25.2	24.2	23.2	22.8	...	40.4	47.8	46.8	41.2	37.6	...
11	26.6	25.2	24.2	23.1	22.8	...	40.7	47.9	47.0	41.1	37.5	...
12	26.6	25.1	24.1	23.1	22.9	...	40.8	47.8	47.1	40.9	37.5	...
13	26.3	25.1	24.0	23.0	22.9	...	41.0	47.7	47.1	40.8	37.4	...
14	26.3	25.0	24.0	23.0	23.0	...	41.1	47.8	46.8	40.7	37.2	...
15	26.3	25.0	24.0	23.0	23.1	...	41.1	47.9	46.5	40.5	37.1	...
16	26.3	25.0	24.0	23.0	23.3	...	41.1	48.0	46.3	40.4	37.1	34.2
17	26.2	24.9	24.0	23.0	23.6	...	41.2	47.9	46.2	40.3	37.0	34.1
18	26.2	24.9	24.0	23.0	23.8	...	41.4	47.8	45.9	40.2	36.9	34.1
19	26.1	24.9	23.8	23.0	24.1	...	41.6	47.6	45.5	40.1	36.8	34.0
20	26.0	24.8	23.8	22.9	24.1	...	41.9	48.0	45.0	40.0	36.8	33.9
21	26.0	24.8	23.8	22.9	24.4	...	42.1	47.5	44.9	39.8	36.7	33.8

JD-23--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	26.0	24.8	23.8	22.9	24.6	....	42.4	47.4	44.6	39.7	....	33.7
23	26.0	24.7	23.7	22.9	24.8	....	42.7	47.3	44.3	39.6	....	33.7
24	25.9	24.7	23.7	22.9	24.8	....	42.1	47.2	44.1	39.5	....	33.6
25	25.8	24.7	23.7	22.9	24.8	....	42.7	47.0	43.8	39.5	....	33.6
26	25.8	24.6	23.7	22.9	24.9	....	43.4	46.8	43.6	39.4	....	33.5
27	25.7	24.6	23.6	22.9	25.0	....	43.9	46.7	43.4	39.3	....	33.4
28	25.7	24.5	23.6	22.9	25.1	....	44.5	46.5	43.3	39.2	....	33.3
29	25.6	....	23.6	22.8	25.3	35.5	45.0	46.4	43.1	39.0	....	33.2
30	25.5	....	23.5	22.8	25.5	35.8	45.4	46.3	42.9	38.9	....	33.2
31	25.5	....	23.5	....	25.6	....	45.8	46.3	....	38.6	....	33.0

JD-26 (\*886, p. 240; 909, p. 38; 939, p. 25; 947, p. 27; 989, p. 38; 1019, p. 50; 1026, p. 48; 1074, p. 54). I. L. Hebert. NE $\frac{1}{4}$  sec. 21, T. 10 S., R. 3 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	23.94	Mar. 10	21.71	Sept. 9	39.62	Nov. 4	33.28
Feb. 6	22.70	May 12	22.29	Oct. 7	35.91		

JD-32 (\*886, p. 240; 1019, p. 50; 1026, p. 48; 1074, p. 54). Joe Petitjean. SE $\frac{1}{4}$  sec. 12, T. 11 S., R. 5 W. Water levels, in feet below land-surface datum, 1947: Jan. 8, 13.22; Feb. 6, 11.92; Mar. 10, 11.01; May 22, 12.03.JD-33 (\*1019, p. 50; 1074, p. 54). Joe Petitjean. NW $\frac{1}{4}$  sec. 18, T. 11 S., R. 4 W. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 3.97 feet. Water levels, in feet below land-surface datum, 1947: Sept. 9, 27.56; Oct. 7, 24.27; Nov. 4, 24.55.JD-43 (\*886, p. 241; 909, p. 39; 939, p. 25; 947, p. 27; 989, p. 38; 1019, p. 52; 1026, p. 49; 1074, p. 55). Colon Leger. NE $\frac{1}{4}$  sec. 24, T. 8 S., R. 6 W.Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.5	....	....	27.9	27.3	32.4	44.5	....	47.1	43.7	41.1	39.1
2	31.1	30.1	....	27.8	27.4	33.1	45.6	....	47.3	43.5	41.0	39.1
3	31.7	29.9	....	27.8	27.4	37.0	46.0	....	47.6	43.4	41.0	39.0
4	31.7	29.8	....	27.7	27.4	39.7	46.9	....	48.3	43.3	40.9	38.8
5	31.6	29.9	....	27.7	27.4	40.6	47.3	....	48.5	43.3	40.8	38.8
6	31.5	29.8	....	27.8	27.4	42.0	47.5	....	48.4	43.2	40.7	38.8
7	31.4	29.6	28.8	27.8	27.7	43.2	....	....	48.3	43.1	40.7	38.6
8	31.3	29.7	28.9	27.8	28.0	43.5	....	....	48.2	43.0	40.7	38.6
9	31.3	29.8	28.9	27.7	31.0	....	....	....	47.5	42.9	40.6	38.3
10	31.3	29.8	28.9	27.6	32.3	....	....	....	47.3	43.0	40.4	38.3
11	31.1	29.8	28.8	27.6	32.7	....	....	....	46.8	43.2	40.3	38.2
12	31.0	29.7	28.5	27.6	33.0	....	....	52.5	46.6	42.8	40.3	38.2
13	30.8	29.7	28.6	27.6	33.7	....	....	....	46.5	42.7	40.3	38.1
14	30.8	29.6	28.6	27.6	34.9	....	....	....	46.5	42.6	40.1	38.0
15	30.8	29.5	28.6	27.6	36.3	....	....	....	46.4	42.5	40.1	38.0
16	30.8	29.5	28.5	27.5	37.3	....	....	....	46.4	42.3	40.1	38.1
17	30.8	29.4	28.5	27.6	38.0	....	....	....	46.4	42.2	40.0	38.1
18	30.7	29.4	28.3	27.5	37.2	....	....	....	46.3	42.2	39.9	38.0
19	30.6	29.3	28.4	27.5	33.9	....	....	....	45.6	42.2	39.9	37.9
20	30.5	29.3	28.3	27.3	33.7	....	....	....	44.6	42.0	39.9	37.9
21	30.7	29.3	28.3	27.4	32.7	....	....	....	44.5	42.1	39.8	37.8
22	30.7	29.3	28.2	27.4	32.2	....	....	50.3	44.4	42.8	39.7	37.6
23	30.6	....	28.2	27.3	36.2	....	....	50.3	44.3	41.9	39.5	37.6
24	30.4	....	28.2	27.3	....	....	....	48.8	44.2	41.8	39.5	37.6
25	....	....	28.2	27.3	....	....	....	48.5	44.2	41.8	39.5	37.6
26	....	....	28.1	27.4	31.2	....	....	48.3	44.1	41.7	39.4	37.5

JD-43--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	....	....	28.2	27.4	34.8	....	....	48.5	44.0	41.6	39.4	37.5
28	....	....	28.1	27.4	34.4	....	....	48.6	44.2	41.5	39.4	37.4
29	....	....	28.0	27.3	32.6	41.4	....	48.5	43.8	41.4	39.3	37.3
30	....	....	28.0	27.3	32.6	45.2	....	48.6	43.9	41.3	39.2	....
31	....	....	28.0	....	32.5	....	....	47.6	....	41.1	....	....

JD-78 (\*1019, p. 54; 1026, p. 49; \*1074, p. 56). E. A. Lyons & Sons. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 24, T. 11 S., R. 5 W. Measuring points: (1) Lower inside edge of flange of pump head, 1.33 feet above land-surface datum; (2) since Sept. 9, 1947, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 10.75 feet.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	8.97	Mar. 10	7.07	Oct. 7	18.95
Feb. 6	7.71	Sept. 9	21.61	Nov. 4	16.64

JD-113 (\*1019, p. 55; 1026, p. 50; 1074, p. 56). Calcasieu-Marine National Bank. NW $\frac{1}{4}$  sec. 33, T. 9 S., R. 6 W. Measurements discontinued.

JD-115 (\*886, p. 241; 909, p. 39; 939, p. 25; 947, p. 27; 989, p. 38; 1019, p. 55; 1026, p. 50; 1074, p. 57). Calcasieu-Marine National Bank. NE $\frac{1}{4}$  sec. 34, T. 9 S., R. 5 W. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 5.05 feet.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	33.74	Mar. 14	30.39	Sept. 9	64.81	Nov. 4	48.05
Feb. 6	31.90	May 26	37.19	Oct. 7	53.23		

JD-120 (\*1019, p. 55; 1026, p. 50; 1074, p. 57). Beulah Henderson. SE $\frac{1}{4}$  sec. 10, T. 11 S., R. 4 W. Measurements discontinued.

JD-126 (\*1074, p. 57). Ralph Hayes. NW $\frac{1}{4}$  sec. 2, T. 10 S., R. 5 W.Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	31.0	28.9	27.7	26.6	26.7	35.2	....	....	60.9	51.9	45.3	40.8
2	30.8	28.9	27.7	26.5	26.7	35.3	....	71.7	61.7	51.6	45.1	40.7
3	30.8	28.8	27.7	26.5	26.8	36.9	....	71.8	62.0	51.3	44.9	40.5
4	30.8	28.8	27.6	26.5	26.8	39.5	....	71.9	62.4	50.9	44.7	40.3
5	30.7	28.8	27.6	26.5	26.9	42.3	....	71.8	62.4	50.7	44.6	40.2
6	30.6	28.6	27.7	26.5	27.0	45.3	....	72.0	61.9	50.4	44.4	40.2
7	30.5	28.5	27.6	26.5	27.4	47.8	60.2	70.5	61.2	50.2	44.2	40.0
8	30.4	28.7	27.6	26.5	29.4	49.8	60.1	71.0	61.7	49.9	44.2	39.8
9	30.4	28.7	27.6	26.4	29.1	....	60.1	....	61.5	49.7	44.0	39.9
10	30.4	28.6	27.6	26.4	30.3	....	60.6	....	61.4	49.7	43.7	39.5
11	30.3	28.6	27.5	26.3	31.7	....	61.0	....	61.2	49.9	43.5	39.4
12	30.2	28.5	27.5	26.3	32.2	....	61.5	....	61.1	50.0	43.4	39.3
13	29.9	28.4	27.3	26.4	32.9	....	61.9	....	59.5	49.2	43.3	39.1
14	29.8	28.4	27.3	26.4	34.2	....	63.4	....	58.9	49.4	43.0	39.0
15	29.8	28.3	27.2	27.1	35.6	....	63.6	....	58.2	48.7	42.9	38.7
16	29.8	28.3	27.3	27.2	36.7	....	63.6	....	57.7	48.5	42.8	38.6
17	29.8	28.2	27.2	27.2	37.7	....	....	....	57.3	48.3	42.6	38.6
18	29.8	28.0	27.2	27.3	37.7	....	....	....	56.9	48.1	42.4	38.7
19	29.7	28.0	27.1	27.1	36.9	....	....	....	56.3	47.9	42.4	38.6
20	29.7	28.0	27.1	26.9	36.3	....	....	....	55.3	47.7	42.2	38.5
21	29.5	28.1	27.0	26.8	35.9	....	....	....	55.3	47.4	42.1	38.4
22	29.6	28.1	27.0	26.7	35.4	....	....	68.5	55.0	47.2	42.0	38.3
23	29.5	28.0	27.0	26.8	34.9	....	63.6	68.1	54.6	47.0	41.7	38.2
24	29.4	28.0	26.9	26.8	34.5	....	....	67.1	54.2	46.8	41.6	38.1

## JD-126--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	29.3	28.0	27.0	26.9	34.1	....	....	66.1	53.9	46.7	41.5	38.1
26	29.3	27.9	26.9	26.9	33.8	....	....	65.6	53.5	46.4	41.3	38.0
27	29.2	27.9	26.8	26.9	33.4	....	....	64.2	53.2	46.4	41.2	37.9
28	29.2	27.8	26.8	26.8	33.5	....	....	63.6	53.0	46.2	41.2	37.7
29	29.0		26.8	26.8	33.9	56.5	....	62.9	52.5	46.0	41.1	37.6
30	29.0		26.7	26.7	34.6	57.8	....	62.0	52.2	45.8	41.0	37.4
31	28.9		26.6		34.9	....	....	61.2		45.6		37.3

JD-216 (\*1074, p. 58). Henry Houssiere. NW $\frac{1}{4}$  sec. 10, T. 8 S., R. 4 W. Measurements discontinued.

JD-221 (\*974, p. 27; 989, p. 38; 1026, p. 51; 1074, p. 58). John Ardoin. One mile north of overpass on U. S. Highway 165, near Iowa Junction.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	2.13	May 5	5.96	July 16	6.74	Oct. 7	9.38
Feb. 5	4.25	12	6.60	Aug. 4	8.27	Nov. 4	11.12
Mar. 10	1.84	June 29	8.34	Sept. 9	8.08		

JD-222 (\*1026, p. 51; 1074, p. 58). Lacassane Co., Inc. SW $\frac{1}{4}$  sec. 32, T. 11 S., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	7.95	May 22	6.20	Aug. 4	17.05	Oct. 7	20.08
Mar. 10	7.15	July 16	13.59	Sept. 9	21.47	Nov. 4	17.87

JD-223 (\*1026, p. 51; 1074, p. 59). Lacassane Co., Inc. SW $\frac{1}{4}$  sec. 27, T. 11 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	9.15	Mar. 10	7.44	July 16	15.31	Oct. 7	18.93
Feb. 6	7.99	May 21	7.53	Aug. 4	18.89	Nov. 4	16.89

JD-224 (\*1074, p. 59). Latreille Estate. Sec. 10, T. 8 S., R. 4 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.2	....	40.6	39.5	39.1	47.6	59.3	69.3	61.3	55.8	52.5	50.4
2	43.0	41.7	40.7	39.5	39.1	48.0	60.5	69.3	61.3	55.7	52.5	50.2
3	43.0	41.5	40.7	39.5	39.1	49.4	61.4	69.5	61.6	55.5	52.4	50.1
4	43.1	41.5	40.6	39.4	39.1	50.5	62.1	69.3	61.6	55.4	52.3	50.0
5	43.0	41.5	40.6	39.4	39.1	....	63.2	69.5	61.2	55.3	52.3	50.0
6	43.0	41.4	40.5	39.5	39.1	....	....	69.8	60.9	55.1	52.2	49.9
7	42.8	41.3	40.4	39.5	39.3	....	....	70.0	60.5	55.0	52.1	49.8
8	42.8	41.4	40.4	39.4	39.7	....	....	70.2	60.1	54.8	52.1	49.8
9	42.8	41.4	40.4	39.4	40.4	....	....	70.1	59.9	54.7	52.0	49.7
10	42.7	41.5	40.4	39.3	40.9	....	....	69.8	59.8	54.6	51.8	49.6
11	....	41.4	40.4	39.2	41.3	....	....	69.6	59.4	54.5	51.6	49.6
12	....	41.3	40.3	39.2	41.6	....	....	68.7	59.1	54.5	51.7	49.6
13	....	41.3	40.1	39.2	42.9	....	....	68.4	59.0	54.4	51.6	49.4
14	....	41.2	40.2	39.2	44.8	....	....	68.6	58.8	54.3	50.9	49.4
15	....	41.2	40.2	39.4	46.4	....	....	68.4	58.6	54.1	51.3	49.1
16	....	....	40.3	39.2	47.8	....	....	68.4	58.3	54.0	51.3	49.2
17	....	....	40.2	39.2	49.0	....	....	68.1	58.1	53.9	51.3	49.2
18	....	....	40.2	39.2	47.8	....	....	67.4	57.9	53.9	51.2	49.2
19	....	....	39.9	39.2	46.8	....	....	67.0	57.5	53.8	51.1	49.1
20	....	....	40.0	39.1	46.3	....	....	66.8	57.3	53.7	51.1	49.1
21	....	40.9	40.0	39.1	45.5	....	....	66.7	....	53.6	51.0	49.0
22	....	40.9	39.9	39.1	45.0	....	....	66.1	....	53.5	51.0	48.9
23	....	40.9	39.8	39.1	44.7	....	....	65.1	....	53.4	50.8	48.8
24	41.9	40.9	39.8	39.1	44.5	....	67.5	64.5	....	53.4	50.7	48.8
25	41.8	40.9	39.9	39.1	44.1	....	68.0	63.8	....	53.3	50.7	48.8

JD-224--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	41.8	40.9	39.9	39.2	44.2	....	68.3	63.2	56.4	53.2	50.6	48.7
27	41.7	40.7	39.8	39.2	45.2	....	68.3	62.8	56.4	53.6	50.6	48.6
28	41.6	40.6	39.8	39.2	46.4	....	68.3	62.5	56.3	53.1	50.6	48.5
29	41.5		39.7	39.1	48.0	57.3	68.7	62.1	56.1	53.0	50.5	48.4
30	41.5		39.6	39.1	47.6	57.5	69.0	61.9	56.0	52.8	50.5	48.3
31	41.5		39.6		49.8		69.2	61.5		52.6		48.2

Lafayette Parish

Lf-6 (\*1019, p. 58; 1026, p. 51; 1074, p. 59). Southwestern Louisiana Institute Horticultural Farm. Irregular sec. 68, T. 9 S., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	26.18	May 14	25.92	Aug. 4	30.18	Oct. 7	35.88
Feb. 3	25.32	July 14	27.54	Sept. 8	32.18	Nov. 3	29.46
Mar. 11	25.36						

Lf-129 (\*1019, p. 58; 1026, p. 51; 1074, p. 60). Claude Hanks. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, T. 10 S., R. 3 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	25.48	Mar. 11	24.39	Sept. 10	28.74
Feb. 5	25.06	Aug. 6	31.46	Nov. 4	38.85

Lf-164 (\*1019, p. 58; 1026, p. 52; 1074, p. 60). Gaston Gordon. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 10 S., R. 5 E.Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.1	18.4	20.6	....	18.9	21.7	23.4	24.4	25.3	26.1	25.9
2	21.6	18.6	20.8	....	18.9	21.8	23.4	24.5	25.3	26.1	25.9
3	21.4	18.5	20.8	....	19.1	21.8	23.5	24.5	25.3	26.1	25.8
4	21.1	18.7	20.8	....	19.2	21.9	23.5	24.5	25.3	26.1	25.8
5	20.9	18.8	20.9	....	19.3	22.0	23.6	24.6	25.3	26.1	25.9
6	20.8	18.8	20.8	....	19.4	22.0	23.6	24.6	25.3	26.1	25.9
7	20.6	18.9	20.4	....	19.5	22.1	23.6	24.6	25.4	26.2	25.9
8	20.6	19.1	20.0	....	19.6	22.2	23.6	24.6	25.4	26.2	25.9
9	20.6	19.3	19.6	....	19.7	22.2	23.7	24.7	25.5	26.2	25.9
10	20.5	19.4	19.6	....	19.9	22.3	23.8	24.7	25.5	26.2	25.8
11	20.4	19.5	19.5	....	20.0	22.4	23.8	24.8	25.5	26.2	25.6
12	20.4	19.5	19.5	....	20.1	22.4	23.9	24.8	25.5	26.2	25.5
13	20.1	19.6	19.1	....	20.2	22.5	23.9	24.8	25.6	26.2	25.3
14	19.8	19.6	17.1	....	20.4	22.6	23.9	24.8	25.6	26.2	25.3
15	19.6	19.7	16.4	20.2	20.4	22.6	24.0	24.9	25.6	26.2	25.1
16	19.4	19.8	16.3	20.4	20.6	22.7	24.0	24.9	25.6	26.2	24.8
17	19.3	19.8	16.3	20.5	20.7	22.7	24.0	24.9	25.7	26.2	24.7
18	19.2	19.9	16.4	20.5	20.8	22.8	24.1	25.0	25.7	26.2	24.6
19	18.9	19.9	16.4	20.6	20.9	22.8	24.1	24.9	25.7	26.2	24.4
20	18.5	20.1	16.3	20.6	20.9	22.9	24.1	25.0	25.7	26.2	24.4
21	18.3	20.2	16.1	20.3	21.0	22.9	24.1	25.0	25.7	26.2	24.3
22	18.1	20.3	16.0	20.2	21.1	23.0	24.2	25.0	25.8	26.2	24.3
23	17.8	20.3	15.9	20.1	21.2	23.0	24.2	25.0	25.8	26.1	24.3
24	17.7	20.4	15.9	20.0	21.2	23.1	24.2	25.1	25.8	26.0	24.2
25	17.7	20.5	15.6	19.4	21.3	23.1	24.2	25.1	25.9	26.0	24.2
26	17.7	20.6	15.4	19.0	21.4	23.2	24.3	25.1	25.9	25.9	24.2
27	17.8	20.6	....	18.8	21.4	23.2	24.3	25.2	25.9	25.9	24.2
28	17.9	20.6	....	18.7	21.5	23.2	24.3	25.2	26.0	25.9	24.2
29	17.9		....	18.6	21.6	23.3	24.4	25.2	26.1	25.9	24.3
30	18.0		....	18.7	21.7	23.3	24.4	25.2	26.1	25.9	24.3
31	18.2		....	18.8		23.3	24.4		26.1		24.3

Lf-199 (\*1019, p. 59; 1026, p. 52; 1074, p. 60). Clovis Kennedy.  
NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 10 S., R. 2 E. Measurements discontinued.

Lf-200 (\*1019, p. 59; 1026, p. 52; 1074, p. 60). Clovis Kennedy.  
NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 10 S., R. 2 E. Measurements discontinued.

Lf-201 (\*1019, p. 59; 1026, p. 52; 1074, p. 60). Cleveland Leger.  
SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 10 S., R. 2 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 4	22.06	Aug. 5	42.47	Oct. 8	31.15
Mar. 11	22.06	Sept. 9	33.54		

Lf-210 (\*1019, p. 59; 1026, p. 52; 1074, p. 61). B. W. Spell.  
Irregular sec. 24, T. 10 S., R. 2 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 7	23.98	Mar. 11	22.54	Nov. 4	29.80
Feb. 4	23.20	May 14	33.46		

Lf-251 (\*1019, p. 59; 1026, p. 53; 1074, p. 61). Milton Syrup Mill.  
Irregular sec. 40, T. 11 S., R. 4 E., in Milton. Measurements discontinued.

Lf-405 (\*1074, p. 61). Mary's Syrup Mill. Irregular sec. 40, T. 11 S., R. 4 W. Water levels, in feet below land-surface datum, 1947:  
Feb. 7, 36.20; Sept. 12, 37.43; Oct. 11, 37.83; Nov. 7, 38.37.

Lf-437 (\*1074, p. 61). Southern Pacific Railroad Co. Irregular sec. 40, T. 11 S., R. 4 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	12.34	May 14	12.06	Aug. 5	14.99	Oct. 8	15.60
Mar. 12	12.25	July 15	22.25	Sept. 9	15.32	Nov. 4	15.73

Lf-478 (\*1019, p. 59; 1026, p. 53; 1074, p. 61). Charles Bradford.  
NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 9 S., R. 3 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 8	28.48	Mar. 11	27.01	Oct. 8	35.83
Feb. 5	27.75	Aug. 5	45.04	Nov. 4	34.16

#### LaSalle Parish

La-41 (\*886, p. 242; 909, p. 40; 939, p. 26; 947, p. 28; \*989, p. 39; 1019, p. 59; 1026, p. 53; 1074, p. 61). Louisiana Delta Hardwood Lumber Co. NE $\frac{1}{4}$  sec. 8, T. 8 N., R. 2 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	27.04	Mar. 24	26.36	Aug. 19	28.11	Oct. 16	28.33
Mar. 3	26.80	Apr. 12	26.39	Sept. 23	28.64		

#### Livingston Parish

Li-10 (\*909, p. 40; 939, p. 26; 947, p. 28; \*989, p. 39; 1019, p. 60; 1026, p. 53; 1074, p. 61). McCarroll Lumber Co. In Frost, on north side of mill pond. Water levels, in feet above land-surface datum, 1947:  
Apr. 3, 3.5; Sept. 2, 3.3; Dec. 29, 5.5.

Li-11 (\*909, p. 40; 939, p. 26; 947, p. 28; 989, p. 39; 1019, p. 60; 1026, p. 53; 1074, p. 61). Sharp Civilian Conservation Corps Camp. In Springville. Water levels, in feet above land-surface datum, 1947: Apr. 3, 2.9; Sept. 2, 0.60; Dec. 29, 1.5.

Li-15. Hammond Lumber Co. Sec. 14, T. 7 S., R. 6 E., south of road at Springville fire tower. Abandoned drilled domestic well, diameter 2.5 inches. Measuring point, top of 2 $\frac{1}{2}$ -inch pipe at elbow, 2.55 feet above land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 3, 8.4; Sept. 2, 6.7; Dec. 29, 7.5.

Li-16 (\*909, p. 40; 939, p. 26; 947, p. 28; \*989, p. 39; 1019, p. 60; 1026, p. 53; 1074, p. 61). J. F. McCarroll. In Holden, 200 feet west of residence. Measuring point is 2.65 feet above land-surface datum. Water level, in feet above land-surface datum, 1947: Apr. 3, 119.7.

Li-38. J. F. McCarroll. In Holden, 100 feet east of well Li-16. Drilled domestic well, diameter 1 $\frac{1}{2}$  inches, depth 100 feet. Measuring point, top of tree stump, at land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 3, 12.2; Sept. 2, 11.6; Dec. 29, 8.6.

#### Morehouse Parish

Mo-9 (\*1026, p. 53; 1074, p. 62). Southern Kraft Corporation. Sec. 24, T. 21 N., R. 5 E.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	147.1	148.0	147.9	147.2	147.9	147.7	148.4	148.7	144.9	152.6	153.7	153.6
2	147.1	148.1	148.0	148.1	147.9	147.7	148.4	148.7	146.5	152.7	153.8	153.6
3	147.3	147.3	148.0	148.1	147.9	147.8	148.4	148.8	146.4	152.8	153.9	153.5
4	147.4	147.3	148.0	148.0	148.0	147.8	145.0	148.8	147.0	152.9	153.9	153.5
5	147.4	147.3	147.9	148.1	148.0	147.8	146.2	148.7	148.5	152.9	153.9	153.5
6	147.4	147.0	146.0	148.1	148.1	147.8	145.0	148.7	149.1	152.9	153.9	153.5
7	147.3	147.1	147.8	145.4	148.1	147.8	146.5	148.8	149.5	152.7	153.9	153.7
8	147.3	147.3	148.0	147.0	148.2	147.8	147.1	148.8	149.9	153.1	153.9	153.9
9	147.5	146.7	146.8	147.1	148.2	147.8	147.5	148.8	150.4	153.3	154.0	153.2
10	147.5	146.9	147.9	147.6	148.3	147.8	147.6	148.7	150.4	152.4	153.8	154.1
11	147.5	147.4	148.0	147.7	148.3	147.9	147.7	148.8	150.5	153.5	153.8	154.3
12	147.5	147.5	147.9	147.8	148.3	147.9	147.8	148.8	150.4	153.6	153.9	154.4
13	147.3	147.6	147.7	147.8	147.9	147.9	148.0	148.8	150.4	153.6	154.0	154.4
14	147.3	147.6	147.9	147.8	147.9	148.0	148.2	148.9	150.4	153.6	153.3	154.4
15	147.2	147.6	148.0	146.6	148.0	148.2	148.2	148.9	149.4	153.7	153.9	152.0
16	147.6	147.3	148.0	147.5	148.1	148.2	148.3	148.6	149.3	153.7	154.1	153.2
17	147.6	147.0	147.9	147.8	148.1	148.1	148.4	148.6	150.4	153.8	154.2	153.9
18	147.7	147.5	147.9	147.8	148.2	148.2	148.5	148.5	150.1	153.9	154.1	154.1
19	147.5	147.7	148.8	147.8	148.0	148.2	148.5	148.4	150.1	153.9	154.2	154.2
20	147.5	147.9	148.8	147.7	147.3	148.2	148.5	148.6	150.0	154.0	153.9	154.3
21	147.2	148.0	148.7	148.0	147.4	148.2	148.7	148.7	150.2	153.9	153.7	154.3
22	147.9	148.3	147.9	148.0	147.8	148.2	148.8	148.6	150.5	153.9	153.7	154.1
23	147.9	148.1	147.8	148.0	147.9	148.2	148.9	148.7	150.7	154.0	153.3	154.3
24	147.9	148.2	147.5	148.1	147.9	148.2	148.9	148.7	150.7	153.5	153.2	154.2
25	147.8	148.3	147.8	148.1	148.0	148.2	148.8	148.6	152.1	153.2	153.6	148.9
26	147.7	148.4	147.9	148.2	148.0	148.1	148.8	147.5	152.6	153.2	153.6	151.9
27	147.7	148.4	147.8	148.2	147.8	148.0	148.8	148.5	152.6	153.4	153.5	154.2
28	148.2	147.8	148.1	148.0	147.8	148.2	148.8	148.5	152.0	153.5	153.7	154.6
29	147.6		148.0	147.7	147.8	148.3	147.8	148.5	152.0	153.6	153.7	154.7
30	147.3		148.1	147.6	147.9	148.3	147.4	148.5	152.0	152.9	153.7	154.8
31	147.8		148.1		147.9		148.7	148.5		153.6		154.8

Mo-15 (\*1026, p. 54; 1074, p. 62). Southern Kraft Corporation. Sec. 24, T. 21 N., R. 5 E.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.2	77.4	76.6	76.6	76.6	....	76.5	76.4	76.6	76.6	76.7	76.8
2	77.3	77.3	76.9	76.7	76.6	....	76.5	76.5	76.6	76.6	76.8	76.8
3	76.7	76.6	76.8	76.7	76.6	....	76.4	76.6	76.5	76.5	76.9	76.8

Mo-15--Continued.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
4	76.8	77.0	76.8	76.5	76.6	....	76.4	76.5	76.4	76.4	76.7	76.8
5	77.1	76.8	76.7	76.6	76.6	....	76.3	76.4	76.4	76.4	77.0	77.0
6	77.2	76.3	77.0	77.1	76.7	....	76.3	76.4	76.5	76.5	76.8	77.1
7	77.2	76.7	76.7	77.0	76.7	....	76.2	76.5	76.6	76.6	76.9	77.4
8	77.0	77.0	77.0	76.6	76.7	....	76.3	76.5	76.5	76.5	77.0	77.0
9	76.8	77.0	77.1	76.6	76.8	....	76.3	76.4	76.5	76.5	77.1	77.0
10	77.1	77.0	76.9	76.4	76.7	....	76.3	76.4	76.6	76.6	77.4	76.8
11	77.4	76.7	77.0	76.6	76.6	....	76.3	76.6	76.6	76.6	77.1	76.9
12	77.3	76.7	76.7	76.7	76.5	....	76.3	76.6	76.6	76.6	77.0	76.9
13	77.3	76.6	76.6	76.7	76.4	....	76.3	76.5	76.6	76.6	77.1	77.0
14	77.1	76.4	76.9	76.6	76.5	....	76.3	76.5	76.5	76.5	77.6	76.8
15	77.1	76.4	77.0	76.4	76.5	76.5	76.3	76.5	76.6	76.6	77.2	76.4
16	77.3	76.3	77.0	76.6	76.5	76.4	76.3	76.5	76.6	76.6	76.9	77.3
17	77.2	76.5	76.8	76.8	76.6	76.2	76.4	76.6	76.6	76.6	77.0	77.2
18	77.1	76.6	76.9	76.7	76.6	76.3	76.4	76.6	76.6	....	76.0	77.0
19	76.6	76.7	76.8	76.5	76.4	76.4	76.4	76.5	76.5	....	77.0	76.9
20	76.7	76.9	76.9	76.4	76.3	76.3	76.5	76.5	76.5	....	77.0	76.9
21	77.5	77.1	76.8	76.6	76.5	76.4	76.5	76.6	76.6	....	76.9	76.9
22	77.3	76.9	76.9	76.7	....	76.5	76.4	76.6	76.6	....	76.9	76.7
23	76.9	76.8	76.5	76.6	....	76.5	76.5	76.5	76.5	....	76.8	76.9
24	76.6	77.0	76.5	76.6	....	76.4	76.5	76.6	76.6	76.8	76.8	77.1
25	76.6	77.1	77.1	76.7	....	76.3	76.5	76.6	76.6	76.8	76.9	77.2
26	76.8	77.1	77.1	76.9	....	76.4	76.4	76.6	76.6	76.7	76.9	76.9
27	76.7	76.9	76.6	76.7	....	76.3	76.4	76.6	76.6	76.7	77.0	76.8
28	76.8	76.5	77.1	76.6	....	76.4	76.4	76.6	76.6	76.8	77.2	76.7
29	76.5		76.9	76.4	....	76.5	76.4	76.6	76.6	76.8	77.0	76.8
30	76.9		76.9	76.4	....	76.5	76.4	76.6	76.6	76.7	77.0	76.9
31	77.2		76.8	....	....		76.4	76.6		76.6		76.6

Natchitoches Parish

Na-53 (\*1026, p. 54 ; 1074, p. 63). City of Natchitoches. Sec. 87, T. 9 N., R. 7 W. Water level, in feet above land-surface datum, 1947: Apr. 15, 6.1.

Na-54 (\*1019, p. 60; 1026, p. 54; 1074, p. 63). S. Rhodes. SW $\frac{1}{4}$  irregular sec. 105, T. 9 N., R. 7 W. Water levels, in feet above land-surface datum, 1947: Apr. 16, 12.0; Nov. 28, 10.4.

Na-58 (\*1019, p. 60; 1026, p. 54; 1074, p. 63). H. J. Taylor. NE $\frac{1}{4}$  sec. 10, T. 8 N., R. 7 W. Water level, in feet above land-surface datum, 1947: Nov. 28, 20.6.

Na-69 (\*1019, p. 60; 1026, p. 54 ; 1074, p. 63). City of Natchitoches. NE $\frac{1}{4}$  sec. 15, T. 8 N., R. 7 W., at pumping plant. No measurements made in 1947.

Orleans Parish

Or-25 (\*1026, p. 55 ; 1074, p. 63). Morgan Ice Co. plant No. 1. 1215 Magnolia Street, New Orleans.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Apr.	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	56.8	....	....	....	....	76.4	77.3	....	....
2	....	60.4	....	73.8	....	76.5	77.6	....	....
3	....	59.6	....	74.3	75.9	77.1	77.6	....	....
4	....	60.2	....	74.1	76.8	77.6	77.6	....	....
5	....	60.5	....	73.8	77.1	77.8	76.9	....	....
6	....	60.4	....	73.7	77.0	77.9	76.4	....	....
7	....	60.5	....	73.8	77.0	77.3	77.1	....	....
8	....	60.7	58.9	73.6	76.9	77.0	77.3	....	....
9	....	60.2	59.1	....	76.8	77.6	77.3	....	....
10	....	59.7	59.2	....	76.9	78.1	77.2	....	....



Or-25--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Apr.	July	Aug.	Sept.	Oct.	Nov.	Dec.
11	....	....	59.3	....	77.7	78.3	77.2	....	....
12	....	....	58.6	....	77.5	78.5	76.3	73.1	....
13	....	....	58.3	....	76.7	78.7	75.7	72.6	....
14	....	....	58.2	....	76.3	78.4	75.6	72.4	....
15	....	....	....	....	76.1	77.9	75.5	73.0	....
16	....	....	....	....	75.5	78.2	75.4	72.9	....
17	....	....	....	....	75.8	78.3	75.3	71.5	....
18	....	....	....	....	76.8	78.4	75.2	71.3	....
19	....	....	....	....	77.0	77.5	75.0	71.4	....
20	....	....	....	....	76.3	76.5	74.9	71.4	....
21	....	....	....	....	76.0	76.2	75.4	71.1	....
22	....	....	....	....	75.7	76.1	75.7	70.9	67.4
23	....	....	....	....	75.4	76.6	75.6	70.3	67.4
24	....	....	....	....	75.6	76.9	....	69.9	68.2
25	....	....	....	....	76.1	77.3	....	....	67.7
26	....	....	....	....	75.9	77.4	....	....	66.8
27	a60.25	....	....	....	a76.85	77.5	....	....	67.0
28	....	....	....	....	77.1	77.5	....	....	67.5
29	....	....	....	....	77.4	76.5	....	....	67.1
30	....	....	....	....	77.3	77.1	....	....	67.8
31	....	....	....	....	76.9	....	....	....	68.5

a Tape measurement at odd hour.

Ouachita ParishOu-23 (\*1074, p. 64). Southern Carbon Co. Sec. 37, T. 19 N.,  
R. 4 E. Measurements discontinued.Ou-26 (\*1074, p. 64). Fred Fudickar. S $\frac{1}{2}$  sec. 81, T. 18 N., R. 4 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 18	70.00	July 24	72.64	Sept. 18	73.54
Mar. 19	70.97	Aug. 21	73.23	Dec. 24	73.87

Ou-30 (\*1074, p. 64). G. B. Cooley Sanitarium. SW $\frac{1}{4}$  sec. 3, T. 18 N.,  
R. 3 E., 7 miles northwest of Monroe.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	130.35	July 25	137.23	Sept. 18	139.47	Dec. 23	137.11
Mar. 19	130.13	Aug. 20	138.02	Nov. 20	138.15		

Ou-73 (\*1074, p. 64). Tennessee Gas & Transmission Co. well 1.  
Adjacent to old Arkansas road.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 17	166.20	Aug. 20	175.53	Dec. 23	171.45
Mar. 19	164.80	Nov. 20	172.59		

Ou-76 (\*1074, p. 64). H. H. Holliway. At Monroe Sand & Gravel Co.,  
West Monroe. Water levels, in feet below land-surface datum, 1947:  
Jan. 17, 229.86; Mar. 19, 193.69.

Cu-77 (\*1074, p. 65). Brown Paper Co. In back of spray pond.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	215.2	.....	.....	209.7	211.0
2	.....	215.4	.....	.....	209.6	211.2
3	.....	215.6	.....	.....	209.5	211.1
4	.....	215.8	.....	.....	209.4	211.2
5	.....	216.0	.....	.....	209.4	211.2
6	212.7	216.1	.....	.....	209.3	211.5
7	212.3	216.3	.....	.....	209.4	211.7
8	211.2	.....	.....	.....	209.4	211.7
9	211.1	.....	.....	.....	209.4	211.9
10	210.8	.....	.....	.....	209.5	212.0
11	210.6	.....	.....	.....	209.4	212.1
12	210.3	.....	.....	.....	209.5	212.1
13	211.9	.....	.....	.....	209.3	212.1
14	.....	.....	.....	.....	209.5	212.4
15	.....	.....	.....	.....	209.3	212.5
16	.....	.....	.....	.....	209.3	212.8
17	.....	.....	.....	.....	209.2	211.0
18	210.2	.....	.....	210.4	209.2	214.8
19	209.8	218.2	a219.01	210.2	209.2	213.0
20	209.5	.....	.....	210.1	209.0	213.2
21	209.8	.....	.....	210.1	209.0	213.2
22	209.8	.....	.....	210.0	209.0	213.2
23	213.9	.....	.....	210.0	208.8	213.5
24	212.7	.....	.....	210.2	208.9	213.4
25	211.9	.....	.....	209.8	208.8	213.8
26	213.7	.....	.....	209.9	208.8	213.5
27	214.2	.....	.....	209.7	209.0	213.5
28	214.5	.....	.....	209.7	209.7	213.6
29	214.5	.....	.....	209.6	210.9	213.6
30	214.6	.....	.....	209.5	210.7	213.8
31	214.8	.....	.....	.....	211.0	.....

a Tape measurement at odd hour.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	213.8	215.4	214.2	210.6	213.9	219.3
2	213.8	215.4	214.0	210.9	216.8	219.5
3	213.8	215.5	214.1	210.9	217.8	219.4
4	214.2	215.7	214.0	210.9	218.4	219.5
5	214.1	215.7	213.9	210.5	218.7	219.4
6	213.8	215.9	214.9	210.9	219.1	219.6
7	214.1	215.5	213.8	210.7	219.5	219.6
8	214.3	215.8	213.9	211.8	219.4	219.8
9	214.4	215.9	213.8	210.4	219.8	219.7
10	214.5	215.7	214.5	210.3	219.7	219.8
11	214.5	215.7	216.4	210.3	219.9	220.0
12	214.5	215.4	214.5	210.2	220.1	220.0
13	214.5	215.2	214.3	210.9	220.1	219.9
14	214.5	215.0	214.3	210.3	219.9	219.8
15	214.6	214.9	210.3	210.3	218.7	219.9
16	214.6	214.8	215.4	210.1	216.2	220.1
17	214.7	214.7	214.5	210.2	215.7	220.1
18	214.8	214.6	214.3	210.1	215.6	220.1
19	214.8	214.5	214.3	210.0	215.4	220.2
20	214.4	214.5	209.0	209.5	213.6	220.3
21	214.9	214.5	207.9	214.8	214.7	220.2
22	215.0	214.4	207.6	214.3	214.4	220.2
23	215.1	214.2	211.5	214.1	214.2	220.4
24	215.1	214.2	211.2	214.1	214.0	220.0
25	215.1	214.1	211.1	208.8	216.3	219.3
26	215.2	214.1	210.8	213.9	217.3	218.4
27	215.1	214.1	210.8	214.0	217.8	217.3
28	215.2	214.0	210.7	213.9	218.6	216.7
29	215.2	214.1	211.1	213.4	218.7	214.2
30	215.2	214.2	210.5	213.2	218.9	214.2
31	215.2	214.1	.....	213.0	.....	214.0

Ou-87 (\*1074, p. 65). Louisville Cooperage. Jackson Street, Monroe.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 17	126.78	July 25	128.61	Sept. 18	128.39	Dec. 23	130.74
Mar. 20	130.59	Aug. 21	130.25	Nov. 20	128.35		

Ou-88. Fred Peters. Irregular sec. 52, T. 17 N., R. 3 E., 0.25 mile west of U. S. Highway 165. Abandoned drilled well, diameter 6 inches, depth 401 feet. Measuring point, top of 6-inch casing, 2.35 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Aug. 21, 51.14; Sept. 18, 51.86; Dec. 23, 49.90.

Ou-89 (\*1074, p. 65). James A. Noe. Sec. 59, T. 17 N., R. 3 E. Water levels, in feet below land-surface datum, 1947: Jan. 17, 67.79; Mar. 20, 70.06.

Ou-94 (\*1074, p. 65). Angels Tourist Court.  $3\frac{1}{2}$  irregular sec. 38, T. 18 N., R. 4 E., near Highway 80, east of Monroe, near Angels Tourist Court.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 17	78.49	July 24	81.62	Sept. 18	82.68
Mar. 19	80.03	Aug. 21	82.45	Dec. 24	83.15

Ou-96 (\*1074, p. 65). U. S. Army. Selman Field No. 2, Monroe. Measurements discontinued.

Ou-100 (\*1074, p. 66). City of Monroe. NE $\frac{1}{4}$  sec. 67, T. 18 N., R. 4 E., east end of Howard Street.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	94.1	94.7	96.3	96.9	95.9	.....	.....	98.2	98.5	98.7	98.8	99.1
2	93.9	94.8	96.4	96.9	95.9	.....	.....	98.3	98.5	98.7	98.8	99.2
3	94.1	94.7	96.5	96.9	95.9	.....	.....	98.3	98.5	98.7	98.8	99.2
4	94.1	94.9	96.5	96.9	.....	.....	.....	98.3	98.5	98.7	98.8	99.2
5	94.1	94.9	96.5	96.9	.....	.....	.....	98.4	98.4	98.7	98.9	99.2
6	94.1	94.8	96.6	97.0	.....	.....	.....	98.5	98.4	98.8	98.9	99.3
7	94.1	94.9	96.5	97.0	.....	.....	.....	98.6	98.5	98.8	98.8	99.2
8	94.1	95.1	96.6	96.8	.....	.....	.....	98.7	98.5	98.8	98.9	99.2
9	94.2	95.2	96.6	96.6	.....	.....	.....	98.8	98.5	98.8	99.0	99.2
10	94.2	95.3	96.7	96.5	.....	.....	.....	98.8	98.5	98.8	98.9	99.2
11	94.2	95.3	96.7	96.3	.....	.....	.....	98.8	98.5	98.8	98.9	99.2
12	94.2	95.4	96.7	96.3	.....	.....	.....	98.8	98.5	98.9	99.0	99.3
13	94.2	95.5	96.4	96.3	.....	.....	.....	98.8	98.5	98.9	99.0	99.3
14	94.2	95.5	96.5	96.2	.....	a98.01	.....	98.8	98.5	98.9	98.9	99.3
15	94.3	95.6	96.6	96.2	.....	.....	.....	98.8	98.5	98.9	98.9	99.1
16	94.4	95.6	96.6	96.2	.....	.....	.....	98.8	98.6	98.9	99.0	99.5
17	94.4	95.7	96.6	96.1	.....	.....	.....	98.7	98.6	98.9	99.1	99.4
18	94.5	95.8	96.6	96.1	.....	.....	.....	98.7	98.6	99.0	99.0	99.4
19	94.3	95.9	96.6	96.0	.....	.....	.....	98.7	98.5	99.0	99.0	99.4
20	94.3	96.0	96.6	96.0	.....	.....	.....	98.7	98.4	99.0	99.1	99.5
21	94.6	96.1	96.6	96.0	.....	.....	98.0	98.6	98.3	99.0	99.0	99.5
22	94.6	96.1	96.7	96.0	.....	.....	98.0	98.6	98.5	99.1	99.0	99.4
23	94.5	96.1	96.6	96.0	.....	.....	98.0	98.6	98.5	99.1	98.9	99.5
24	94.4	96.2	96.6	96.0	.....	.....	98.0	98.6	98.5	99.0	98.8	99.6
25	94.4	96.3	96.8	96.0	.....	.....	98.0	98.6	98.5	99.1	98.8	99.7
26	94.4	96.3	96.8	96.0	.....	.....	98.0	98.6	98.6	99.1	98.9	99.7
27	94.4	96.3	96.9	96.0	.....	.....	98.0	98.6	98.6	98.9	98.9	99.7
28	94.4	96.2	96.9	96.0	.....	.....	98.0	98.6	98.6	99.0	99.0	99.6
29	94.3		96.9	96.0	.....	.....	98.1	98.6	98.6	98.9	99.1	99.6
30	94.4		96.9	95.9	.....	.....	98.1	98.5	98.7	98.9	99.1	99.6
31	94.5		96.9	.....	.....	.....	98.1	98.5		98.8		99.9

a Tape measurement at odd hour.

Ou-102 (\*1074, p. 66). City of Monroe. NW. corner sec. 6, T. 18 N., R. 4 E. Water levels, in feet below land-surface datum, 1947: Jan. 18, 80.74; July 25, 83.87; Aug. 20, 84.42; Sept. 18, 84.57.

Ou-103 (\*1074, p. 66). City of Monroe. NE. corner sec. 49, T. 18 N., R. 4 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	76.68	July 25	80.19	Sept. 18	80.97	Dec. 23	81.52
Mar. 20	78.47	Aug. 20	80.86	Nov. 20	81.25		

Ou-120 (\*1074, p. 66). S. H. Thatcher. SE. corner sec. 39, T. 19 N., R. 3 E., 501 Speed Drive, Monroe. Water levels, in feet below land-surface datum: Mar. 19, 78.15; Aug. 20, 79.11; Sept. 18, 79.62.

Ou-121 (\*1074, p. 66). Fowler Interstate Natural Gas Co. well 8. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 19 N., R. 4 E. Measurements discontinued.

Ou-124 (\*1074, p. 67). Brown Paper Co. test well 8. In West Monroe, in center sec. 10, T. 17 N., R. 3 E. Measurements discontinued.

Ou-127 (\*1074, p. 67). W. T. Worley. Route 2, Dooley Road, Monroe. Measurements discontinued.

Ou-133. Southern Carbon Co. Sec. 37, T. 19 N., R. 4 E. Drilled industrial well, diameter 8 inches, depth 90 feet. Measuring point, collar on top of 8-inch casing, 3.40 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Mar. 19	9.33	Aug. 20	11.54	Nov. 20	12.01
July 25	10.36	Sept. 18	12.10	Dec. 24	11.66

#### Rapides Parish

R-21 (\*845, p. 140; 886, p. 245; 909, p. 42; 939, p. 27; 947, p. 29; \*989, p. 39; 1019, p. 21; 1026, p. 55; \*1074, p. 67). City of Alexandria. In Alexandria, at Fourth and St. James Streets.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	145.58	Apr. 12	160.67	Aug. 25	146.87	Oct. 15	149.34
Mar. 3	144.06	May 28	153.18	Sept. 23	146.37	31	129.37
24	146.32						

R-26 (\*845, p. 140; 886, p. 245; 909, p. 43; 939, p. 28; 947, p. 30; \*989, p. 40; 1019, p. 61; 1026, p. 55; \*1074, p. 67). Missouri Pacific Railroad Co. In Alexandria, at abandoned roundhouse on North 13th Street.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	127.3	130.4	134.9	135.4	138.8	135.3	.....	.....	140.6	126.2	120.8	116.3
2	127.8	130.8	135.2	135.4	139.0	132.3	.....	.....	142.6	125.8	120.6	116.1
3	128.3	134.5	132.2	135.2	139.4	132.8	.....	.....	139.9	125.5	120.5	116.0
4	128.5	134.1	132.8	135.2	139.4	133.0	.....	.....	138.5	125.2	120.3	115.8
5	130.5	133.6	133.2	136.5	139.4	133.2	.....	.....	137.8	124.9	120.0	115.7
6	131.5	133.2	133.9	136.8	139.5	134.4	.....	.....	137.3	124.7	119.7	115.5
7	131.1	133.2	134.0	133.7	139.3	135.5	.....	.....	136.6	124.4	119.5	115.3
8	130.7	132.4	135.7	134.2	139.2	136.0	.....	.....	133.6	124.3	119.5	115.0
9	130.5	132.8	135.8	135.9	139.3	133.0	.....	.....	135.2	124.1	119.4	114.7
10	130.2	129.9	132.6	137.3	139.4	133.2	.....	.....	136.3	124.0	119.4	114.6
11	131.7	132.6	133.3	137.4	138.8	133.5	.....	.....	136.8	123.8	119.2	114.4
12	131.2	134.5	133.7	137.6	135.5	133.8	.....	.....	137.1	123.8	119.1	114.3
13	129.1	135.6	133.9	138.2	136.9	134.1	.....	.....	137.2	123.7	118.9	114.1

R-26--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	129.8	136.0	134.0	135.8	138.0	135.4	.....	.....	136.7	123.6	118.6	113.9
15	130.4	136.1	135.4	136.8	138.5	136.1	.....	134.8	133.7	123.5	118.4	113.5
16	131.5	135.9	135.9	137.4	138.2	133.3	.....	135.4	135.1	123.4	118.3	113.5
17	132.8	132.7	135.8	138.2	138.0	133.7	.....	.....	136.3	123.4	118.1	113.5
18	132.7	133.2	133.4	138.6	137.3	134.0	.....	.....	136.8	123.3	117.9	113.4
19	133.0	133.4	133.9	138.1	134.6	134.1	.....	.....	137.1	123.2	117.9	113.5
20	132.3	133.5	134.0	138.2	134.6	134.0	.....	135.4	136.7	123.1	117.8	113.5
21	131.8	133.5	134.1	136.3	134.8	133.9	.....	136.1	136.3	122.9	117.6	113.8
22	131.5	134.9	135.5	135.8	134.6	133.4	.....	136.5	133.3	122.7	117.5	113.6
23	131.5	135.2	135.8	136.9	134.5	131.0	.....	136.8	134.3	122.6	117.3	113.6
24	131.4	132.1	132.8	137.5	135.7	132.0	.....	137.4	135.7	122.6	117.0	113.5
25	132.7	132.6	133.5	138.1	135.8	.....	.....	140.4	133.7	122.5	116.8	113.0
26	133.8	133.2	134.0	139.3	132.8	.....	.....	138.7	131.1	122.3	116.7	113.3
27	132.3	133.6	134.1	138.8	134.5	.....	.....	137.6	129.1	121.8	116.7	113.1
28	132.2	133.4	135.9	135.5	134.4	.....	.....	137.1	128.1	121.6	116.7	113.0
29	131.8	.....	137.0	137.0	134.2	.....	.....	137.0	127.3	121.4	116.6	112.9
30	131.6	.....	137.5	138.1	134.0	.....	.....	136.7	126.7	121.3	116.4	112.9
31	132.0	.....	135.0	.....	135.1	.....	.....	137.1	.....	121.0	.....	112.9

a Tape measurement at odd hour.

R-35 (\*845, p. 141; 886, p. 246; 909, p. 44; 939, p. 29; 947, p. 30; \*989, p. 40; 1019, p. 61; 1026, p. 55; 1074, p. 67). Pine Products Co. In Alexandria. Water level, in feet below land-surface datum, 1947: Dec. 30, 129.85.

R-41 (\*1074, p. 68). L. D. Kellogg. Kellogg Lumber Co., Ransville. Measurements discontinued.

R-43A (\*845, p. 61; 886, p. 246; 909, p. 44; 939, p. 29; 947, p. 31; \*989, p. 41; 1019, p. 61; 1026, p. 55). Missouri Pacific Railroad Co. In Alexandria. Measurements resumed.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	55.43	Mar. 25	57.99	Aug. 25	58.69	Oct. 15	57.60
Mar. 3	57.53	Apr. 12	58.09	Sept. 23	57.79	Dec. 30	57.02

R-135 (\*845, p. 143; 886, p. 247; 909, p. 45; 939, p. 30; 947, p. 31; \*989, p. 41; 1019, p. 61; 1026, p. 55; 1074, p. 68). Arbuthnot sawmill. In Zimmerman, adjacent to State Highway 20. Depth about 450 feet. Measuring point, top of 2-inch casing inside 4-inch casing, 0.50 foot above land-surface datum. Measurements resumed. Water levels, in feet below land-surface datum, 1947: Nov. 20, 6.20; Dec. 31, 5.62.

R-208 (\*845, p. 145; 886, p. 249; 909, p. 46; 939, p. 31; 947, p. 31; \*989, p. 41; 1026, p. 56; 1074, p. 68). State Hospital for Insane. In Pineville. Measurements discontinued.

R-318 (\*1019, p. 62; 1026, p. 56; 1074, p. 68). Camp Claiborne. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 1 N., R. 2 W., test hole at tent theater.

Water level, in feet below land-surface datum, 1947

Jan. 20	69.09	Apr. 12	68.80	Aug. 25	68.32	Oct. 16	68.18
Mar. 25	68.86	May 28	68.63	Sept. 23	68.28	Nov. 28	68.10

R-344 (\*939, p. 31; 947, p. 32; \*989, p. 42; 1019, p. 63; 1026, p. 56; 1074, p. 68). Camp Livingston. NW. corner sec. 3, T. 5 N., R. 1 E. Water levels, in feet below land-surface datum, 1947: Jan. 15, 182.45; Feb. 17, 177.59.

R-347 (\*939, p. 32; 947, p. 32; \*989, p. 42; 1019, p. 63; 1026, p. 56; 1074, p. 68). Camp Claiborne. About 200 feet north of South Street and 75 feet west of I Street.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	64.16	May 28	62.89	Sept. 23	63.57	Nov. 28	64.06
Mar. 25	63.54	Aug. 25	63.43	Oct. 16	63.82	Dec. 30	64.01
Apr. 12	63.31						

R-364 (\*1074, p. 69). Camp Claiborne. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 1 N., R. 2 W. Measurements discontinued.

R-366 (\*1019, p. 63; 1026, p. 56; 1074, p. 69). Camp Claiborne observation well 11a. At Camp Claiborne.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	59.86	May 28	58.92	Sept. 23	57.65	Nov. 28	57.70
Mar. 25	59.52	Aug. 25	57.79	Oct. 16	57.45	Dec. 30	57.50
Apr. 12	59.33						

R-381 (\*947, p. 33; \*989, p. 43; 1019, p. 64; 1026, p. 56; 1074, p. 69). Camp Livingston. About 100 feet west and 60 feet north of well 3NW (U. S. Geological Survey well 355).

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 15	67.83	Apr. 12	67.21	Aug. 19	66.96	Nov. 17	67.62
Feb. 17	67.34	May 28	66.72	Oct. 16	67.25	Dec. 24	67.82
Mar. 17	67.22	July 24	66.78				

St. Charles Parish

Sc-6 (\*989, p. 43; 1019, p. 65; 1026, p. 56; 1074, p. 69). Shell Oil Co. N $\frac{1}{2}$  sec. 6, T. 12 S., R. 8 E., 1,000 feet south of Louisiana & Arkansas Railway tracks.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	47.8	51.8	54.9	56.4	56.5	56.1	....	56.0	64.5	....	63.7	....
2	48.0	51.9	55.0	56.1	56.4	55.7	....	58.8	....	....	63.6	....
3	48.3	51.4	55.1	56.6	56.5	56.1	56.0	59.7	....	65.7	62.9	....
4	48.0	52.1	51.3	57.2	56.6	....	55.8	59.9	64.4	65.6	....	64.2
5	47.4	51.6	51.2	57.2	56.5	....	55.9	59.8	64.5	65.7	....	65.5
6	46.7	....	50.4	57.2	56.5	....	55.8	60.1	64.3	65.7	....	66.1
7	47.2	....	50.3	57.2	56.5	....	56.0	61.8	64.4	65.6	62.8	65.9
8	47.5	....	50.3	57.1	56.5	....	55.3	60.4	64.3	65.8	62.9	66.0
9	47.6	....	50.3	57.1	56.8	....	55.2	60.4	64.4	65.8	62.7	66.0
10	47.5	....	50.2	57.0	56.8	56.0	55.8	60.5	64.6	65.9	62.4	65.9
11	47.3	....	50.0	56.8	56.8	55.8	56.1	60.5	....	66.2	62.3	66.1
12	47.3	....	55.0	56.6	56.9	55.9	56.0	60.5	....	66.2	62.6	66.4
13	47.2	....	54.9	56.9	56.8	56.0	56.0	61.8	64.5	66.3	63.1	66.5
14	47.3	....	55.0	56.8	57.1	56.2	55.9	62.5	64.7	66.4	63.2	66.2
15	47.2	....	55.4	56.6	56.7	56.0	55.9	62.5	64.7	66.5	62.5	66.0
16	47.3	....	55.8	56.8	56.7	56.2	56.0	63.6	64.6	66.4	63.0	66.0
17	47.3	....	55.9	56.8	56.5	56.1	56.2	63.1	....	66.4	63.1	66.2
18	48.0	....	55.9	....	56.6	....	55.5	63.1	....	66.5	62.9	66.2
19	48.1	....	55.8	....	56.6	....	55.1	63.2	....	66.6	62.9	66.1
20	48.1	54.3	56.1	....	56.6	....	54.9	63.6	....	66.8	62.9	64.8
21	47.9	54.0	56.4	....	56.5	....	54.8	63.4	....	66.9	62.4	64.5
22	45.7	54.4	56.9	....	56.6	55.6	54.8	63.5	....	66.6	62.6	64.2
23	47.8	54.6	56.9	56.6	56.5	....	55.4	63.2	....	66.6	62.6	66.0
24	48.1	54.5	56.9	56.7	56.5	....	55.5	62.7	64.3	66.3	62.7	66.4
25	48.0	55.1	57.0	56.7	56.2	....	55.9	63.0	64.1	66.7	62.8	66.6
26	48.1	55.2	56.9	56.6	56.2	....	55.9	63.4	64.8	66.7	62.9	66.6
27	48.2	54.9	56.8	56.6	56.2	....	56.0	63.6	64.1	66.6	....	66.6
28	49.1	54.9	56.7	56.6	56.2	....	56.1	63.8	64.1	66.5	....	66.8
29	49.8	....	56.7	56.7	56.3	....	56.1	63.8	65.1	66.7	....	66.0
30	51.5	....	56.3	56.7	56.3	....	....	63.9	65.1	66.7	....	65.8
31	51.5	....	56.5	....	56.3	....	....	64.2	....	64.0	....	66.5

St. Landry Parish

SL-7 (\*1019, p. 66; 1026, p. 57; 1074, p. 70). W. J. Durio. In Arnaudville, 50 feet northwest of Shell garage, 100 feet west of State Highway 25.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	13.28	May 13	12.18	Aug. 4	14.86	Oct. 7	18.48
Feb. 3	12.03	July 14	13.52	Sept. 8	16.67	Nov. 3	18.22
Mar. 10	12.48						

SL-10 (\*1019, p. 66; 1026, p. 57; 1074, p. 70). Cankton Gin Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 8 S., R. 3 E., in Cankton, at rear of cotton gin.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	37.54	Mar. 11	37.80	July 16	38.53	Sept. 10	40.09
Feb. 5	38.31	May 15	37.48	Aug. 6	47.57	Oct. 9	40.25

SL-14 (\*1019, p. 66; 1026, p. 57; 1074, p. 70). Z. T. Gary. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 16, T. 7 S., R. 3 E., in Lewisburg at rear of cotton gin.

Daily noon water level, in feet below land-surface datum, 1947

(From Recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	53.4	....	52.4	51.9	51.7	53.3	55.3	57.6	58.1	57.8	57.5	57.1
2	53.3	....	52.4	51.9	51.7	53.3	55.3	57.7	58.1	57.8	57.3	56.9
3	53.4	52.8	52.5	51.9	51.7	53.3	55.3	57.8	58.2	57.8	57.3	56.8
4	53.6	52.9	52.5	51.9	51.7	53.3	55.3	57.8	58.2	57.7	57.2	56.7
5	53.5	52.9	52.4	51.8	51.7	53.4	55.3	57.9	58.2	57.7	57.2	56.7
6	53.4	52.7	52.3	51.8	51.8	53.5	55.5	57.8	58.2	57.7	57.3	56.7
7	53.3	52.7	52.3	51.8	51.8	53.6	55.4	57.8	58.1	57.7	57.3	56.7
8	53.2	52.8	52.2	51.7	51.9	53.7	55.4	57.8	58.1	57.6	57.4	56.7
9	53.1	52.9	52.3	51.8	52.1	53.7	55.6	57.8	58.1	57.6	57.4	56.6
10	53.2	52.9	52.3	51.8	52.2	53.8	55.7	57.8	58.1	57.6	57.2	56.4
11	53.2	52.9	52.4	51.9	52.3	53.8	55.8	57.7	....	57.5	57.1	56.5
12	53.1	52.8	52.4	51.9	52.4	53.9	55.9	57.8	....	57.5	57.2	56.6
13	53.0	52.8	51.9	51.9	52.5	54.0	56.1	57.9	....	57.6	57.3	56.4
14	53.0	52.7	52.2	51.8	52.6	54.1	56.3	57.9	....	57.6	57.0	56.5
15	52.9	52.6	52.2	51.7	52.8	54.3	56.4	57.9	....	57.6	57.1	56.5
16	52.5	52.6	52.2	51.6	52.9	54.6	56.6	57.9	....	57.4	57.1	56.4
17	52.3	52.5	52.2	51.7	52.9	54.7	56.6	57.9	....	57.4	57.1	56.2
18	52.0	52.5	52.1	51.8	53.1	54.8	56.6	57.9	....	57.5	57.1	56.4
19	51.9	52.4	52.0	51.7	53.0	54.9	56.7	57.9	....	57.5	57.1	56.6
20	51.9	52.5	52.0	51.7	53.0	54.9	56.8	57.9	....	57.5	57.2	56.6
21	51.9	52.6	52.1	51.7	52.9	55.0	56.8	57.9	....	57.5	57.1	56.6
22	51.9	52.7	52.1	51.7	53.0	55.0	56.9	58.0	57.8	57.5	57.1	56.4
23	51.9	52.6	52.1	51.7	53.0	55.1	57.0	58.1	57.9	57.5	57.0	56.4
24	51.9	52.6	52.1	51.8	53.0	54.9	57.1	58.0	57.8	57.5	57.0	56.4
25	51.9	52.6	51.9	51.9	53.0	55.2	57.3	58.1	57.9	57.4	57.0	56.3
26	51.9	52.7	51.9	51.8	53.1	55.3	57.3	58.0	57.9	57.5	57.0	56.2
27	51.9	52.7	52.1	51.8	53.1	55.3	57.4	58.1	57.9	57.5	57.0	56.2
28	52.0	52.5	52.1	51.6	53.0	55.3	57.4	58.1	57.9	57.5	57.1	56.3
29	52.0		52.0	51.7	53.1	55.3	57.4	58.2	57.9	57.4	57.2	56.3
30	51.9		52.0	51.7	53.1	55.3	57.5	58.1	57.9	57.4	57.1	56.3
31	51.8		52.0		53.2		57.5	58.1		57.4		56.3

SL-19 (\*1019, p. 66; 1026, p. 57; 1074, p. 70). Mrs. A. R. Childs. Irregular sec. 64, T. 7 S., R. 2 E., 2.5 miles north of Church Point on State Highway 375. Water levels, in feet below land-surface datum, 1947; Jan. 8, 53.24; Feb. 5, 52.90; Mar. 11, 66.26.

SL-26 (\*1019, p. 66; 1026, p. 57; 1074, p. 71). George Parker. Irregular sec. 71, T. 4 S., R. 3 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 6	39.69	Mar. 10	39.78	Oct. 7	40.84
Feb. 5	39.60	May 13	39.68	Nov. 3	40.06

SL-31 (\*1074, p. 71). Dr. Otig. Irregular sec. 42, T. 3 S., R. 3 E.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	10.08	May 13	9.79	Aug. 4	11.42	Oct. 7	12.81
Feb. 3	9.26	July 14	10.49	Sept. 8	12.10	Nov. 3	12.70
Mar. 10	9.50						

SL-33 (\*1026, p. 57; 1074, p. 71). Charles Bye. SW $\frac{1}{4}$  sec. 31, T. 3 S., R. 5 E. Measurements discontinued.

SL-40 (\*1019, p. 66; 1026, p. 58; 1074, p. 71). Dalfrey Bros. cotton gin. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 53, T. 7 S., R. 5 E., in Leonville, at rear of cotton gin.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	12.98	May 13	11.95	Aug. 4	14.58	Oct. 7	16.91
Feb. 3	11.86	July 14	13.49	Sept. 8	18.89	Nov. 3	17.96
Mar. 10	11.98						

SL-43 (\*1019, p. 67; 1026, p. 58; 1074, p. 71). E. C. Simmons. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 6 S., R. 2 E.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	58.46	Mar. 12	57.15	Sept. 10	69.75	Nov. 5	65.93
Feb. 5	58.27	May 15	60.30	Oct. 8	67.26		

SL-48 (\*1019, p. 67; 1026, p. 58; 1074, p. 71). L. P. Erickson. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 24, T. 6 S., R. 1 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	53.06	Mar. 12	49.64	Sept. 11	84.14	Nov. 6	67.46
Feb. 5	51.25	July 27	64.55	Oct. 10	73.16		

SL-50. J. Morrison. SW $\frac{1}{4}$  sec. 49, T. 6 S., R. 1 E. Used drilled irrigation well, diameter 10 inches. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.80 feet. Water levels, in feet below land-surface datum, 1947: Mar. 12, 53.99; Oct. 9, 83.76; Nov. 5, 68.95.

SL-78 (\*1074, p. 71). H. E. Lowery. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 2 S., R. 4 E.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	6.95	Mar. 10	5.96	July 14	8.53	Sept. 8	11.28
Feb. 3	6.10	May 13	7.61	Aug. 4	9.79	Nov. 3	13.07

SL-79. W. E. Dupre. SE $\frac{1}{4}$  sec. 12, T. 4 S., R. 5 E. Used drilled domestic well, diameter 4 inches, depth about 200 feet. Measuring point, top of 4-inch casing, 0.70 foot above land-surface datum. Water levels, in feet below land-surface datum, 1947: Mar. 10, 12.53; May 13, 13.67; July 14, 14.90.

#### St. Martin Parish

SMn-20 (\*1019, p. 67; 1026, p. 58; 1074, p. 72). Smedes Bros. sugar mill. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 11 S., R. 5 E., at Cade Station, 50 feet east of water-tank tower.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	18.00	July 15	22.57	Sept. 9	24.82	Nov. 4	24.72
Mar. 11	18.75	Aug. 5	22.99	Oct. 8	24.24		

SMn-51 (\*1019, p. 67; 1026, p. 58; 1074, p. 72). People's Cotton Oil Co. Irregular sec. 35, T. 8 S., R. 6 E., 1.2 miles northeast of Champagne.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	4.67	Mar. 10	4.04	July 14	3.09	Oct. 7	8.94
Feb. 3	2.88	May 13	1.96	Sept. 8	7.79	Nov. 3	9.88

SMn-58 (\*1019, p. 67; 1026, p. 58; 1074, p. 72). St. Joseph Catholic Church. Irregular sec. 55, T. 8 S., R. 6 E., in Cecelia.



## SMn-58--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	13.58	May 13	11.05	Aug. 4	14.60	Oct. 7	18.79
Feb. 3	11.82	July 14	12.24	Sept. 8	16.83	Nov. 3	18.84
Mar. 10	12.77						

SMn-61 (\*1019, p. 68; 1026, p. 58; 1074, p. 72). Regis Lagrange. T. 8 S., R. 6 E., 3.0 miles southeast of Arnaudville, on State Highway 401. Water level, in feet below land-surface datum, 1947: Mar. 10, 11.20.

SMn-62 (\*1019, p. 68; 1026, p. 59; 1074, p. 72). Ernest Fuselier. T. 8 S., R. 6 E., 2.4 miles southeast of Arnaudville on State Highway 401.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	12.17	May 13	10.61	Aug. 4	13.05	Oct. 7	16.74
Feb. 3	10.90	July 14	12.00	Sept. 8	15.63	Nov. 3	17.54

SMn-63 (\*1019, p. 68; 1026, p. 59; 1074, p. 72). L. Charles Willis. Irregular sec. 47, T. 8 S., R. 6 E., 3.5 miles east of Arnaudville. Measuring points: (1) Top of 4-inch casing, 2.20 feet above land-surface datum; (2) since Feb. 3, 1947, 0.45 foot above land-surface datum.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	2.76	May 13	0.65	Aug. 4	3.83	Oct. 7	10.22
Feb. 3	2.72	July 14	2.08	Sept. 8	17.43	Nov. 3	9.00
Mar. 10	2.29						

SMn-68 (\*1019, p. 68; 1026, p. 59; 1074, p. 73). A. R. Fuselier. Irregular sec. 7, T. 11 S., R. 7 E., 3.0 miles southeast of St. Martinville.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	3.91	May 14	3.09	Aug. 5	5.96	Oct. 8	7.07
Feb. 4	2.97	July 15	7.21	Sept. 9	6.80	Nov. 4	7.76
Mar. 11	3.28						

SMn-86. Continental Oil Co. Irregular sec. 82, T. 10 S., R. 6 E. Abandoned drilled industrial well, diameter 4 inches, depth about 300 feet. Measuring point, top of 1-inch air line, 3.27 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Mar. 11, 0.59; Sept. 9, 5.11; Oct. 8, 5.54; Nov. 4, 6.21.

St. Tammany Parish

St-2 (\*886, p. 250; 909, p. 47; 939, p. 32; 947, p. 34; \*989, p. 44; 1019, p. 68; 1026, p. 59; 1074, p. 73). Mayer Israel. At Covington, in NE $\frac{1}{4}$  sec. 7, T. 6 S., R. 11 E. Measuring point is 1.0 foot above land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 4, 81.5; Sept. 3, 81.5; Dec. 30, 80.2.

St-6 (\*886, p. 250; 909, p. 47; 939, p. 32; 947, p. 34; \*989, p. 44; 1019, p. 68; 1026, p. 59; 1074, p. 73). Poitevent & Favre Lumber Co. SW $\frac{1}{4}$  sec. 17, T. 7 S., R. 13 E., on south side of Highway 114. Water levels, in feet above land-surface datum, 1947: Apr. 4, 4.3; Sept. 3, 3.3; Dec. 30, 3.5.

St-10 (\*886, p. 250; 909, p. 47; 939, p. 32; 947, p. 34; \*989, p. 44; 1019, p. 68; 1026, p. 59; 1074, p. 73). State Fish Hatchery. At Lacombe, in sec. 38, T. 8 S., R. 12 E., south well. Water levels, in feet above land-surface datum, 1947: Apr. 4, 32.3; Sept. 3, 27.4.

St-12 (\*886, p. 250; 909, p. 47; 939, p. 32; 947, p. 34; \*989, p. 44; 1019, p. 68; 1026, p. 59; 1074, p. 73). Techefonte State Park. In park, in sec. 43, T. 8 S., R. 12 E., on golf course. Measuring point, top of 1 $\frac{1}{2}$ -inch tee, 1.0 feet above land surface. Water levels, in feet above land-surface datum, 1947: Apr. 4, 48.8; Sept. 3, 47.0; Dec. 30, 47.4.

St-16 (\*886, p. 250; 909, p. 47; 939, p. 32; 947, p. 34; \*989, p. 44; 1019, p. 68; 1026, p. 59; 1074, p. 73). Great Southern Lumber Co. In sec. 20, T. 5 S., R. 13 E., 0.5 mile south and 1.5 miles west of Bush. Water levels, in feet above land-surface datum, 1947: Apr. 4, 33.0; Sept. 3, 28.7; Dec. 30, 32.3.

St-38 (\*1074, p. 73). Jesse Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 7 S., R. 13 E. Water levels, in feet above land-surface datum, 1947: Apr. 4, 7.55; Sept. 3, 6.50.

St-95. McLane City Club. Sec. 44, T. 9 S., R. 14 E. Used drilled domestic well, diameter 2 inches, depth about 600 feet. Measuring point, top of 2-inch tee, 1.90 feet above land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 4, 7.3; Sept. 3, 7.0; Dec. 30, 6.7.

St-117. Owner unknown. SE $\frac{1}{4}$  sec. 37, T. 8 S., R. 14 E. Used drilled domestic well, diameter 2 inches, depth about 900 feet. Measuring point, top of tap on well, 3.50 feet above land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 4, 24.4; Sept. 3, 14.9; Dec. 30, 23.2.

St-763. Marshal Wagner. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 7 S., R. 10 E. Used drilled domestic well, diameter 2 inches, depth 617 feet. Measuring point, top of  $2\frac{1}{2}$  inch tee on well casing, 0.95 foot above land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 3, 15.2; Sept. 4, 13.9.

St-1020 (\*947, p. 34; \*989, p. 44; 1019, p. 69; 1026, p. 60; 1074, p. 73). H. D. Howser Estate. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 7 S., R. 14 E., 0.5 mile east of Highway 58. Water levels, in feet above land-surface datum, 1947: Sept. 3, 16.2; Dec. 30, 16.1.

St-1150. H. Maitrejean. Sec. 37, T. 8 S., R. 13 E. Used drilled domestic well, diameter 4 inches, depth 1,503 feet. Measuring point, concrete walk at edge of swimming pool, at land-surface datum. Water levels, in feet above land-surface datum, 1947: Apr. 4, 3.0; Sept. 3, 2.5.

#### Tangipahoa Parish

Ta-5 (\*886, p. 251; 909, p. 47; 939, p. 33; 947, p. 34; \*989, p. 44; 1019, p. 69; 1026, p. 60; 1074, p. 73). Southern United Ice Co. In Amite, at rear of lot behind ice plant. Measurements discontinued.

Ta-7 (\*886, p. 251; 909, p. 47; 939, p. 33; 947, p. 34; \*989, p. 44; 1019, p. 69; 1026, p. 60; \*1074, p. 74). Town of Ponchatoula. In Ponchatoula, about 50 feet west of pumping station. Water levels, in feet above land-surface datum, 1947: Sept. 2, 6.7; Dec. 29, 6.2.

Ta-8 (\*886, p. 251; 909, p. 47; 939, p. 33; 947, p. 34; \*989, p. 44; 1019, p. 69; 1026, p. 60; \*1074, p. 74). Louisiana Cypress Lumber Co. In Ponchatoula, about 200 yards west of Highway 122, at railroad spur on road to lumber mill. Water levels, in feet above land-surface datum, 1947: Sept. 2, 5.6; Dec. 29, 6.3.

Ta-10 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 34; \*989, p. 45; 1019, p. 69; 1026, p. 60; \*1074, p. 74). Williams Lumber Co. 1 mile south of Ponchatoula, at arch across Highway 122. Measurements discontinued.

Ta-17 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 35; \*989, p. 45; 1019, p. 69; 1026, p. 60; \*1074, p. 74). Carl Blumquist. Center of NE $\frac{1}{4}$  sec. 6, T. 6 S., R. 8 E., in corner of field. Water levels, in feet above land-surface datum, 1947: Sept. 2, 9.1; Dec. 29, 5.1.

Ta-19 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 35; \*989, p. 45; 1019, p. 69; 1026, p. 60; \*1074, p. 74). V. Stevens. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 7 S., R. 8 E., in field. Water level, in feet above land-surface datum, 1947: Sept. 2, 13.4.

Ta-21 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 35; \*989, p. 45; 1019, p. 69; 1026, p. 60; 1074, p. 74). Burns Davis. N $\frac{1}{4}$  irregular sec. 54, T. 7 S., R. 7 E. Measurements discontinued.

Ta-23 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 35; \*989, p. 45; 1019, p. 69; 1026, p. 60; \*1074, p. 74). Otto Bignor. South line of sec. 50, T. 7 S., R. 7 E., in field. Water level, in feet above land-surface datum, 1947: Sept. 2, 2.7.

Ta-24 (\*886, p. 251; 909, p. 48; 939, p. 33; 947, p. 35; \*989, p. 45; 1019, p. 69; 1026, p. 60; 1074, p. 74). Clyde Starkey. Center of sec. 53, T. 7 S., R. 7 E., in field. Water level, in feet above land-surface datum, 1947: Apr. 3, 6.3.

Ta-242 (\*1026, p. 60; 1074, p. 74). Byron Stevens. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, T. 7 S., R. 8 E. Water level, in feet above land-surface datum, 1947: Apr. 3, 14.9.

### Vermilion Parish

Ve-6 (\*1019, p. 69; 1026, p. 60; 1074, p. 74). City of Abbeville. In Abbeville, at water works. Measurements discontinued.

Ve-22 (\*1019, p. 69; 1026, p. 61; 1074, p. 74). Maurice Ginning Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 11 S., R. 3 E., in Maurice.

#### Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	16.98	May 14	17.33	Aug. 5	20.46	Oct. 8	20.42
Feb. 4	16.45	July 15	19.74	Sept. 9	20.84	Nov. 4	20.36

Ve-28 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). Corps of Engineers, U. S. Army, New Orleans District. At Vermilion Locks on Intracoastal Canal.

#### Water level, in feet below land-surface datum, 1947

Jan. 7	2.24	May 14	2.14	Aug. 5	3.70	Oct. 8	5.06
Mar. 11	2.08	July 15	3.22	Sept. 9	3.69	Nov. 4	4.45

Ve-30 (\*1074, p. 75). S. Hebert. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 14 S., R. 3 E.

#### Water level, in feet below land-surface datum, 1947

Jan. 7	1.41	May 14	1.80	Aug. 5	2.80	Oct. 8	4.32
Feb. 4	1.41	July 15	3.17	Sept. 9	3.67	Nov. 4	4.77
Mar. 11	1.37						

Ve-41 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). C. Foreman. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, T. 11 S., R. 2 E.

#### Water level, in feet below land-surface datum, 1947

Jan. 7	22.91	Mar. 11	21.62	Aug. 5	34.71	Oct. 8	29.03
Feb. 4	22.17	May 15	26.20	Sept. 9	30.44	Nov. 4	28.20

Ve-57. Onezie Vincent. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 32, T. 11 S., R. 3 E. Used drilled irrigation well, diameter 10 inches. Measuring point, bottom edge of discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.40 feet.

#### Water level, in feet below land-surface datum, 1947

Feb. 4	17.35	July 15	17.57	Sept. 9	32.58	Nov. 4	22.26
Mar. 11	17.31	Aug. 5	23.31	Oct. 8	21.56		

Ve-78 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). J. F. Noel. Irregular sec. 14, T. 13 S., R. 3 E., 1.5 miles south of Perry.

#### Water level, in feet below land-surface datum, 1947

Jan. 7	6.46	Mar. 11	6.12	Aug. 5	9.28	Oct. 7	9.71
Feb. 4	6.14	May 14	6.84	Sept. 9	9.22	Nov. 4	9.97

Ve-97 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). George Broussard. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 14, T. 13 S., R. 2 E. Water levels, in feet below land-surface datum, 1947: Mar. 3, 1.72; May 14, 2.62. Measurements discontinued after May 14, 1947.

Ve-106 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). H. DuBois. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 12 S., R. 2 E.

#### Water level, in feet below land-surface datum, 1947

Feb. 4	9.46	May 14	10.93	Aug. 5	15.18	Oct. 8	14.69
Mar. 11	9.44	July 15	13.52	Sept. 9	14.47	Nov. 4	14.72

Ve-118 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). Henry High School. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 13 S., R. 4 E., in Henry.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	5.49	May 14	10.00	Aug. 5	7.91	Oct. 8	13.27
Feb. 4	5.41	July 15	7.52	Sept. 9	8.03	Nov. 4	8.22
Mar. 11	5.13						

Ve-120 (\*1019, p. 70; 1026, p. 61; 1074, p. 75). Erath Sugar Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 12 S., R. 4 E., in Erath. Automatic water-stage recorder installed Feb. 26, 1947. Measuring point, floor of recorder house, 3.60 feet above land-surface datum.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	...	...	5.3	4.8	...	5.6	7.5	...	9.0	8.6	...	8.8
2	...	...	5.3	4.8	...	5.7	7.6	...	8.7	8.9	...	8.8
3	...	...	5.3	4.8	...	5.7	7.7	...	8.6	8.6	...	8.8
4	...	a5.40	5.3	4.8	...	5.8	7.9	...	8.6	8.5	8.9	8.8
5	...	...	5.3	4.7	...	5.9	8.0	...	8.7	8.5	9.0	8.8
6	...	...	5.3	4.8	...	5.9	8.0	9.0	8.7	8.5	8.9	8.4
7	a5.79	...	5.1	4.8	...	6.1	8.0	9.0	8.7	8.5	9.0	8.8
8	...	...	5.1	4.8	...	6.2	8.0	9.0	8.7	...	8.8	8.8
9	...	...	5.2	4.8	...	6.3	8.1	9.1	8.7	8.5	8.7	8.7
10	...	...	5.2	4.8	...	6.4	8.2	9.1	8.8	8.5	9.1	8.5
11	...	...	5.2	4.7	...	6.5	8.3	9.1	8.9	8.5	8.9	8.5
12	...	...	5.2	4.7	...	6.7	8.4	9.0	9.0	8.5	9.0	8.6
13	...	...	4.6	4.7	...	6.9	8.5	9.0	9.0	8.6	8.6	8.6
14	...	...	4.8	4.7	6.0	7.0	8.5	9.0	8.9	8.6	8.9	8.6
15	...	...	4.9	4.7	5.7	7.2	...	9.0	8.8	8.6	8.9	8.6
16	...	...	4.9	4.7	5.7	7.2	...	9.0	8.8	8.6	9.0	8.6
17	...	...	4.9	4.8	5.8	7.2	...	9.0	8.8	8.6	9.0	8.6
18	...	...	4.9	4.8	5.9	7.3	...	9.0	8.7	8.6	8.9	8.6
19	...	...	4.9	4.9	5.9	7.3	...	8.9	8.6	...	9.0	8.6
20	...	...	4.9	4.9	5.9	7.3	...	9.0	8.6	...	8.5	8.6
21	...	...	4.9	4.8	5.8	7.3	...	8.9	8.6	...	8.8	8.6
22	...	...	4.9	4.8	5.8	7.3	...	8.9	8.6	...	8.9	8.6
23	...	...	4.9	4.9	5.8	7.2	...	8.9	8.6	...	8.8	8.6
24	...	...	4.8	4.9	5.7	7.2	...	8.9	8.5	...	8.6	8.7
25	...	...	4.9	4.9	5.7	7.2	...	8.9	8.5	...	8.8	8.7
26	...	5.3	4.9	4.9	5.7	7.3	...	8.8	8.6	...	8.8	8.7
27	...	5.4	4.8	...	5.7	7.3	...	8.7	8.6	...	8.8	8.7
28	...	5.3	4.9	...	5.6	7.4	...	8.7	8.6	...	8.8	8.8
29	...	...	4.9	...	5.6	7.4	...	8.7	8.6	...	8.8	8.8
30	...	...	4.8	...	5.6	7.4	...	8.6	8.6	...	8.8	8.8
31	...	...	4.8	...	5.6	...	...	9.0	...	...	...	8.7

a Tape measurement at odd hour.

Ve-124 (\*1026, p. 62; 1074, p. 76). Dr. G. L. Gardiner. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, T. 12 S., R. 2 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	7.77	July 17	11.74	Sept. 11	14.37	Oct. 10	13.48
Feb. 7	6.84	Aug. 7	15.06	Oct. 2	13.75	Nov. 6	12.78
May 21	6.49						

Ve-125 (\*1026, p. 62; 1074, p. 76). Loffland Bros. Sec. 33, T. 11 S., R. 1 W. Water level, in feet below land-surface datum, 1947: Oct. 2, 17.15.

Ve-126 (\*1026, p. 62; 1074, p. 76). Magnolia Petroleum Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 12 S., R. 2 W. Measuring points: (1) Top of 4-inch tee, 1.85 feet above land-surface datum; (2) since May 21, 1947, top of 4-inch casing, 0.85 foot above land-surface datum.

## Ve-126--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	8.15	May 21	6.20	Sept. 11	15.74	Oct. 10	14.46
Feb. 7	6.95	July 17	12.03	Oct. 2	14.91	Nov. 6	13.57
Mar. 18	5.87						

Ve-127 (\*1026, p. 62; 1074, p. 76). Loffland Bros. Southwest of Ve-125, sec. 33, T. 11 S., R. 1 W.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	July	Aug.	Oct.	Nov.	Dec.
1	7.1	6.0	5.4	4.7	4.5	.....	.....	....	13.1	11.6
2	7.1	6.0	5.4	4.7	4.5	.....	.....	14.5	13.1	11.5
3	7.0	5.9	5.4	4.7	4.5	.....	.....	14.5	13.0	11.5
4	6.9	5.9	5.4	4.7	4.5	.....	.....	14.4	13.0	11.5
5	6.9	5.9	5.4	4.7	4.6	.....	.....	14.4	13.0	11.4
6	6.8	5.8	5.4	4.7	4.6	.....	.....	14.3	12.8	11.4
7	6.8	a5.80	5.2	4.7	5.0	.....	a19.96	14.2	12.7	11.3
8	6.8	5.8	5.1	4.7	5.2	.....	.....	14.2	12.7	11.3
9	6.8	5.8	5.1	4.7	5.2	.....	.....	14.2	12.7	11.2
10	6.8	5.8	5.1	4.6	5.4	.....	.....	14.2	12.6	11.1
11	6.7	5.7	5.1	4.5	5.5	.....	.....	14.1	12.4	10.8
12	6.7	5.7	5.2	4.4	5.5	.....	.....	14.1	12.5	10.8
13	6.7	5.7	...	4.3	5.5	.....	.....	14.1	12.4	10.7
14	6.3	5.7	...	4.3	5.6	.....	.....	14.1	12.3	10.7
15	6.2	5.7	...	4.4	...	.....	.....	14.0	12.3	10.5
16	6.2	5.7	...	4.5	...	.....	.....	13.9	12.3	10.6
17	6.2	5.7	...	4.5	...	a16.92	.....	13.9	12.2	10.6
18	6.2	5.6	...	4.5	...	.....	.....	13.9	12.1	10.6
19	6.2	5.6	4.9	4.5	...	.....	.....	13.9	12.1	10.6
20	6.1	5.5	4.9	4.4	...	.....	.....	13.9	12.1	10.6
21	6.1	5.6	5.0	4.5	a6.49	.....	.....	13.8	12.0	10.6
22	6.2	5.6	5.0	4.5	.....	.....	.....	13.7	12.0	10.5
23	6.2	5.5	5.0	4.5	.....	.....	.....	13.6	11.7	10.6
24	6.1	5.5	4.9	4.5	.....	.....	.....	13.6	11.7	10.5
25	6.1	5.5	4.9	4.5	.....	.....	.....	13.6	11.7	10.5
26	6.1	5.5	4.9	4.5	.....	.....	.....	13.5	11.6	10.4
27	6.1	5.5	4.9	4.5	.....	.....	.....	13.4	11.6	10.4
28	6.0	5.5	4.9	4.5	.....	.....	.....	13.4	11.6	10.3
29	6.0	...	4.9	4.5	.....	.....	.....	13.3	11.7	10.3
30	6.0	...	4.8	4.5	.....	.....	.....	13.2	11.6	10.2
31	6.0	...	4.8	...	.....	.....	.....	13.2	...	10.1

a Tape measurement at odd hour.

Ve-128 (\*1074, p. 76). Charles Stancil. NE $\frac{1}{4}$  sec. 33, T. 11 S., R. 1 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 7	11.20	Aug. 7	24.34	Oct. 2	19.60	Nov. 6	17.86
May 21	11.27	Sept. 11	21.15	10	17.24		

Washington Parish

Wa-8 (\*1019, p. 70; 1026, p. 62; 1074, p. 76). Vertrees Young. NE $\frac{1}{4}$  irregular sec. 45, T. 3 S., R. 13 E. No measurements made in 1947.

Webster Parish

Wb-2. City of Springhill. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 23 N., R. 11 W. Abandoned drilled public-supply well, diameter 8 inches, depth 321 feet. Measuring point, top of vent plug west side of pump, 1.75 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Feb. 18, 157.52; Mar. 18, 156.89; Apr. 16, 154.63; Nov. 19, 157.51.

Wb-15 (\*1026, p. 62; \*1074, p. 77). International Paper Co., Southern Kraft Division. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, T. 23 N., R. 11 W. Automatic water-stage recorder removed Sept. 16, 1947. Measuring points: (1) Floor of recorder house, 4.00 feet above land-surface datum; (2) since Sept. 16, 1947, top of tile crock, 4.00 feet above land-surface datum.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	June	July	Aug.	Sept.	Oct.	Nov.
1	111.0	110.4	.....	.....	.....	112.7	113.1	113.2	.....	.....
2	110.8	110.4	.....	.....	.....	112.7	113.1	113.3	.....	.....
3	.....	110.1	.....	.....	.....	112.7	113.2	113.3	.....	.....
4	.....	110.1	.....	111.4	.....	112.7	113.3	113.3	.....	.....
5	.....	110.3	.....	111.3	.....	112.7	113.2	113.2	.....	.....
6	.....	109.9	.....	.....	.....	112.7	113.1	113.2	.....	.....
7	.....	110.2	.....	.....	.....	112.7	113.1	113.3	.....	.....
8	.....	110.3	.....	.....	.....	112.8	113.1	113.3	.....	.....
9	.....	110.4	.....	.....	.....	112.8	113.0	113.2	.....	.....
10	.....	110.5	.....	111.4	.....	112.7	113.0	113.2	.....	.....
11	110.8	110.4	.....	111.5	.....	112.8	113.1	113.3	.....	.....
12	110.7	110.4	.....	.....	.....	112.8	113.2	113.3	.....	.....
13	110.6	110.4	.....	.....	.....	112.8	113.2	113.2	.....	.....
14	110.7	110.4	.....	.....	.....	112.8	113.2	113.2	.....	.....
15	110.8	110.3	.....	.....	.....	112.8	113.2	113.3	all 13.16	.....
16	110.8	110.1	.....	111.3	112.3	112.8	113.2	113.3	.....	.....
17	.....	110.1	.....	.....	112.3	112.8	113.3	.....	.....	.....
18	.....	111.1	111.5	.....	112.3	112.8	113.3	.....	.....	.....
19	110.8	.....	.....	.....	112.4	112.9	113.3	.....	all 13.67	.....
20	110.7	.....	.....	.....	112.3	112.9	113.2	.....	.....	.....
21	111.3	.....	.....	.....	112.3	112.9	113.3	.....	.....	.....
22	111.3	.....	.....	.....	112.4	113.0	113.3	.....	.....	.....
23	111.1	.....	111.5	.....	112.4	113.1	113.2	.....	.....	.....
24	109.9	.....	111.5	.....	112.5	113.1	113.2	.....	.....	.....
25	109.9	.....	.....	.....	112.5	113.2	113.2	.....	.....	.....
26	109.9	.....	.....	.....	112.5	113.2	113.2	.....	.....	.....
27	109.8	.....	.....	.....	112.5	113.1	113.3	.....	.....	.....
28	109.8	.....	.....	.....	112.5	113.1	113.2	.....	.....	.....
29	109.6	.....	.....	.....	112.6	113.1	113.3	.....	.....	.....
30	109.9	.....	.....	.....	112.6	113.1	113.3	.....	.....	.....
31	110.0	.....	.....	.....	.....	113.1	113.2	.....	.....	.....

a Tape measurement at odd hour.

Wb-27. International Paper Co., Southern Kraft Division. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 25, T. 23 N., R. 11 W. Abandoned drilled industrial well, diameter 18 inches, depth 312 feet. Measuring point, floor of recorder house, 0.22 foot above land-surface datum. Automatic water-stage recorder installed Dec. 29, 1946.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	147.3	.....	144.2	129.0	149.7	.....	150.7	147.2	113.7	151.3	163.2	163.0
2	146.9	.....	144.3	147.1	149.7	.....	151.0	128.3	112.3	157.2	163.2	163.1
3	146.9	.....	144.3	148.8	149.8	.....	150.9	124.6	112.5	157.0	163.1	163.2
4	147.1	.....	143.6	151.7	150.9	.....	149.8	123.3	112.2	157.0	163.1	163.0
5	147.1	.....	144.0	152.9	151.2	.....	150.6	122.3	112.3	157.5	163.1	163.1
6	146.8	.....	145.4	153.4	150.9	.....	134.3	121.4	112.4	156.4	163.0	163.2
7	146.9	.....	143.6	154.2	150.9	.....	150.3	120.7	112.4	156.1	163.1	163.1
8	146.7	146.0	143.7	131.1	151.0	.....	151.1	119.6	112.1	169.2	163.1	163.1
9	146.7	145.9	144.2	.....	151.0	.....	151.4	118.9	112.1	166.6	163.4	163.4
10	146.7	146.1	144.1	.....	151.1	149.9	151.6	118.3	111.9	165.0	163.2	163.6
11	146.5	145.7	144.4	146.3	151.2	150.7	151.6	117.8	112.1	164.8	163.1	163.6
12	146.8	145.4	.....	147.1	151.0	150.9	151.7	117.5	111.8	159.9	163.4	163.7
13	146.5	146.1	.....	147.6	.....	151.0	151.8	116.9	111.9	161.3	163.2	163.8
14	146.3	145.7	.....	148.1	.....	151.0	151.9	116.8	112.0	161.9	162.9	163.7
15	146.5	145.4	.....	148.3	.....	150.9	151.9	116.7	112.8	162.2	163.1	163.2
16	146.6	144.9	.....	148.6	.....	150.9	152.3	116.5	111.2	162.5	163.3	163.5
17	146.8	144.6	143.2	149.0	.....	151.0	152.8	116.1	153.8	162.8	163.1	163.7
18	146.7	144.3	143.2	149.1	.....	151.1	153.3	115.7	148.7	162.8	163.1	163.7
19	146.4	144.6	143.8	148.9	.....	151.1	153.6	115.7	151.0	163.1	163.2	163.7

Wb-27--Continued.

Daily noon water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	146.2	144.3	126.9	148.9	.....	151.1	153.7	115.4	154.8	163.2	163.2	163.5
21	146.4	144.3	117.8	148.9	.....	151.0	153.7	115.2	156.8	163.2	163.2	163.7
22	146.4	144.3	133.8	149.0	.....	151.0	154.0	115.0	157.9	163.4	163.0	163.4
23	146.3	144.1	136.1	149.0	.....	150.9	154.1	114.8	158.7	162.9	162.9	163.6
24	146.3	144.2	137.2	149.3	.....	150.9	154.1	114.8	159.4	163.4	162.9	163.7
25	146.3	144.3	138.5	149.3	.....	151.0	154.2	114.4	159.4	163.4	163.1	153.0
26	146.1	144.7	138.4	149.3	.....	151.0	154.3	114.5	159.0	163.4	163.1	153.8
27	146.2	144.6	138.9	149.7	.....	150.9	154.4	114.3	158.8	163.3	163.2	143.8
28	145.9	144.3	139.6	149.5	.....	150.8	154.3	114.2	158.7	163.3	163.1	131.5
29	145.9		139.8	149.5	.....	150.8	154.4	114.1	157.7	163.3	163.3	139.3
30	145.9		140.0	149.4	.....	150.7	153.6	114.2	157.5	163.3	163.2	148.2
31	.....		130.0	.....	.....		139.5	114.0		163.2		149.6

Wb-91 (\*1026, p. 63; \*1074, p. 77). International Paper Co., Southern Kraft Division. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, T. 23 N., R. 11 W., about 40 feet west of Wb-15.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 23	166.18	Mar. 18	164.24	Sept. 16	157.66
Feb. 18	164.34	Apr. 16	161.43	Oct. 15	148.88

Wb-95. International Paper Co., Southern Kraft Division. Abandoned drilled industrial well, depth 150 feet. Automatic water-stage recorder installed Sept. 17, 1947. Measuring point, floor of recorder house, 0.45 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 17	52.2	Oct. 14	52.9	Nov. 10	52.4	Dec. 6	53.6
18	52.3	15	52.6	11	52.5	7	53.4
19	52.1	16	52.5	12	52.6	8	53.6
20	51.9	17	52.6	13	52.6	9	53.6
21	52.0	18	52.7	14	52.2	10	53.7
22	52.1	19	52.7	15	52.5	11	53.7
23	52.1	20	52.7	16	52.7	12	53.7
24	52.1	21	52.7	17	52.7	13	53.6
25	52.1	22	52.7	18	52.6	14	53.4
26	52.3	23	52.7	19	52.7	15	53.1
27	52.4	24	52.8	20	52.8	16	53.5
28	51.3	25	52.6	21	52.8	17	53.4
29	52.1	26	52.5	22	52.9	18	53.3
30	52.3	27	52.4	23	52.8	19	53.2
Oct. 1	52.5	28	52.4	24	52.9	20	53.2
2	52.5	29	52.4	25	52.9	21	53.0
3	52.6	30	52.4	26	53.0	22	52.6
4	52.6	31	52.3	27	53.1	23	52.7
5	52.6	Nov. 1	52.4	28	53.3	24	51.0
6	52.6	2	52.5	29	53.4	25	48.0
7	52.8	3	52.5	30	53.4	26	46.2
8	52.9	4	52.4	Dec. 1	53.2	27	45.9
9	52.9	5	52.6	2	53.2	28	47.7
10	52.9	6	52.5	3	53.2	29	48.9
11	52.9	7	52.6	4	53.4	30	49.7
12	53.0	8	52.7	5	53.6	31	50.1
13	53.1	9	52.7				

West Baton Rouge Parish

WBR-4 (\*989, p. 45; 1019, p. 71; 1026, p. 63; 1074, p. 78). Town of Port Allen. Sec. 66, T. 7 S., R. 12 E., at Port Allen, about 40 feet north of municipal swimming pool. Water levels, in feet above land-surface datum, 1947: Feb. 3, 20.6; Aug. 20, 21.8.

WER-5 (\*989, p. 45; 1019, p. 71; 1026, p. 64 ; 1074, p. 78). Town of Port Allen. Sec. 66, T. 7 S., R. 12 E., at Port Allen, about 30 feet south of reservoir behind pumping plant. Water level, in feet above land-surface datum, 1947: Feb. 3, 13.3.

WER-23 (\*1074, p. 78). Cinclare Sugar Refinery. Sec. 10, T. 8 S., R. 12 E., about 50 feet northeast of well 2 (WER-6A). No measurements made in 1947.



## OKLAHOMA

By S. L. Schoff, E. W. Reed, and L. V. Davis

### PROGRAM OF WORK

The observation-well program in Oklahoma, which was begun in 1934, was continued through 1947 in cooperation with the Oklahoma Geological Survey and the Oklahoma Agricultural and Mechanical College.

In the Stillwater Creek Basin, Payne County, where the first systematic observations of water level in Oklahoma were begun in cooperation with the Soil Conservation Service, the observation-well program was continued in cooperation with Dr. H. J. Harper, head of the Department of Agronomy of the Oklahoma Agricultural and Mechanical College. Dr. M. J. Plice, also of Department of Agronomy, who has served as voluntary well observer since 1940, made 108 measurements of water level in 1947.

Measurements in an irrigation well at the Southwestern Cotton Substation near Tipton, Tillman County, started in 1944, were continued in 1947 through the courtesy of I. M. Parrott, superintendent. The substation is operated by the Oklahoma Agricultural and Mechanical College and the United States Department of Agriculture.

The rest of the observation-well program was conducted in cooperation with the Oklahoma Geological Survey. It includes observations in the Panhandle, begun in 1937; Cleveland County, begun in 1939; the North Canadian River Valley (Canadian, Blaine, Major, Woodward, and Harper Counties) begun in 1940; Oklahoma and McClain Counties, begun in 1943; Caddo County, begun in 1945; Grady, Ellis, and Custer Counties, begun in 1946; and Comanche, Jackson, Kiowa, Roger Mills, and Washita Counties, begun in 1947. The locations of the observation wells are shown in figure 11.

Brief descriptions of the topography, geology and ground-water conditions of the parts of Oklahoma covered by the observation-well program have been published in previous water-supply papers of this series as follows: Stillwater Creek Basin, 777; the Panhandle, 840 and 845; Cleveland County, 886 and 939, North Canadian River Valley, 909; Canadian County, 947;

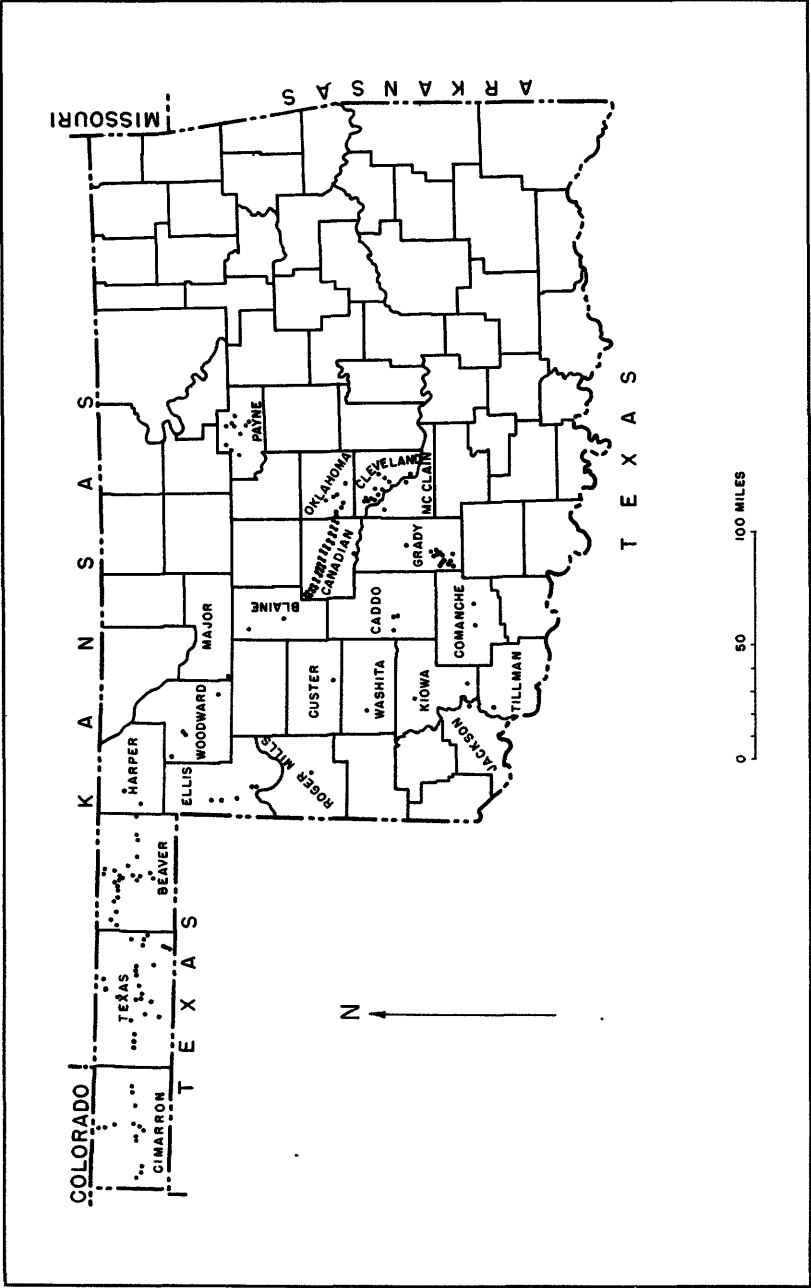


Figure 11.--Map of Oklahoma showing location of observation wells in 1947.

Oklahoma County, 989 and 1026; Tillman County, 1019; Caddo County, 1026; Grady, Ellis and Custer Counties, 1074; and Comanche, Jackson, Kiowa, Roger Mills, and Washita Counties are described in this report.

During 1947, a total of 1,430 tape measurements of water level were made in 179 wells, and automatic water-stage recorders were operated in 3 wells. Altogether, 195 wells are listed on pages that follow, including 14 that were added to the program during the year. Observations were discontinued in three wells after several measurements had been made, and in nine others without measurements having been made in 1947. Three wells were retained on the active list, although they were not measured during the year. Measurements were resumed in one well in Canadian County. Another well in the same county, destroyed in 1946 and reported as discontinued, was replaced by a new well on the opposite side of the road. The number of active wells at the end of 1947 was 183.

The observation wells in Cleveland County and Beaver County well 528 were measured weekly, as was Tillman County well 1, except during periods of heavy pumping for irrigation. Measurements were made monthly in Payne, Caddo, Oklahoma and Grady Counties through the year and in McClain County until the end of July. The wells usually considered as representative of ground-water conditions in the North Canadian Valley were measured from 3 to 13 times, the frequency depending partly on accessibility. Most of the wells in Canadian County were measured three or four times. A few, however, were measured only once or twice, and some were measured more often, the maximum in any well being 13. The wells in the Oklahoma Panhandle were measured once or twice, except Beaver County well 528 and Texas County well 228. The latter was measured about once a week beginning late in April, by Charles R. Haddock, hydraulic engineer of the surface water branch of the Geological Survey. The other observation wells in Oklahoma were measured at irregular intervals, the number of measurements ranging from two to seven.

#### PRECIPITATION

The average precipitation in the State of Oklahoma in 1947 was 31.51 inches, which "was 1.42 inches below the 56-year average." It was "96 percent of the 56-year average, and ranged from 92 percent of normal in the Eastern Division to 99 percent in the Western Division." Despite this near approach to normal for the year, the precipitation was not evenly distributed. It was "below normal from June through October," and "the late

summer drought was especially severe in the northwest where precipitation from August through October averaged less than 30 percent of normal....the least annual amount was 15.78 inches at Kenton."<sup>1/</sup>

The precipitation at four stations in the Oklahoma Panhandle averaged 19.07 inches, which is about 0.98 inch above the normal for the area based on the average for Beaver, Hooker, and Kenton. The precipitation was 3.63 and 2.31 inches above average at Beaver and Hooker, respectively, but was 1.33 inches below average at Kenton.

At Stillwater the precipitation for 1947 was 27.40 inches, which is 5.95 inches below average, whereas at Oklahoma City it was 36.50 inches, which is 5.35 inches above average. An average for Tipton, in Tillman County, has not been established by the Weather Bureau, but the total precipitation of 30.92 inches in 1947<sup>2/</sup> is 3.55 inches above the average for nearby Frederick.

Precipitation at Chickasha was 28.83 inches in 1947, or 1.98 inches below average. It was above average only in 4 months, April, May, October, and November. At Marlow and Anadarko the precipitation was 33.14 and 31.39 inches, respectively, or 0.21 inch and 3.09 inches above average.

For seven stations along the North Canadian River Valley, from Oklahoma City to Supply, the precipitation in 1947 ranged from 21.81 to 36.50 inches and averaged 26.56 inches, which is 0.95 inch below normal. Some stations received an excess of precipitation, while at others there was a deficiency. At Supply precipitation was 5.70 inches above average, whereas at Geary it was 6.57 inches below average.

Precipitation in Canadian County is represented by the stations at El Reno and Fort Reno, which had 25.90 and 26.03 inches respectively, or 2.79 and 3.99 inches below average.

#### PUMPAGE

Records of ground-water pumpage in Oklahoma are best for the panhandle counties, from which reports of municipal pumpage for the larger towns are furnished regularly through the courtesy of the Southwestern Public Service Company. The total pumpage for seven towns in the panhandle was about 25 percent greater in 1947 than in 1946. Including the estimated pumpage

<sup>1/</sup> U. S. Dept. of Commerce, Weather Bureau, Climatological data, Oklahoma Section, Annual, vol. LVI, no. 13, 1947.

<sup>2/</sup> Recorded and reported by C. F. Fox, Southwestern Cotton Substation.

of industries not supplied with water from municipal systems and pumpage for irrigation, the total for 1947 is 631,015,000 gallons, or about 1,936 acre-feet.

#### FLUCTUATIONS OF WATER LEVEL

##### Panhandle

In the panhandle (Beaver, Texas, and Cimarron Counties), the water levels in the Ogallala formation, which is the most important aquifer in the area, continued the general rise that began in 1941, and reached new high stages. Compared with the levels of October 1946, the average water level for October 1947 was 1.09 feet higher in Beaver County, 0.74 foot higher in Texas County, and 0.12 foot higher in Cimarron County. The October level in Beaver and Texas Counties was the highest in the 10 years of record, but in Cimarron County the average level for April 1947 was the highest recorded, being 0.08 foot above the October level.

The weighted average water levels, in which the behavior of the water levels in all aquifers is considered, likewise were at high stages in 1947. In Beaver and Cimarron Counties the highest level for the year and for the period of record was reflected in the measurements in April, but in Texas County the highest level was recorded in October. The highest weighted average for the panhandle as a whole was recorded in October, but it was only about 0.03 foot above the April level.

The record obtained from an automatic water-stage recorder that was operated in Texas County well 188 from late May until the end of the year suggests that changes in barometric pressure are responsible for some of the water-level fluctuations. Between August 30 and September 4, the water level in the well rose each day to a peak in late afternoon or early evening and then declined to a low level at about 6 a.m. (fig. 12). This daily fluctuation in water level probably can be traced to fluctuations in barometric pressure induced by changes in air temperature. As air becomes warm --or hot, as it normally does by afternoon in the panhandle about September 1--it expands and becomes lighter, and the barometric pressure declines. In wells tapping confined water, or in wells reaching the water table at such depths that the changes in barometric pressure are transmitted less freely through the formation than down the well, an increase in barometric pressure forces the water down and out through the well screen into the formation. Conversely, a decrease in barometric pressure permits the water to

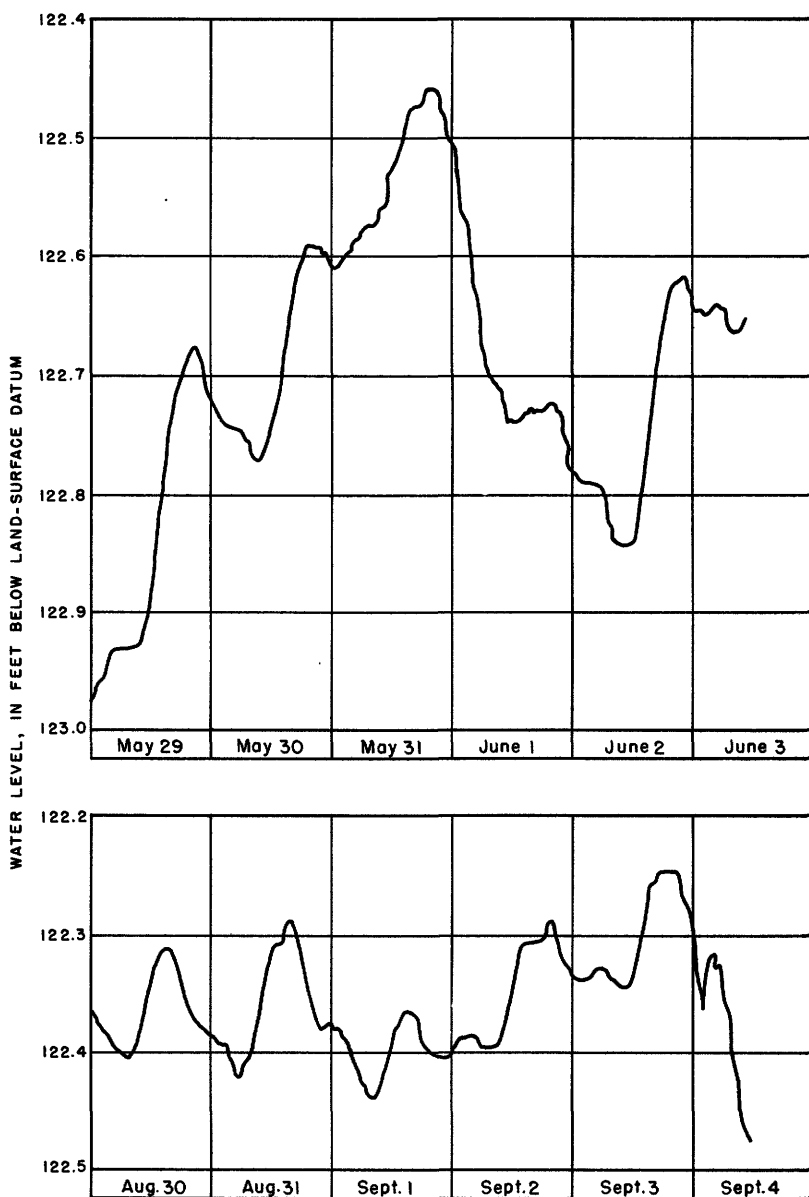


Figure 12.--Recorder hydrograph from Texas County well 188, Oklahoma, showing fluctuations interpreted as partly due to changes in barometric pressure in 1947.

rise in the well. The water level rose in the afternoon when air temperatures were highest and barometric pressures were least; it declined during the night when the cooling air became denser and heavier.

The maximum amplitude of fluctuation in water level shown by the record for August 30-September 4 is about 0.2 foot. The small range and the regularity indicate that atmospheric conditions were fairly stable except for the effects of temperature. Apparently no major atmospheric disturbances visited the locality. Greater amplitude and less regularity are illustrated by the record for May 29-June 3, when an over-all fluctuation of about 0.55 foot occurred. At that season the variable weather of spring is still more or less prevalent, and passing storms probably brought fluctuations of barometric pressure that caused part or all of the water-level fluctuation. The diurnal range in temperature, being smaller, produced only a small effect in barometric pressure, which was mostly masked out.

As a continuous record of barometric pressure near the observation well is not available for comparison with the hydrographs, it is not possible unequivocally to attribute all of the water-level fluctuations to changes in barometric pressure, but it appears reasonable that a part of them can be. It is evident, therefore, that individual tape measurements of water levels are not dependable to 0.01 foot for indicating changes in ground-water storage. Nevertheless, the average of all the water levels in the panhandle, and even those for the counties individually, seems to be significant. Otherwise, no general rise of average water levels over the past 10 years would be evident. Instead, there would be only a baffling succession of ups and downs.

The following tables summarize the average water levels for the several groups of wells in the Oklahoma Panhandle. They continue the record of averages in similar tables published in previous water-supply papers of this series. An asterisk indicates that the water level is the highest observed during the period of record, and two asterisks indicate the lowest.

Average water levels in groups of wells in the Oklahoma Panhandle,  
in feet above assumed datum planes, 1946-47

Date	Beaver County			Texas County			Cimarron County	
	1	2	3	4	5	6	7	8
Oct. 1946	102.30	100.91	101.57	101.67	99.42	*101.79	103.09	100.95
Apr. 1947	103.01	*101.53	103.55	101.98	99.01	101.31	*103.29	101.44
Oct. 1947	*103.29	101.12	101.83	*102.41	*99.03	100.85	103.21	100.21
Net change	+1.09	+.21	+.26	+.74	-.39	-.94	+.12	-.74

1. Wells in northwestern part of Beaver County, tapping water in the Ogallala formation.
2. Wells in southeastern part of Beaver County, tapping water principally in the Permian redbeds.
3. Wells tapping water in alluvium.
4. Wells on uplands, tapping water in the Ogallala formation.
5. Well 294, tapping water in the Triassic or Permian redbeds.
6. Wells tapping water in alluvium.
7. Wells on the uplands, tapping water in the Ogallala formation, and locally in the Dakota sandstone.
8. Wells tapping water in the alluvium.

Weighted average of water levels in wells in the Oklahoma Panhandle,  
by counties, in feet above assumed datum planes, 1946-47

Date	Beaver <sup>a</sup> /	Texas <sup>b</sup> /	Cimarron <sup>c</sup> /	Averaged <sup>d</sup> /
Oct. 1946	101.98	101.63	102.88	102.41
Apr. 1947	*102.70	101.89	*103.11	102.56
Oct. 1947	102.60	*102.26	102.91	*102.59
Net change	+.72	+.63	+.03	+.18

a Weighted average, in which wells in the northwestern part of county represent 65 percent of the total area; wells in the southeastern part, 25 percent; and wells in the alluvium, 10 percent.

b Weighted average, in which upland wells in Ogallala formation represent 93 percent; wells in the alluvium, 5 percent; and wells in redbeds (Permian to Jurassic), 2 percent.

c Weighted average, in which upland wells in Ogallala formation and Dakota sandstone represent 90 percent of the total area and wells in the alluvium, 10 percent.

d Arithmetical average of the three weighted county averages.

#### North Canadian River Valley

The water levels in 13 wells in Canadian, Blaine, Major, Woodward, Harper, and Beaver Counties have been selected as representative of ground-water conditions in the alluvium of the North Canadian River between Yukon and the town of Beaver. Most of these wells are close to the channel and their water levels reflect the stages in the river. For the year ending October 31 they showed an average net decline of 2.45 feet, and in individual wells the decline ranged from 0.96 foot to 6.21 feet. In only two wells were the water levels for October 1947 higher than for October 1946, and these two are farther from the channel than most. Harper County well 1 is about 0.5 mile from Kiowa Creek near its confluence with the North Canadian River, and in it the water level showed a net rise of 1.51 feet. Beaver County well 628 is 4.7 miles northwest of Harper County well 1, is about 3.3 miles from Kiowa Creek and only about 0.6 mile from the North Canadian River, and in it the net rise of water level was 0.14 foot.



High stages were recorded in April in seven wells; in May, in four wells; in July, in two wells; and in February, in one well. However, the highest water level recorded is not necessarily the highest that may have been reached. The wells showing maximum stages in May were the only ones measured that month. If measurements had been made in May in the other wells, higher stages for those wells might have been recorded.

Woodward wells 1 and 2 were dry beginning about the end of August. In five wells the lowest water levels were recorded in October; in one well the lowest was in November; in five wells the lowest was in December; and in one well the same low level was recorded in both October and December.

#### Caddo County

During 1947, the water levels in Caddo County well 1, which taps water in the Rush Springs sandstone, fluctuated through a narrow range of only 0.74 foot. The highest water level was recorded on January 28, and the lowest on October 1.

Wells 2 and 3 are driven wells penetrating the alluvium of the Washita River near the channel and both were constructed in the summer of 1947 by the Geological Survey. Well 2 is south of Fort Cobb, and five measurements were made in it, the highest level being recorded on August 19 and the lowest on October 1. The range in fluctuation was 1.65 feet. Well 3 is east of Carnegie, and two measurements were made in it, the water level of July 17 being 3.87 feet higher than the level recorded October 28.

#### Canadian County

The Canadian County observation wells are all in the North Canadian River Valley except well G-53, which is in the Canadian River Valley south of Union. The wells were measured as a group four times during 1947, in January, April, July, and December. In addition, four of the wells--the three north of Yukon, and well G-53--were measured monthly and the fluctuations of the water level in them are probably representative. The water levels fluctuated very little during the first 3 months, rose sharply during April and May in response to heavy rains and increased stream flow, and then declined throughout the remainder of the year until December, when precipitation was high enough to cause a slight rise. At the end of the year, water levels were about 0.5 foot to 1.5 feet lower than at the beginning of the year.

Cleveland County

Cleveland County well 1 is on a high terrace above the Canadian River. It penetrates a thin terrace deposit of low permeability that contains water only part of the time, and it enters the Hennessey shale, which is the only contributing aquifer when the water table declines below the 13-foot level. As pumpage from these aquifers is negligible, the water level fluctuates in response to natural causes, promptly reflecting precipitation once the soil moisture has been replenished after drought. From January through April 10, the water level in this well declined 1.14 feet, then it rose 5.19 feet by April 30. In the first 8 days of May it declined 1.41 feet, only to rise 4.27 feet to the highest recorded level for the year--only 2.83 feet below the land surface--on May 22. In the last 9 days of May it declined 1.26 feet, but on June 2 had risen to within 0.04 foot of the previous high stage. Thereafter it declined until the end of December, when it was 0.37 foot below the stage recorded at the end of December 1946.

Wells 14 and 15 tap water in alluvium and closely related terrace deposits on the east side of the Canadian River. From January 1 until March 21, the water level in well 14 declined 1.84 feet. Then it rose 4.75 feet so that on April 17 it was only 1.23 feet below the land surface. After declining 2.09 feet, it rose 2.20 feet to a stage only 1.12 feet below the land surface on May 22. Even this stage was exceeded on June 2, when the water was only 1.04 feet below the surface. Thereafter, the water level declined irregularly 8.10 feet to the low stage of the year, reached on October 22, and rose again 0.21 foot to end the year 4.04 feet lower than near the end of 1946. In well 15 the measurements were begun on June 5, and the highest level for the year was recorded on June 24, when the water was only 2.97 feet below the surface. The water level promptly fell to 5.99 feet below the surface by June 30, and during the last half of the year it roughly paralleled the trend in well 14. The lowest stage was recorded on October 8, and was followed by a rise of 1.22 feet, so that on December 26 the water level was 4.06 feet below the initial recorded level.

The water levels in the deep wells tapping water in sandstones of the Garber and Wellington formations are affected by pumping by the city of Norman, the University of Oklahoma, Central State Hospital, and others. In well 4, in the Norman city park near the center of the heavily pumped area,

the water level fluctuated through a range of 38 feet, and at the end of the year was nearly 18 feet below the level of the previous December 1946, thus cancelling all but 15 feet of the net rise registered during 1946. In well 10, on the main campus of the university, the range of fluctuation was a little over 18 feet, and a net rise of 1.55 feet for the year was recorded. In both wells the water levels reached their highest stage in April and their lowest in September.

Of the wells farther from the center of heavy pumping, well 5 affords the best index of trends in ground-water levels, because an automatic water-stage recorder was operated in it throughout the year. It is 5.5 miles east of Norman, and showed a water-level fluctuation of 4.92 feet (based on the lowest daily reading), with a peak level attained on June 9, a minimum level on November 3, and a net rise of 0.98 foot for the year.

In wells 6, 11, and 12 the water levels fluctuated through 2.68, 4.48, and 6.35 feet, respectively, and showed net gains of 2.77, 3.30, and 1.75 feet. In well 9 the water level fluctuated through a range of 7.13 feet and showed a net decline of 0.61 foot. In well 13 the measurements were made only until October, when a stage was reached 3.20 feet above that for the nearest comparable date in 1946.

Well 8 is only 57 feet from the public-supply well of the town of Noble, and in it the water level fluctuates widely in response to pumping. In 1947 the supply well was generally pumping when the measurements were made, but the lowest level recorded was more than 5 feet higher than the lowest recorded in 1946.

#### Comanche County

Comanche County is in southwestern Oklahoma, and is bounded by Kiowa, Caddo, Grady, Stephens, Cotton, and Tillman Counties. The Wichita Mountains extend from near Lawton, the county seat, toward the northwest corner. In them pre-Cambrian granite and gabbro are exposed. Ridges flanking the mountains on their northeast side expose formations of Cambrian and Ordovician age, among which the Arbuckle limestone is prominent. The ground-water resources of the Arbuckle limestone are largely unproved in and immediately adjacent to the areas of outcrop because the demand for water has not been great enough to encourage much drilling. In and near Lawton, however, many wells reaching the Arbuckle limestone at depths down to 2,000 feet are reported, and some of them have flowed at rates ranging from 23 to 1,400

gallons per minute. The water is unusually soft compared with most waters taken from limestone formations, but contains fluoride in amounts up to 11 parts per million, which is an objectionable concentration. In emergencies, the city of Lawton has set pumps at depths of 600 to 800 feet in some of these wells and has pumped them at rates up to 600 gallons per minute.

Except for about three townships in the northeast, where formations ranging from the Duncan sandstone to the Rush Springs sandstone crop out, the undulating to rolling plains surrounding the mountains are underlain by the Clear Fork and Wichita formations, of Permian age. These consist of red and gray shale, from which only small supplies of water normally can be obtained, interbedded with fine-grained, lenticular, red and gray sandstones, which yield water only a little more freely. The alluvium along West Cache Creek and smaller streams affords small to moderate local supplies of ground water.

Well 1 is a flowing well, reported to be 735 feet deep, which taps water in the Arbuckle limestone. It was measured twice in 1947, the water level in August being 0.68 foot lower than in October. Well 2 is only 9 feet deep, and may tap water in the very thin alluvium of a shallow draw, or perhaps it encounters water in both the alluvium and the underlying bedrocks. It was measured three times in 1947, the record showing that the water level declined 0.46 foot between July 16 and October 19.

#### Custer County

Six measurements were made in Custer County well 1, which taps water in the alluvium of the Washita River. The water level rose 3.88 feet between late February and mid-July, and then declined 1.84 feet by mid-October when, however, it was 2.02 feet above the initial water level of October 9, 1946.

#### Ellis County

The water levels in the observation wells in Ellis County were measured from three to six times in 1947--in February, April, July, August, October, and December. In wells 1-4, which begin on the upland plain, the recorded fluctuations ranged from 0.66 foot to 2.27 feet. The most complete record is for well 1, in which the water level reached its lowest recorded stage for the year in October, although this stage was only 0.01 foot below those recorded for April and July. The highest level for the year in this well

was reached in December. No measurements were obtained in well 2 after August, when the lowest level for the year was recorded. Likewise, none were obtained in well 3 after July, when the highest level for the year was recorded. In well 4, the lowest level was recorded in July and the highest in December. The December water levels in wells 1 and 4 were 1.41 and 2.25 feet, respectively, higher than the levels for December 1946.

Well 6 is a driven well penetrating the alluvium of Wolf Creek. After the initial measurement on July 12, the water level declined 0.81 foot in a month and reached its lowest recorded level for the year--0.01 foot lower--on October 19. From that level it had risen 0.53 foot by December 31.

#### Grady County

Of the 14 observation wells in Grady County, 1 taps water in the alluvium of the Washita River and the rest tap water in the Rush Springs sandstone or in alluvium that receives underflow from the Rush Springs. Well 34 was measurable only in April and May, well 4 could not be measured after July, and well 7 was not measured early in December. Therefore, the number of water-level measurements in wells in the Rush Springs sandstone ranged from 10 to 12 a month. Comparison of the water-level fluctuations in artesian wells with those in water-table wells indicated no significant difference, and therefore all were averaged together.

The average water level was generally low throughout the year. During January, February, and March the precipitation was below normal, and the water levels declined an average of 0.33 foot. Through April, May, June, and July, the rainfall ranged from normal to substantially above normal, and the water levels in the observation wells rose an average of 0.22 foot. Hot weather and subnormal rainfall in August and September resulted in an average decline of 0.70 foot in ground-water levels. Although rainfall through October, November, and December was about normal, it was enough only to partially check the downward trend initiated in preceding months, and the net change for the 3 months was a decline of 0.03 foot.

The fluctuations of water level were greater in the alluvium. In well 45, which begins on the flood plain of the Washita River, the range in fluctuation was 7.54 feet, the highest level being recorded in May and the lowest in September.

### Harper County

Harper County well 1 penetrates alluvium and the water-level fluctuations in it have been mentioned in the discussion of the North Canadian River Valley. In well 2, which begins in sand dunes and may enter underlying Tertiary rocks, the water level fluctuated through a range of 2.65 feet. The highest water level was recorded on July 11 and the lowest on April 22.

### Jackson County

Jackson County is in southwestern Oklahoma and is bounded on the west by Harmon County, on the north by Greer County, on the east by Kiowa and Tillman Counties, and on the south by the State of Texas. Altus, the county seat, is a few miles northeast of the middle of the county.

Except for small inliers of pre-Cambrian granite in knobs and peaks rising a few hundred feet above the plains in the east-central part of the county, the rock formations underlying the surface are shale, fine-grained sandstone, and gypsum, of Permian age, or alluvium, of Quaternary age. Of the Permian formations, the Clear Fork and Wichita in the eastern half of the county contain some lenticular layers of fine-grained sandstone that will yield small to moderate supplies of water; the Chickasha and Duncan, in the central part, are similar in character and may be expected to yield small supplies of ground water; and the Blaine, in the western half of the county, yields 1,000 gallons a minute locally, as at Duke, apparently from solution openings in the layers of gypsum that are bedded with the shale. The water from the Blaine, however, is rather highly mineralized for human use although satisfactory for irrigation.

Alluvium occurs along the streams. The observation well in Jackson County taps water in the alluvium of the North Fork of Red River about 2 miles east of Hedrick, near the middle of the east boundary of the county. Measurements of water level were begun in it in June. The lowest level was recorded on August 29, and the highest on October 19, the difference between them being 1.00 foot.

### Kiowa County

Kiowa County is in southwestern Oklahoma, being bounded on the north by Washita County, on the east by Caddo and Comanche Counties, on the south by Tillman County, and on the west by Jackson and Greer Counties. The county seat, Hobart, is in the north-central part.

Pre-Cambrian granite and gabbro crop out in peaks and ridges of the Wichita Mountains in the southern half of the county; the Arbuckle limestone and associated formations, of Cambrian and Ordovician age, crop out in ridges in the east-central part of the county, flanking the main granitic peaks of the Wichitas; and Permian formations underlie the rest of the area except for small areas of alluvium along streams. Most of the area of Permian rocks is underlain by the Clear Fork and Wichita formations, which will yield small to moderate supplies of ground water. The Duncan, Chickasha, Blaine, and Dog Creek formations crop out in a narrow strip along the northern boundary. Measurements of water level were made in July, August, and October, but opposite trends were recorded in the two observation wells. In well 1, a net rise of 0.78 foot occurred over the 3-month period, whereas in well 2 a net decline of 0.61 foot was registered.

#### McClain County

Tape measurements in McClain County well 1 continued to show so little fluctuation of water level that an automatic water-stage recorder was operated in the well from August 19 until September 29. The continuous record confirmed the suspicion that the well does not communicate freely with the aquifer and the measurements, therefore, have been discontinued.

Measurements were begun in McClain County well 2, which penetrates the Hennessey shale, a formation that generally is a poor aquifer. Between late April and early October, the water level fluctuated through a range of 3.64 feet, the highest level being recorded in May.

#### Oklahoma County

Water levels in the deep wells, which derive artesian water from the sandstones of the Garber and Wellington formations generally reflected changes in pumpage. In wells 1, 2, and 3, the water levels rose during the winter and spring and started to decline in April or May in response to seasonal increases in pumpage. In wells 2 and 3 the lowest stage was reached at the end of August, and the water levels rose thereafter. At the end of the year, they were at about the same level as at the beginning of the year. In well 1, the water level continued to decline through September and October and, on November 24, was at the lowest stage recorded since measurements were begun in 1943. At the end of December, the water level was 5.5 feet lower than at the beginning of the year, due principally

to increased municipal pumpage at Britton, about 1 mile southeast of the well.

The water level in well 4 is affected by the pumping in a water-supply well of the Oklahoma City Air Depot, which is 27 feet distant, and by pumping from other wells of the air depot, and by the municipal pumping of Midwest City. Pumpage in the area was slightly greater in 1947 than in 1946, but was less than during the war years. Correspondingly, the water levels in well 4 were slightly lower in 1947 than in 1946, but considerably higher than those of the war years.

Water levels in three shallow observation wells west of Bethany, which tap water in a high-level terrace deposit of the North Canadian River, fluctuated little during the first few months of the year, rose sharply during April and May, and declined throughout the remainder of the year, except in well 11 which showed a rise during November and December. The water table is closer to the land surface at well 11 than at the other two, and it responds more rapidly to changes in precipitation, transpiration, and evaporation. At the end of the year the water level in well 11 was 0.36 foot higher than at the end of 1946, but the levels in the other two wells were about 0.5 foot lower.

The water levels in four shallow wells in the alluvium of the North Canadian River at Oklahoma City fluctuated through a range of 5 feet during the year. Generally, the water levels declined slightly during the first part of the year, rose sharply during April and May when precipitation was heavy, and declined throughout the remainder of the year, except for a slight rise in December. At the end of the year, the water levels averaged a little more than 0.4 foot lower than at the end of 1946.

#### Payne County

##### (Stillwater Creek Basin)

The observation wells in the Stillwater Creek Basin are shallow and the water levels in them generally respond quickly to excesses or deficiencies of precipitation. The deficient moisture conditions of the latter part of the year caused the average of the water levels at the end of the year to be the lowest recorded since 1941.



The monthly average of the water levels declined slightly during the first 3 months of 1947 and then rose more than 1.5 feet during April and May in response to above-normal precipitation. It then declined throughout the remainder of the year until December, when it rose slightly.

#### Roger Mills County

Roger Mills County is in western Oklahoma, and is bounded on the north by Ellis County, on the east by Dewey and Custer Counties, on the south by Beckham County, and on the west by the State of Texas. The northern boundary follows the Canadian River. The Washita River crosses the county from east to west, passing about 1 mile north of Cheyenne, the county seat, which is near the middle.

The eastern two-thirds of Roger Mills County is moderately dissected, undulating to rolling, and is underlain by Permian redbeds consisting of shales and thin, fine-grained sandstones that will yield only small to moderate supplies of ground water; or shale and layers of gypsum, in which meager supplies of ground water are likely to contain high concentrations of calcium sulfate. The western third of the county is higher in altitude, flat to gently rolling, and is underlain by Quaternary dune sand and terrace deposits, from which moderately large supplies of good water generally may be obtained at depths of about 100 feet. There is also a smaller area of terrace deposits, totaling somewhat less than a township, south of the Canadian River in the northeastern corner of the county.

Alluvium in a band 0.25 to 1.0 mile wide underlies the flood plain on the south side of the Canadian River, and in a band 1 to 3 miles wide along the Washita River. Observation well 1 is in the alluvium on the south side of the Washita about 1 mile north of Cheyenne. The water level in it was measured seven times. Between the end of February and the end of April it rose 2.6 feet, then it declined 5.80 feet to the low stage for the year, which was recorded on October 19, and thereafter rose 0.23 foot by December 31, when it was 2.97 feet below the initial measurement recorded in February.

#### Tillman County

The water level in the irrigation well at the Southwestern Cotton Substation, near Tipton, varied only a few tenths of a foot during the first 3 months of 1947, when rainfall was below normal. Heavy rains in April

and May, totaling 14.65 inches, caused the water level to rise more than 4 feet until, on May 26, it was at the highest stage recorded since measurements began in 1944. From the May high the water level declined gradually through the following months until the middle of October. During August and September, 21.6 acre-feet of water was pumped from the well to irrigate cotton but the pumpage had no visible effect on the long-term trends of the water level. Rains during the latter part of October and the remainder of the year resulted in a rise of water level during these months and, on December 29, 1947, the water level was 2.34 feet higher than on December 30, 1946.

#### Washita County

Washita County is in west-central Oklahoma, is very nearly rectangular, and includes about 28 townships. It is bounded on the north by Custer County, on the east by Caddo County, on the south by Kiowa County, and on the west by Beckham County. Cordell, the county seat, is centrally located. The Washita River enters the county near the middle of the north line and leaves near the southeast corner.

The bedrock formations of Washita County are of Permian age, ranging from the Blaine and Dog Creek formations to the Quartermaster formation. The Blaine and Dog Creek crop out in small areas along the southern boundary, consist mostly of shale, and are of little consequence as aquifers. The Whitehorse formation crops out in a north-south band one township or less in width in the eastern part of the county, continuing along the southern side as a band 2 to 4 miles wide. The upper member of the Whitehorse, known as the Rush Springs sandstone, is 200 to 300 feet thick, and although it is very fine-grained, it is the most favorable of the bedrock formations in the county as a source of ground water. To the east, in Caddo County, it is tapped for water for small towns and for irrigation. The Cloud Chief formation overlies the Whitehorse, crops out in the eastern part of the county on either side of the Washita River, where its outcrop is about two townships wide, and in the southern part, where its outcrop is 2 to 4 miles wide. As it consists principally of shale and gypsum, it yields only meager supplies of water of poor quality. The Quartermaster is the surface formation in most of the western half of the county, consists principally of red shale and very fine-grained, thin-bedded, red sandstone from which meager to moderate supplies of ground water can be obtained, but

locally the formation includes a fairly thick sandstone near the base, which has yielded up to 100 gallons a minute per well. Washita County observation well 1 taps water in this sandstone, and in 1947 the water level fluctuated through a range of 7.43 feet, the highest level being recorded on March 26 and the lowest on October 19.

The alluvium underlying the flood plain on either side of the channel of the Washita River is a ground-water reservoir of considerable capacity and productivity, but the water is rather highly mineralized because the river crosses the outcrop of the gypsiferous Cloud Chief formation through most of Washita County and for many miles upstream.

#### WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

##### Beaver County

253 (\*1074, p. 100). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 2 N., R. 23 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 8.59; Oct. 22, 8.36.

275 (\*1074, p. 100). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 2 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 76.69; Oct. 22, 76.58.

401 (\*845, p. 391; 886, p. 600; 909, p. 59; 939, p. 47; 947, p. 48; 989, p. 60; 1019, p. 85; 1026, p. 77; 1074, p. 101). T. T. Yarnold. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 7, T. 3 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 89.36; Oct. 22, 91.51.

417 (\*845, p. 389; 886, p. 597; 909, p. 59; 939, p. 47; 947, p. 48; 989, p. 60; 1019, p. 85; 1026, p. 77; 1074, p. 101). Ralph Ridgeway. SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 11, T. 3 N., R. 25 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 10.28; Oct. 22, 10.42.

432 (\*845, p. 388; 886, p. 596; 909, p. 59; 939, p. 47; 947, p. 48; 989, p. 60; 1019, p. 85; 1026, p. 77; 1074, p. 101). George H. Button. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, T. 3 N., R. 26 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 27.14; Oct. 22, 27.52.

433 (\*845, p. 388; 886, p. 596; 909, p. 59; 939, p. 47; 947, p. 48; 989, p. 60; 1019, p. 85; 1026, p. 77; 1074, p. 101). Federal Land Bank. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 3 N., R. 26 E. Water levels, in feet below land-surface datum, 1947: Apr. 22, 39.09; Oct. 22, 39.06.

518 (\*845, p. 391; 886, p. 600; 909, p. 60; 939, p. 47; 947, p. 49; 989, p. 60; 1019, p. 86; 1026, p. 77; 1074, p. 101). Pete Sanders Estate. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 36, T. 4 N., R. 23 E. No measurements made in 1947.

523 (\*845, p. 389; 886, p. 597; 909, p. 60; 939, p. 47; 947, p. 49; 989, p. 60; 1019, p. 86; 1026, p. 77; 1074, p. 101). Frances M. Hancock. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 24, T. 4 N., R. 24 E. No measurements made in 1947.

527 (\*845, p. 391; 886, p. 600; 939, p. 47; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 77; 1074, p. 101). Mrs. Ellen F. Williams. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 30, T. 4 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 45.10; Oct. 22, 44.78.

528 (\*886, p. 600; 909, p. 60; 939, p. 47; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 77; 1074, p. 101). Southwestern Public Service Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 4 N., R. 24 E.

528--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	11.40	Apr. 4	10.94	July 4	10.03	Oct. 3	13.90
10	11.28	11	11.07	11	10.36	10	13.94
17	11.21	18	9.63	18	10.65	17	13.98
24	11.23	25	9.61	25	10.94	24	14.09
31	11.28	May 2	9.57	Aug. 1	11.44	31	14.09
Feb. 7	11.55	9	9.94	8	11.96	Nov. 7	13.98
14	11.57	16	9.44	15	12.21	14	13.84
21	11.65	23	7.98	22	12.55	21	13.90
28	11.65	30	8.57	29	12.84	28	13.82
Mar. 7	11.80	June 6	9.01	Sept. 5	13.03	Dec. 5	13.82
14	12.28	13	9.53	12	13.28	12	13.61
21	10.88	20	10.19	19	13.53	19	13.57
28	11.01	27	9.65	26	13.82	26	13.53

573 (#845, p. 388; 886, p. 595; 909, p. 61; 939, p. 48; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 78; 1074, p. 102). Federal Land Bank. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 34, T. 4 N., R. 28 E. Measurements discontinued.

576 (#845, p. 390; 886, p. 598; 909, p. 61; 939, p. 48; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 78; 1074, p. 102). J. C. Peters. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 5 N., R. 20 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 157.61; Oct. 20, 157.52.

577 (#845, p. 390; 886, p. 598; 909, p. 61; 939, p. 48; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 78; 1074, p. 102). George Loepp. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 19, T. 5 N., R. 20 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 136.44; Oct. 20, 135.79.

591 (#845, p. 390; 886, p. 598; 909, p. 61; 939, p. 48; 947, p. 49; 989, p. 61; 1019, p. 86; 1026, p. 78; 1074, p. 102). A. J. Isaac. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 5 N., R. 21 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 190.89; Oct. 20, 190.73.

593 (#845, p. 390; 886, p. 598; 909, p. 61; 939, p. 48; 947, p. 49; 989, p. 61; 1019, p. 87; 1026, p. 78; 1074, p. 102). Ada Allred. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 5 N., R. 21 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 171.20; Oct. 20, 170.96.

612 (#939, p. 48; 947, p. 50; 989, p. 61; 1019, p. 87; 1026, p. 78; 1074, p. 102). Clarence Lamaster. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 26, T. 4 N., R. 28 E.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 25	10.13	Aug. 28	11.92	Dec. 30	12.56
Apr. 22	9.01	Oct. 20	12.80		

613 (#845, p. 389; 886, p. 597; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 78; 1074, p. 102). T. J. Trew. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 13, T. 5 N., R. 22 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 62.10; Oct. 20, 61.90.

614 (#845, p. 389; 886, p. 597; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 78; 1074, p. 102). E. W. Lewis. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 14, T. 5 N., R. 22 E. No measurements made in 1947.

617 (#845, p. 390; 886, p. 598; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 78; 1074, p. 102). Minnie B. Dorman and others. SW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 20, T. 5 N., R. 22 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 167.30; Oct. 20, 167.09.

631 (#845, p. 389; 886, p. 597; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 78; 1074, p. 102). George W. Dubois. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, T. 5 N., R. 23 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 107.09; Oct. 20, 107.35.

635 (\*845, p. 391; 886, p. 599; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 78; 1074, p. 102). A. E. Shillingburg. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 5 N., R. 23 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 58.39; Oct. 22, 58.17.

647 (\*845, p. 390; 886, p. 599; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 61; 1019, p. 87; 1026, p. 79; 1074, p. 102). Gilbert Hedges. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, T. 5 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 49.46; Oct. 20, 48.49.

649 (\*845, p. 391; 886, p. 579; 909, p. 62; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 79; 1074, p. 103). Arthur Williams. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 30, T. 5 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 4.29; Oct. 22, 4.50.

767 (\*845, p. 390; 886, p. 599; 909, p. 63; 939, p. 49; 947, p. 50; 989, p. 62; 1019, p. 87; 1026, p. 79; 1074, p. 103). Robert F. LeCrone. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 6 N., R. 23 E. Water level, in feet below land-surface datum, 1947: Apr. 28, 66.07.

777 (\*845, p. 390; 886, p. 599; 909, p. 63; 939, p. 49; 947, p. 51; 989, p. 62; 1019, p. 87; 1026, p. 79; 1074, p. 103). J. H. Neese. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 20, T. 6 N., R. 24 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 19.91; Oct. 20, 18.24.

#### Blaine County

1 (\*909, p. 63; 939, p. 50; 947, p. 51; 989, p. 63; 1019, p. 87; 1026, p. 79; 1074, p. 103). Oklahoma City Water Department. NE $\frac{1}{4}$  sec. 27, T. 16 N., R. 12 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	4.99	July 10	5.07	Oct. 23	7.67
Apr. 22	3.32	Aug. 28	7.07	Dec. 30	6.55

2 (\*909, p. 63; 939, p. 50; 947, p. 51; 989, p. 63; 1019, p. 87; 1026, p. 79; 1074, p. 103). Oklahoma City Water Department. Near NE corner sec. 9, T. 18 N., R. 13 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	5.29	July 10	5.08	Oct. 23	8.22
Apr. 22	4.08	Aug. 28	7.60	Dec. 30	(a)

a Dry.

#### Caddo County

1 (\*1026, p. 79; 1074, p. 103). P. C. Haun. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 2, T. 7 N., R. 12 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	48.22	Apr. 30	48.52	July 30	48.78	Oct. 28	48.59
Feb. 25	48.67	May 27	48.65	Aug. 19	48.87	Dec. 1	48.52
Mar. 24	48.32	July 19	48.67	Oct. 1	48.96	23	48.36

2. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 11, T. 7 N., R. 12 W. On flood plain of Washita River about 0.4 mile south of Fort Cobb near end of bridge on State Highway 9. Driven well, diameter 1 $\frac{1}{4}$  inches, depth 17 feet, with 1 $\frac{1}{4}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{4}$ -inch casing, 0.80 foot above land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Aug. 19	12.54	Oct. 28	13.88	Dec. 23	12.84
Oct. 1	14.19	Dec. 1	13.01		

3. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 3, T. 7 N., R. 13 W. On flood plain of Washita River immediately east of bridge on State Highway 9, near Carnegie. Driven well, diameter 1 $\frac{1}{4}$  inches, depth 18 feet, with 1 $\frac{1}{4}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{4}$ -inch casing, 0.3 foot above land-surface datum. Water levels, in feet below land-surface datum, 1947: July 17, 11.54; Oct. 28, 15.41.

Canadian County

RFC 1 (#1026, p. 80; 1074, p. 103). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 12 N., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.55	May 28	1.30	July 24	5.66	Oct. 30	10.54
Feb. 28	6.20	June 23	5.40	Aug. 27	8.39	Nov. 24	10.44
Mar. 25	5.55	July 9	5.12	Sept. 26	9.75	Dec. 26	9.46
Apr. 22	4.28						

2 (#909, p. 64; 939, p. 50; 947, p. 51; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 103). Oklahoma City Water Department. NW $\frac{1}{4}$  sec. 33, T. 13 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	10.74	May 28	7.45	July 24	9.81	Oct. 23	13.45
Feb. 24	11.41	June 23	9.43	Aug. 28	12.39	Dec. 27	21.99
Apr. 22	9.97	July 10	9.27				

RFC 3 (#909, p. 64; 939, p. 50; 947, p. 52; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 103). Geological Survey, U. S. Dept. of Interior. SW. corner sec. 1, T. 13 N., R. 9 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	3.84	Mar. 4	4.33	July 10	3.64	Oct. 23	4.32
Feb. 24	4.34	Apr. 23	2.69	25	4.10	Dec. 29	5.92

RFC 4 (#947, p. 53; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 104). Geological Survey, U. S. Dept. of Interior. NE. corner sec. 17, T. 14 N., R. 10 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	3.95	Apr. 23	2.73	July 25	3.56	Oct. 23	6.64
Feb. 24	4.57	July 10	3.35	Aug. 28	5.73		

10 (#947, p. 51; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 104). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 13 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 23.25; Apr. 23, 23.54; July 25, 21.01; Dec. 27, 22.90.

13 (#947, p. 52; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 104). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, T. 13 N., R. 9 W. Water level, in feet below land-surface datum, 1947: Apr. 23, 5.45.

82 (#947, p. 52; 989, p. 63; 1019, p. 88; 1026, p. 80; 1074, p. 104). Ryba Jacob. SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 22.27; Apr. 22, 22.18; July 24, 20.90; Dec. 26, 22.87.

85 (#947, p. 52; 989, p. 64; 1019, p. 88; 1026, p. 80; 1074, p. 104). W. L. Towe. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 6, T. 12 N., R. 5 W. Water levels, in feet below land-surface datum, 1947: Jan. 28, 10.75; Apr. 22, 8.81; July 24, 8.64; Dec. 26, 11.77.

151 (#947, p. 52; 989, p. 64; 1019, p. 88; 1026, p. 80; 1074, p. 104). Canadian County. NW. corner SW $\frac{1}{4}$  sec. 20, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 12.66; Apr. 23, 12.47; July 25, 12.70.

152 (\*947, p. 52). Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 13 N., R. 10 W. Measurements resumed in 1945.

Water level, in feet below land-surface datum, 1945-47

Date	Water level	Date	Water level	Date	Water level
June 26, 1945	17.78	Aug. 19, 1946	18.05	Apr. 23, 1947	18.22
Dec. 20	17.79	Dec. 17	18.27	July 25	18.01
May 15, 1946	17.88	Jan. 29, 1947	18.14	Dec. 29	16.06

G1 (\*947, p. 53; 989, p. 64; 1019, p. 88; 1026, p. 80; 1074, p. 104). Geological Survey, U. S. Dept. of Interior. SW. corner sec. 29, T. 13 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 17.89; Apr. 22, 18.05; July 24, 17.91; Dec. 27, 18.40.

G3 (\*947, p. 53; 989, p. 64; 1019, p. 88; 1026, p. 80; 1074, p. 104). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 13 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 7.40; Apr. 22, 5.29; July 24, 6.30; Dec. 27, 8.50.

G4 (\*947, p. 53; 989, p. 64; 1019, p. 88; 1026, p. 80; 1074, p. 104). Geological Survey, U. S. Dept. of Interior. NE. corner sec. 8, T. 13 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 11.41; Apr. 23, 11.43; July 25, 10.19; Dec. 27, 14.26.

G5 (\*947, p. 54; 989, p. 64; 1019, p. 89; 1026, p. 80; 1074, p. 104). Geological Survey, U. S. Dept. of Interior. NW. corner sec. 5, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 2.15; Apr. 22, 0.64; July 24, 2.01; Dec. 26, 3.61.

G6 (\*947, p. 54; 989, p. 64; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SE. corner sec. 8, T. 12 N., R. 5 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	8.97	Apr. 22	6.50	July 24	7.46	Oct. 30	10.16
Feb. 28	8.97	May 28	4.74	Aug. 27	8.91	Nov. 24	10.35
Mar. 25	9.03	June 23	6.05	Sept. 26	9.80	Dec. 26	10.33

G7 (\*947, p. 54; 989, p. 64; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. NW. corner sec. 21, T. 13 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 15.72; Apr. 22, 15.57; July 24, 16.06; Dec. 27, 16.24.

G8 (\*947, p. 54; 989, p. 64; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 13 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 14.75; Apr. 22, 14.09; July 24, 13.07; Dec. 27, 13.81.

G10 (\*947, p. 54; 989, p. 64; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. NW. corner sec. 15, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 9.67; Apr. 23, 9.10; July 25, 9.59.

G11 (\*947, p. 55; 989, p. 64; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SW. corner sec. 8, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 4.08; Apr. 23, 2.67; July 25, 4.51; Dec. 29, 5.19.

G12 (\*947, p. 55; 989, p. 65; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SW. corner sec. 17, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 5.25; Apr. 23, 3.20; July 25, 5.74; Dec. 29, dry at 6.65.

G13 (\*947, p. 55; 989, p. 65; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SW. corner sec. 14, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 7.47; Apr. 23, 5.96; July 25, 7.15; Dec. 29, 8.14.

G14 (#947, p. 55; 989, p. 65; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. 500 feet east of NW corner sec. 25, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 17.28; Apr. 23, 17.16; July 25, 16.35; Dec. 29, 17.59.

G16 (#947, p. 55; 989, p. 65; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SE corner SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 28, T. 14 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 16.03; Apr. 23, 15.55; July 25, 15.32; Dec. 29, 16.89.

G17 (#947, p. 56; 989, p. 65; 1019, p. 89; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, T. 14 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 12.22; Apr. 23, 11.50; July 25, 10.57; Dec. 29, 12.08.

G18 (#947, p. 56; 989, p. 65; 1019, p. 90; 1026, p. 81; 1074, p. 105). Geological Survey, U. S. Dept. of Interior. NW corner sec. 11, T. 13 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 19.22; Apr. 23, 18.82; Dec. 29, 20.64.

G20 (#947, p. 56; 989, p. 65; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. NW corner SW $\frac{1}{4}$  sec. 12, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 8.63; Apr. 22, 7.13; July 24, 7.98; Dec. 26, 10.63.

G22 (#947, p. 56; 989, p. 65; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 5.30; Apr. 22, 3.59; July 25, 4.16.

G23 (#947, p. 57; 989, p. 65; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 7, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 8.60; Apr. 22, 6.84; July 24, 8.58.

G24 (#947, p. 57; 989, p. 65; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 5.53; Apr. 22, 3.19; July 24, 5.58; Dec. 27, 7.47.

G25 (#947, p. 57; 989, p. 65; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW corner sec. 15, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 11.30; Apr. 23, 11.07; July 25, 10.55; Dec. 29, 11.42.

G27 (#947, p. 57; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW corner NW $\frac{1}{4}$  sec. 36, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 2.79; Apr. 23, 1.94; July 25, 5.49; Dec. 29, 8.29.

G28 (#947, p. 57; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SE corner sec. 23, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 17.18; Apr. 22, 16.84; July 24, 16.48; Dec. 27, 17.36.

G29 (#947, p. 58; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW corner SE $\frac{1}{4}$  sec. 10, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 6.83; Apr. 22, 3.95; July 24, 6.12; Dec. 27, 7.40.

G30 (#947, p. 58; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW corner sec. 36, T. 14 N., R. 9 W. Water levels, in feet below land-surface datum, 1947: Apr. 23, 7.00; Dec. 29, dry at 9.36.

G32 (#947, p. 58; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. NE corner NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 5.68; Apr. 22, 4.58; July 24, 5.31; Dec. 27, 7.00.



G34 (\*947, p. 59; 989, p. 66; 1019, p. 90; 1026, p. 82; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW corner sec. 32, T. 13 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 11.47; Apr. 22, 7.92; July 25, 11.23.

G35 (\*947, p. 59; 989, p. 66; 1019, p. 91; 1026, p. 83; 1074, p. 106). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 18, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 1.70; Apr. 22, 1.54.

G36 (\*947, p. 59; 989, p. 66; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 13, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 8.31; Apr. 22, 6.46.

G38 (\*947, p. 59; 989, p. 66; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, T. 12 N., R. 6 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 6.16; Apr. 22, 4.77; July 25, 6.17; Dec. 27, 7.47.

G41 (\*947, p. 60; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. 150 feet north of SW corner sec. 4, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 7.73; Apr. 22, 5.74; July 24, 6.99; Dec. 27, 8.22.

G42 (\*947, p. 60; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. SE corner SW $\frac{1}{4}$  sec. 22, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 28, 12.29; Apr. 22, 11.71; July 24, 12.17; Dec. 27, dry at 13.7.

G44 (\*947, p. 60; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. NW corner sec. 28, T. 14 N., R. 10 W. Water levels, in feet below land-surface datum, 1947: Jan. 29, 14.82; Apr. 23, 13.72; July 25, 13.75; Dec. 29, 15.81.

G45 (\*947, p. 60; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. NW corner sec. 21, T. 14 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 8.69; Apr. 22, 6.13; July 24, 8.33; Dec. 27, 9.64.

G46 (\*947, p. 60; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. NE corner sec. 29, T. 13 N., R. 8 W. Water levels, in feet below land-surface datum, 1947: Jan. 28, 14.49; Apr. 22, 13.80; July 24, 13.90; Dec. 27, 15.24.

G48 (\*947, p. 61; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. SE corner sec. 3, T. 12 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 14.63; Apr. 22, 13.50; July 24, 13.89; Dec. 27, 15.09.

G49 (\*947, p. 61; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. NE corner SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, T. 12 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 17.78; Apr. 22, 17.33; July 24, 16.89; Dec. 27, 18.15.

G50 (\*947, p. 61; 989, p. 67; 1019, p. 91; 1026, p. 83; 1074, p. 107). Geological Survey, U. S. Dept. of Interior. SE corner sec. 1, T. 12 N., R. 7 W. Water levels, in feet below land-surface datum, 1947: Jan. 27, 17.43; Apr. 22, 16.31; July 24, 16.63; Dec. 27, 17.98.

G52a. Geological Survey, U. S. Dept. of Interior. Replacement for well (G52) destroyed in 1946. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, T. 12 N., R. 5 W. Driven well, diameter 1 $\frac{1}{2}$  inches, depth 14.6 feet, with 1 $\frac{1}{2}$ -by 24-inch well point. Measuring point, top of 1 $\frac{1}{2}$ -inch casing, 1,264.97 feet above mean sea level, 2.70 feet above land-surface, and 1.52 feet above land-surface datum of well G52.

## G52a--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
July 9	4.65	Aug. 27	7.78	Oct. 30	9.75
24	5.35	Sept. 26	9.20	Nov. 24	9.86

G53 (\*1074, p. 108). Geological Survey, U. S. Dept. of Interior.  
SW $\frac{1}{4}$  sec. 3, T. 10 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	6.57	Apr. 23	4.79	July 30	6.00	Oct. 28	8.04
Feb. 24	6.80	May 28	3.49	Aug. 28	7.07	Dec. 1	7.82
Mar. 4	6.76	June 23	4.40	Sept. 30	7.93	22	7.47
26	6.73						

Cimarron County

129 (\*886, p. 603; 909, p. 64; 939, p. 52; 947, p. 61; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 108). George Camilli. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 2 N., R. 2 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 164.17; Oct. 21, 163.70.

156 (\*1074, p. 108). Geological Survey, U. S. Dept. of Interior.  
SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 2 N., R. 5 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 5.48; Oct. 21, 6.00.

224 (\*845, p. 393; 886, p. 603; 909, p. 65; 939, p. 52; 947, p. 61; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 108). Walter R. Wood.  
NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 15, T. 3 N., R. 1 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 132.39; Oct. 21, 132.24.

237 (\*886, p. 603; 909, p. 65; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 108). Central Life Assurance Society.  
NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 3 N., R. 1 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 56.63; Oct. 21, 56.05.

262 (\*845, p. 393; 886, p. 603; 909, p. 65; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 108). W. H. and Z. B. Stone.  
SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 12, T. 3 N., R. 4 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 182.36; Oct. 21, 181.65.

263 (\*845, p. 393; 886, p. 603; 909, p. 65; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 108). John Ohnick, Jr.  
SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 15, T. 3 N., R. 4 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 121.07; Oct. 21, 120.73.

275 (\*886, p. 602; 909, p. 65; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 109). O. A. Showalter. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 3 N., R. 5 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 146.78; Oct. 21, 146.44.

276 (\*845, p. 393; 886, p. 603; 909, p. 65; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 109). Atchison, Topeka & Santa Fe Railroad. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 14, T. 3 N., R. 5 E. Water level, in feet below land-surface datum, 1947: Oct. 21, 133.70.

313 (\*845, p. 392; 886, p. 602; 909, p. 66; 939, p. 52; 947, p. 62; 989, p. 68; 1019, p. 92; 1026, p. 84; 1074, p. 109). E. J. Behrent.  
NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, T. 3 N., R. 7 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 42.55; Oct. 21, 42.38.

435 (\*845, p. 392; 886, p. 601; 909, p. 66; 939, p. 53; 947, p. 62; 989, p. 69; 1019, p. 93; 1026, p. 84; 1074, p. 109). B. J. Wiggins. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 26, T. 4 N., R. 8 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 136.55; Oct. 21, 136.80.

436 (\*845, p. 392; 886, p. 601; 909, p. 67; 939, p. 53; 947, p. 62; 989, p. 69; 1019, p. 93; 1026, p. 85; 1074, p. 109). Mrs. S. C. Cantrell. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 32, T. 4 N., R. 8 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 150.86; Oct. 21, 150.74.

516 (\*886, p. 604; 909, p. 67; 939, p. 53; 947, p. 62; 989, p. 69; 1019, p. 93; 1026, p. 85; 1074, p. 109). State of Oklahoma. SE $\frac{1}{4}$  sec. 34, T. 5 N., R. 5 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 6.78; Oct. 21, 6.99.

528 (\*886, p. 605; 909, p. 67; 939, p. 53; 947, p. 62; 989, p. 69; 1019, p. 93; 1026, p. 85; 1074, p. 109). Alliance Insurance Co. NW $\frac{1}{4}$  sec. 4, T. 5 N., R. 7 E. Measurements discontinued.

610 (\*845, p. 393; 886, p. 604; 909, p. 67; 939, p. 53; 947, p. 62; 989, p. 69; 1019, p. 93; 1026, p. 85; 1074, p. 109). A. S. Parker. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 6 N., R. 5 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 28.76; Oct. 21, 28.65.

660 (\*1074, p. 109). Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 5 N., R. 5 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 4.11; Oct. 21, 6.04.

#### Cleveland County

1 (\*886, p. 614; 909, p. 67; 939, p. 53; 947, p. 63; 989, p. 69; 1019, p. 93; 1026, p. 85; 1074, p. 109). Mrs. Elizabeth E. Taylor. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, T. 10 N., R. 3 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.74	Apr. 25	6.25	July 7	5.98	Sept. 30	9.53
10	9.81	30	5.69	14	6.60	Oct. 10	9.75
17	9.96	May 1	6.11	22	7.09	17	9.79
24	9.91	8	7.10	28	6.71	24	9.99
31	10.07	15	6.25	31	6.93	31	9.81
Feb. 12	10.36	22	2.83	Aug. 4	7.26	Nov. 6	9.86
17	10.30	28	4.02	11	7.57	14	9.97
28	10.43	31	4.09	18	7.91	19	9.69
Mar. 3	10.51	June 2	2.87	25	8.17	26	9.57
10	10.76	9	4.89	30	8.38	Dec. 5	9.33
31	10.84	16	6.01	Sept. 8	8.79	10	9.34
Apr. 7	10.88	24	6.09	15	8.99	17	9.66
10	9.13	30	6.19	26	9.44	29	10.02
17	6.78						

4 (\*947, p. 63; 989, p. 70; 1019, p. 93; 1026, p. 85; 1074, p. 110). City of Norman. 93 feet north of center of Daws Street, 150 feet west of Santa Fe Avenue, in city park, Norman.

Water level, in feet below land-surface datum, 1947

Jan. 10	264.17	Apr. 17	259.84	June 30	274.02	Sept. 30	291.41
17	266.75	25	265.99	July 7	271.33	Oct. 8	291.45
25	267.72	May 1	280.14	14	275.19	22	291.99
31	267.41	8	271.82	23	282.47	29	288.36
Feb. 14	269.69	15	273.96	28	275.93	Nov. 5	285.76
21	270.57	22	274.60	Aug. 4	282.50	12	289.09
28	266.16	28	277.27	11	286.93	28	288.18
Mar. 5	264.54	June 2	271.36	18	287.66	Dec. 5	293.72
21	262.07	9	273.52	26	290.15	10	294.27
28	263.77	16	274.38	Sept. 8	298.16	19	294.68
Apr. 7	261.79	24	276.77	16	295.19	26	286.14
10	262.20						

5 (\*947, p. 63; 989, p. 70; 1019, p. 94; 1026, p. 86; 1074, p. 110).  
 F. W. Goldsby. NW. corner SE $\frac{1}{4}$  sec. 30, T. 9 N., R. 1 W. Well equipped  
 with automatic water-stage recorder throughout year.

Lowest daily water level, in feet below land-surface datum, 1947  
 (From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	143.60	142.36	142.54	a 142.14	141.16	140.50
2	143.60	142.33	142.52	142.14	141.11	140.56
3	143.58	142.79	142.40	142.06	141.03	140.55
4	143.57	142.79	142.36	.....	141.08	140.50
5	143.43	142.73	142.49	.....	141.08	140.52
6	.....	142.50	142.49	.....	141.04	140.50
7	.....	142.64	142.46	142.09	141.13	140.53
8	.....	142.66	142.43	142.02	141.11	140.53
9	.....	142.71	142.44	141.94	141.11	140.47
10	143.07	142.69	142.44	141.80	141.11	140.50
11	143.00	142.61	142.37	141.85	141.10	140.57
12	142.89	142.66	142.25	141.91	141.05	140.62
13	142.81	142.64	142.31	141.87	140.95	140.71
14	142.86	142.56	142.38	141.82	140.98	140.74
15	142.95	142.56	142.38	141.64	140.99	140.75
16	143.06	142.47	142.36	141.72	140.92	140.77
17	143.05	142.46	142.32	141.71	140.90	140.70
18	143.00	142.56	142.31	141.57	140.91	140.73
19	142.85	142.56	142.30	141.44	140.84	140.79
20	142.93	142.57	142.30	141.49	140.78	140.76
21	142.98	142.59	142.28	141.43	140.91	140.77
22	142.92	142.53	142.25	141.34	140.76	140.82
23	142.77	142.53	142.10	141.33	140.77	140.85
24	142.66	142.59	a 142.24	141.34	140.73	140.85
25	142.64	142.58	.....	141.39	140.72	140.82
26	142.66	142.60	142.13	141.38	140.70	140.79
27	142.59	142.55	142.24	141.28	140.64	140.74
28	142.58	142.36	142.24	141.20	140.66	140.73
29	142.42		142.16	141.03	140.70	140.85
30	142.62		142.16	141.18	140.69	140.98
31	142.72		142.04		140.58	

a Estimated

Lowest daily water level, in feet below land-surface datum, 1947  
 (From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	141.07	141.36	142.53	143.74	145.43	144.63
2	141.07	141.41	142.59	143.73	145.46	144.55
3	141.00	141.48	142.59	143.81	145.39	144.56
4	140.88	141.49	142.61	143.84	145.45	144.55
5	140.88	.....	142.64	143.88	145.49	144.61
6	140.95	.....	142.69	143.90	144.47	144.56
7	141.97	141.52	142.77	143.93	144.58	144.50
8	141.01	141.57	142.78	143.96	144.60	144.55
9	140.99	141.60	142.83	144.01	144.54	144.55
10	140.97	141.63	142.84	144.06	144.61	144.62
11	140.97	141.73	142.91	143.98	144.64	144.62
12	141.00	141.81	143.02	144.16	144.68	144.64
13	140.98	141.92	142.98	144.20	144.69	144.66
14	141.05	141.85	143.09	144.16	144.63	144.54
15	141.10	141.88	143.16	144.14	144.57	144.52
16	141.15	141.94	143.14	144.14	144.63	144.55
17	141.17	142.00	143.25	144.07	144.66	144.58
18	141.29	142.04	143.28	144.23	144.61	144.56
19	141.31	142.04	143.29	144.28	144.61	144.59
20	141.24	142.08	143.23	144.30	144.60	144.66
21	141.34	142.12	143.37	144.30	144.61	144.66
22	141.35	142.14	143.49	144.28	144.68	144.54
23	141.31	142.19	143.46	144.32	144.65	144.65
24	141.30	142.22	143.47	144.36	144.60	144.75
25	141.30	142.28	143.58	144.35	144.61	144.75
26	141.30	142.32	143.67	144.34	144.61	144.70

5--Continued.

Lowest daily water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	141.31	142.33	143.66	144.36	144.70	144.65
28	141.31	142.38	143.65	144.36	144.73	144.60
29	141.35	142.41	143.74	144.36	144.72	144.50
30	141.35	142.47	143.75	144.33	144.77	144.54
31	141.36	142.49		145.41		144.58

6 (\*989, p. 71; 1019, p. 95; 1026, p. 87; 1074, p. 111). C. H. Taylor. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 8 N., R. 2 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	118.17	Apr. 17	116.53	July 7	115.67	Oct. 15	116.06
17	117.99	25	116.53	14	115.73	22	115.90
24	117.72	May 1	116.35	23	115.71	31	115.83
31	117.61	8	116.29	28	115.70	5	115.75
Feb. 14	117.52	22	115.90	Aug. 4	115.80	12	115.78
21	117.48	28	115.66	11	115.82	22	115.71
28	117.19	June 2	115.74	18	115.97	28	115.69
Mar. 5	117.22	9	115.59	25	116.00	Dec. 6	115.50
14	117.15	16	115.72	Sept. 8	116.05	12	115.60
21	117.02	24	115.65	15	116.12	19	115.50
28	116.96	30	115.70	26	116.15	26	115.49
Apr. 7	116.89						

8 (\*989, p. 72; 1019, p. 95; 1026, p. 87; 1074, p. 112). Town of Noble. SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, T. 8 N., R. 2 W. In southeast corner of town garage at water tower, 57 feet south of Noble public-supply well.

Water level, in feet below land-surface datum, 1947

Feb. 14 a	204.96	June 2 a	202.88	Aug. 4 a	206.39	Oct. 29 a	198.58
Mar. 5	203.95	9 a	203.40	11 a	204.34	Nov. 5 a	198.91
Apr. 7	200.10	16 a	206.27	18 a	205.19	12 a	198.95
17 a	201.56	23 a	206.53	Sept. 8 a	206.85	22 a	198.96
25 a	202.46	30 a	204.05	15 a	209.80	28 a	200.30
May 1 a	202.90	July 7 a	206.28	26 a	202.86	Dec. 6 a	192.78
8 a	205.56	14 a	205.75	Oct. 8	202.87	12 a	198.93
15 a	201.19	23 a	207.60	15 a	202.12	19 a	200.27
22 a	202.90	28 a	205.83	22 a	201.49	26 a	178.17
28 a	204.13						

a Public-supply well at Noble pumping.

9 (\*989, p. 73; 1019, p. 95; 1026, p. 87; 1074, p. 112). E. G. Johnson. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, T. 9 N., R. 3 W.

Water level, in feet below land-surface datum, 1947

Jan. 10	214.73	Apr. 10	212.12	July 7	213.37	Oct. 15	215.50
17	214.57	17	213.39	14	213.43	22	215.67
25	214.29	25	212.61	22	213.70	29	215.69
31	214.20	May 1	213.12	28	213.70	Nov. 5	215.86
Feb. 14	218.06	8	213.17	Aug. 4	213.84	14	218.78
21	217.96	15	212.98	11	214.02	19	216.02
28	217.93	22	213.20	18	214.27	28	216.19
Mar. 5	217.81	June 2	213.12	25	214.53	Dec. 5	216.12
14	214.86	9	212.90	Sept. 8	215.76	10	216.13
21	212.74	16	213.16	15	215.81	19	216.14
28	213.66	24	213.21	30	215.34	26	216.16
Apr. 7	211.65	30	213.32	Oct. 8	215.41		

10 (\*1019, p. 96; 1026, p. 88; 1074, p. 112). University of Oklahoma. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 31, T. 9 N., R. 2 W., east of fieldhouse.

10--Continued.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	271.28	Apr. 10	268.79	June 30	269.72	Sept. 30	282.16
17	269.20	17	269.42	July 7	269.48	Oct. 22	281.39
24	269.42	25	270.14	14	272.13	29	278.38
Feb. 1	270.04	May 1	275.61	23	272.99	Nov. 5	278.37
14	273.10	8	276.49	28	268.96	14	274.03
21	273.28	15	276.74	Aug. 4	270.40	19	274.06
28	275.15	22	276.26	11	274.07	28	273.48
Mar. 5	274.41	28	271.89	18	274.26	Dec. 5	274.30
14	269.52	June 2	269.23	25	276.58	12	273.78
21	270.77	9	267.37	Sept. 8	277.80	19	275.09
28	271.43	16	270.42	16	282.05	26	270.40
Apr. 7	263.85	24	274.80				

11 (\*1019, p. 96; 1026, p. 88; 1074, p. 112). Mid-Continent Petroleum Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 29, T. 10 N., R. 3 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	180.35	Apr. 25	178.06	July 7	178.01	Oct. 24	177.44
Feb. 12	179.91	May 1	177.90	14	177.48	31	177.39
17	179.51	8	177.88	21	178.20	Nov. 6	177.17
28	179.14	15	177.80	28	178.33	14	181.23
Mar. 3	179.02	22	177.46	Aug. 4	177.55	19	177.56
10	178.98	28	177.28	11	177.48	26	177.36
17	179.23	June 2	177.39	18	177.51	Dec. 5	176.30
24	178.91	9	179.09	25	177.56	10	177.33
Apr. 7	178.78	16	177.94	Sept. 8	177.56	17	177.24
10	178.25	24	177.59	15	178.78	29	176.91
17	178.06	30	177.52				

12 (\*1026, p. 88; 1074, p. 113). Dave Price. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 9 N., R. 3 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	153.01	Apr. 7	151.44	June 30	150.41	Oct. 15	150.45
10	152.42	17	149.99	July 7	150.32	22	150.51
17	152.45	25	151.10	14	150.29	29	150.52
24	152.17	May 1	150.98	22	150.31	Nov. 5	150.58
31	152.14	8	150.95	28	150.30	14	150.47
Feb. 14	152.07	15	150.67	Aug. 4	150.22	19	150.70
21	151.98	22	150.55	11	150.21	28	150.93
28	151.71	28	151.36	18	150.34	Dec. 5	150.81
Mar. 5	151.79	June 2	150.37	25	156.34	10	150.85
14	151.76	9	150.36	Sept. 8	150.37	19	150.83
21	153.51	16	150.56	Oct. 3	150.48	29	150.61
28	151.61	24	150.43				

13 (\*1026, p. 88; 1074, p. 113). Hardin. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 31, T. 10 N., R. 3 W. Pump installed, measurements discontinued after Oct. 24.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	138.38	Mar. 24	137.10	June 2	135.53	Aug. 4	135.27
24	138.00	Apr. 7	137.10	9	135.36	11	135.26
31	137.89	17	135.39	16	135.53	18	135.30
Feb. 12	137.88	25	136.35	24	135.33	25	135.33
17	137.51	May 1	136.20	30	135.30	Sept. 8	135.39
28	137.34	8	136.15	July 7	135.25	15	135.55
Mar. 3	137.27	15	135.81	14	135.13	26	135.54
10	137.35	22	135.63	22	135.30	Oct. 15	135.37
17	137.19	28	135.44	28	135.27	24	135.45

14 (\*1074, p. 113). Geological Survey, U. S. Dept. of Interior. NE. corner sec. 29, T. 9 N., R. 3 W.

14--Continued.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	4.14	Apr. 7	4.89	June 24	4.03	Sept. 26	7.32
17	4.35	10	3.73	30	4.46	Oct. 15	8.02
24	4.37	17	1.23	July 7	4.33	22	8.10
31	4.50	25	1.60	14	4.04	29	7.86
Feb. 14	4.67	May 1	2.82	22	5.06	Nov. 5	8.05
21	4.76	8	3.32	28	4.88	19	7.88
28	4.67	15	2.29	Aug. 4	5.29	26	8.03
Mar. 4	4.71	22	1.12	11	5.64	Dec. 5	7.82
5	4.87	28	2.19	18	5.94	10	7.96
14	5.96	June 2	1.04	25	6.12	19	7.99
21	5.98	9	2.78	Sept. 8	6.79	29	7.89
28	5.03	16	3.57	15	7.08		

15. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 6 N., R. 1 W., on terrace of the Canadian River, in north part of Lexington beside U. S. Highway 77. Driven well, diameter 1 $\frac{1}{2}$  inches, depth 22.85 feet, with 1 $\frac{1}{2}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{2}$ -inch casing, 1.40 feet above land-surface datum.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 5	3.46	Aug. 25	7.54	Oct. 8	8.74	Nov. 22	7.70
24	2.97	Sept. 29	8.58	29	8.05	Dec. 26	7.52
July 30	5.99						

Comanche County

1. Landall. SW corner sec. 28, T. 2 N., R. 11 W., between abandoned swimming pool and skating rink. Used well, diameter 7 inches, reported depth 735 feet. Probable aquifer, Arbuckle limestone. Measuring point, south edge of 7-inch casing, 2.9 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Aug. 29, 23.35; Oct. 19, 22.67.

2. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 2 N., R. 12 W., about 150 feet north of U. S. Highway 62. Unused well, diameter about 3 feet, depth 9 feet. Measuring point, top of wooden platform on east side, 1.8 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: July 16, 5.89; Aug. 29, 6.11; Oct. 19, 6.35.

Custer County

1 (\*1074, p. 113). Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 12 N., R. 17 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	11.34	Apr. 30	8.96	Aug. 31	8.50		
Mar. 24	11.30	July 13	7.46	Oct. 19	9.30		

Ellis County

1 (\*1074, p. 113). Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 18 N., R. 24 W.

Water level, in feet below land-surface datum, 1947							
Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	38.15	July 12	38.20	Oct. 19	38.21		
Apr. 29	38.20	Aug. 28	37.94	Dec. 31	37.55		

2 (\*1074, p. 114). Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 34, T. 18 N., R. 24 W. Water levels, in feet below land-surface datum, 1947: Feb. 25, 42.05; Apr. 29, 41.93; July 12, 41.88; Aug. 28, 43.12.

3 (\*1074, p. 114). Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 5, T. 20 N., R. 25 W. Pump repaired and in use after July 12, measurements discontinued. Water levels, in feet below land-surface datum, 1947: Feb. 25, 21.31; Apr. 29, 21.63; July 12, 20.77.

4 (\*1074, p. 114). Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 10, T. 19 N., R. 25 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Apr. 29	27.55	Aug. 28	27.90	Dec. 31	25.78
July 12	28.05	Oct. 19	27.96		

6. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 21 N., R. 25 W., on flood plain of Wolf Creek near north end of bridge on U. S. Highway 283, north of Shattuck. Driven well, diameter 1 $\frac{1}{2}$  inches, depth 5.7 feet, with 1 $\frac{1}{2}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{2}$ -inch casing, 0.50 foot above land-surface datum. Water levels, in feet below land-surface datum, 1947: June 12, 3.98; Aug. 28, 4.79; Oct. 19, 4.80; Dec. 31, 4.27.

Grady County

3 (\*1074, p. 114). Simmons. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 4 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	13.51	Apr. 29	12.75	July 31	13.04	Nov. 3	15.01
Feb. 26	13.62	May 27	12.17	Aug. 21	14.57	Dec. 2	15.61
Mar. 24	13.82	June 25	12.67	Sept. 30	14.94	23	14.01

4 (\*1074, p. 114). C. W. West. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, T. 5 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	61.21	Mar. 24	62.33	May 27	61.99	July 31	61.81
Feb. 26	61.79	Apr. 29	62.03	June 25	61.84		

7 (\*1074, p. 114). Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, T. 4 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	54.20	Apr. 29	54.79	July 31	54.89	Nov. 3	54.37
Feb. 26	54.81	May 27	54.77	Aug. 21	54.20	Dec. 23	54.65
Mar. 24	55.08	June 25	54.73	Oct. 1	54.34		

8 (\*1074, p. 115). Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, T. 4 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	28.04	Apr. 29	28.84	July 31	27.03	Nov. 3	28.02
Feb. 26	29.57	May 27	27.47	Aug. 21	27.75	Dec. 2	30.10
Mar. 24	29.60	June 25	26.90	Sept. 30	27.97	23	30.19

11 (\*1074, p. 115). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 9, T. 4 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.56	Apr. 29	3.18	July 31	3.16	Nov. 3	8.30
Feb. 26	6.37	May 27	2.90	Aug. 21	7.66	Dec. 2	9.11
Mar. 24	7.78	June 25	3.84	Sept. 30	7.58	23	9.37

12 (\*1074, p. 115). Owner unknown. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 36, T. 4 N., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	46.98	Apr. 29	47.60	July 31	47.47	Nov. 3	47.65
Feb. 26	47.33	May 27	47.39	Aug. 21	47.68	Dec. 2	47.72
Mar. 24	47.94	June 25	47.37	Sept. 30	47.73	23	47.66



19 (\*1074, p. 115). Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, T. 4 N., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	26.22	Apr. 29	25.14	July 31	25.19	Nov. 3	26.10
Feb. 26	26.41	May 27	25.59	Aug. 21	25.90	Dec. 2	26.23
Mar. 24	26.48	June 25	24.64	Sept. 30	26.47	23	27.48

24 (\*1074, p. 115). W. W. Mobley. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 4 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	14.80	Apr. 29	11.67	July 31	16.29	Nov. 3	15.36
Feb. 26	15.64	May 27	10.19	Aug. 21	18.90	Dec. 2	15.62
Mar. 24	15.01	June 25	11.54	Sept. 30	16.89	23	15.64

26 (\*1074, p. 116). G. W. Wade. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 9, T. 3 N., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	10.43	Apr. 29	9.21	July 31	9.28	Nov. 3	10.73
Feb. 26	10.51	May 27	9.01	Aug. 21	10.99	Dec. 2	11.91
Mar. 24	11.26	June 25	9.20	Sept. 30	10.63	23	10.86

34 (\*1074, p. 116). E. M. Nixey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 3 N., R. 7 W.  
Water levels, in feet below land-surface datum, 1947: Apr. 29, 29.13;  
May 27, 29.13.

35 (\*1074, p. 116). Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 3 N., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	52.52	Apr. 29	53.38	July 31	53.15	Nov. 3	53.77
Feb. 26	53.78	May 27	53.42	Aug. 21	53.29	Dec. 2	53.88
Mar. 24	53.54	June 25	53.31	Sept. 30	53.68	23	53.76

36 (\*1074, p. 116). Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, T. 4 N., R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	73.09	Apr. 29	73.62	July 31	73.97	Nov. 3	73.71
Feb. 26	72.98	May 27	73.52	Aug. 21	73.84	Dec. 2	73.54
Mar. 24	72.97	June 25	73.84	Sept. 30	73.84	23	73.29

43 (\*1074, p. 116). Q. L. Merideth. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 4 N.,  
R. 8 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	4.83	Apr. 29	4.90	July 31	5.11	Nov. 3	5.50
Feb. 26	4.89	May 27	4.97	Aug. 21	4.89	Dec. 2	5.31
Mar. 24	4.82	June 25	4.91	Sept. 30	5.26	23	5.18

45 (\*1074, p. 116). Geological Survey, U. S. Dept. of Interior.  
SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, T. 7 N., R. 7 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	7.50	Apr. 29	5.62	July 31	5.22	Nov. 3	6.59
Feb. 26	8.00	May 27	5.96	Aug. 21	6.49	Dec. 2	5.16
Mar. 4	7.99	June 25	3.29	Sept. 30	8.50	23	4.97
24	8.29						

### Harper County

1 (\*909, p. 68; 939, p. 54; 947, p. 64; 989, p. 73; 1019, p. 96;  
1026, p. 89; 1074, p. 117). E. W. Johnson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, T. 26 N.,  
R. 25 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	7.64	July 11	5.70	Oct. 20	9.02		
Apr. 22	5.05	28	7.76	Dec. 30	8.70		

2. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 27 N., R. 25 W. Drilled well, diameter 4 inches, depth 20.5 feet in an area of sand dunes. Aquifer, sand dunes, or possibly underlying Tertiary rocks. Measuring point, top south edge of casing, at land-surface datum.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 25	16.64	July 11	14.00	Oct. 20	14.52
Apr. 22	16.65	Aug. 28	16.00		

Jackson County

1. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 2 N., R. 18 W., on flood plain of North Fork of Red River, at bridge on U. S. Highway 62, 2.5 miles east of Headrick. Driven well, diameter 1 $\frac{1}{2}$  inches, depth 9.0 feet, with 1 $\frac{1}{2}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{2}$ -inch casing, 1.45 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: June 16, 6.74; Aug. 29, 6.91; Oct. 19, 5.91.

Kiowa County

1. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 2, T. 6 N., R. 18 W. Dug well, depth 17 feet. Measuring point, top of wooden cover beside pitcher pump, 1.4 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: July 16, 10.69; Aug. 29, 10.48; Oct. 19, 9.91.

2. Edith L. Wright. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 13, T. 2 N., R. 17 W., in a flat area. Dug, unused well, depth 42 feet. Measuring point, top of east side of wooden cover, 4.3 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: July 16, 38.97; Aug. 29, 39.41; Oct. 19, 39.58.

McClain County

1 (\*989, p. 73; 1019, p. 96; 1026, p. 89; 1074, p. 117). H. A. Perkinson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 22, T. 7 N., R. 2 W. Measurements discontinued after July 30.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	84.14	Mar. 28	84.30	May 28	83.86	July 30	84.20
Mar. 1	84.22	Apr. 29	83.94	June 24	83.87		

2. Roy McDonald. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 15, T. 8 N., R. 4 W., at the intersection of U. S. Highway 62 and State Highway 9, on top of hill in gently rolling topography. Drilled well, diameter 6 inches, depth 69 feet. Aquifer, Hennessey shale. Measuring point, north edge of galvanized-iron casing, 1.35 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Apr. 29, 26.85; May 27, 23.21; Oct. 3, 24.18.

Major County

RFM 1 (\*947, p. 64; 989, p. 73; 1019, p. 97; 1026, p. 89; 1074, p. 117). Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 29, T. 20 N., R. 16 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	6.14	July 10	6.04	Oct. 23	8.91
Apr. 22	4.68	Aug. 28	8.38	Dec. 30	8.91

Oklahoma County

1 (\*989, p. 74; 1019, p. 97; 1026, p. 89; 1074, p. 117). Joslyn Production Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 29, T. 13 N., R. 3 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	169.20	May 28	168.65	Aug. 27	173.07	Nov. 24	180.38
Feb. 28	167.93	June 23	169.05	Sept. 26	175.22	Dec. 29	173.67
Apr. 30	168.88	July 26	169.49	Oct. 30	175.08		

2 (\*989, p. 74; 1019, p. 97; 1026, p. 89; 1074, p. 117). Sunray Oil Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 25, T. 12 N., R. 3 W., Avey lease, 28th Street and Lindsay Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Jan. 27	184.20	Apr. 30	181.47	July 26	178.87	Oct. 30	193.80
Feb. 28	186.20	May 28	180.30	Aug. 27	201.55	Nov. 24	192.82
Mar. 25	182.85	June 23	188.82	Sept. 26	200.90	Dec. 29	186.50

3 (\*989, p. 74; 1019, p. 97; 1026, p. 89; 1074, p. 117). Skelly Oil Co. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, T. 12 N., R. 3 W., Gast Heights lease, 18th Street and N. Lottie Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Jan. 27	201.77	Apr. 30	198.05	July 26	222.19	Oct. 30	212.32
Feb. 28	198.70	May 28	197.75	Aug. 27	235.64	Nov. 24	212.17
Mar. 25	198.25	June 23	218.30	Sept. 26	232.96	Dec. 29	204.55

4 (\*1019, p. 97; 1026, p. 90; 1074, p. 118). Oklahoma City Air Depot, U. S. Army. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 11, T. 11 N., R. 2 W. Equipped with automatic water-stage recorder throughout year.

Lowest daily water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	156.67	155.10	152.85	151.70	150.54	151.53
2	156.22	155.03	152.83	151.66	150.55	152.00
3	156.30	154.68	152.66	151.54	150.37	151.20
4	156.30	154.67	152.55	151.37	150.15	151.34
5	156.30	154.66	152.34	151.51	150.10	151.67
6	156.47	154.20	152.34	151.51	150.25	152.12
7	156.65	154.19	152.18	151.44	150.30	152.35
8	159.26	154.17	152.12	151.15	150.39	152.34
9	158.22	154.09	152.26	151.00	150.31	152.27
10	157.70	153.96	152.20	150.97	151.08	152.10
11	157.30	153.69	152.20	151.20	151.26	152.14
12	157.08	153.73	152.17	151.39	151.30	152.00
13	156.95	153.71	152.41	151.42	151.24	152.10
14	156.85	153.76	152.53	151.39	151.26	152.21
15	156.84	153.77	152.56	151.22	151.25	152.28
16	156.94	153.83	152.53	151.22	151.07	152.31
17	156.93	153.77	152.33	151.16	150.93	152.39
18	156.75	153.54	152.16	150.98	150.97	153.90
19	156.42	153.47	151.89	150.97	150.97	153.58
20	156.06	153.37	151.80	150.99	151.00	153.73
21	156.07	153.37	151.68	150.98	151.02	153.89
22	155.95	153.28	151.63	.....	151.07	153.88
23	155.48	153.27	151.44	.....	151.15	153.90
24	155.16	153.23	151.63	.....	151.18	153.69
25	155.03	153.79	151.73	151.39	151.16	153.42
26	154.97	153.01	152.00	151.34	151.03	153.21
27	154.72	152.92	152.29	151.10	150.78	153.19
28	154.70	152.66	152.28	150.81	150.84	153.53
29	154.45		152.35	150.48	155.16	153.85
30	154.70		152.35	150.27	152.13	154.13
31	154.98		152.03		151.99	

## 4--Continued.

Lowest daily water level, in feet below land-surface datum, 1947

(From recorder charts)						
Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	154.24	156.93	162.80	161.84	159.90	157.10
2	154.25	157.08	162.70	161.69	159.87	156.48
3	154.23	157.08	162.48	162.60	159.47	157.33
4	154.43	157.08	166.68	161.68	158.91	156.11
5	154.74	156.97	168.03	161.47	158.85	156.13
6	154.92	157.01	168.68	161.08	163.52	156.11
7	155.04	157.09	169.02	160.60	160.39	155.94
8	155.28	157.15	169.15	160.30	160.44	163.48
9	155.33	157.20	169.29	160.29	160.40	166.05
10	155.35	157.23	167.00	160.32	160.20	167.70
11	155.25	157.19	165.68	160.37	159.99	168.25
12	155.15	157.21	165.53	160.52	160.75	163.62
13	155.07	157.19	165.40	161.77	159.61	161.52
14	154.90	158.08	165.28	160.62	159.43	160.21
15	154.87	158.04	164.90	163.73	159.23	159.07
16	154.83	158.36	164.43	161.05	159.20	158.41
17	155.24	158.52	163.98	160.78	158.92	157.83
18	155.55	158.63	163.71	160.55	158.41	157.61
19	155.66	158.88	163.46	160.57	158.13	156.80
20	155.63	159.21	163.16	166.93	156.93	156.68
21	155.75	161.93	163.00	168.85	157.17	156.58
22	155.82	165.98	162.94	165.58	157.28	160.21
23	160.69	166.19	162.74	163.43	157.28	156.70
24	156.96	161.63	162.47	162.72	157.30	155.98
25	156.61	161.43	162.43	162.13	157.47	156.39
26	156.40	161.25	162.43	161.74	157.58	155.50
27	156.26	161.20	162.39	161.25	157.83	155.17
28	156.06	161.30	162.23	160.72	157.84	154.82
29	156.02	166.39	162.10	160.26	157.70	154.40
30	157.57	167.07	162.01	159.86	157.66	154.02
31	156.78	163.16		159.89		153.87

6 (\*1019, p. 99; 1026, p. 91; 1074, p. 119). Oklahoma City Water Department. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 12 N., R. 3 W., north of Reno Street and 145 feet east of Pennsylvania Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	6.83	Apr. 30	3.16	July 26	4.73	Oct. 30	7.54
Feb. 28	6.26	May 28	2.97	Aug. 27	6.18	Nov. 24	7.69
Mar. 25	6.82	June 23	3.86	Sept. 29	6.95	Dec. 29	7.36

7 (\*1019, p. 99; 1026, p. 91; 1074, p. 119). Oklahoma City Water Department. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 12 N., R. 3 W., north of Reno Street and 195 feet east of Pennsylvania Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	6.91	Apr. 30	3.18	July 26	4.84	Oct. 30	7.68
Feb. 28	6.82	May 28	2.82	Aug. 27	6.31	Nov. 24	7.78
Mar. 25	7.02	June 23	4.08	Sept. 29	7.15	Dec. 29	7.58

8 (\*1019, p. 99; 1026, p. 91; 1074, p. 119). Oklahoma City Water Department. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, T. 12 N., R. 3 W., north of Reno Street and 55 feet east of Pennsylvania Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 28	7.28	May 28	2.88	Sept. 29	6.89	Nov. 24	7.63
Mar. 25	6.77	July 26	4.82	Oct. 30	7.53	Dec. 29	7.36
Apr. 30	3.33	Aug. 27	6.16				

9 (\*1019, p. 99; 1026, p. 91; 1074, p. 119). Oklahoma City Water Department. SE. corner sec. 36, T. 12 N., R. 4 W., on northwestern corner of intersection of Reno Street and May Avenue, Oklahoma City.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	3.14	Apr. 30	0.51	July 26	1.64	Oct. 30	4.19
Feb. 28	3.13	May 28	.43	Aug. 27	3.08	Nov. 24	4.19
Mar. 25	4.42	June 23	.83	Sept. 29	3.77	Dec. 29	3.57

10 (\*1026, p. 91; 1074, p. 119). Oklahoma City Water Department well 26. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 12 N., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	35.85	Apr. 30	36.04	July 25	35.70	Oct. 30	36.03
Feb. 28	35.83	May 28	35.82	Aug. 27	35.83	Nov. 24	36.10
Mar. 25	36.09	June 23	35.65	Sept. 26	36.06	Dec. 29	36.19

11 (\*1026, p. 91; 1074, p. 119). Oklahoma City Water Department well 27. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, T. 12 N., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	12.38	Apr. 30	10.10	July 25	11.29	Oct. 30	13.79
Feb. 28	12.34	May 28	9.05	Aug. 27	12.96	Nov. 24	13.54
Mar. 25	12.67	June 23	10.45	Sept. 26	13.69	Dec. 29	13.07

12 (\*1026, p. 92; 1074, p. 120). Oklahoma City Water Department well 28. SW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, T. 12 N., R. 4 W.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	16.16	Apr. 30	15.17	July 25	14.38	Oct. 30	16.36
Feb. 28	16.17	May 28	13.69	Aug. 27	15.31	Nov. 24	16.54
Mar. 25	16.32	June 23	13.83	Sept. 26	15.95	Dec. 29	16.65

### Payne County

1 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 64; 989, p. 74; 1019, p. 100; 1026, p. 92; 1074, p. 120). Unknown oil company. SW $\frac{1}{4}$  sec. 15, T. 19 N., R. 4 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	5.67	Apr. 26	3.70	July 25	4.90	Oct. 26	6.23
Feb. 25	5.94	May 27	3.28	Aug. 29	5.73	Nov. 25	6.40
Mar. 26	6.20	June 26	4.22	Sept. 24	5.94	Dec. 29	5.97

2 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 64; 989, p. 74; 1019, p. 100; 1026, p. 92; 1074, p. 120). J. F. Gilchrist. NW $\frac{1}{4}$  sec. 36, T. 20 N., R. 3 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	7.50	Apr. 26	6.65	July 25	7.08	Oct. 26	7.77
Feb. 25	7.67	May 27	6.50	Aug. 29	7.75	Nov. 25	8.05
Mar. 26	7.65	June 26	6.84	Sept. 24	7.85	Dec. 29	7.94

3 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 64; 989, p. 74; 1019, p. 100; 1026, p. 92; 1074, p. 120). V. D. Hesser. NW $\frac{1}{4}$  sec. 23, T. 20 N., R. 3 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	10.04	Apr. 26	9.28	July 25	8.66	Oct. 26	10.53
Feb. 25	10.19	May 27	7.02	Aug. 29	9.67	Nov. 25	10.85
Mar. 26	10.22	June 26	8.05	Sept. 24	10.22	Dec. 29	10.79

4 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 64; 989, p. 75; 1019, p. 100; 1026, p. 92; 1074, p. 120). W. O. Snyder. NW $\frac{1}{4}$  sec. 2, T. 19 N., R. 3 E.

## 4--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	21.05	Apr. 26	20.30	July 25	19.12	Oct. 26	21.79
Feb. 25	21.22	May 27	18.57	Aug. 29	20.65	Nov. 25	21.91
Mar. 26	20.74	June 26	18.53	Sept. 24	21.32	Dec. 29	22.06

7 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 100; 1026, p. 92; 1074, p. 120). Charles Focht. NW $\frac{1}{4}$  sec. 20, T. 19 N., R. 3 E.

## Water level, in feet below land-surface datum, 1947

Jan. 26	16.88	Apr. 26	16.47	July 25	14.87	Oct. 26	17.93
Feb. 25	17.36	May 27	12.79	Aug. 29	16.67	Nov. 25	18.83
Mar. 26	17.35	June 26	13.67	Sept. 24	16.62	Dec. 29	19.75

9 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 100; 1026, p. 92; 1074, p. 120). Owner unknown. SW $\frac{1}{4}$  sec. 21, T. 20 N., R. 2 E.

## Water level, in feet below land-surface datum, 1947

Jan. 26	20.87	Apr. 26	18.96	July 25	18.82	Oct. 26	20.67
Feb. 25	21.23	May 27	15.21	Aug. 29	19.98	Nov. 25	20.74
Mar. 26	21.68	June 26	16.90	Sept. 24	20.47	Dec. 29	20.80

13 (\*777, p. 141; \*817, p. 232; 845, p. 401; 866, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 100; 1026, p. 93; 1074, p. 121). Erma T. Pool. SW $\frac{1}{4}$  sec. 23, T. 19 N., R. 1 E.

## Water level, in feet below land-surface datum, 1947

Jan. 26	23.07	Apr. 26	22.87	July 25	22.84	Oct. 26	22.55
Feb. 25	23.17	May 27	22.99	Aug. 29	22.55	Nov. 25	22.82
Mar. 26	23.38	June 26	22.83	Sept. 24	22.77	Dec. 29	22.47

15 (\*777, p. 141; \*817, p. 232; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 101; 1026, p. 93; 1074, p. 121). Lovell Bros. NE $\frac{1}{4}$  sec. 35, T. 19 N., R. 3 E.

## Water level, in feet below land-surface datum, 1947

Jan. 26	34.20	Apr. 26	33.63	July 25	33.59	Oct. 26	34.35
Feb. 25	34.23	May 27	33.00	Aug. 29	32.81	Nov. 25	34.45
Mar. 26	34.42	June 26	33.12	Sept. 24	34.10	Dec. 29	34.02

16 (\*817, p. 235; 845, p. 401; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 101; 1026, p. 93; 1074, p. 121). W. K. Hartman. SW $\frac{1}{4}$  sec. 12, T. 18 N., R. 3 E.

## Water level, in feet below land-surface datum, 1947

Jan. 26	19.30	Apr. 26	18.37	July 25	19.33	Oct. 26	20.14
Feb. 25	19.40	May 27	18.29	Aug. 29	19.70	Nov. 25	20.16
Mar. 26	19.84	June 26	18.80	Sept. 24	19.80	Dec. 29	20.26

17 (\*777, p. 141; 845, p. 402; 886, p. 613; 909, p. 70; 939, p. 55; 947, p. 65; 989, p. 75; 1019, p. 101; 1026, p. 93; 1074, p. 121). R. J. Haskett. NE $\frac{1}{4}$  sec. 12, T. 19 N., R. 1 E. Measurements discontinued.

Roger Mills County

1. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 13 N., R. 23 W., on flood plain of Washita River south of bridge on U. S. Highway 283, near Cheyenne. Driven well, diameter 1 $\frac{1}{4}$  inches, depth 15.5 feet, with 1 $\frac{1}{2}$ -inch by 24-inch well point. Measuring point, top of 1 $\frac{1}{4}$ -inch casing, 0.5 foot above land-surface datum. Bench mark, 10-penny nail in west base of square corner fence post, 1 foot east of well, 0.2 foot above land-surface datum.

1--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 25	5.55	Apr. 30	2.90	Aug. 28	7.40	Dec. 31	8.47
Mar. 24	5.46	July 12	5.01	Oct. 19	8.70		

Texas County

40 (\*840, p. 331; 845, p. 395; 886, p. 607; 909, p. 70; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 101; 1026, p. 93; 1074, p. 121). August Lorenz. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, T. 3 N., R. 17 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 89.54; Oct. 20, 89.49.

125 (\*886, p. 611; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 101; 1026, p. 93; 1074, p. 121). J. Donald Hughes. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, T. 1 N., R. 18 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 8.83; Oct. 22, 8.89.

130 (\*886, p. 611; 909, p. 71; 939, p. 56; 949, p. 66; 989, p. 76; 1019, p. 101; 1026, p. 93; 1074, p. 121). Robert Johnson. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 1 N., R. 17 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 8.05; Oct. 22, 8.01.

138 (\*886, p. 611; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 101; 1026, p. 93; 1074, p. 121). Joe Sutton. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 1 N., R. 19 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 5.92; Oct. 22, 7.97.

176 (\*840, p. 333; 845, p. 398; 886, p. 610; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 102; 1026, p. 94; 1074, p. 122). W. N. Ballinger. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 18, T. 3 N., R. 15 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 5.99; Oct. 20, 6.15.

182 (\*845, p. 399; 886, p. 611; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 102; 1026, p. 94; 1074, p. 122). Panhandle Agricultural and Mechanical College. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 34, T. 2 N., R. 13 E. Water levels, in feet below land-surface datum, 1947: Apr. 23, 138.60; Oct. 20, 138.71.

187 (\*840, p. 331; 845, p. 396; 886, p. 607; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 102; 1026, p. 94; 1074, p. 122). John Gill. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, T. 3 N., R. 15 E. Measurements discontinued.

188 (\*886, p. 610; 909, p. 71; 939, p. 56; 947, p. 66; 989, p. 76; 1019, p. 102; 1026, p. 94; 1074, p. 122). Kuhn Bros. NW $\frac{1}{4}$  sec. 1, T. 2 N., R. 14 E.

Lowest daily water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	122.80	122.58	122.37	122.44	122.22	122.41	122.55
2	.....	.....	122.84	122.35	122.45	122.40	122.22	122.44	122.76
3	.....	.....	122.66	122.19	122.46	122.55	122.36	122.53	122.79
4	.....	.....	122.68	122.23	122.40	122.48	122.42	.....	122.81
5	.....	.....	122.78	122.40	122.32	122.59	122.30	.....	122.81
6	.....	.....	122.75	122.41	122.44	122.51	122.22	.....	122.65
7	.....	.....	122.77	122.41	122.44	122.39	122.37	.....	122.78
8	.....	.....	122.71	122.38	122.36	122.35	122.48	122.79	122.85
9	.....	.....	122.60	122.28	122.53	122.53	122.36	122.70	122.84
10	.....	.....	122.75	122.19	122.35	122.55	122.29	122.81	122.86
11	.....	.....	122.80	122.21	122.38	122.64	122.27	122.76	122.82
12	.....	.....	122.74	122.35	122.39	122.64	122.53	122.85	122.93
13	.....	.....	122.70	122.35	122.39	122.31	122.53	122.76	122.77
14	.....	.....	122.61	122.30	122.40	122.57	122.35	122.70	122.51
15	.....	.....	122.38	122.26	122.36	122.61	122.35	122.86	122.72
16	.....	.....	122.40	122.26	122.38	122.50	122.35	122.85	122.77

188--Continued.

Lowest daily water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	.....	.....	122.26	122.42	122.44	122.39	122.55	122.85	122.81
18	.....	.....	122.46	122.46	122.44	122.48	122.66	122.76	122.70
19	.....	.....	122.50	122.35	122.39	122.46	122.59	122.73	122.72
20	.....	.....	122.48	122.50	122.39	122.35	122.49	122.82	122.63
21	.....	.....	122.62	122.40	122.39	122.54	122.41	122.94	122.43
22	.....	.....	122.85	122.34	122.41	122.59	122.52	122.90	122.51
23 a	122.84	.....	122.94	122.34	122.35	122.34	122.58	122.79	122.55
24	.....	.....	122.77	122.34	122.45	122.57	.....	122.83	122.64
25	.....	.....	122.71	122.34	122.45	122.57	.....	122.86	122.63
26	.....	.....	122.60	122.35	122.38	122.45	.....	122.86	122.40
27	.....	.....	122.61	122.33	122.35	122.35	122.41	122.96	122.36
28	.....	122.98	122.54	122.32	122.35	122.33	122.36	122.85	122.26
29	.....	122.97	122.62	122.33	122.38	122.41	122.60	122.90	122.33
30	.....	122.77	122.61	122.31	122.41	122.38	122.69	122.85	122.50
31	.....	122.61	.....	122.36	122.42	.....	122.59	.....	122.48

a Tape measurement.

228 (\*1074, p. 122). Geological Survey, U. S. Dept. of Interior.  
NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 15, T. 2 N., R. 17 E.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 29	5.19	July 3	4.62	Sept. 3	6.33	Nov. 13	6.22
May 7	5.39	10	4.85	11	6.51	18	6.08
13	5.35	16	5.18	17	6.61	25	5.99
20	4.96	23	5.42	23	6.69	Dec. 3	5.92
27	5.14	Aug. 1	5.61	Oct. 1	6.77	11	5.90
June 5	5.33	6	5.78	15	6.57	17	5.78
10	5.47	13	5.91	22	6.58	23	5.80
18	5.66	20	6.02	28	6.50	31	5.76
25	5.26	26	6.08	Nov. 5	6.38		

270 (\*845, p. 397; 886, p. 609; 909, p. 71; 947, p. 66; 989, p. 76; 1019, p. 102; 1026, p. 94; 1074, p. 122). Owner unknown. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 7, T. 3 N., R. 11 E. Measurements discontinued.281 (\*947, p. 67; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 122). C. F. Webb. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 3 N., R. 11 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 88.99; Oct. 21, 88.98.284 (\*886, p. 608; 909, p. 71; 939, p. 57; 947, p. 67; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 122). Paul Spradlin. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 5, T. 3 N., R. 12 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 100.78; Oct. 21, 100.61.294 (\*845, p. 396; 886, p. 608; 909, p. 72; 939, p. 57; 947, p. 67; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 122). Stonebraker-Zea Ranch. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 25, T. 3 N., R. 13 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 43.10; Oct. 20, 43.68.295 (\*840, p. 331; 845, p. 396; 886, p. 607; 909, p. 72; 939, p. 57; 947, p. 67; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 122). E. O. Hobson. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, T. 3 N., R. 15 E. Measurements discontinued.309 (\*1074, p. 122). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, T. 3 N., R. 14 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 10.54; Oct. 21, 9.20.332 (\*840, p. 332; 845, p. 396; 886, p. 607; 909, p. 72; 939, p. 57; 947, p. 67; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 122). Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 17, T. 3 N., R. 15 E. No measurements made in 1947.



354 (\*840, p. 332; 845, p. 398; 886, p. 609; 909, p. 72; 939, p. 57; 947, p. 67; 989, p. 77; 1019, p. 102; 1074, p. 123). A. M. Fankhouser. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 27, T. 6 N., R. 15 E. Water levels, in feet below land-surface datum, 1947: Apr. 28, 146.32; Oct. 21, 146.12.

404 (\*840, p. 333; 845, p. 399; 886, p. 611; 909, p. 73; 939, p. 57; 947, p. 68; 989, p. 77; 1019, p. 102; 1026, p. 94; 1074, p. 123). Everett J. Ritter. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 4, T. 1 N., R. 14 E. Measurements discontinued.

406 (\*1074, p. 123). Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 35, T. 4 N., R. 11 E. Water levels, in feet below land-surface datum, 1947: Apr. 25, 78.71; Oct. 21, 78.50.

436 (\*845, p. 398; 886, p. 610; 909, p. 73; 939, p. 53; 947, p. 68; 989, p. 77; 1019, p. 103; 1026, p. 95; 1074, p. 123). Leo Holtgraver. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, T. 4 N., R. 14 E. Water level, in feet below land-surface datum, 1947: Apr. 26, 170.47.

459 (\*840, p. 333; 845, p. 399; 886, p. 611; 909, p. 73; 939, p. 58; 947, p. 68; 989, p. 78; 1019, p. 103; 1074, p. 123). Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, T. 1 N., R. 14 E. Measurements discontinued.

462 (\*1074, p. 123). Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 36, T. 4 N., R. 16 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 2.88; Oct. 20, 3.45.

497 (\*845, p. 395; 886, p. 606; 909, p. 73; 939, p. 58; 947, p. 68; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 123). R. M. Van Hynning. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 21, T. 4 N., R. 19 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 101.50; Oct. 20, 101.28.

551 (\*840, p. 332; 845, p. 396; 886, p. 608; 909, p. 73; 939, p. 58; 947, p. 68; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 123). Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 4 N., R. 13 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 143.63; Oct. 21, 143.44.

589 (\*340, p. 331; 845, p. 395; 886, p. 606; 909, p. 73; 939, p. 58; 947, p. 68; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 123). George Hoferber. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 34, T. 4 N., R. 17 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 117.03; Oct. 20, 116.71.

725 (\*1074, p. 124). Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, T. 3 N., R. 15 E. Water levels, in feet below land-surface datum, 1947: Apr. 29, 7.85; Oct. 20, 9.28.

761 (\*840, p. 331; 845, p. 395; 886, p. 606; 909, p. 74; 939, p. 58; 949, p. 68; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 124). Federal Life Insurance Co., Chicago. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, T. 3 N., R. 19 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 100.54; Oct. 20, 100.29.

765 (\*840, p. 331; 845, p. 395; 886, p. 606; 909, p. 74; 939, p. 59; 947, p. 68; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 124). O. Jolliffe. SW $\frac{1}{4}$  sec. 26, T. 3 N., R. 19 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 105.38; Oct. 20, 105.35.

770 (\*840, p. 331; 845, p. 395; 886, p. 606; 909, p. 74; 939, p. 59; 947, p. 69; 989, p. 78; 1019, p. 103; 1026, p. 95; 1074, p. 124). A. C. DeHart. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, T. 3 N., R. 19 E. Water levels, in feet below land-surface datum, 1947: Apr. 27, 122.57; Oct. 20, 122.31.

842 (\*840, p. 332; 845, p. 397; 886, p. 609; 909, p. 74; 939, p. 59; 947, p. 69; 989, p. 79; 1019, p. 103; 1026, p. 95; 1074, p. 124). C. A. Rahm. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 22, T. 6 N., R. 16 E. Water levels, in feet below land-surface datum, 1947: Apr. 26, 114.57; Oct. 21, 114.48.

Tillman County

1 (#1019, p. 104; 1026, p. 96; 1074, p. 124). Southwestern Cotton Substation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, T. 1 S., R. 19 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	22.33	Apr. 7	22.31	July 7	19.23	Oct. 13	21.82
13	22.29	14	22.18	14	19.35	20	21.46
20	22.40	21	22.06	21	19.59	27	21.31
27	22.36	28	21.62	28	19.81	Nov. 2	21.03
Feb. 3	22.32	May 5	21.70	Aug. 4	a 20.04	9	21.03
10	22.42	12	21.20	11	20.13	16	21.03
17	22.32	19	19.36	25	b 22.33	23	21.03
24	22.43	26	18.29	Sept. 8	c 23.73	Dec. 1	20.96
Mar. 3	22.33	June 2	18.38	15	21.53	8	20.28
10	22.42	9	18.42	22	21.51	15	20.17
17	22.42	16	18.83	29	21.60	22	20.06
24	22.45	23	18.88	Oct. 6	21.66	29	20.09
31	22.44	30	19.03				

- a Pumped 125 hours, Aug. 4-9.  
 b Pumped 296 hours, Aug. 11-23.  
 c Pumped 175 hours, Aug. 26-Sept. 2.

Washita County

1. S. A. LeMasters. NE, corner sec. 6, T. 9 N., R. 19 W. Unused drilled stock well, diameter 6 inches, depth 80 feet. Measuring point, west edge of casing, 1.0 foot above land-surface datum. Bench mark, south-east end of cross cut in wall of concrete water tank, 8 feet south of well, 0.06 foot above measuring point and 1.06 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: Mar. 26, 20.44; Apr. 30, 20.42; Aug. 28, 14.75; Oct. 19, 13.01.

Woodward County

1 (#909, p. 74; 939, p. 59; 947, p. 69; 989, p. 79; 1019, p. 104; 1026, p. 96; 1074, p. 124). Oklahoma City Water Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 8, T. 20 N., R. 17 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	2.92	July 10	1.67	Oct. 23	(a)
Apr. 22	2.38	Aug. 28	(a)	Dec. 30	(a)

a Dry.

2 (#909, p. 75; 939, p. 59; 947, p. 69; 989, p. 79; 1019, p. 104; 1026, p. 96; 1074, p. 124). Oklahoma City Water Department. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, T. 23 N., R. 21 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	2.74	July 10	2.30	Oct. 23	(a)
Apr. 22	2.40	Aug. 28	3.60		

a Dry.

4 (#1074, p. 125). Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, T. 23 N., R. 20 W.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 24	2.07	Aug. 28	4.48	Dec. 31	4.88
July 10	2.36	Oct. 23	4.87		

5. Geological Survey, U. S. Dept. of Interior. ~~SW~~<sup>NE</sup><sub>4</sub> sec. 6, T. 24 N., R. 22 W., on flood plain of North Canadian River, at bridge on U. S. Highway 83, northwest of Supply. Driven well, diameter  $1\frac{1}{4}$  inches, depth 7.8 feet, with  $1\frac{1}{4}$ -inch by 24-inch well point. Measuring point, top of  $1\frac{1}{4}$ -inch casing, 3.2 feet above land-surface datum. Water levels, in feet below land-surface datum, 1947: July 11, 3.04; Aug. 28, 4.99; Oct. 23, 5.69; Dec. 31, 4.50.

# TEXAS

By C. R. Follett

## INTRODUCTION

A State-wide investigation of the ground-water resources of Texas has been in progress since 1929 in cooperation with the Texas State Board of Water Engineers. The more or less periodical measuring of the water levels and artesian pressures in selected observation wells has been part of the program from the start of the study. As the ground-water investigations were extended to new areas, the observation-well program was expanded to take in the new areas, especially if there was considerable pumpage or an indication that the water level was declining. During 1947, 2,554 measurements were made in 904 wells in 40 counties.

The water-level measurements made in connection with the program prior to 1947 were published in Water-Supply Papers 777, 817, 840, 845, 886, 909, 939, 947, 989, 1019, 1026, and 1074. Several mimeographed progress reports have been issued which contain water-level measurements and discussions of the fluctuation of water levels in the Houston district, the High Plains irrigation area, and the Winter Garden district.

## PRECIPITATION

For the purpose of summarizing climatological data, the U. S. Weather Bureau has divided Texas into three parts as follows: Eastern division, comprising the area east of the 97th meridian; middle division, comprising the area between the 97th and 101st meridians; and the western division, comprising the area west of the 101st meridian.

The average yearly precipitation decreases from east to west; most of the eastern division is humid or semihumid, the western division is arid, and the middle division is between the two. The yearly precipitation at any given station varies widely. For example, at El Paso, in the extreme western part of the State, the average yearly precipitation from 1850 through 1947 was 9.16 inches, but the annual precipitation ranged from 2.22 inches in 1891 to 21.81 inches in 1856. At Bon Wier, in Newton County, in

the eastern part of the State, the average yearly precipitation from 1914 through 1947 was 55.95 inches, but the annual precipitation ranged from 38.21 inches in 1925 to 81.92 inches in 1940. A similar wide range in annual precipitation occurs at numerous stations throughout the State.

According to the U. S. Weather Bureau's summary for the year 1947, the average precipitation for the State was 26.33 inches, which was 3.42 inches or 11 percent below normal. The 7.05 inches at Pecos, in Reeves County, was the lowest, and 54.92 inches at Goose Creek, in Harris County, was the highest. The precipitation averaged below normal in all divisions in 1947. The precipitation was below normal in the western division in 1945 and 1946, near normal and above normal in the middle division for 1945 and 1946, respectively, and above normal in the eastern division in both 1945 and 1946.

Only 35 of the 168 stations reported above-normal precipitation for 1947, the greatest being 7.16 inches at Goose Creek; the greatest deficiency was 12.43 inches at Blanco, in Blanco County.

#### SUMMARY OF CHANGES IN WATER LEVELS

##### BALCONES FAULT ZONE

The observation wells in Bexar, Comal, Guadalupe, Hays, Kinney, Travis, Uvalde, Val Verde, and Williamson Counties are in the Balcones fault zone. Most of them draw water from reservoirs in the Edwards limestone, but a few draw from reservoirs in the Glen Rose limestone, Austin chalk, and shallow sands and gravels. The Edwards limestone supplies water to the large springs near Comstock, Del Rio, Brackettville, San Antonio, New Braunfels, San Marcos, and Austin. The combined maximum recorded daily discharge from these seven springs is 1,200 million gallons, and the average daily discharge is about 550 million gallons. The average daily flow of Comal Springs was about 227 million gallons a day in 1946, and the average increased only about half a million gallons a day in 1947. The Edwards limestone supplies water to irrigation wells in Bexar, Uvalde, and Medina Counties, to public and industrial wells in San Antonio and other towns and cities along the Balcones fault zone, and to farms and ranches.

During June or July and November 1947, water-level measurements were made in most of the observation wells along the fault zone except in Williamson County and northern Travis County.

Val Verde County.--In two observation wells, drawing from the Edwards limestone, the water levels were 0.57 foot and 1.24 feet higher in June 1947 than they were in April 1946.

Kinney County.--In 11 observation wells, drawing from the Edwards limestone, the water level was lower in 3 wells and higher in 8 wells in June 1947 than in April 1946. The average of the water levels showed a net rise of 7.47 feet. The water level in most of the wells continued to rise from June to November 1947. In 3 observation wells in the Austin chalk the water level rose an average of 7.74 feet between April 1946 and June 1947.

Uvalde County.--In eight observation wells drawing from the Edwards limestone, the water level rose an average of 9.00 feet between April 1946 and July 1947. In one well equipped with a continuous water-stage recorder, a steady decline amounting to 2.30 feet was recorded from January 1 to June 14, 1947. From June 14 to September 26 the stage of the water level was almost constant, and from September 26 to the end of the year the water level rose 3.58 feet. Of the four observation wells in the Austin chalk, the water level in one well declined and in three wells it rose from April 1946 to July 1947. The average of the four water level measurements showed a rise of 2.39 feet.

Medina County.--In five observation wells drawing from the Edwards limestone, the water level in two wells declined 1.29 and 6.62 feet and in three wells the water levels rose 2.94, 5.37, and 6.99 feet. The average of the five water-level measurements shows an average rise of 1.48 feet.

Bexar County.--In five observation wells, drawing from the Edwards limestone, the water level declined from 0.18 foot to 3.95 feet from April 1946 to July 1947. The average decline in water level amounted to 1.32 feet. In a well in the northeast part of San Antonio, equipped with a continuous water-stage recorder, the water level declined 12 feet at a steady rate from January 1 to August 1, 1947, rose 3 feet in August, declined 4 feet to the middle of November, and rose 1 foot to the end of December. The water level was both higher and lower in 1946 than in 1947, but averaged about 1 foot lower in 1947.

Guadalupe County.--In one observation well, probably drawing from the Edwards limestone, the water level was 3.27 feet lower in July 1947 than in March 1946.

Comal County.--In 13 observation wells drawing from the Edwards limestone, the water level in 4 wells declined from 0.29 foot to 20.86 feet and in 9 wells it rose from 0.21 foot to 6.08 feet. The average decline in water level in the 13 wells amounted to 1.05 feet between March 1946 and July 1947.

Hays County.--In eight observation wells drawing from the Edwards limestone the water level in three wells rose from 1.20 to 16.88 feet and in five wells it declined from 0.09 foot to 8.53 feet between March 1946 and June 1947. The average net rise was 1.50 feet. In one well in the Austin chalk, for which monthly measurements are available, the water level was rising most of the year in 1946 while it declined continuously for the entire year in 1947; however, the average water level for the 2 years was about the same.

Travis County.--In two observation wells in the Edwards limestone, the decline in water level was 13.04 and 13.20 feet from March 1946 to June 1947. In a well in the Austin chalk, for which monthly measurements are available, the average water level was 4.43 feet lower in 1947 than in 1946. In a well to the Glen Rose limestone, the average water level was 1.99 feet lower in 1947 than in 1946. In a well drawing from the alluvium, the average water level was 4.07 feet lower in 1947 than in 1946.

#### SOUTHWEST TEXAS

Dimmit and Zavala Counties, the Winter Garden district.--Pumping for the irrigation of vegetables has been in progress for about 30 years, and for citrus trees, feed crops, and cotton in more recent years. Most of the irrigation wells draw from the Carrizo sand which crops out in western Dimmit County, eastern Maverick County, and western and northern Zavala County. The amount of water used for irrigation in 1947 is estimated to be about twice as much as the amount used 10 years ago.

During the period of record since 1929, the largest decline in water level took place from 1941 to 1947, and the most accelerated rate of a single year was from 1946 to 1947. In the heavily pumped district east of Crystal City, the decline in water level in five observation wells ranged from 55.3 to 74.8 feet and averaged 64.7 feet between 1941 and 1947. The average decline of water level in several wells in other areas for the same period was as follows: Outcrop area near Carrizo Springs, 4.4 feet; La Pryor area, 26.0 feet; Cometa area, 9.7 feet; Winter Haven area, 35.8 feet;

Carrizo Springs area, 41.9 feet; Asherton area, 29.2 feet; Catarina area, 20.4 feet; Brundage area, 23.9 feet; and Big Wells area, 21.6 feet.

The average decline in water level in 12 areas in the Winter Garden district from 1946 to 1947 was as follows: Crystal City area, 18.4 feet; outcrop area near Carrizo Springs, 0.3 foot; La Pryor area, 13.9 feet; Cometa area, 1.3 feet; Winter Haven area, 7.1 feet; Carrizo Springs area, 9.3 feet; Asherton area, 3.1 feet; Brundage area, 10.6 feet; Big wells area, 4.2 feet; El Cid area, 2.7 feet. In the Caterina area there was an average rise of 1.7 feet and at Valley Wells a rise of 1.0 foot.

#### SOUTHEAST TEXAS

Both surface and ground water are used to irrigate rice in Wharton, Jackson, and Matagorda Counties. The number of acres irrigated has been increasing since 1935, the rate of increase being greater since 1940. The amount of irrigation water applied varies to some extent inversely with the amount of rain that falls during the rice-growing season. The average rainfall at five U. S. Weather Bureau stations in the three counties for the months of April through July was 13.97 inches in 1945, 18.39 inches in 1946, and 12.99 inches in 1947. The increase in rainfall during the 1946 growing season probably offset the amount of water normally needed to irrigate the additional acres planted to rice in 1946. The observation wells are measured each year in March or April when they reach their maximum recovery prior to the start of pumping.

Wharton County.--In 21 observation wells the water level rose an average of 1.28 feet between April 1946 and March 1947.

Jackson County.--In 21 observation wells the water level rose an average of 1.11 feet between April 1946 and March 1947.

Houston district.--The Houston district is a great plain of low relief, most of which lies less than 150 feet above sea level. It is a part of the West Gulf Coastal Plain. Large quantities of ground water are pumped in the district from industrial and municipal wells in the Houston-Pasadena area, and irrigation wells in the Katy area, which is a rice-growing area of about 500 square miles roughly centering around the town of Katy, 30 miles west of Houston. These wells draw their water supply from sands which crop out west, northwest, and north of Houston in Harris, Fort Bend, Waller, and Montgomery Counties. About 230 observation wells in the



district are measured periodically at intervals ranging from one month to one year. For discussion, the district is divided into three general areas designated as (1) the Houston-Pasadena area, (2) the Katy rice-growing area, and (3) the outcrop area of the water-bearing sands which supply the water.

The following table gives the estimated average quantities of water, in millions of gallons a day, withdrawn from wells in the Houston district in 1930, 1935, 1937, and 1939-47, inclusive.

Estimated daily average withdrawal of ground water in the Houston, Pasadena, and Katy areas  
(millions of gallons a day)<sup>a/</sup>

	1930	1935	1937	1939	1940	1941
Houston Water Department (from city records)	25.8	24.5	25.2	27.2	28.8	27.2
Houston independent public- water supplies and industrial wells	14	14	16	16	17	16
Pasadena industrial wells	10	10	29	29	33	34
Total for the Houston- Pasadena area	50	49	70	72	79	77
Katy irrigation wells	18	14	30	40	45	23
Total for the district	68	63	100	112	124	100

	1942	1943	1944	1945	1946	1947
Houston Water Department (from city records)	30.5	35.2	39.5	43.2	51.3	55.8
Houston independent public- water supplies and industrial wells	18	20	21	21	22	24
Pasadena industrial wells	36	39	47	48	50	55
Total for the Houston- Pasadena area	85	94	108	112	123	135
Katy irrigation wells	38	52	55	50	60	75
Total for the district	123	146	163	162	183	210

<sup>a</sup> The rice wells are pumped only during the rice-growing season from April to August, and the pumpage in the Houston and Pasadena areas, although continuous, is much heavier in the summer than it is during the remainder of the year. For convenience, the withdrawals are given as daily averages for the entire year.

Houston-Pasadena area.--The preceding table shows that the average daily withdrawal of ground water was about constant for the periods 1930-35 and 1937-41, inclusive, and then the rate of withdrawal increased substantially, year by year, through 1947. When the war ended in August 1945 several plants that had been producing war goods were shut down or production was curtailed and there was a corresponding decrease in pumpage. However, this decrease was only temporary, and in 1946 and 1947 industry became launched on a large expansion program which resulted in an even greater pumpage of ground water. Several industrial concerns, not previously

established in the area, began construction of plants, and most of the existing plants started expanding their facilities. Practically all the ground water used in the area in 1947 was pumped from about 300 wells.

In the observation wells that are screened opposite the heavily pumped sands at Houston and Pasadena and in the area west of Houston, the average decline in water level from the spring of 1942 to the spring of 1947 was 39.1 feet. The largest average decline, amounting to 47.7 feet in 21 observation wells, occurred in the eastern Houston-Pasadena area, where the increase in pumping was the heaviest. In the northern, central, and western parts of Houston and in the locality west of the city, there was an average decline in water level of 30.8 feet between the spring measurements of 1942 and 1947. For the period 1946-47 the average decline in these localities was 9.7 feet as compared to declines of 7.5 feet during 1945-46, and 5.5 feet during 1944-45. This increase in annual average decline since 1944 is mostly the result of the year-by-year increase in pumpage by the city of Houston. In the locality north of Houston, there was an average decline in water level of 4.5 feet between 1946 and 1947, as compared with 5.2 feet between 1945 and 1946, and 4.2 feet between 1944 and 1945. With the all-time record-breaking average pumpage of 135 million gallons a day in 1947, the decline in water level has continued at an accelerated rate, and the spring measurements of 1948 are expected to be the lowest on record for the Houston-Pasadena area.

In the observation wells that are screened opposite the lightly pumped sands to a depth of 400 feet, the decline in water level continued during the period 1942-47, but at a considerably slower rate than the decline in wells drawing from the deeper, more heavily pumped sands. In 5 representative wells the losses between spring measurements in 1942 and 1947 ranged from 11.2 to 21.9 feet and averaged 17.2 feet. The decline by years occurred as follows: 1942-43, 1.8 feet; 1943-44, 3.9 feet; 1944-45, 3.8 feet; 1945-46, 2.3 feet; 1946-47, 5.0 feet. In 3 wells for which comparative measurements are available the declines from 1931 to 1947 were 25.9, 32.3, and 35.9 feet.

Katy rice-growing area.--In the Katy rice-growing area additional land has been put under irrigation year by year as a result of high prices for farm products. It is estimated that 44,900 acres was irrigated in 1947,

as compared with 37,530 acres in 1946; 34,320 acres in 1945, 31,740 acres in 1944; 24,200 acres in 1940; 13,740 acres in 1937; and 8,000 acres in 1935. Spring measurements of water levels in observation wells in this area show a slow but persistent decline from 1931 to 1941. The maximum decline for the 10-year period was 20.3 feet, the minimum was 5.4 feet, and the average was 11.3 feet in the 12 wells for which comparable records are available. Between the spring of 1941 and the spring of 1942, the water levels in 44 observation wells showed an average rise of 2.1 feet. This was on account of the small demands for irrigation in 1941 and the unusually large amount of recharge from the heavy rains of November 1940 to November 1941. In 1942-43 little net change occurred. From the spring of 1943 to the spring of 1946, an average net decline of 3.6 feet was recorded, of which 1.6 feet occurred in 1943-44, 1.4 feet in 1944-45, and 0.5 foot in 1945-46. There was no net change from 1946 to 1947; in 6 wells the water level remained the same, 18 wells showed an average loss of 1 foot, and 13 wells showed an average rise of 1 foot. For the 16-year period, 1931-47, the 11 wells for which comparable measurements are available showed an average decline of 13.4 feet.

Outcrop area of the water-bearing sands.--The water table in the outcrop area of the water-bearing sands that supply the municipal and industrial wells in the Houston-Pasadena area was from 5 to 10 feet higher during the period 1941-46 than during the period 1938-40, and the few wells for which comparable measurements are available indicated it was as high or higher than in 1931-34. From the January 1946 measurements to those in January 1947, the observation wells showed continued rises ranging from 0.2 foot to 5.2 feet as a result of the above-normal rainfall during the year. Available data indicate that during the period of record more water was contributed to storage in the outcrop area than moved down the dip toward the pumped areas. Most of the recharge occurred during the abnormally wet year November 1940 to November 1941, and during periods of above-normal rainfall in 1945 and 1946. During 1947 the water levels showed declines ranging from about 1 foot to 8 feet; the average loss was about 4 feet.

Galveston County.--Water levels in Galveston County dropped persistently for a number of years prior to 1944 as a result of continued heavy pumping in the Texas City industrial area and in the Alta Loma well field

of the city of Galveston. From 1944 to 1946, the rate of decline decreased and at Texas City the water levels became almost stationary as the cone of depression caused by the pumping became flatter and larger each year. After the Texas City disaster of April 1947, which resulted in the destruction of or serious damage to several of the industrial plants with a consequent decrease in water consumption for several months, there was some recovery in a few wells in the damaged area. In the county as a whole, however, water levels continued to decline slowly during 1947.

#### HIGH PLAINS

In the High Plains of Texas, most of the irrigation wells are in the following 16 counties: Deaf Smith, Randall, Armstrong, Parmer, Castro, Swisher, Briscoe, Bailey, Lamb, Hale, Floyd, Hockley, Lubbock, Crosby, Terry, and Lynn.

Irrigation from wells in this region was started near Plainview, Hale County, in 1911. By 1914, about 140 irrigation wells had been drilled in the 3 principal districts--Plainview, Hereford and Muleshoe. In the 7 years from 1919 to 1926, the rainfall in most of the region was above average and comparatively little irrigation was practiced. Interest was revived during a period of several years of low rainfall that began in 1927, and, according to the available records, 296 wells were pumped to irrigate about 35,000 acres in 1934. Since that time the development has grown rapidly.

The following table gives the approximate number of wells in operation and acres irrigated from the start of irrigation.

Estimated number of irrigation wells and acres irrigated from wells in the High Plains of Texas		
Year	Approximate number of wells in operation	Approximate number of acres irrigated
1910	0	0
1914	139	16,000
1934	296	35,000
1936	600	80,000
1937	1,150	160,000
1938	1,500	200,000
1939	1,700	230,000
1940	2,180	250,000
1941	2,560	.....
1942	2,680	.....
1943	2,950	400,000
1944	3,500	450,000
1945	4,300	550,000
1946	5,600	650,000
1947	7,500	900,000

Since 1937 water-level measurements have been made periodically in several hundred observation wells in the High Plains. Some of these wells are used for irrigation, some for domestic purposes and stock, and some are unused. Until 1940 measurements were made for the most part at intervals of 1 to 3 months. It was found, however, that the most dependable information regarding net annual losses from or additions to storage in the ground-water reservoirs in the pumping districts and closely adjacent territory can be obtained by comparing water-level measurements made each year in the late winter or early spring before the start of irrigation.

The following table shows a summary by counties of the average net changes in water level between March 1938 and January 1947 in 83 observation wells for which comparable measurements are available.

<u>Average net changes in water level between March 1938 and January 1947</u>		
County	Number of wells	Average net rise (+) or net decline (-), in feet
Bailey	8	-1.7
Castro	4	-4.9
Crosby	3	-1.0
Deaf Smith	17	-5.1
Floyd	10	-9.3
Hale	20	-7.7
Hockley	5	+2.7
Lamb	5	+5
Lubbock	4	+1
Swisher	7	-6.4

The following table shows a summary by counties of the average net changes in water levels between February 1946 and January 1947.

<u>Average net changes in water level between February 1946 and January 1947</u>		
County	Number of wells	Average net rise (+) or net decline (-), in feet
Bailey	8	-1.6
Castro	8	-.4
Crosby	2	-1.2
Deaf Smith	18	-1.4
Floyd	15	-4.3
Hale	21	-2.3
Hockley	6	+.3
Lamb	6	-1.0
Lubbock	14	-1.7
Swisher	10	-1.6

## WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Angelina County

168 (\*909, p. 85; 939, p. 71; 947, p. 86; \*989, p. 94; 1019, p. 112). City of Lufkin. About 300 feet west of Redland School. Water levels, in feet below land-surface datum: Dec. 17, 1944, 227.76; May 6, 1945, 237.35; Oct. 17, 1945, 238.89.

169 (\*909, p. 85; 939, p. 71; 947, p. 86; \*989, p. 95; 1019, p. 112). Gulf Pipe Line Co. 2.75 miles northwest of Redland.

Water level, in feet below land-surface datum, 1944-46

Date	Water level	Date	Water level	Date	Water level
Dec. 17, 1944	65.03	Nov. 17, 1945	74.91	Sept. 20, 1946	82.04
May 25, 1945	67.76	Feb. 25, 1946	75.14		

Aransas County

35 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). W. S. Kirby. At northeast edge of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 6.86.

46 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). R. R. Barber. 5.25 miles southwest of Rockport. Water level, in feet below land-surface datum, 1947: Nov. 20, 7.92.

59 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). E. F. Barber. 5.5 miles west of Rockport. Water level, in feet below land-surface datum, 1947: Nov. 20, 7.72.

77 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). H. G. Smith. At southwest edge of Rockport. Water level, in feet below land-surface datum, 1947: Nov. 20, 6.70.

244 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). Willie Owens. 0.6 mile northeast of Oak Grove School. Water level, in feet below land-surface datum, 1947: Nov. 20, 10.26.

247 (\*909, p. 85; 939, p. 71; 947, p. 88; 1026, p. 106). G. M. Broach. 0.6 mile west of State Highway 36, on Bayside road. Water level, in feet below land-surface datum, 1947: Nov. 20, 5.49.

Bailey County

5a (\*840, p. 379; 845, p. 446; 886, p. 556; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1019, p. 112; 1026, p. 107; 1074, p. 136). E. W. Gray. Formerly owned by Gus Schrader. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, blk. Z, 10 miles northwest of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 63.56; Mar. 20, 63.48.

9 (\*840, p. 379; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1019, p. 112; 1026, p. 107; 1074, p. 136). Fred McKillip. Formerly owned by Jim Ellis. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, blk. Z, 10.5 miles west of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 41.80; Mar. 20, 41.31.

21a (\*886, p. 656; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 136). Mrs. J. W. Gregory, Sr. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, blk. X, 8 miles west of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 27.60.

25 (\*840, p. 379; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 137). C. A. Wagner. NW corner SE $\frac{1}{4}$  sec. 6, blk. Z, 8 miles west of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 24.23; Mar. 20, 24.74.

31 (\*840 p. 379; 845, p. 447; 886, p. 656; 909, p. 86; 947, p. 88; \*989, p. 96; 1074, p. 137). J. H. Farley. No measurements made in 1947.

33 (\*840, p. 379; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1026, p. 107; 1074, p. 137). Mrs. J. W. Gregory. NW corner SW $\frac{1}{4}$  sec. 12, blk. X, 7 miles northwest of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 34.29; Mar. 20, 34.21.

36 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 88; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 137). J. E. Jeter. Formerly owned by J. M. Murrah. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 23, blk. X, 4.75 miles northwest of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 20.60; Mar. 20, 20.10.

45 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 89; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 137). H. M. Schofner. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 32, blk. Y, 2.25 miles northwest of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 20.07.

49 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 89; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 137). Jess Mitchell. NW corner NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, blk. X, 3.75 miles northwest of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 25.21; Mar. 20, 24.07.

53 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 89; \*989, p. 96; 1019, p. 113; 1026, p. 107; 1074, p. 137). W. B. Gwyn, Sr. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, blk. Y, 3.25 miles northwest of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 24.48.

62 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 107; 1074, p. 137). Levi Churchill. NW corner SE $\frac{1}{4}$  sec. 42, blk. Y, 2.75 miles north of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 24.56.

63 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 72; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 107). Sam Gorrell. NW corner SW $\frac{1}{4}$  sec. 42, blk. Y, 2.75 miles north of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 24.95; Mar. 20, 25.90.

66 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 107; 1074, p. 137). C. W. Patterson. Formerly owned by J. L. Wallace. NW corner NE $\frac{1}{4}$  sec. 41, blk. Y, 2.25 miles north of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 23.49.

67 (\*840, p. 380; 845, p. 447; 886, p. 656; 909, p. 86; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 108; 1074, p. 137). I. W. Hardin. NW corner NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 41, blk. Y, 2.25 miles north of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 22.36.

69 (\*840, p. 381; 845, p. 447; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 108). E. R. Hart. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 52, blk. Y, 1.75 miles north of Muleshoe. Water level, in feet below land-surface datum, 1947: Jan. 15, 18.58.

79 (\*840, p. 381; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 108). D. E. Cox. Measurements discontinued.

92 (\*840, p. 381; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 113; 1026, p. 108). L. H. McConnell. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 51, blk. Y, 3.25 miles north of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 22.21; Mar. 20, 21.72.

95 (\*840, p. 381; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 114; 1026, p. 108; 1074, p. 138). E. R. Hart. NW. corner NW $\frac{1}{4}$  sec. 71, blk. Y, 4 miles northeast of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 23.88; Mar. 20, 23.30.

108 (\*840, p. 381; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 114; 1026, p. 108; 1074, p. 138). T. L. Mounts. NW. corner SE $\frac{1}{4}$  sec. 31, blk. W, 7 miles northeast of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 32.90. Measurements discontinued after Mar. 20.

116 (\*840, p. 381; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 114; 1026, p. 108). E. R. Hart. Formerly owned by T. L. Mounts. NW $\frac{1}{4}$  sec. 32, blk. W, 7 miles northeast of Muleshoe. Water level, in feet below land-surface datum, 1947: May 20, 24.70.

117 (\*840, p. 382; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 89; \*989, p. 97; 1019, p. 114; 1026, p. 108; 1074, p. 138). Allison Cassady. Formerly owned by H. L. Dempster. NW. corner NW $\frac{1}{4}$  sec. 32, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 34.50; Mar. 20, 33.72.

130 (\*840, p. 382; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108). No measurements made in 1947.

131 (\*840, p. 382; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108; 1074, p. 138). R. D. Precure. NW. corner SW $\frac{1}{4}$  sec. 34, blk. W, 6 miles northeast of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 20.49; Mar. 20, 20.26.

132 (\*840, p. 382; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 73; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108). J. A. Ryan. NW. corner SE $\frac{1}{4}$  sec. 34, blk. W, 6.5 miles northeast of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 20, 20.15.

136 (\*840, p. 382; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 74; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108; 1074, p. 138). C. A. Barnett. NW. corner SE $\frac{1}{4}$  sec. 48, blk. W, 5.5 miles east of Muleshoe. Water levels, in feet below land-surface datum, 1947: Jan. 15, 15.23; Mar. 20, 14.58.

137 (\*840, p. 383; 845, p. 448; 886, p. 657; 909, p. 87; 939, p. 74; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108; 1074, p. 138). J. O. Hunt. NW $\frac{1}{4}$  sec. 48, blk. W, 4.75 miles east of Muleshoe. Water level, in feet below land-surface datum, 1947: Jan. 18, 12.5.

205 (\*840, p. 383; 845, p. 448; 886, p. 657; 909, p. 89; 939, p. 74; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 108; 1074, p. 138). W. A. Mathis. Formerly owned by Halsell Land & Cattle Co. NW $\frac{1}{4}$  lab. 19, lge. 189, Ector County School land, 5 miles south and 1.5 miles west of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 24, 50.40.

207 (\*840, p. 383; 845, p. 449; 886, p. 657; 909, p. 89; 939, p. 74; 947, p. 90; \*989, p. 98; 1026, p. 109; 1074, p. 138). Mr. Whittington. SE $\frac{1}{4}$  lab. 22, lge. 188, 8 miles south of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 24, 86.13.

324a (\*840, p. 384; 845, p. 449; 886, p. 658; 909, p. 89; 939, p. 74; 947, p. 90; \*989, p. 98; 1019, p. 114; 1026, p. 109; 1074, p. 138). Foard County School land. NW $\frac{1}{4}$  lab. 15, lge. 192, 9 miles south of Muleshoe. Water level, in feet below land-surface datum, 1947: Mar. 24, 92.58.

435 (\*840, p. 384; 845, p. 449; 886, p. 658; 909, p. 90; 939, p. 74; 947, p. 90; \*989, p. 99; 1019, p. 115; 1026, p. 109). I. C. Enochs. SE $\frac{1}{4}$  lab. 69, lge. 182, 9 miles northeast of Baileyboro. Water level, in feet below land-surface datum, 1947: Mar. 24, 18.16.



Bexar County

15 (\*777, p. 179; 817, p. 322; 840, p. 385; 845, p. 450; 886, p. 658; 909, p. 90; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Robert Mechler. 6 miles east of Castroville. Water levels, in feet below land-surface datum, 1947: July 2, 120.33; Nov. 8, 125.33.

26 (\*777, p. 181; 817, p. 322; 840, p. 385; 845, p. 450; 886, p. 659; 909, p. 90; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Fuller's earth plant, 13.5 miles west of San Antonio. Water levels, in feet below land-surface datum, 1947: July 2, 105.02; Nov. 7, 110.18.

28 (\*777, p. 181; 817, p. 322; 840, p. 385; 845, p. 450; 886, p. 659; 909, p. 91; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). A. J. McCulley. Formerly owned by Robert Boenig. 8 miles west of San Antonio. Water levels, in feet below land-surface datum, 1947: July 2, 65.81; Nov. 8, 70.30.

XB-1 (\*840, p. 386; 845, p. 450; 886, p. 659; 909, p. 91; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Robert Boenig. Formerly owned by Oscar Schiesselbein. 11 miles west of San Antonio. Water levels, in feet below land-surface datum, 1947: July 2, 121.16; Nov. 8, 125.74.

XB-2 (\*840, p. 386; 845, p. 450; 886, p. 659; 909, p. 91; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Oscar Bippert. 18 miles west of San Antonio. Water levels, in feet below land-surface datum, 1947: July 2, 72.21; Nov. 8, 77.71.

XB-3 (\*845, p. 450; 886, p. 659; 909, p. 91; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Beitel Church. 8 miles northeast of San Antonio. Water levels, in feet below land-surface datum, 1947: July 3, 56.13; Nov. 8, 59.18.

436 (\*909, p. 91; 939, p. 75; 947, p. 91; \*989, p. 99; 1019, p. 115; 1026, p. 109; 1074, p. 139). Ed Steves & Sons. Formerly owned by Beverly Lodges. At Beverly Lodges tourist court, in northeast part of San Antonio.

Highest daily water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	43.42	42.14	43.40	44.77	47.03	.....	52.87	55.40	52.13	55.70	56.22	55.07
2	43.50	42.16	43.59	44.93	.....	.....	53.18	54.82	52.35	55.76	55.93	55.11
3	43.70	42.02	43.40	45.09	.....	.....	53.29	54.20	52.81	55.85	55.82	55.55
4	43.90	42.31	43.63	45.18	.....	.....	53.52	53.75	53.08	55.88	56.27	55.64
5	43.93	42.32	43.70	45.22	.....	.....	53.17	53.90	53.24	55.69	56.48	55.79
6	43.90	42.36	43.93	45.36	.....	.....	53.13	53.93	53.47	55.48	56.59	55.90
7	43.68	42.45	43.82	45.37	.....	.....	52.97	54.30	53.45	55.67	56.75	55.48
8	43.65	42.80	43.85	45.44	.....	.....	53.50	54.57	53.25	55.81	56.68	55.27
9	43.67	42.69	43.92	45.52	.....	.....	53.35	54.98	53.56	55.77	56.33	55.10
10	43.55	42.65	43.82	45.70	.....	.....	53.29	55.13	53.77	55.97	55.90	55.09
11	43.35	42.79	.....	45.93	.....	.....	53.32	54.11	54.08	55.86	56.27	55.14
12	43.07	42.82	.....	46.62	.....	.....	53.69	53.80	54.20	55.74	56.32	55.16
13	42.93	42.98	.....	46.67	.....	.....	53.32	53.69	54.04	55.61	56.38	55.20
14	42.92	43.07	.....	46.55	.....	.....	53.04	53.53	54.06	55.45	55.90	54.95
15	42.94	43.18	.....	46.84	.....	.....	53.56	53.44	.....	55.55	56.11	54.67
16	42.93	43.22	.....	46.54	.....	.....	54.06	53.46	.....	55.60	55.94	54.88
17	42.99	43.08	.....	46.51	.....	.....	54.20	53.47	.....	55.91	55.70	54.92
18	42.84	43.22	.....	46.66	.....	.....	54.42	53.18	.....	55.98	55.26	54.97
19	42.53	43.36	.....	46.69	.....	.....	54.56	53.53	.....	55.90	55.13	54.90
20	42.40	43.35	.....	46.83	.....	.....	53.50	53.76	.....	55.72	54.98	54.97
21	42.51	43.40	44.25	46.76	.....	.....	53.37	53.55	.....	56.00	55.25	54.93
22	42.42	43.49	44.24	47.05	.....	.....	54.00	53.24	.....	56.16	55.53	54.68
23	42.28	43.49	44.12	47.23	.....	51.32	54.34	53.08	.....	56.32	55.23	55.10
24	42.22	43.46	44.19	47.29	.....	.....	54.58	52.80	.....	56.42	55.04	55.29
25	42.19	43.58	44.43	47.59	.....	52.88	54.94	52.42	.....	56.41	55.21	55.14
26	42.01	43.56	44.58	47.16	.....	52.13	55.02	52.28	.....	56.19	55.25	54.85
27	41.86	43.54	44.58	46.83	.....	52.39	54.89	52.00	.....	55.91	55.25	54.85

436--Continued.

Highest daily water level, in feet below land-surface datum, 1947  
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	41.98	43.39	44.90	46.51	.....	52.58	54.65	51.97	.....	56.15	55.15	54.78
29	41.96		44.80	46.58	.....	52.63	55.08	52.12	.....	56.39	55.25	54.63
30	42.05		44.80	46.79	.....	52.44	55.10	52.28	.....	56.08	55.19	54.82
31	42.00		44.74	.....	.....	55.21	52.28			56.02		54.68

Brazoria County

10 (\*1019, p. 116; 1026, p. 110; 1074, p. 140). Gulf Coast & Santa Fe Railroad Co. About 200 feet north of depot at Pearland. Water level, in feet below land-surface datum, 1947: May 28, 104.64.

Brooks County

202 (\*777, p. 183; 840, p. 386; 845, p. 451; 939, p. 76; \*989, p. 100; 1026, p. 110). E. C. Lasater Estate. 4 miles northwest of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 15, 41.55.

254 (\*777, p. 185; 840, p. 386; 845, p. 451; 886, p. 659; 909, p. 96; 939, p. 76; \*989, p. 100; 1019, p. 116; 1026, p. 110; 1074, p. 140). E. G. Maun. 2.5 miles northwest of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 15, 44.08.

270 (\*777, p. 185; 840, p. 386; 845, p. 451; 886, p. 659; 909, p. 96; 939, p. 76; \*989, p. 100; 1019, p. 116; 1026, p. 110; 1074, p. 140). J. W. Story. No measurements made in 1947.

273 (\*777, p. 185; 840, p. 386; 845, p. 451; 886, p. 660; 909, p. 96; 939, p. 76; \*989, p. 100; 1019, p. 116; 1026, p. 110; 1074, p. 140). George Franks. 1.5 miles west of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 15, 46.62.

324 (\*777, p. 184; 840, p. 387; 845, p. 451; 886, p. 660; 909, p. 96; 939, p. 76; \*989, p. 100; 1019, p. 116; 1026, p. 110). L. C. Atkinson. 1 mile south of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 18, 20.29.

340 (\*777, p. 186; 840, p. 387; 845, p. 452; 886, p. 660; 909, p. 96; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111; 1074, p. 140). Dr. H. M. Bennett. 2 miles south of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 18, 23.39.

405 (\*777, p. 186; 840, p. 387; 845, p. 452; 886, p. 660; 909, p. 96; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111; 1074, p. 140). A. Rupp. 5 miles east of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 18, 43.02.

474 (\*777, p. 186; 840, p. 387; 845, p. 452; 909, p. 96; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111; 1074, p. 140). A. Rupp. 5.5 miles southeast of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 18, 41.04.

504 (\*777, p. 187; 840, p. 387; 845, p. 452; 886, p. 660; 909, p. 96; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111; 1074, p. 140). Neal Rupp. No measurements made in 1947.

505 (\*777, p. 187; 840, p. 387; 845, p. 452; 886, p. 660; 909, p. 96; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111; 1074, p. 141). Neal Rupp. 5.5 miles southeast of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 18, 41.29.

865 (\*777, p. 184; 840, p. 387; 845, p. 452; 886, p. 660; 909, p. 97; 939, p. 77; \*989, p. 101; 1019, p. 117; 1026, p. 111). Florencio Rodriguez. 4.5 miles west of Rachal. Water level, in feet below land-surface datum, 1947: Feb. 19, 77.71.

Castro County

4 (\*840, p. 387; 845, p. 454; 886, p. 66; 909, p. 98; 947, p. 92; \*989, p. 102; 1019, p. 117; 1026, p. 111). H. J. Kuper. Formerly owned by L. L. Cannon. At railroad crossing on west edge of Summerfield. Water level, in feet below land-surface datum, 1947: Mar. 20, 104.07.

8 (\*840, p. 387; 845, p. 454; 886, p. 661; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 117; 1026, p. 111; 1074, p. 141). Earl Cole. Formerly owned by S. P. Rosson. NW corner SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 125, blk. M7, 4.5 miles southeast of Summerfield. Water levels, in feet below land-surface datum, 1947: Jan. 17, 73.08; Mar. 20, 72.84.

18 (\*845, p. 454; 886, p. 661; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 117; 1026, p. 111; 1074, p. 141). Frio Public School. NE corner NE $\frac{1}{4}$  sec. 118, blk. M7, 11.5 miles northwest of Dimmitt. Water levels, in feet below land-surface datum, 1947: Jan. 17, 69.08; Mar. 20, 70.09.

20 (\*840, p. 387; 845, p. 454; 886, p. 661; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 117; 1026, p. 112; 1074, p. 141). H. E. Lindley. Formerly owned by A. C. Hawks. NW corner NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 97, blk. M7, 8 miles east of Summerfield and 1.7 miles southeast of Frio Public School. Water levels, in feet below land-surface datum, 1947: Jan. 17, 73.74; Mar. 20, 72.81.

32 (\*840, p. 386; 845, p. 454; 886, p. 661; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 117; 1026, p. 112; 1074, p. 141). W. A. Springer. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 81, blk. M7, 8 miles east of Summerfield and 2 miles east of Frio Public School. Water levels, in feet below land-surface datum, 1947: Jan. 17, 65.56; Mar. 20, 67.23.

36 (\*845, p. 454; 886, p. 661; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 118; 1026, p. 112; 1074, p. 141). E. O. Baker. Formerly owned by V. K. McCaskill. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 72, blk. M7, 12 miles north of Dimmitt. Water levels, in feet below land-surface datum, 1947: Jan. 16, 87.91; Mar. 20, 87.57.

40 (\*845, p. 454; 886, p. 661; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 118; 1026, p. 112; 1074, p. 141). W. W. Adams. No measurements made in 1947.

48 (\*840, p. 388; 845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 118; 1026, p. 112; 1074, p. 141). J. M. Richardson. NW corner NW $\frac{1}{4}$  sec. 30, blk. M7, 13.2 miles east of Summerfield. Water levels, in feet below land-surface datum, 1947: Jan. 16, 67.25; Mar. 20, 64.47.

52 (\*845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 102; 1019, p. 118; 1026, p. 112; 1074, p. 142). C. G. Maples. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 1, blk. M10A, 6.5 miles north of Dimmitt. Water levels, in feet below land-surface datum, 1947: Jan. 16, 79.78; Mar. 20, 78.15.

53 (\*840, p. 388; 845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 92; \*989, p. 103; 1019, p. 188; 1026, p. 112; 1074, p. 142). W. A. Hunter. SW corner SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 52, blk. M7, 11 miles east of Summerfield. Water levels, in feet below land-surface datum, 1947: Jan. 16, 65.12; Mar. 20, 64.15.

57 (\*845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 93; \*989, p. 103; 1019, p. 118). E. S. Ireland. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 33, blk. M7, 6 miles north of Dimmitt. Water level, in feet below land-surface datum, 1947: Mar. 20, 79.78.

58 (\*845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 93; \*989, p. 103; 1019, p. 118; 1026, p. 112; 1074, p. 142). Owner unknown. SW corner SW $\frac{1}{4}$  sec. 2, J. E. Tucker subdivision, 2 miles northeast of Dimmitt. Water levels, in feet below land-surface datum, 1947: Jan. 16, 151.58; Mar. 20, 151.61.

201 (\*845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 93; \*989, p. 103; 1019, p. 118; 1026, p. 112). J. C. Heiman. Formerly owned by J. C. Holman. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 339, blk. M6, 6.5 miles east of Dimmitt. Water level, in feet below land-surface datum, 1947: Mar. 20, 151.60.

202 (\*845, p. 455; 886, p. 662; 909, p. 98; 939, p. 78; 947, p. 93; \*989, p. 103; 1019, p. 118; 1026, p. 112; 1074, p. 142). Frank Huseman. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 222, blk. M6, 11 miles east of Dimmitt. Water levels, in feet below land-surface datum, 1947: Jan. 16, 102.38; Mar. 20, 102.40.

#### Cochran County

1 (\*840, p. 390; 845, p. 456; 886, p. 663; 909, p. 100; 939, p. 79; 947, p. 93; 1019, p. 118; 1026, p. 112; 1074, p. 142). Beck Gin Co. Northeastern edge of Whiteface. Water level, in feet below land-surface datum, 1947: Mar. 5, 152.66.

5 (\*840, p. 390; 845, p. 456; 886, p. 663; 909, p. 100; 939, p. 79; 947, p. 93; 1019, p. 118; 1026, p. 112; 1074, p. 142). Dave Linder. At dugout, 8.0 miles northwest of county line at Whiteface, and 0.15 mile south of State Highway 24. Water level, in feet below land-surface datum, 1947: Mar. 5, 125.59.

10 (\*840, p. 390; 845, p. 456; 886, p. 663; 909, p. 100; 939, p. 93; 1026, p. 112). John W. Lynch. 5 miles north of Morton. Water level, in feet below land-surface datum, 1947: Mar. 5, 94.03.

#### Comal County

117 (\*886, p. 663; 909, p. 100; 939, p. 79; 947, p. 93; \*989, p. 103; 1026, p. 113; 1074, p. 142). Alfred Brierle. No measurements made in 1947.

118 (\*886, p. 663; 909, p. 100; 939, p. 79; 947, p. 93; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 142). Henry Jonas Estate. No measurements made in 1947.

119 (\*886, p. 663; 909, p. 100; 939, p. 79; 947, p. 93; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 142). John Stricker. No measurements made in 1947.

120 (\*886, p. 663; 909, p. 101; 939, p. 79; 947, p. 93; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 142). S. L. Gill. No measurements made in 1947.

131 (\*886, p. 664; 909, p. 101; 939, p. 80; 947, p. 94; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 142). J. J. Arrechea. No measurements made in 1947.

155 (\*886, p. 664; 909, p. 101; 939, p. 80; 947, p. 94; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 142). George Fromme. No measurements made in 1947.

162 (\*909, p. 101; 939, p. 80; 947, p. 94; \*989, p. 103; 1019, p. 119; 1026, p. 113; 1074, p. 143). H. Conrads. No measurements made in 1947.

171 (\*886, p. 664; 909, p. 101; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). Mrs. Mattie Shelburne. No measurements made in 1947.

183 (\*886, p. 664; 909, p. 101; 939, p. 80; 947, p. 94; \*989, p. 104; 1026, p. 113; 1074, p. 143). August Wehe. No measurements made in 1947.

184 (\*886, p. 664; 909, p. 102; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). Charles Willig. No measurements made in 1947.

221 (\*886, p. 664; 909, p. 102; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). Albert Simon. 4 miles north of New Braunfels. Water levels, in feet below land-surface datum, 1947: July 6, 176.03; Nov. 23, 162.22.

222 (\*886, p. 664; 909, p. 102; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). William Kraft. No measurements made in 1947.

223 (\*886, p. 664; 909, p. 102; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). Albert Kraft. 4.5 miles northwest of New Braunfels. Water levels, in feet below land-surface datum, 1947: July 6, 204.35; Nov. 23, 205.28.

225 (\*886, p. 664; 909, p. 102; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). W. H. Harborth Estate. 4 miles northwest of New Braunfels. Water levels, in feet below land-surface datum, 1947: July 6, 165.91; Nov. 23, 171.30.

232 (\*886, p. 664; 909, p. 103; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119; 1026, p. 113; 1074, p. 143). Krueger Bros. Formerly owned by A. J. Caldwell. 8 miles northwest of New Braunfels. Water levels, in feet below land-surface datum, 1947: July 6, 188.86; Nov. 23, 192.74.

263A (\*886, p. 665; 909, p. 103; 939, p. 80; 947, p. 94; \*989, p. 104; 1019, p. 119). Walter Kappelmacher. 3.75 miles northwest of New Braunfels.

Water level, in feet below land-surface datum, 1945-47

Date	Water level	Date	Water level	Date	Water level
May 24, 1945	217.8	May 19, 1946	225.1	Nov. 23, 1947	225.16
July 3	219.10	July 6, 1947	220.58		

271 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). Albert Wallhoefer. 1.5 miles northeast of Gruene station. Water levels, in feet below land-surface datum, 1947: June 23, 86.68; Nov. 19, 89.25.

274 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). Charles Soechting. 3 miles northeast of Gruene station. Water levels, in feet below land-surface datum, 1947: July 5, 146.92; Nov. 19, 150.15.

278 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). Nancy Gruene. 2.5 miles southwest of Hunter. Water levels, in feet below land-surface datum, 1947: July 2, 146.73; Nov. 19, 147.74.

291 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). Oscar Preiss. 1.1 miles southeast of Thornhill school. Water levels, in feet below land-surface datum, 1947: July 6, 52.30; Nov. 22, 52.98.

326 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). William Schaeffer. 3.5 miles west of Solms. Water levels, in feet below land-surface datum, 1947: July 5, 34.34; Nov. 22, 37.10.

336 (\*840, p. 391; 845, p. 457; 886, p. 665; 909, p. 103; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 143). A. W. Feich. 1.5 miles southwest of Solms. Water levels, in feet below land-surface datum, 1947: July 5, 82.76; Nov. 22, 85.58.

373 (\*840, p. 391; 845, p. 458; 886, p. 665; 909, p. 104; 939, p. 81; 947, p. 95; \*989, p. 105; 1019, p. 120; 1026, p. 114; 1074, p. 144). L. Jentsch. 1 mile east of Solms. Water levels, in feet below land-surface datum, 1947: July 5, 21.75; Nov. 22, 24.45.

399 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 939, p. 82; 947, p. 95; \*989, p. 106; 1019, p. 120; 1026, p. 114; 1074, p. 144). John Karback. 1.3 miles north of Gruene. Water levels, in feet below land-surface datum, 1947: July 6, 169.54; Nov. 22, 171.01.

588 (\*947, p. 95; \*989, p. 106; 1019, p. 120; 1026, p. 114). Measurements discontinued.

#### Crosby County

1 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 947, p. 96; \*989, p. 106; 1019, p. 120; 1026, p. 114; 1074, p. 144). J. T. Vaughan. In Cone. at store and filling station, on east side of street, 1 block south of school. Water levels, in feet below land-surface datum, 1947: Jan. 17, 113.70; Mar. 5, 112.80.

2 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 947, p. 96; \*989, p. 106; 1019, p. 121; 1026, p. 114). C. B. Travis. 1.85 miles south of Cone. Water levels, in feet below land-surface datum, 1947: Jan. 17, 107.48; Mar. 5, 107.58.

3 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 939, p. 82; 947, p. 96; \*989, p. 106; 1019, p. 121; 1026, p. 114; 1074, p. 144). New Home School. NW. corner NW $\frac{1}{4}$  S. M. Walker survey. Water levels, in feet below land-surface datum, 1947: Jan. 17, 137.90; Mar. 5, 137.21.

4 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 939, p. 82; 947, p. 96; \*989, p. 106; 1019, p. 121; 1026, p. 114). No measurements made in 1947.

7 (\*840, p. 392; 845, p. 458; 886, p. 666; 909, p. 104; 939, p. 82; 947, p. 96; \*989, p. 106; 1019, p. 121; 1026, p. 114; 1074, p. 144). B. F. Lackey. In Ralls, on north side of U. S. Highway 62, 3 miles west of its junction with State Highway 207. Water levels, in feet below land-surface datum, 1947: Jan. 17, 96.35; Mar. 4, 95.41.

9 (\*840, p. 393; 845, p. 458; 886, p. 666; 909, p. 104; 939, p. 82; 947, p. 96; \*989, p. 106; 1019, p. 121; 1026, p. 116; 1074, p. 144). Dallas Stock Land Bank. On east edge of Lorenzo, 1 block north of U. S. Highway 62, on east side of road. Water levels, in feet below land-surface datum, 1947: Jan. 17, 81.59; Mar. 5, 80.88.

#### Deaf Smith County

113 (\*840, p. 398; 845, p. 462; 886, p. 671; 909, p. 109; 939, p. 84; 947, p. 97; \*989, p. 108; 1019, p. 122; 1026, p. 116; 1074, p. 144). A. S. Higgins. NW. corner NW $\frac{1}{4}$  sec. 58, blk. K4, 12.5 miles north of Hereford. Water level, in feet below land-surface datum, 1947: Jan. 20, 99.49.

150 (\*845, p. 462; 886, p. 671; 909, p. 109; 939, p. 85; 947, p. 97; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 144). I. J. Loving. Formerly owned by D. Thompson. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 79, blk. K4, 10.5 miles north of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 99.71.

205 (\*845, p. 463; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 144). Hilland Ricketts. No measurements made in 1947.

207 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 109; 939, p. 85; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 144). Charles B. Miles. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, blk. K3. Water levels, in feet below land-surface datum, 1947: Jan. 20, 56.91; Mar. 19, 58.18.

212 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 109; 939, p. 85; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 145). Alfred May. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 16, blk. 3. Water level, in feet below land-surface datum, 1947: Jan. 20, 75.26.

216 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 109; 939, p. 85; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 145). C. C. Stewart. SW. corner SE $\frac{1}{4}$  sec. 14, blk. 3, 13 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 69.17.

217 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 145). W. E. Neal. SE $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 21, blk. 3, 13 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 90.62; Mar. 18, 89.82.

219 (\*845, p. 463; 886, p. 671; 909, p. 110; 939, p. 85; 947, p. 93; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 145). J. E. Menz. No measurements made in 1947.

220 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 108; 1019, p. 123; 1026, p. 116; 1074, p. 145). C. T. Wimberly. SW. corner SW $\frac{1}{4}$  sec. 22, blk. 3, 11.5 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 90.32; Mar. 18, 90.87.

224 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). A. T. Fry. No measurements made in 1947.

226 (\*840, p. 398; 845, p. 463; 886, p. 671; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). Formerly owned by J. B. Stoker. Jack Renfro. NW. corner NW $\frac{1}{4}$  NE $\frac{1}{4}$  sec. 7, blk. K3, 9 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 52.38.

230 (\*840, p. 398; 845, p. 463; 886, p. 672; 909, p. 100; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). E. C. Reineaur. NW. corner SW $\frac{1}{4}$  sec. 6, blk. K3, 7.5 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 47.12.

234 (\*840, p. 399; 845, p. 463; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). Formerly owned by L. A. Smith. H. M. Horton. Sec. 534, excess acreage strip, 7.75 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 51.56.

235 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). Lewis A. Smith. SW $\frac{1}{4}$  SE $\frac{1}{4}$  sec. 5, blk. K3, 7 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 52.87; Mar. 18, 52.61.

236 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). Formerly owned by Western National Bank. Ray Kershen. SW. corner SW $\frac{1}{4}$  sec. 5, blk. K3, 6.4 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 49.98.

237 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 123; 1026, p. 117; 1074, p. 145). Ray Kershen. Formerly owned by Western National Bank. NW. corner NW $\frac{1}{4}$  sec. 5, blk. K3, 7 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 46.24; Mar. 18, 46.10.

241 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 124; 1026, p. 117; 1074, p. 145). Frank Wilde. Formerly owned by J. K. Estes. NW. corner NW $\frac{1}{4}$  NW $\frac{1}{4}$  sec. 17, blk. K3, 5.5 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 51.47.

242 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 98; \*989, p. 109; 1019, p. 124; 1026, p. 117; 1074, p. 145). Travis Damron. NW. corner SW $\frac{1}{4}$  sec. 24, blk. K3, 4.5 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 51.07.

245 (\*840, p. 399; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 99; \*989, p. 109; 1019, p. 124; 1026, p. 117; 1074, p. 146). E. F. Plank. SW. corner NW $\frac{1}{4}$  sec. 25, blk. K3, 5.5 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 51.94; Mar. 18, 51.65.

247 (\*840, p. 400; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 85; 947, p. 99; \*989, p. 109; 1019, p. 124; 1026, p. 117; 1074, p. 146). R. R. Lindsey. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, blk. K3, 7.5 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 25.40; Mar. 19, 25.61.

251 (\*840, p. 400; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 117; 1074, p. 146). R. R. Lindsey. NW. corner SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 47, blk. K3, 6.5 miles north of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 60.32.

258 (\*840, p. 400; 845, p. 464; 886, p. 672; 909, p. 110; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 117; 1074, p. 146). J. R. Davis. Formerly owned by Dr. G. W. Heard. SW. corner NE $\frac{1}{4}$  sec. 77, blk. K3, 3 miles north of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 62.44.

261 (\*840, p. 400; 845, p. 465; 886, p. 672; 909, p. 110; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 117; 1074, p. 146). D. L. McDonald. NW. corner NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 65, blk. K3, 4 miles north of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 61.90; Mar. 19, 61.30.

265 (\*840, p. 400; 845, p. 465; 886, p. 672; 909, p. 110; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). Reinauer Bros. NW. corner SE $\frac{1}{4}$  sec. 74, blk. K3, 6 miles north of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 71.80; Mar. 19, 71.59.

272 (\*840, p. 401; 845, p. 465; 886, p. 672; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). J. L. Hoffman. SW. corner SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 86, blk. K3, 5 miles northwest of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 76.75.

281 (\*845, p. 465; 886, p. 672; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). R. A. Freeman. Formerly owned by Jerry Keith. NW. corner NW $\frac{1}{4}$  sec. 96, blk. K3, 5.5 miles northwest of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 74.57; Mar. 19, 73.69.

283 (\*840, p. 401; 845, p. 466; 886, p. 672; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). J. T. Gilbreath. North line of NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 133, blk. M7, 3 miles west of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 66.90; Mar. 19, 66.49.

288 (\*840, p. 401; 845, p. 466; 886, p. 672; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). Lee Hopson. Formerly owned by John W. Kropff. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 63, blk. K3, 2.5 miles north of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 74.33; Mar. 19, 72.58.

291 (\*840, p. 401; 845, p. 466; 886, p. 672; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). Roy T. Slagle. NW. corner NW $\frac{1}{4}$  sec. 59, blk. K3, 1 mile northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 64.76.

300 (\*840, p. 401; 845, p. 466; 886, p. 673; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). Ayres Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 43, blk. K3, 2 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 53.60.



301 (\*840, p. 402; 845, p. 466; 886, p. 673; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 110; 1019, p. 124; 1026, p. 118; 1074, p. 146). V. C. Hodges. Formerly owned by C. Phillips. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 43, blk. K3, 2.6 miles northeast of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 49.24.

302 (\*840, p. 402; 845, p. 466; 886, p. 673; 909, p. 111; 939, p. 86; 947, p. 99; \*989, p. 111; 1019, p. 124; 1026, p. 118; 1074, p. 146). Noel Ewton. Formerly owned by F. G. Collier. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 38, blk. K3, 4 miles northeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 52.64; Mar. 18, 52.50.

311 (\*840, p. 402; 845, p. 466; 886, p. 673; 909, p. 111; 939, p. 86; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 118; 1074, p. 147). H. H. Boardman. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 41, blk. K3, 2 miles east of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 50.37; Mar. 18, 49.95.

315 (\*840, p. 402; 845, p. 466; 886, p. 673; 909, p. 111; 939, p. 86; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 118; 1074, p. 147). William Woulff. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 67, blk. M7, 3.5 miles east of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 56.52; Mar. 18, 56.45.

322 (\*840, p. 402; 845, p. 467; 886, p. 673; 909, p. 111; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 118; 1074, p. 147). Dr. G. W. Heard. SW, corner SE $\frac{1}{4}$  sec. 112, blk. M7, 2.5 miles south of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 80.25; Mar. 8, 79.71.

326 (\*840, p. 402; 845, p. 467; 886, p. 673; 909, p. 111; 939, p. 87; 947, p. 100; 1026, p. 118; 1074, p. 147). Frank J. Knabe. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 114, blk. M7. Water level, in feet below land-surface datum, 1947: Mar. 8, 99.22.

331 (\*840, p. 403; 845, p. 467; 886, p. 673; 909, p. 111; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119; 1074, p. 147). Owen Andrews. SW, corner NW $\frac{1}{4}$  sec. 107, blk. M7, 4 miles south of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 8, 81.80.

336 (\*840, p. 403; 845, p. 467; 886, p. 673; 909, p. 111; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119; 1074, p. 147). George M. Clingan. SW, corner NE $\frac{1}{4}$  sec. 86, blk. M7, 3.5 miles southeast of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 20, 92.98; Mar. 18, 92.54.

340 (\*845, p. 467; 886, p. 673; 909, p. 111; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119; 1074, p. 147). Felix Urbanczyk. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 108, blk. M7, 3.75 miles south of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 8, 82.68.

342 (\*845, p. 467; 886, p. 673; 909, p. 112; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119). Felix Urbanczyk. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 108, blk. M7, 3.5 miles south of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 18, 82.25.

431 (\*840, p. 403; 845, p. 468; 886, p. 673; 909, p. 112; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119; 1074, p. 147). S. J. Barclay. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 152, blk. M7, 4.5 miles southwest of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 72.54; Mar. 19, 72.50.

502 (\*845, p. 468; 886, p. 673; 909, p. 112; 939, p. 87; 947, p. 100; \*989, p. 111; 1019, p. 125; 1026, p. 119; 1074, p. 147). Carl H. Schroeder. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 50, blk. K8, 8.5 miles west of Hereford. Water levels, in feet below land-surface datum, 1947: Jan. 17, 102.14; Mar. 19, 101.30.

506 (\*845, p. 468; 886, p. 673; 909, p. 112; 939, p. 87; 947, p. 100; \*989, p. 112; 1019, p. 125; 1026, p. 119; 1074, p. 147). Alton Fraser. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, Gregg County School land, 9.2 miles west of Hereford. Water level, in feet below land-surface datum, 1947: Mar. 19, 81.14.

513 (\*845, p. 468; 886, p. 673; 909, p. 112; 947, p. 100; \*989, p. 112; 1019, p. 125; 1026, p. 119; 1074, p. 147). A. E. Acton. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 174, blk. M7, 7.5 miles southwest of Hereford. Water level, in feet below land-surface datum, 1947: Jan. 17, 80.60.

514 (\*845, p. 468; 886, p. 473; \*989, p. 112; 1019, p. 125; 1026, p. 119; 1074, p. 147). Howard Gault. Formerly owned by B. A. Achley. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 173, blk. M7, 0.5 mile north of Summerfield. Water level, in feet below land-surface datum, 1947: Mar. 19, 108.04.

#### Dimmit County

M9-9 (\*777, p. 187; 840, p. 403; 845, p. 469; 886, p. 674; 909, p. 112; 939, p. 87; 947, p. 100; \*989, p. 112; 1026, p. 119; 1074, p. 147). Mr. Myers. 2.5 miles southwest of Cometa. Water level, in feet below land-surface datum, 1947: July 23, 87.60.

N7-34 (\*777, p. 187; 840, p. 403; 845, p. 469; 886, p. 674; 909, p. 112; 939, p. 87; 947, p. 101; \*989, p. 112; 1019, p. 126; 1026, p. 119; 1074, p. 148). Byrd Cattle Co. 2 miles northwest of Winter Haven. Water level, in feet below land-surface datum, 1947: July 23, 55.85.

N7-48 (\*777, p. 188; 840, p. 403; 845, p. 469; 886, p. 674; 909, p. 112; 939, p. 87; 947, p. 101; \*989, p. 112). H. Hagelstein. Measurements discontinued.

N7-78 (\*777, p. 188; 840, p. 404; 845, p. 659; 886, p. 674; 909, p. 112; 939, p. 88; 947, p. 101; \*989, p. 112; 1019, p. 126; 1026, p. 119; 1074, p. 148). C. Schmitt. 3 miles west of Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 23, 111.78.

N7-95 (\*777, p. 189; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 112; 939, p. 88; 947, p. 101; \*989, p. 112; 1019, p. 126; 1026, p. 119; 1074, p. 148). M. E. Cook. Measurements discontinued.

N7-125 (\*777, p. 189; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 112; 939, p. 88; 947, p. 101; \*989, p. 112; 1019, p. 126; 1026, p. 120; 1074, p. 148). J. Gardner. In Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 23, 72.14.

N7-135 (\*777, p. 189; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 112; 1019, p. 126; 1026, p. 120; 1074, p. 148). J. L. Bell. Measurements discontinued.

N8-26 (\*777, p. 190; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). George C. Riha. No measurements made in 1947.

N8-28 (\*777, p. 190; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). G. W. Weston. 4 miles southeast of Winter Haven. Water level, in feet below land-surface datum, 1947: July 23, 88.35.

N8-40 (\*777, p. 191; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). John Stahl. 3 miles northeast of Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 24, 96.72.

N8-47 (\*777, p. 191; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). C. W. Miller. Measurements discontinued.

N8-58 (\*777, p. 192; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). G. Denton Estate. Measurements discontinued.

N8-103 (\*777, p. 192; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 101; \*989, p. 113; 1026, p. 120; 1074, p. 148). Nueces Land & Irrigation Co. 4 miles southwest of Brundage. Water level, in feet below land-surface datum, 1947: July 24, 49.72.

N9-8 (\*777, p. 193; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 102; \*989, p. 113; 1026, p. 120). T. S. Buchanan. Measurements discontinued.

N9-12 (\*777, p. 193; 840, p. 404; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; 947, p. 102; \*989, p. 113; 1026, p. 120). Federal Land Bank. No measurements made in 1947.

N9-16 (\*777, p. 193; 840, p. 404; 909, p. 113; 947, p. 102; \*989, p. 113; 1019, p. 126; 1026, p. 120; 1074, p. 148). Boyd Bros. 1.5 miles east of Big Wells. Water level, in feet below land-surface datum, 1947: July 22, 77.16.

N9-25 (\*777, p. 193; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 113; 947, p. 102; \*989, p. 113; 1019, p. 127; 1026, p. 120; 1074, p. 149). Order of Calenthia. No measurements made in 1947.

N9-32 (\*777, p. 193; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 113; 939, p. 88; \*989, p. 112; 1026, p. 120). P. J. Lewis. 2.5 miles south of Big Wells. Water level, in feet below land-surface datum, 1947: July 22, 40.80.

N9-33 (\*909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 113; 1019, p. 127; 1026, p. 120; 1074, p. 149). P. J. Lewis. 2.5 miles south of Big Wells. Water level, in feet below land-surface datum, 1947: July 22, 38.61.

07-3 (\*777, p. 194; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 120; 1074, p. 149). G. W. Hatch. 9 miles northwest of Big Wells. Water level, in feet below land-surface datum, 1947: July 22, 107.93.

S1-15 (\*777, p. 195; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). Central Securities Co. 6 miles southwest of Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 21, 56.80.

S1-16 (\*777, p. 195; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). No measurements made in 1947.

S1-18 (\*777, p. 195; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). Central Securities Co. 3.5 miles southwest of Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 21, 109.72.

S2-24 (\*777, p. 195; 840, p. 405; 845, p. 469; 886, p. 674; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1026, p. 121; 1074, p. 149). L. V. Richardson. 5.5 miles southeast of Carrizo Springs. Water level, in feet below land-surface datum, 1947: July 22, 125.22.

S2-27 (\*777, p. 195; 840, p. 405; 845, p. 469; 886, p. 675; 909, p. 114; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). J. A. McDonald. 3.5 miles northeast of Asherton. Water level, in feet below land-surface datum, 1947: July 24, 68.02.

S2-29 (\*777, p. 196; 840, p. 405; 845, p. 469; 886, p. 675; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1026, p. 121). E. W. Tackert. Measurements discontinued.

S2-78 (\*777, p. 196; 840, p. 405; 845, p. 469; 886, p. 675; 909, p. 114; 939, p. 88; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). J. W. Robinson. 2.5 miles southwest of Asherton. Water level, in feet below land-surface datum, 1947: July 22, 178.23.

S2-94 (\*777, p. 197; 840, p. 405; 845, p. 470; 909, p. 114; 939, p. 89; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). Catarina Farms Co. Measurements discontinued.

S2-102 (\*777, p. 197; 840, p. 405; 845, p. 470; 886, p. 675; 909, p. 114; 939, p. 89; 947, p. 102; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). William H. McKinney. 4 miles northwest of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 110.91.

S3-10 (\*777, p. 197; 840, p. 405; 845, p. 470; 886, p. 675; 909, p. 114; 939, p. 89; 947, p. 103; \*989, p. 114; 1019, p. 127; 1026, p. 121; 1074, p. 149). Catarina Farms Co. 4.5 miles northeast of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 90.16.

S3-16 (\*909, p. 114; 939, p. 89; 947, p. 103; \*989, p. 114; 1026, p. 121; 1074, p. 149). Catarina Farms Co. 2.5 miles west of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 141.43.

S5-3 (\*777, p. 197; 840, p. 405; 845, p. 470; 909, p. 115; 939, p. 89; 947, p. 103; \*989, p. 115; 1019, p. 127; 1026, p. 121; 1074, p. 150). Catarina Farms Co. 6 miles west of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 138.75.

S5-5 (\*777, p. 198; 840, p. 405; 845, p. 470; 909, p. 115; 939, p. 89; 947, p. 103; \*989, p. 115; 1019, p. 128; 1026, p. 121; 1074, p. 150). Dolph Briscoe. 13 miles southwest of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 77.04.

S5-10 (\*777, p. 198; 840, p. 405; 845, p. 470; 886, p. 675; 909, p. 115; 947, p. 103; \*989, p. 115; 1019, p. 128; 1026, p. 121; 1074, p. 150). Catarina Farms Co. 5 miles southwest of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 95.63.

S6-4 (\*777, p. 198; 840, p. 405; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; 947, p. 103; \*989, p. 115; 1019, p. 128; 1026, p. 121; 1074, p. 150). O. V. Ray. 1.5 miles southeast of Catarina. Water level, in feet below land-surface datum, 1947: July 22, 20.86.

T1-5 (\*777, p. 198; 840, p. 405; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; 947, p. 103; \*989, p. 115; 1019, p. 128; 1026, p. 122). Bob Graves. 2.25 miles east of Valley Wells. Water level, in feet below land-surface datum, 1947: July 22, 16.45.

#### Duval County

55 (\*776, p. 96; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 115; 1026, p. 122). L. N. Garcia. 3.7 miles west of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 12, 61.82.

61 (\*776, p. 98; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 115; 1026, p. 122). Jose M. Sepulveda. 7 miles northwest of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 12, 36.06.

69 (\*776, p. 98; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 115; 1026, p. 122). Juan Penalez. 9 miles west of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 12, 66.74.

70 (\*776, p. 98; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 115). M. Cantu. No measurements made in 1947.

71 (\*776, p. 98; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 116; 1026, p. 122). Helena de Pena. 11.2 miles west of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 12, 41.28.

73 (\*776, p. 98; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 89; \*989, p. 116; 1026, p. 122). Severo Ranjel. 11 miles west of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 12, 35.31.

143 (\*776, p. 102; \*777, p. 199; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 122). Salidonia Ruiz. In Benavides. Water level, in feet below land-surface datum, 1947: Feb. 13, 34.66.

144 (\*776, p. 102; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 122). Pete Coronado. In Benavides. Water level, in feet below land-surface datum, 1947: Feb. 13, 34.98.

145 (\*776, p. 102; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 122). T. Ramirez. In Benavides. Water level, in feet below land-surface datum, 1947: Feb. 13, 35.62. Measurements discontinued after Feb. 13.

158 (\*776, p. 104; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 122). Mareas Gomez. No measurements made in 1947.

173 (\*776, p. 104; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 122). Ismael Garcia Estate. 2.3 miles east of Benavides. Water level, in feet below land-surface datum, 1947: Feb. 13, 46.56.

175 (\*776, p. 104; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 115; 939, p. 90; \*989, p. 116; 1026, p. 123). Mrs. Tom Cavanaugh. 1 mile east of Benavides. Water level, in feet below land-surface datum, 1947: Feb. 13, 43.74.

183 (\*776, p. 104; \*777, p. 200; 840, p. 406; 845, p. 470; 886, p. 675; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Lazaro Vela. 8 miles south of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 13, 49.27.

184 (\*776, p. 106; \*777, p. 200; 840, p. 406; 845, p. 471; 886, p. 675; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Eusebio Alanís. 7.5 miles southwest of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 13, 40.30.

185 (\*776, p. 106; \*777, p. 200; 840, p. 406; 845, p. 471; 886, p. 675; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Cervando Saenz. 10 miles south of San Diego. Water level, in feet below land-surface datum, 1947: Feb. 13, 33.28.

188 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Encarnacion Pena. 1 mile north of San Jose. Water level, in feet below land-surface datum, 1947: Feb. 13, 74.52.

189 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Pedro Lopez. At San Jose. Water level, in feet below land-surface datum, 1947: Feb. 13, 60.73.

190 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123). Margarita Lopez. About 0.5 mile south of San Jose. Water level, in feet below land-surface datum, 1947: Feb. 13, 40.93.

201 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 116; 1026, p. 123; 1074, p. 151). Maria Villareal de Saenz. 1.25 miles north of Santa Cruz. Water level, in feet below land-surface datum, 1947: Feb. 14, 73.92.

203 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 123; 1074, p. 151). N. E. Martinez. In Santa Cruz. Water level, in feet below land-surface datum, 1947: Feb. 14, 61.22.

204 (\*776, p. 106; \*777, p. 201; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 123; 1074, p. 151). Hillario Saenz. 1 mile south of Santa Cruz. Water level, in feet below land-surface datum, 1947: Feb. 14, 74.63.

211 (\*776, p. 106; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117). J. Perez. 1.3 miles north of Concepcion. Water level, in feet below land-surface datum, 1947: Feb. 13, 39.53.

230 (\*776, p. 108; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 123). San Antonio Land & Trust Co. 3.5 miles north of Realitos. Water level, in feet below land-surface datum, 1947: Feb. 13, 57.24.

240 (\*776, p. 108; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 124). Gus Minges. 1.5 miles northeast of Realitos. Water level, in feet below land-surface datum, 1947: Feb. 13, 95.22.

271 (\*776, p. 110; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 124). J. Mann. 5.5 miles southeast of Realitos. Water level, in feet below land-surface datum, 1947: Feb. 13, 75.00.

276 (\*776, p. 110; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 124). Hermann Dammier. 10.25 miles south of Realitos. Water level, in feet below land-surface datum, 1947: Feb. 13, 40.87.

287 (\*776, p. 110; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 124). Virginia J. Ramirez. 4 miles southwest of Concepcion. Water level, in feet below land-surface datum, 1947: Feb. 13, 47.92. Measurements discontinued after Feb. 13.

289 (\*776, p. 110; \*777, p. 202; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 90; \*989, p. 117; 1026, p. 124). Adolfo Garcia. 3.75 miles northeast of Sejita. Water level, in feet below land-surface datum, 1947: Feb. 13, 44.25.

290 (\*776, p. 110; \*777, p. 202; 840, p. 406; 845, p. 471; 909, p. 116; 939, p. 91; \*989, p. 117; 1026, p. 124). Andalsia Gracia. 3 miles northeast of Sejita. Water level, in feet below land-surface datum, 1947: Feb. 13, 49.47.

292 (\*776, p. 110; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 91; \*989, p. 117). Raphael Flores. 1 mile east of Sejita. Water level, in feet below land-surface datum, 1947: Feb. 13, 33.06.

297 (\*776, p. 110; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 91; \*989, p. 117; 1026, p. 124). San Antonio Loan & Trust Co. 6.5 miles southeast of Sejita. Water level, in feet below land-surface datum, 1947: Feb. 14, 52.26.

301 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 116; 939, p. 81; \*989, p. 118; 1026, p. 124). Virginia Garcia. 5 miles south of Concepcion. Water level, in feet below land-surface datum, 1947: Feb. 14, 61.89.

302 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 117; 939, p. 91; \*989, p. 118; 1026, p. 124). Rafael Garcia. 4.5 miles south of Concepcion. Water level, in feet below land-surface datum, 1947: Feb. 14, 31.30.

304 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 117; 939, p. 91; \*989, p. 118; 1026, p. 124). Rafael Garcia. 3 miles south of Concepcion. Water level, in feet below land-surface datum, 1947: Feb. 14, 56.99.

315 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 939, p. 91; \*989, p. 118; 1026, p. 124; 1074, p. 152). Reuben Schultz. 6.75 miles southwest of Santa Cruz. Water level, in feet below land-surface datum, 1947: Feb. 14, 45.82.

319 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 939, p. 117; 939, p. 91; \*989, p. 118; 1026, p. 124; 1074, p. 152). San Antonio Land & Trust Co. 5.25 miles southeast of Santa Cruz. Water level, in feet below land-surface datum, 1947: Feb. 14, 44.38.

322 (\*776, p. 112; \*777, p. 203; 840, p. 406; 845, p. 471; 886, p. 676; 909, p. 117; 939, p. 91; \*989, p. 118; 1026, p. 124). Santana Jinojosa. About 0.75 mile east of La Copita. Water level, in feet below land-surface datum, 1947: Feb. 14, 38.50.

325 (\*776, p. 112; 1074, p. 152). Val Stockton. 3 miles east of La Copita. Water levels, in feet below land-surface datum: Mar. 12, 1946, 46.20; Feb. 14, 1947, 45.02.

#### El Paso County

8 (\*817, p. 331; 840, p. 408; 845, p. 473; 886, p. 678; 909, p. 119; 939, p. 91; 947, p. 103; \*989, p. 118; 1019, p. 128; 1026, p. 125; 1074, p. 153). El Paso Electric Co. well 4. At Santa Fe and Fourth Streets. Water level, in feet below land-surface datum, 1947: Jan. 15, 21.32.

9 (\*817, p. 331; 840, p. 408; 845, p. 474; 886, p. 678; 909, p. 119; 939, p. 91; 947, p. 103; \*989, p. 118; 1019, p. 128; 1026, p. 125). El Paso Electric Co. well 3. At Santa Fe and Fourth Streets. Water level, in feet below land-surface datum, 1947: Jan. 15, 18.04.

10 (\*845, p. 474; 886, p. 678; 909, p. 119; 939, p. 92; 947, p. 103; \*989, p. 118; 1019, p. 128; 1026, p. 125; 1074, p. 153). City of El Paso drainage well. At Fourth and Oregon Streets. Water levels, in feet below land-surface datum, 1947: Jan. 15, 16.34; Feb. 26, 15.10; Mar. 25, 16.70; Sept. 30, 19.66.

12 (\*817, p. 331; 840, p. 408; 845, p. 474; 886, p. 678; 909, p. 119; 939, p. 92; 947, p. 103; \*989, p. 118; 1019, p. 128; 1026, p. 125). City of Juarez well 1. Measurements discontinued.

18 (\*817, p. 331; 840, p. 408; 845, p. 474; 886, p. 678; 909, p. 119; 939, p. 92; 947, p. 104; \*989, p. 119; 1019, p. 128; 1026, p. 125). City of Juarez well 3. In Ciudad Juarez, Chihuahua, Mexico, near Hipodromo. Water level, in feet below land-surface datum, 1947: Jan. 21, 49.79.

19 (\*817, p. 332; 840, p. 408; 845, p. 474; 886, p. 678; 909, p. 119; 939, p. 92; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 125; 1074, p. 153). El Paso Milling Co. At Kansas and Eleventh Streets. Water level, in feet below land-surface datum, 1947: Jan. 15, 16.99.

21 (\*817, p. 332; 840, p. 409; 845, p. 474; 886, p. 678; 909, p. 119; 939, p. 92; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 125; 1074, p. 153). City of El Paso well 10. At Campbell and Sixth Streets. Water levels, in feet below land-surface datum, 1947: Jan. 15, 23.14; Mar. 26, 24.17; Sept. 30, 23.43; Dec. 18, 22.40.

28 (\*817, p. 332; 840, p. 409; 845, p. 475; 886, p. 679; 909, p. 120; 939, p. 92; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 125). Acme Laundry. Measurements discontinued.

29a (\*909, p. 120; 939, p. 92; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 125; 1074, p. 153). Consumers Ice & Fuel Co. well 2. At Cotton and Dallas Streets. Water levels, in feet below land-surface datum, 1947: Jan. 15, 48.24; Feb. 26, 49.71.

30a (\*845, p. 475; \*886, p. 679; 909, p. 120; 939, p. 93; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 125; 1074, p. 153). City of El Paso well 14. At San Antonio and Walnut Streets.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 15	60.47	Mar. 25	31.93	Dec. 17	26.20
Feb. 26	61.56	Sept. 30	30.73		

32a (\*886, p. 679; 909, p. 120; 939, p. 93; 947, p. 104; \*989, p. 119; 1019, p. 129; 1026, p. 126; 1074, p. 153). City of El Paso well 17. At San Antonio and Tornillo Streets. Water levels, in feet below land-surface datum, 1947: Jan. 15, 68.15; Feb. 26, 68.67; Sept. 30, 32.88; Dec. 17, 29.50.

39 (\*817, p. 333; 840, p. 409; 845, p. 475; 886, p. 680; 909, p. 121; 939, p. 93; 947, p. 105; \*989, p. 120; 1019, p. 129; 1026, p. 126). Midwest Dairies, Inc. Measurements discontinued.

42 (\*817, p. 334; 840, p. 410; 845, p. 475; 886, p. 680; 909, p. 121; 939, p. 93; 947, p. 105; \*989, p. 120; 1026, p. 126; 1074, p. 154). City of El Paso well 9. At Luma and Pera Streets.

Water level, in feet below land-surface datum, 1947

Jan. 15	74.74	Mar. 25	29.78	Dec. 17	24.48
Feb. 26	75.09	Sept. 30	30.21		

48a (\*909, p. 121; 939, p. 93; 947, p. 105; \*989, p. 120; 1019, p. 130; 1026, p. 126; 1074, p. 154). City of El Paso well 18. In Hadlock Addition. Water levels, in feet below land-surface datum, 1947: Feb. 26, 32.37; Mar. 25, 27.20; Sept. 30, 30.13.

48b (\*909, p. 122; 939, p. 93; 947, p. 105; \*989, p. 120; 1019, p. 130; 1026, p. 126; 1074, p. 154). City of El Paso test well 33. Near Franklin Canal.

Water level, in feet below land-surface datum, 1947

Jan. 14	22.27	Mar. 25	21.00	Dec. 17	18.75
Feb. 26	23.96	Sept. 29	22.65		

49 (\*840, p. 410; 845, p. 476; 886, p. 680; 909, p. 122; 939, p. 93; 947, p. 105; \*989, p. 121; 1019, p. 130; 1026, p. 126; 1074, p. 154). City of El Paso well 4. In Montana well field. Water levels, in feet below land-surface datum, 1947: Jan. 13, 72.75; Feb. 25, 75.60; Mar. 24, 71.30; Dec. 17, 69.17.

50 (\*840, p. 410; 845, p. 476; 886, p. 680; 909, p. 122; 939, p. 94; 947, p. 105; \*989, p. 121; 1019, p. 130; 1026, p. 126; 1074, p. 154). City of El Paso well 1. In Montana well field.

Water level, in feet below land-surface datum, 1947

Jan. 13	90.82	Mar. 24	89.92	Dec. 15	88.32
Feb. 25	92.27	Sept. 29	98.54		

51 (\*817, p. 334; 840, p. 410; 845, p. 476; 886, p. 680; 909, p. 122; 939, p. 94; 947, p. 105; \*989, p. 121; 1019, p. 130; 1026, p. 126; 1074, p. 154). City of El Paso well 2. In Montana well field. Water levels, in feet below land-surface datum, 1947: Jan. 13, 100.85; Feb. 25, 102.74; Mar. 24, 99.19.



52 (\*817, p. 334; 840, p. 410; 845, p. 476; 886, p. 680; 909, p. 122; 939, p. 94; 947, p. 106; \*989, p. 121; 1019, p. 131; 1026, p. 127; 1074, p. 154). City of El Paso well 3. In Montana well field. Water levels, in feet below land-surface datum, 1947: Jan. 13, 109.29; Mar. 25, 111.68.

53 (\*817, p. 335; 840, p. 410; 845, p. 476; 886, p. 681; 909, p. 122; 939, p. 94; 947, p. 106; \*989, p. 121; 1019, p. 131; 1026, p. 127; 1074, p. 154). Loretta College. At Clifton and Reynolds Streets.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 13	136.76	Mar. 25	135.84	Dec. 17	132.83
Feb. 25	139.26	Sept. 29	141.73		

55 (\*817, p. 335; 840, p. 411; 845, p. 476; 886, p. 681; 909, p. 122; 939, p. 94; 947, p. 106; \*989, p. 121; 1019, p. 131; 1026, p. 127; 1074, p. 154). The Texas Co. 0.6 mile northeast of Ascarate. Water level, in feet below land-surface datum, 1947: Jan. 14, 46.28.

59 (\*947, p. 106; \*989, p. 122; 1019, p. 131; 1026, p. 127). Phelps-Dodge Refining Corporation well 1. Near Southern Pacific Railroad, at North Loop Road. Water level, in feet below land-surface datum, 1947: Jan. 15, 75.23.

59a (\*947, p. 106; \*989, p. 122; 1019, p. 131; 1026, p. 127). Phelps-Dodge Refining Corporation well 2. Measurements discontinued.

64 (\*817, p. 335; 840, p. 411; 845, p. 477; 886, p. 681; 909, p. 122; 939, p. 94; 947, p. 106; \*989, p. 122; 1019, p. 131; 1026, p. 127; 1074, p. 155). City of El Paso and Geological Survey test well 1. On Carlsbad Highway.

Water level, in feet below land-surface datum, 1947

Jan. 14	265.64	Mar. 24	265.95	Dec. 26	266.60
Feb. 25	265.70	Sept. 29	266.50		

67b (\*845, p. 477; 886, p. 681; 909, p. 123; 939, p. 94; 947, p. 106; \*989, p. 122; 1019, p. 131; 1026, p. 127). Texas & New Orleans Railroad Co. well 3. Near south entrance to Fort Bliss. Water level, in feet below land-surface datum, 1947: Jan. 14, 218.86.

72 (\*817, p. 335; 840, p. 411; 845, p. 477; 886, p. 681; 909, p. 123; 939, p. 94; 947, p. 107; \*989, p. 122; 1019, p. 132; 1026, p. 127). U. S. Dept. of the Army. Fort Bliss well 2. Water level, in feet below land-surface datum, 1947: Jan. 15, 226.77.

75b (\*845, p. 477; 886, p. 681; 909, p. 123; 939, p. 95; 947, p. 107; \*989, p. 122; 1019, p. 132; 1026, p. 127; 1074, p. 155). City of El Paso test well 10. 0.6 mile south of Wilson Road and 0.6 mile west of Airport Road.

Water level, in feet below land-surface datum, 1947

Jan. 14	215.55	Mar. 24	215.20	Dec. 16	214.72
Feb. 25	215.97	Sept. 29	218.52		

76 (\*817, p. 336; 840, p. 411; 845, p. 478; 886, p. 681; 909, p. 123; 939, p. 95; 947, p. 107; \*989, p. 122; 1019, p. 132; 1026, p. 127; 1074, p. 155). City of El Paso and Geological Survey test well 2. Near southeast corner of Biggs Field.

Water level, in feet below land-surface datum, 1947

Jan. 14	245.26	Mar. 24	245.58	Dec. 15	244.91
Feb. 25	245.37	Sept. 29	247.95		

77 (\*817, p. 336; 840, p. 411; 845, p. 478; 886, p. 681; 909, p. 123; 939, p. 95; 947, p. 107; \*989, p. 123; 1019, p. 132; 1026, p. 128; 1074, p. 155). City of El Paso well 12. In Mesa well field.

77--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 14	217.74	Mar. 24	217.60	Dec. 15	214.94
Feb. 25	218.50	Sept. 29	224.97		

77b (\*845, p. 478; 886, p. 681; 909, p. 123; 939, p. 94; 947, p. 107; \*989, p. 123; 1019, p. 132; 1026, p. 128). City of El Paso well 15. Measurements discontinued.

78c (\*845, p. 478; 886, p. 682; 909, p. 124; 939, p. 95; 947, p. 107; \*989, p. 123; 1019, p. 132; 1026, p. 128; 1074, p. 155). City of El Paso test well 4. 1 mile north of city well 11.

Water level, in feet below land-surface datum, 1947

Jan. 17	197.67	Mar. 24	197.78	Dec. 15	198.98
Feb. 25	197.55	Sept. 29	198.06		

73 (\*845, p. 478; 886, p. 682; 909, p. 124; 939, p. 95; 947, p. 107; \*989, p. 123; 1019, p. 132; 1026, p. 128). City of El Paso well 8. Measurements discontinued.

82a (\*939, p. 93; 947, p. 107; \*989, p. 123; 1019, p. 132; 1026, p. 128). City of El Paso test well 20. Measurements discontinued.

112 (\*817, p. 336; 840, p. 412; 845, p. 479; 886, p. 682; 909, p. 124; 939, p. 95; 947, p. 108; \*989, p. 123; 1019, p. 133; 1026, p. 128; 1074, p. 156). City of El Paso old Mesa well 32. In Mesa well field. Water levels, in feet below land-surface datum, 1947: Jan. 17, 207.35; Feb. 25, 207.64; Mar. 24, 206.82; Dec. 15, 205.94.

128b (\*939, p. 96; 947, p. 108; \*989, p. 123; 1019, p. 133; 1026, p. 128; 1074, p. 156). City of El Paso well 21. 2 miles north of Mesa well field. Water levels, in feet below land-surface datum, 1947: Jan. 17, 245.05; Feb. 25, 246.51; Dec. 23, 248.06.

128c (\*886, p. 682; 909, p. 124; 939, p. 96; 947, p. 108; \*989, p. 124; 1019, p. 133; 1026, p. 128; 1074, p. 156). City of El Paso well 23. 2.5 miles north of Mesa well field.

Water level, in feet below land-surface datum, 1947

Jan. 17	203.25	Mar. 24	202.54	Dec. 15	202.50
Feb. 25	202.39	Sept. 29	203.10		

130 (\*840, p. 412; 845, p. 479; 909, p. 124; 939, p. 96; 947, p. 108; \*989, p. 124; 1019, p. 133; 1026, p. 128). G. T. Cook. Measurements discontinued.

136 (\*817, p. 339; 840, p. 412; 845, p. 479; 886, p. 682; 909, p. 124; 939, p. 96; 947, p. 108; \*989, p. 124; 1019, p. 133; 1026, p. 128; 1074, p. 156). City of El Paso and Geological Survey test well 3. 6.9 miles north of Wilson Road.

Water level, in feet below land-surface datum, 1947

Jan. 17	247.45	Mar. 24	247.65	Dec. 15	247.83
Feb. 25	247.50	Sept. 29	248.00		

139a (\*909, p. 125; 939, p. 96; 947, p. 108; \*989, p. 124; 1019, p. 133; 1026, p. 128). City of El Paso test well 30. 9 miles north of Mesa well field. Water level, in feet below land-surface datum, 1947: Jan. 21, 337.81.

143a (\*909, p. 124; 939, p. 96; 947, p. 108; \*989, p. 124; 1019, p. 133; 1026, p. 129). City of El Paso test well 29. 12 miles north of Mesa well field. Water level, in feet below land-surface datum, 1947: Jan. 21, 318.28.

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5 (\*840, p. 413; 845, p. 480; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 124; 1019, p. 134; 1026, p. 129; 1074, p. 156). M. O. Scheele. SW. corner SW $\frac{1}{4}$  sec. 127, blk. D2, 11 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 17, 57.07; Mar. 19, 56.83.

14 (\*840, p. 413; 845, p. 480; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 124; 1019, p. 134; 1026, p. 129; 1074, p. 156). Herman R. King. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, blk. C9, 10 miles north of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 17, 62.07; Mar. 19, 62.33.

32 (\*840, p. 413; 845, p. 480; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1026, p. 129; 1074, p. 156). Frank Whitfill. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 12, blk. C9, 9 miles north of Lockney. Water level, in feet below land-surface datum, 1947: Jan. 17, 94.35.

57 (\*840, p. 413; 845, p. 480; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). T. L. Wilhite. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 87, blk. D2, 7.5 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 17, 69.80; Mar. 7, 69.70.

106 (\*840, p. 413; 845, p. 480; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). Texas Land & Development Co. No measurements made in 1947.

108 (\*845, p. 480; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). Ivan Thompson. Formerly owned by Texas Land & Development Co. NW. corner SE $\frac{1}{4}$  sec. 65, blk. D2, 6.5 miles northwest of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 17, 67.30.

111 (\*840, p. 414; 845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). Texas Land & Development Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 65, blk. D2, 6.5 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 17, 62.60; Mar. 19, 63.30.

112 (\*840, p. 414; 845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129). C. R. Roach. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 12, blk. D5, 7 miles northwest of Lockney. Water levels, in feet below land-surface datum: Feb. 26, 1946, 58.89; Mar. 19, 1947, 61.42.

120 (\*845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). Francis Carthel. NW. corner NW $\frac{1}{4}$  sec. 1, blk. D5, 4.5 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 17, 72.65; Mar. 17, 71.60.

124 (\*840, p. 414; 845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129). Rose Lee Carthel. Measurements discontinued.

139 (\*840, p. 414; 845, p. 481; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). L. R. Collis. Formerly owned by Texas Land & Development Co. SE. corner SE $\frac{1}{4}$  sec. 2, blk. D5, 3 miles northwest of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 81.66.

140 (\*845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 110; \*989, p. 125; 1019, p. 134; 1026, p. 129; 1074, p. 157). C. Williams. Formerly owned by Texas Land & Development Co. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 2, blk. D5, 3.5 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 73.95; Mar. 19, 72.72.

143 (\*840, p. 414; 845, p. 481; 886, p. 683; 909, p. 126; 939, p. 97; 947, p. 111; \*989, p. 125; 1019, p. 134; 1026, p. 130; 1074, p. 157). Plainview-Lockney Farms. SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, blk. D5, 5 miles northwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 77.70; Mar. 17, 77.07.

150 (\*840, p. 414; 845, p. 481; 886, p. 684; 909, p. 126; 939, p. 97; 947, p. 111; \*989, p. 125; 1019, p. 135; 1026, p. 130; 1074, p. 157). Mollie S. Gholson. NW. corner NW $\frac{1}{4}$  sec. 14, blk. D5, 7 miles northwest of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 54.53.

153 (\*840, p. 415; 845, p. 481; 886, p. 684; 909, p. 126; 939, p. 97; 947, p. 111; \*989, p. 125; 1019, p. 135; 1026, p. 130; 1074, p. 157). E. C. Morrow. No measurements made in 1947.

157 (\*840, p. 415; 845, p. 482; 886, p. 684; 909, p. 126; 939, p. 97; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 157). Texas Land & Development Co. NW. corner NE $\frac{1}{4}$  sec. 10, blk. D5, 6 miles west of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 66.78.

161 (\*840, p. 415; 845, p. 482; 886, p. 684; 909, p. 127; 939, p. 97; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 157). Texas Land & Development Co. SW. corner NE $\frac{1}{4}$  sec. 10, blk. D5, 5.5 miles west of Lockney, 0.5 mile northwest of Aiken. Water level, in feet below land-surface datum, 1947: Mar. 17, 76.53.

326 (\*947, p. 111; \*989, p. 126; 1026, p. 130; 1074, p. 158). W. C. Sims. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 68, blk. 1, 2 miles east of Floydada. Water level, in feet below land-surface datum, 1947: Mar. 17, 147.49.

409 (\*840, p. 415; 845, p. 482; 886, p. 684; 909, p. 127; 939, p. 97; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). A. V. and J. H. Campbell. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 24, blk. N, 5 miles west of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 67.00.

410 (\*845, p. 482; 886, p. 684; 909, p. 127; 939, p. 98; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). W. C. McGrede. SW. corner W $\frac{1}{2}$  sec. 44, blk. D6, 5.5 miles west of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 62.20; Mar. 19, 61.48.

414 (\*845, p. 482; 886, p. 684; 909, p. 127; 939, p. 98; 947, p. 111; 989, p. 126; 1026, p. 130). Mrs. Harriet B. Robbins. Measurements discontinued.

416 (\*845, p. 482; 886, p. 684; 909, p. 127; 939, p. 98; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). J. R. Belt, Jr. Formerly owned by John Spears. NW. corner NE $\frac{1}{4}$  sec. 46, blk. D6, 4.5 miles west of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 16, 81.10; Mar. 19, 88.92.

421 (\*840, p. 415; 845, p. 482; 886, p. 684; 909, p. 127; 939, p. 98; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). J. R. Belt. NW. corner NW $\frac{1}{4}$  sec. 48, blk. D6, 3.5 miles west of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 16, 79.72; Mar. 17, 80.15.

428 (\*845, p. 483; 886, p. 684; 909, p. 127; 939, p. 98; 947, p. 111; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). W. L. Thomas. Formerly owned by Texas Land & Development Co. NW. corner F. Griggs survey, 3.5 miles southwest of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 67.50.

435 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 126; 1019, p. 135; 1026, p. 131; 1074, p. 158). W. M. Summerlin. Formerly owned by Home Owner's Loan Corporation. Center of L. C. Reed survey, at crossing of Burlington and Santa Fe Railroads, in southwest part of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 82.95.

436 (\*840, p. 416; 845, p. 483; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 126; 1019, p. 135; 1026, p. 130; 1074, p. 158). Measurements discontinued.

437 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 135; 1026, p. 131; 1074, p. 158). Lockney Oil Mill Co. On north side of Panhandle & Santa Fe Railway. Water level, in feet below land-surface datum, 1947: Mar. 19, 62.96.

439 (\*845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 135; 1026, p. 131). O. J. Schacht. Measurements discontinued.

441 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 158). Federal Land Bank. NW. corner NW $\frac{1}{4}$  sec. 50, blk. D3, 2 miles northeast of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 67.65; Mar. 19, 67.97.

442 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 158). Solon Clements. No measurements made in 1947.

446 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 127; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 158). W. J. King. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 68, blk. G, 2.5 miles southeast of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 46.40; Mar. 19, 46.35.

459 (\*840, p. 416; 845, p. 483; 886, p. 685; 909, p. 128; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). Texas Land & Development Co. SW. corner M. Y. Price Survey, 5.5 miles southwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 60.50; Mar. 19, 60.12.

463 (\*840, p. 417; 909, p. 128; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). Texas Land & Development Co. NW. corner NW $\frac{1}{4}$  sec. 14, blk. N. 6 miles west of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 61.50; Mar. 19, 60.50.

467 (\*840, p. 417; 845, p. 484; 886, p. 685; 909, p. 128; 939, p. 98; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). C. J. Barnard. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, blk. N, 8 miles southwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 50.02; Mar. 11, 49.35.

472 (\*845, p. 484; 886, p. 685; 909, p. 128; 939, p. 99; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). Texas Land & Development Co. NW. corner J. K. Andrews Survey, 5.5 miles southwest of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 19, 59.30.

486 (\*840, p. 417; 845, p. 484; 886, p. 685; 909, p. 128; 939, p. 99; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). Mrs. M. E. Morris. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 53, blk. G, 5.5 miles southeast of Lockney. Water level, in feet below land-surface datum, 1947: Mar. 17, 34.70.

509 (\*840, p. 417; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131). S. H. Boon. Measurements discontinued.

510 (\*840, p. 417; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 112; \*989, p. 127; 1019, p. 136; 1026, p. 131; 1074, p. 159). W. R. Crow. North end of J. R. Powell survey, 8 miles southwest of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 52.90; Mar. 19, 52.41.

519 (\*840, p. 417; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 112; \*989, p. 128; 1019, p. 136; 1026, p. 131; 1074, p. 159). J. L. Faulkner. NE corner SW $\frac{1}{4}$  sec. 44, blk. G, 7.5 miles west of Floydada. Water levels, in feet below land-surface datum, 1947: Jan. 20, 55.85; Mar. 19, 55.90.

523 (\*909, p. 128; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 136; 1026, p. 131; 1074, p. 159). C. F. Harris. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 41, blk. G, 7.5 miles northwest of Floydada. Water levels, in feet below land-surface datum, 1947: Jan. 20, 69.57; Mar. 19, 69.00.

525 (\*840, p. 418; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 136; 1026, p. 132; 1074, p. 159). W. Fry. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 52, blk. G, 5.5 miles south of Lockney. Water levels, in feet below land-surface datum, 1947: Jan. 20, 42.44; Mar. 17, 42.60.

528 (\*840, p. 418; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 136; 1026, p. 132). Mrs. Maude Holloms. Measurements discontinued.

529 (\*840, p. 418; 845, p. 484; 886, p. 686; 909, p. 128; 947, p. 113; \*989, p. 128; 1019, p. 136; 1026, p. 132; 1074, p. 159). Panhandle & Santa Fe Railway. SW corner SE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 63, blk. 1, 2 miles northwest of Floydada. Water level, in feet below land-surface datum, 1947: Mar. 17, 109.50.

533 (\*840, p. 418; 845, p. 484; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 113; \*989, p. 128; 1026, p. 132). Martin heirs. Measurements discontinued.

562 (\*840, p. 418; 886, p. 686; 909, p. 128; 939, p. 99; 947, p. 113; 989, p. 128; 1026, p. 132; 1074, p. 159). H. W. Carver. No measurements made in 1947.

603 (\*840, p. 418; 845, p. 485; 886, p. 686; 909, p. 129; 939, p. 99; 947, p. 113; \*989, p. 128; 1026, p. 132). Gladys Fox. Measurements discontinued.

#### Fort Bend County

7 (\*889-C, p. 253; \*909, p. 129; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 137; 1026, p. 132; 1074, p. 160). Owner's well 1. C. C. Cardiff. 4 miles southwest of Katy. Water levels, in feet below land-surface datum, 1947: Mar. 28, 62.08; Apr. 14, 61.71.

11 (\*889-C, p. 253; \*909, p. 129; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 137; 1026, p. 132; 1074, p. 160). Owner's well 3. P. V. Cook. 1.75 miles southwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 60.43.

15 (\*889-C, p. 254; \*909, p. 130; 939, p. 99; 947, p. 113; \*989, p. 128; 1019, p. 137; 1026, p. 132; 1074, p. 160). Owner's well 1. P. V. Cook. 3.25 miles southwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 69.88.

17 (\*889-C, p. 254; \*989, p. 129; 1019, p. 137; 1026, p. 132; 1074, p. 160). Mrs. H. L. Gordon. 5 miles south of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 55.28.

20 (\*889-C, p. 254; \*909, p. 130; 939, p. 100; 947, p. 114; \*989, p. 129; 1019, p. 137; 1026, p. 132; 1074, p. 160). L. Pauli. 5.75 miles southeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 39.18.

21 (\*889-C, p. 254; \*909, p. 130; 939, p. 100; 947, p. 114; \*989, p. 129; 1019, p. 137; 1026, p. 132; 1074, p. 160). L. Pauli. 6 miles south of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 44.87.

26 (\*889-C, p. 254; \*909, p. 130; 939, p. 100; 947, p. 114; \*989, p. 129; 1019, p. 137; 1026, p. 132; 1074, p. 160). Owner's well 1. C. Pillot. 10 miles southeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 31.23.

29 (\*889-C, p. 255; \*989, p. 129; 1019, p. 137; 1026, p. 132; 1074, p. 160). C. Pillot. No measurements made in 1947.

30 (\*889-C, p. 255; \*989, p. 129; 1019, p. 137; 1026, p. 133; 1074, p. 160). Owner's well 2. B. Ray Woods. 6.5 miles southwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 64.43.

33 (\*889-C, p. 255; \*909, p. 130; 939, p. 100; 947, p. 114; \*989, p. 129; 1019, p. 137; 1026, p. 133; 1074, p. 160). Earl McMillian. 3.5 miles southwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 65.16.

75 (\*889-C, p. 257; \*909, p. 131; 939, p. 100; 947, p. 114; \*989, p. 129; 1019, p. 137; 1026, p. 133; 1074, p. 160). Gulf Pipe Line Co. 10 miles southeast of Sugarland. Water levels, in feet below land-surface datum, 1947: Feb. 3, 77.00; Sept. 15, 84.61; Dec. 15, 84.85.

76 (\*889-C, p. 257; \*909, p. 131; 939, p. 100; 947, p. 114; \*989, p. 130; 1019, p. 137; 1026, p. 133; 1074, p. 160). Owner unknown. About 0.5 mile west of Blue Ridge State Prison. Water levels, in feet below land-surface datum, 1947: Feb. 3, 43.43; Mar. 11, 43.35. Measurements discontinued after Mar. 11.

77 (\*1074, p. 160). Ansel & Brinkman. 2 miles north of Blue Ridge State Prison. Water levels, in feet below land-surface datum, 1947: Feb. 3, 60.82; Mar. 11, 60.88; Dec. 15, 68.33.

#### Gaines County

(No measurements made in 1947.)

#### Galveston County

16 (\*886, p. 686; 909, p. 133; 939, p. 101; \*989, p. 130; 1019, p. 138; 1026, p. 133). Cecil Brown. Water levels, in feet below land-surface datum, 1947: July 7, 94.7(?); Nov. 4, 97.4(?).

28 (\*777, p. 204; 886, p. 688; 909, p. 133; 939, p. 101; 947, p. 114; \*989, p. 130; 1019, p. 138; 1026, p. 133; 1074, p. 161). Galveston, Houston & Henderson Railroad. Water levels, in feet below land-surface datum, 1947: July 9, 85.77; Nov. 4, 87.71.

42 (\*886, p. 688; 909, p. 133; 939, p. 101; 947, p. 114; \*989, p. 130; 1019, p. 138; 1026, p. 133; 1074, p. 161). J. Freund. In Kemah. Water levels, in feet below land-surface datum, 1947: July 9, 65.20; Nov. 4, 66.18.

112 (\*777, p. 204; 840, p. 420; 845, p. 488; 886, p. 688; 909, p. 133; 939, p. 101; 947, p. 114; \*989, p. 130; 1019, p. 138; 1026, p. 133). Galveston Houston & Henderson Railroad. Water levels, in feet below land-surface datum, 1947: July 9, 87.69; Nov. 5, 90.90.

115 (\*777, p. 204; 840, p. 420; 845, p. 488; 886, p. 688; 909, p. 133; 939, p. 101; 947, p. 114; \*989, p. 130; 1019, p. 138; 1026, p. 133; 1074, p. 161). J. W. Palmer. 6 miles northeast of Alta Loma. Water levels, in feet below land-surface datum, 1947: June 13, 67.77; Nov. 5, 69.63.

244 (\*886, p. 689; 909, p. 134; 939, p. 101; 947, p. 115; \*989, p. 130; 1019, p. 138; 1026, p. 133; 1074, p. 161). Stone Oil Co. In Texas City. Water levels, in feet below land-surface datum, 1947: June 13, 136.37; July 10, 133.98; Nov. 7, 131.11.

295 (\*886, p. 689; 909, p. 134; 939, p. 101; \*989, p. 131; 1019, p. 138; 1026, p. 133; 1074, p. 161). Atchison, Topeka & Santa Fe Railway Co. In Hitchcock. Water level, in feet below land-surface datum, 1947: July 8, 88.56.

381 (\*886, p. 689; 909, p. 134; 939, p. 101; 947, p. 115; \*989, p. 131; 1019, p. 138; 1026, p. 133; 1074, p. 161). Stewart Production Co. No measurements made in 1947.

688 (\*939, p. 101; 947, p. 115; \*989, p. 131; 1019, p. 138; 1026, p. 134; 1074, p. 161). City of Galveston test well 1. In Alta Loma. Water levels, in feet below land-surface datum, 1947: July 11, 111.76; Nov. 10, 105.41.

689 (\*939, p. 101; 947, p. 115; \*989, p. 131; 1019, p. 138-9; 1026, p. 134; 1074, p. 161). City of Galveston test well 2. 2.5 miles north-east of Alta Loma.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6 a	100.55	Nov. 23	105.5	Dec. 6	105.5	Dec. 19	105.6
May 28 a	100.97	24	105.5	7	105.5	20	105.6
Nov. 12	105.5	25	105.5	8	105.5	21	105.6
13	105.6	26	105.5	9	105.5	22	105.6
14	105.5	27	105.6	10	105.5	23	105.6
15	105.5	28	105.6	11	105.5	24	105.7
16	105.5	29	105.6	12	105.5	25	105.7
17	105.5	30	105.6	13	105.5	26	105.8
18	105.5	Dec. 1	105.6	14	105.4	27	105.8
19	105.5	2	105.6	15	105.4	28	105.7
20	105.5	3	105.5	16	105.5	29	105.7
21	105.5	4	105.5	17	105.5	30	105.7
22	105.5	5	105.5	18	105.5	31	105.7

a Tape measurement.

692 (\*939, p. 101; 947, p. 115; \*989, p. 131; 1019, p. 139; 1026, p. 134; 1074, p. 162). Carbide & Carbon Chemical Co. 3 miles southwest of Texas City. Water levels, in feet below land-surface datum, 1947: June 13, 104.49; July 10, 107.37; Nov. 5, 110.15.

#### Guadalupe County

316 (\*840, p. 422; 845, p. 489; 886, p. 690; 909, p. 135; 939, p. 102; 947, p. 115; \*989, p. 131; 1019, p. 139; 1026, p. 134; 1074, p. 162). Alvin Fresinhahn. 400 feet north of U. S. Highway 81, 0.1 mile east of Guadalupe-Bexar County line. Water levels, in feet below land-surface datum, 1947: July 5, 110.82; Nov. 8, 113.25.

#### Hale County

11 (\*840, p. 422; 845, p. 490; 886, p. 690; 909, p. 136; 939, p. 102; 947, p. 115; \*989, p. 131; 1019, p. 139; 1026, p. 134). S. C. Hutchinson. Measurements discontinued.



15 (\*939, p. 102; 947, p. 115; \*989, p. 131; 1019, p. 139; 1026, p. 134; 1074, p. 163). S. C. Hutchinson. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, blk. S1, 15 miles northwest of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 12, 62.92.

16a (\*947, p. 115; \*989, p. 131; 1019, p. 139; 1026, p. 134). L. W. Guthrie. Measurements discontinued.

17a (\*947, p. 116; \*989, p. 131; 1019, p. 139; 1026, p. 134; 1074, p. 163). L. W. Guthrie. No measurements made in 1947.

36 (\*840, p. 423; 845, p. 490; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 131; 1019, p. 139; 1026, p. 134). G. D. Lewellen. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 18, blk. 06, 12.5 miles northwest of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 81.60; Mar. 12, 81.34.

103 (\*840, p. 423; 845, p. 490; 886, p. 691; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 132; 1019, p. 139; 1026, p. 134; 1074, p. 163). Carl Meyer. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 8, blk. C4, 16 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 50.38; Mar. 10, 50.20.

105 (\*840, p. 423; 845, p. 490; 886, p. 691; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 134; 1074, p. 163). Texas Land & Development Co. No measurements made in 1947.

123 (\*840, p. 424; 845, p. 490; 886, p. 691; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 134; 1074, p. 163). J. Smith. Formerly owned by L. C. Wayland. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 24, blk. JK, 11 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 67.07; Mar. 12, 66.56.

124b (\*947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 135; 1074, p. 163). Lester James. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 4, blk. JK 4, 9.5 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 77.70; Mar. 21, 76.88.

125 (\*840, p. 424; 845, p. 490; 886, p. 691; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 132; 1026, p. 135; 1074, p. 163). E. E. Clark. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 1, blk. JK4, 10 miles northwest of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 12, 86.55.

202 (\*840, p. 424; 845, p. 491; 886, p. 691; 909, p. 136; 939, p. 102; 947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 135; 1074, p. 163). Texas Land & Development Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 20, blk. 03, 17 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 70.66; Mar. 13, 70.63.

206 (\*840, p. 424; 845, p. 491; 886, p. 691; 909, p. 136; 939, p. 103; 947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 135; 1074, p. 163). Texas Land & Development Co. Just east of Richard William Survey, 18 miles north of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 77.45.

208 (\*845, p. 491; 886, p. 691; 909, p. 136; 939, p. 103; 947, p. 116; \*989, p. 132; 1026, p. 135; 1074, p. 163). Texas Land & Development Co. SW $\frac{1}{4}$  J. P. Lattimore Survey, 17.5 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 74.52.

210 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 136; 939, p. 103; 947, p. 116; \*989, p. 132; 1019, p. 140; 1026, p. 135; 1074, p. 164). Dr. M. Howell. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$  D. R. McVicker survey, 18.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 73.00; Mar. 13, 72.58.

212 (\*845, p. 491; 886, p. 692; 909, p. 136; 939, p. 103; 947, p. 117; \*989, p. 132; 1019, p. 140; 1026, p. 135; 1074, p. 164). Ray Smith. Formerly owned by Texas Land & Development Co. West center of C. R. McVicker strip, west of sec. 55, blk. M14, 18 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 68.28.

220 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 132; 1019, p. 140; 1026, p. 135). Texas Land & Development Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, blk. JK3, 15.5 miles north of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 64.60.

223 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 133; 1019, p. 140; 1026, p. 135; 1074, p. 164). Texas Land & Development Co. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, blk. C3, 14.5 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 60.85; Mar. 13, 60.21.

232 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 137; 939, p. 103; \*989, p. 133; 1019, p. 140; 1026, p. 135; 1074, p. 164). Dick Carter. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 1, blk. JK3, 13.5 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 5, 56.78.

238 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 133; 1019, p. 140; 1026, p. 135; 1074, p. 164). Dr. McKinley Howell. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, blk. JK3, 13.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 55.57; Mar. 5, 55.40.

246 (\*840, p. 425; 845, p. 491; 886, p. 692; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 133; 1019, p. 140; 1026, p. 135; 1074, p. 164). J. O. Sherman. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, blk. JK 2, 12 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 16, 62.00; Mar. 5, 62.36.

255 (\*840, p. 426; 845, p. 492; 886, p. 692; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 133; 1019, p. 141; 1026, p. 135; 1074, p. 164). G. H. Slaton. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 15, blk. JK2, 10 miles north of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 21, 26.92.

259 (\*840, p. 426; 845, p. 492; 886, p. 693; 909, p. 137; 939, p. 103; 947, p. 117; \*989, p. 133; 1019, p. 141; 1026, p. 136; 1074, p. 164). C. J. Ebeling. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, blk. JK2, 9 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 21.34; Mar. 21, 21.93.

305 (\*845, p. 493; 886, p. 693; 909, p. 138; 939, p. 104; 947, p. 117; \*989, p. 133; 1019, p. 141; 1026, p. 136; 1074, p. 164). T. H. Ringwald. Formerly owned by Texas Land & Development Co. On strip land, 0.55 mile east of southwest corner of sec. 54, blk. M14, 18.5 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 76.38.

307 (\*845, p. 493; 886, p. 693; 909, p. 138; 939, p. 104; 947, p. 117; \*989, p. 133; 1019, p. 141; 1026, p. 136; 1074, p. 164). Texas Land & Development Co. On strip land, 0.3 mile east of SW. corner sec. 53, blk. M14, 19 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 70.10; Mar. 13, 69.92.

314a (\*947, p. 117; \*989, p. 133; 1026, p. 136; 1074, p. 164). Willard White. Measurements discontinued.

316 (\*840, p. 427; 845, p. 493; 886, p. 693; 909, p. 138; 939, p. 104; 947, p. 117; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). Homer Rook. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$ S. D. Lemaster survey, 17.5 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 13, 57.37.

317 (\*840, p. 427; 845, p. 493; 886, p. 693; 909, p. 138; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). Harry Duncan. Formerly owned by Texas Land & Development Co. NE $\frac{1}{4}$ J. F. Owens survey, 18.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 57.50; Mar. 13, 57.92.

330 (\*840, p. 427; 845, p. 493; 886, p. 693; 909, p. 138; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). E. H. Cox. Formerly owned by George White. NE $\frac{1}{4}$  J. M. Martin survey, 16.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 52.17; Mar. 13, 53.30.

338 (\*840, p. 427; 845, p. 494; 886, p. 694; 909, p. 138; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). Dr. J. H. Stewart. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 110, blk. D2, 20 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 52.51; Mar. 19, 53.09.

357 (\*840, p. 428; 845, p. 494; 886, p. 694; 909, p. 138; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). G. D. Lewellen. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 8, blk. D6, 14.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 16, 45.90; Mar. 13, 45.82.

370 (\*840, p. 428; 845, p. 494; 886, p. 694; 909, p. 138; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). D. A. Reading. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 5, blk. D4, 14.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 17, 52.10; Mar. 13, 51.54.

402 (\*840, p. 428; 845, p. 494; 886, p. 694; 909, p. 139; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). N. R. Johnson. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 40, blk. JK2, 11 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 5, 30.37.

422 (\*840, p. 429; 845, p. 405; 886, p. 694; 909, p. 139; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136). Mrs. J. B. Long. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, blk. D5, 16 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 19, 47.70.

427 (\*840, p. 429; 845, p. 495; 886, p. 694; 909, p. 139; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 136; 1074, p. 165). C. M. Smith. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 17, blk. D5, 17.5 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 16, 55.44; Mar. 19, 55.25.

428 (\*840, p. 429; 845, p. 495; 886, p. 694; 909, p. 139; 939, p. 104; 947, p. 118; \*989, p. 134; 1019, p. 141; 1026, p. 137; 1074, p. 165). C. M. Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, blk. D5, 17 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 16, 55.35; Mar. 19, 55.07.

433a (\*845, p. 495; 886, p. 695; 909, p. 139; 939, p. 105; 947, p. 118; \*989, p. 134; 1019, p. 142; 1026, p. 137; 1074, p. 165). Lizzie B. Morris. SW. corner of west 186 acres in sec. 37, blk. D6, 15 miles east of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 11, 26.20.

434 (\*845, p. 495; 886, p. 695; 909, p. 139; 939, p. 105; 947, p. 118; \*989, p. 134; 1019, p. 142; 1026, p. 137; 1074, p. 165). Texas Land & Development Co. Measurements discontinued.

435 (\*845, p. 495; 886, p. 695; 909, p. 139; 939, p. 105; 947, p. 118; \*989, p. 135; 1019, p. 142; 1026, p. 137). H. O. Thompson. Formerly owned by Texas Land & Development Co. SW. corner NE $\frac{1}{4}$  sec. 35, blk. D6, 14 miles east of Hale Center. Water levels, in feet below land-surface datum: Mar. 1, 1946, 55.04; Mar. 14, 1947, 58.07.

436 (\*840, p. 429; 845, p. 495; 886, p. 695; 909, p. 139; 939, p. 105; 947, p. 118; \*989, p. 135; 1019, p. 142; 1026, p. 137; 1074, p. 165). I. B. Rankin. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, blk. D6, 13.5 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 63.20; Mar. 11, 62.53.

449 (#840, p. 430; 845, p. 495; 886, p. 695; 909, p. 139; 939, p. 105; 947, p. 119; #989, p. 135; 1019, p. 142; 1026, p. 137; 1074, p. 166). G. A. Benefield. Formerly owned by W. S. Messick. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, blk. D7, 8 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 64.63; Mar. 14, 64.58.

454 (#840, p. 430; 845, p. 496; 886, p. 695; 909, p. 139; 939, p. 105; #989, p. 135; 1019, p. 142; 1026, p. 137; 1074, p. 166). B. F. Smith. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 21, blk. N., 16.5 miles east of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 11, 60.59.

462 (#840, p. 430; 845, p. 496; 886, p. 695; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1019, p. 142; 1026, p. 137; 1074, p. 166). R. E. Keniston. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, blk. N, 16 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 52.32; Mar. 11, 51.85.

463 (#840, p. 430; 845, p. 496; 886, p. 695; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1019, p. 142; 1026, p. 137; 1074, p. 166). R. E. Keniston. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 16, blk. N. 16 miles east of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 11, 45.49.

467 (#840, p. 430; 845, p. 496; 886, p. 695; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 137; 1074, p. 166). M. E. Courtney. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, blk. N, 13.5 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 40.70; Mar. 14, 39.95.

470 (#840, p. 431; 845, p. 496; 886, p. 695; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 137; 1074, p. 166). M. H. Neer. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 25, blk. D7, 11 miles east of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 14, 32.30.

477 (#840, p. 431; 845, p. 496; 886, p. 696; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 137; 1074, p. 166). C. J. Jagalky. Measurements discontinued.

508 (#840, p. 431; 845, p. 496; 886, p. 696; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 137; 1074, p. 166). J. D. Webb. Formerly owned by Mrs. J. H. Slaton. SW. corner sec. 8, blk. JK2, 7.5 miles north of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 53.65; Mar. 12, 53.58.

510 (#840, p. 431; 845, p. 496; 886, p. 696; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 137; 1074, p. 166). R. E. Walker. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 9, blk. JK2, 9 miles north of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 21, 43.10. Measurements discontinued after Mar. 21.

511 (#840, p. 431; 845, p. 497; 886, p. 696; 909, p. 140; 939, p. 105; 947, p. 119; #989, p. 135; 1026, p. 138; 1074, p. 166). Dr. J. Anderson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, blk. JK2, 10 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 27.37; Mar. 12, 28.12. Measurements discontinued after Mar. 12.

539 (#845, p. 497; 886, p. 696; 909, p. 140; 939, p. 106; 947, p. 119; #989, p. 136; 1026, p. 138; 1074, p. 166). Fred Bastetter. SE. corner SE $\frac{1}{4}$  sec. 29, blk. A. 3.25 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 62.79; Mar. 14, 61.96.

547 (#840, p. 432; 845, p. 497; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 119; #989, p. 136; 1026, p. 138; 1074, p. 166). O. C. McClain. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 40, blk. A1, 7 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 55.13; Mar. 14, 53.12.

552 (#840, p. 432; 845, p. 498; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 120; #989, p. 136; 1026, p. 138; 1074, p. 166). H. S. Dunaway. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 6, blk. A1, 4 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 61.77; Mar. 14, 61.53.

553 (\*840, p. 432; 845, p. 498; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 120; \*989, p. 136; 1026, p. 138; 1074, p. 166). B. Jacobs. Formerly owned by Texas Land & Development Co., NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, blk. A1, 4.5 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 57.57; Mar. 14, 57.34.

564 (\*840, p. 433; 845, p. 498; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 120; \*989, p. 136; 1026, p. 138; 1074, p. 167). T. F. Mounts. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, blk. A1, 2 miles northeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 14, 60.68.

567 (\*840, p. 433; 845, p. 498; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 120; \*989, p. 136; 1019, p. 143; 1026, p. 138; 1074, p. 167). J. B. Maxey. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 19, blk. A1, 1.25 miles northeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 56.00; Mar. 14, 55.76.

569 (\*840, p. 433; 845, p. 498; 886, p. 697; 909, p. 141; 939, p. 106; 947, p. 120; \*989, p. 136; 1019, p. 143; 1026, p. 138; 1074, p. 167). O. C. Sanders. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 3, blk. A1, 1 mile southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 59.05; Mar. 14, 58.43.

720b (\*845, p. 499; 886, p. 698; 939, p. 106; 947, p. 120; \*989, p. 137; 1026, p. 138; 1074, p. 167). P. R. Caraway. No measurements made in 1947.

816 (\*840, p. 434; 845, p. 499; 886, p. 698; 909, p. 142; 939, p. 107; 947, p. 120; \*989, p. 137; 1019, p. 143; 1026, p. 138; 1074, p. 167). A. M. Eason. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, blk. R, 9.5 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 55.80; Mar. 14, 55.78.

825 (\*840, p. 434; 845, p. 499; 886, p. 698; 909, p. 142; 939, p. 107; 947, p. 120; \*989, p. 137; 1019, p. 143; 1026, p. 138; 1074, p. 167). Mathilda Akesson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 18, blk. A4, 3.25 miles north of Hale Center. Water level, in feet below land-surface datum, 1947: Jan. 21, 68.38.

828 (\*886, p. 698; 909, p. 142; 939, p. 107; 947, p. 120; \*989, p. 137; 1019, p. 143; 1026, p. 138; 1074, p. 167). John Bowling. Formerly owned by G. W. Bigler. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, blk. A4, 5 miles south of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 76.04; Mar. 11, 75.32.

834 (\*845, p. 499; 886, p. 698; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 137; 1019, p. 143; 1026, p. 138; 1074, p. 167). R. E. Sikes. NE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 64, blk. A4, 8.5 miles south of Hale Center. Water level, in feet below land-surface datum, 1947: Jan. 21, 79.84. Measurements discontinued after Jan. 21.

837 (\*845, p. 500; 886, p. 698; 909, p. 142; 939, p. 107; 947, p. 131; \*989, p. 137; 1019, p. 144; 1026, p. 139; 1074, p. 167). F. L. Hunsickar. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 54, blk. A4, 8 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 62.63; Mar. 14, 62.58.

840 (\*845, p. 500; 886, p. 698; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 137; 1026, p. 139; 1074, p. 167). Debb McLaughlin. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 12, blk. R, 12 miles southeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 14, 61.24.

852 (\*845, p. 500; 886, p. 699; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 137; 1019, p. 144; 1026, p. 139; 1074, p. 167). Abernathy Cemetery. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 2, blk. X, 15 miles south of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 21, 117.30; Mar. 11, 117.23.

859 (\*886, p. 600; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 137; 1019, p. 144; 1026, p. 139; 1074, p. 167). L. Ragland. NW $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 22, blk. CL, 15.5 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 78.13; Mar. 11, 77.96.

906 (\*840, p. 434; 845, p. 500; 886, p. 699; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 137; 1019, p. 144; 1026, p. 139; 1074, p. 167). Floyd Reagan. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 59, blk. R, 14 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 42.35; Mar. 11, 41.98.

923 (\*840, p. 434; 845, p. 500; 886, p. 699; 909, p. 142; 939, p. 197; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). D. C. Bayley. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, blk. R, 9.5 miles east of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 50.83; Mar. 14, 50.76.

936 (\*840, p. 435; 845, p. 500; 886, p. 699; 909, p. 142; 939, p. 107; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). B. E. Porter. NW $\frac{1}{4}$ NW $\frac{1}{4}$  C. K. Andrews survey, east of sec. 38, blk. R, 14 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 50.77; Mar. 11, 50.43.

946 (\*886, p. 699; 909, p. 143; 939, p. 107; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). B. E. Porter. SE $\frac{1}{4}$ SE $\frac{1}{4}$  C. K. Andrews survey, east of sec. 38, blk. R, 14.5 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 63.60; Mar. 11, 63.45.

956 (\*845, p. 500; 886, p. 699; 909, p. 143; 939, p. 107; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). J. W. Heard. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 7, blk. R, 11.5 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 67.00; Mar. 14, 66.53.

958 (\*840, p. 435; 845, p. 500; 886, p. 699; 909, p. 143; 939, p. 107; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). Luther Bain. Formerly owned by W. C. Sewell. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, blk. R, 12 miles southeast of Hale Center. Water level, in feet below land-surface datum, 1947: Mar. 14, 58.55.

971 (\*886, p. 699; 909, p. 143; 939, p. 108; 947, p. 121; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). L. S. Claiborne. NW corner NW $\frac{1}{4}$  sec. 15, blk. CL, 17.5 miles southeast of Hale Center. Water levels, in feet below land-surface datum, 1947: Jan. 20, 61.76; Mar. 11, 61.63.

#### Harris County

6a (\*777, p. 206; 840, p. 437; 886, p. 700; 909, p. 144; 939, p. 108; 947, p. 122; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). C. H. Burton. At east edge of Waller.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	7.20	June 6	8.54	Dec. 16	12.92
Mar. 13	8.60	Sept. 16	12.72		

11 (\*777, p. 206; 840, p. 437; 845, p. 501; 886, p. 700; \*889-C, p. 175; 909, p. 14; 947, p. 122; \*989, p. 138; 1019, p. 144; 1026, p. 139; 1074, p. 168). J. A. Hafner. 2.25 miles southeast of Waller. Water levels, in feet below land-surface datum, 1947: Jan. 30, 42.93; Mar. 13, 42.18; Dec. 16, 43.88.

14 (\*886, p. 701; \*889-C, p. 175; 909, p. 144; 939, p. 108; 947, p. 122; \*989, p. 139; 1019, p. 144; 1026, p. 140; 1074, p. 168). J. A. Hafner. 1.75 miles east of Waller.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	55.88	June 6	62.99	Dec. 16	60.24
Mar. 13	54.94	Sept. 16	71.20		

31 (\*777, p. 206; 840, p. 437; 845, p. 501; 886, p. 701; \*889-C, p. 175; 909, p. 144; 939, p. 108; 947, p. 122; \*989, p. 138; 1019, p. 145; 1026, p. 140; 1074, p. 168). R. L. Burton. 4 miles southeast of Waller.

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## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	45.28	June 6	65.59	Dec. 16	50.47
Mar. 13	42.22	Sept. 16	73.50		

33 (\*886, p. 701; \*889-C, p. 175; 909, p. 144; 939, p. 109; 947, p. 122; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 169). W. C. Neeley. In Hockley.

## Water level, in feet below land-surface datum, 1947

Jan. 30	13.67	June 6	26.01	Dec. 16	29.02
Mar. 13	23.53	Sept. 16	37.30		

35 (\*777, p. 207; 840, p. 437; 845, p. 501; 886, p. 701; \*889-C, p. 175; 909, p. 144; 939, p. 109; 947, p. 122; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 169). Dr. A. N. Byd. 6.25 miles southeast of Waller.

## Water level, in feet below land-surface datum, 1947

Jan. 30	10.50	June 6	15.46	Dec. 15	31.68
Mar. 13	13.46	Sept. 16	32.71		

40 (\*889-C, p. 175; \*909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 169). Ira Southard. Near Hockley. Water level, in feet below land-surface datum, 1947: Mar. 26, 42.68.

69 (\*1074, p. 169). W. F. Klenk. 2.5 miles west of Spring.

## Water level, in feet below land-surface datum, 1947

Jan. 31	10.18	June 4	16.91	Dec. 18	23.94
Mar. 17	14.15	Sept. 18	21.49		

70 (\*1074, p. 169). E. W. Klenk. 2.5 miles west of Spring.

## Water level, in feet below land-surface datum, 1947

Jan. 31	11.57	June 4	15.62	Dec. 18	23.10
Mar. 17	13.61	Sept. 18	20.14		

95 (\*777, p. 207; 840, p. 437; 886, p. 701; \*889-C, p. 178; 909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 169). H. C. Middlestead. 1.75 miles southeast of Spring.

## Water level, in feet below land-surface datum, 1947

Jan. 31	4.76	June 4	13.41	Dec. 18	20.95
Mar. 17	9.68	Sept. 18	20.14		

97 (\*777, p. 207; 840, p. 437; 845, p. 502; 886, p. 701; \*889-C, p. 178; 947, p. 123; \*989, p. 139; 1074, p. 169). H. C. Middlestead. 1.2 miles northwest of Westfield.

## Water level, in feet below land-surface datum, 1947

Jan. 31	2.25	June 4	5.34	Dec. 18	10.66
Mar. 17	2.39	Sept. 18	9.49		

98 (\*889-C, p. 178; \*1074, p. 170). John Jones. 4.5 miles west of Westfield.

## Water level, in feet below land-surface datum, 1947

Jan. 31	22.03	June 4	23.17	Dec. 18	26.95
Mar. 17	22.40	Sept. 18	26.36		

100 (\*1074, p. 170). D. D. Mintz. 4.3 miles west of Westfield.

## Water level, in feet below land-surface datum, 1947

Jan. 31	29.74	June 4	29.39	Dec. 18	33.25
Mar. 17	29.49	Sept. 18	31.58		

104.103 (\*886, p. 102; \*889-C, p. 178; 909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 170). George Glameyer. 4.5 miles south of Spring.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	8.12	June 4	11.61	Dec. 18	18.07
Mar. 17	9.39	Sept. 18	17.06		

107 (\*1074, p. 170). H. M. Harrel Oil Co. 6.5 miles southwest of Westfield. Water levels, in feet below land-surface datum, 1947: Jan. 31, 45.19; Mar. 17, 44.87; June 4, 45.61. Measurements discontinued after June 4, well destroyed.

108 (\*1074, p. 170). R. L. Glazner. 1.75 miles west of Westfield.

Water level, in feet below land-surface datum, 1947

Jan. 31	32.52	June 4	33.99	Dec. 18	38.53
Mar. 17	32.82	Sept. 18	37.38		

109 (\*1074, p. 171). H. M. Harrel Oil Co. 2.4 miles southwest of Westfield. Water levels, in feet below land-surface datum, 1947: Jan. 29, 38.06; Mar. 17, 38.28; June 4, 39.46. Measurements discontinued after June 4, well destroyed.

134 (\*886, p. 702; \*889-C, p. 178; 909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 171). Owner's well 1. Ira Southard. 9 miles northwest of Cypress. Water level, in feet below land-surface datum, 1947: Mar. 26, 53.52.

136 (\*886, p. 702; \*889-C, p. 179; 909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 145; 1026, p. 140; 1074, p. 171). Owner's well 1. J. Freeman. 9 miles southwest of Cypress. Water level, in feet below land-surface datum, 1947: Mar. 26, 54.47.

139 (\*889-C, p. 179; \*1019, p. 145; 1026, p. 140; 1074, p. 171). Owner's well 1. Oscar Kemp. 7.5 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 49.14.

140 (\*886, p. 702; \*889-C, p. 179; 909, p. 145; 939, p. 109; 947, p. 123; \*989, p. 139; 1019, p. 146; 1026, p. 140; 1074, p. 171). Owner's well 2. Oscar Kemp. 7.5 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 48.38.

157 (\*889-C, p. 180; \*989, p. 139; 1074, p. 171). H. J. Longenbaugh. No measurements made in 1947.

166 (\*777, p. 207; 840, p. 437; 886, p. 702; \*889-C, p. 181; 909, p. 145; 947, p. 123; \*989, p. 140; 1019, p. 146; 1026, p. 140; 1074, p. 171). E. C. Smith. 1.75 miles northwest of Cypress. Water level, in feet below land-surface datum, 1947: Jan. 30, 1.67. Measurements discontinued after Jan. 30; well destroyed.

167 (\*777, p. 208; 840, p. 437; 845, p. 202; 886, p. 702; \*889-C, p. 181; 909, p. 146; 947, p. 123-4; \*989, p. 140; 1019, p. 146; 1026, p. 140; 1074, p. 171). E. C. Smith. 1.75 miles northwest of Cypress. Water levels, in feet below land-surface datum, 1947: Jan. 30, 8.72; Mar. 13, 9.80; June 6, 12.07; Sept. 16, 21.48.

169a.160 (\*886, p. 703; \*889-C, p. 181; 909, p. 146; 939, p. 109; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 171). Ben Pugh. 2.75 miles northwest of Cypress. Water level, in feet below land-surface datum, 1947: Mar. 26, 11.41.

171 (\*777, p. 208; 840, p. 437; 845, p. 602; 886, p. 703; \*889-C, p. 181; 909, p. 146; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 171). E. H. Juergen. In Cypress.



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## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	8.02	June 6	7.77	Dec. 16	10.22
Mar. 13	8.10	Sept. 16	9.12		

178 (\*777, p. 208; 840, p. 437; 886, p. 709; \*889-C, p. 181; 909, p. 146; 939, p. 110; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 172). K. P. Black. 5 miles southeast of Cypress.

## Water level, in feet below land-surface datum, 1947

Jan. 30	1.55	June 6	4.08	Dec. 16	4.39
Mar. 13	1.31	Sept. 16	9.27		

182 (\*886, p. 703; \*889-C, p. 181; 909, p. 146; 939, p. 110; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 172). Joel Schmidt. 4.5 miles south of Cypress. Water level, in feet below land-surface datum, 1947: Mar. 26, 30.00.

186 (886, p. 703; \*889-C, p. 181; 909, p. 146; 939, p. 110; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 172). Owner's well 3. T. B. Tucker. 6 miles southwest of Cypress. Water level, in feet below land-surface datum, 1947: Mar. 26, 29.34.

205 (\*777, p. 209; 840, p. 437; 845, p. 502; 886, p. 703; \*889-C, p. 182; 909, p. 146; 939, p. 110; 947, p. 124; \*989, p. 140; 1019, p. 146; 1026, p. 141; 1074, p. 172). Humble Pipe Line Co. well 2. At Satsuma.

## Water level, in feet below land-surface datum, 1947

Jan. 30	42.35	June 6	41.83	Dec. 16	50.04
Mar. 13	41.90	Sept. 16	48.40		

206 (\*777, p. 209; 840, p. 438; 845, p. 502; 886, p. 703; \*889-C, p. 182; 909, p. 146; 939, p. 110; 947, p. 124; \*989, p. 141; 1019, p. 146; 1026, p. 141; 1074, p. 172). R. B. Tucker. At Satsuma. Water levels, in feet below land-surface datum, 1947: Jan. 30, 30.35; Mar. 13, 29.59; June 6, 34.29; Dec. 16, 38.01.

210 (\*777, p. 209; 840, p. 438; 886, p. 703; \*889-C, p. 182; 909, p. 147; 939, p. 110; 947, p. 124; \*989, p. 141; 1019, p. 146; 1026, p. 141; 1074, p. 172). M. Milton. 7.25 miles southeast of Cypress. Water levels, in feet below land-surface datum, 1947: Jan. 30, 19.22; June 6, 22.86.

211 (\*1074, p. 172). Amerada-Stanolind. 4 miles northwest of Fairbanks.

## Water level, in feet below land-surface datum, 1947

Jan. 30	40.43	June 6	44.21	Dec. 16	47.56
Mar. 13	39.91	Sept. 16	53.03		

221 (\*886, p. 703; \*889-C, p. 183; 909, p. 147; 939, p. 110; 947, p. 124; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 172). S. Terpstra. 10.75 miles east of Cypress. Water levels, in feet below land-surface datum, 1947: Jan. 31, 41.80; June 6, 44.69.

225 (\*886, p. 704; \*889-C, p. 183; 909, p. 147; 939, p. 110; 947, p. 125; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 172). Trinity & Brazos Valley Railway Co. 11.5 miles southeast of Cypress. Water levels, in feet below land-surface datum, 1947: Jan. 31, 57.50; Mar. 19, 56.62; June 6, 60.57; Mar. 19, 56.62; June 6, 60.57; Sept. 18, 70.35.

226 (\*889-C, p. 183; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 172). W. A. Fraser. 3 miles east of Satsuma. Water level, in feet below land-surface datum, 1947: Jan. 30, 44.45.

229 (\*1074, p. 172). F. S. Clancy. 4 miles northeast of Satsuma. Water level, in feet below land-surface datum, 1947: Jan. 31, 45.44.

230 (\*1074, p. 173). Amerada-Stanolind. 2.3 miles north of Fairbanks. Water levels, in feet below land-surface datum, 1947: Jan. 30, 56.54; Mar. 13, 56.15; June 6, 58.52.

231 (\*1074, p. 173). Jack Frazier Drilling Co. About 100 yards south of Fairbanks-West Montgomery road and between North Houston-Rosslyn road and railroad.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	54.38	June 6	55.60	Dec. 16	62.73
Mar. 19	53.73	Sept. 18	61.67		

249 (\*1074, p. 173). United Gas Corporation. 4.5 miles west of Aldine. Water levels, in feet below land-surface datum, 1947: Jan. 31, 61.54; June 4, 64.75; Sept. 18, 53.65; Dec. 18, 47.37.

253 (\*1074, p. 173). Homer J. Moore. 3.5 miles west of Aldine. Water levels, in feet below land-surface datum, 1947: Jan. 31, 57.58; Dec. 18, 64.04.

255 (\*886, p. 704; \*889-C, p. 184; 909, p. 147; 939, p. 110; 947, p. 125; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 173). J. M. Blake. 2.5 miles northwest of Aldine. Water levels, in feet below land-surface datum, 1947: Jan. 29, 7.32; Mar. 17, 10.79; June 5, 11.23; Dec. 18, 14.90.

258 (\*1074, p. 173). F. M. Corzelius. 2.7 miles northwest of Aldine.

Water level, in feet below land-surface datum, 1947

Jan. 29	45.86	June 5	50.67	Dec. 18	50.64
Mar. 18	43.88	Sept. 17	54.30		

264 (\*777, p. 210; 840, p. 438; 845, p. 502; 886, p. 704; \*889-C, p. 185; 909, p. 147; 939, p. 110; 947, p. 125; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 173). H. Weary. 3 miles south of Aldine.

Water level, in feet below land-surface datum, 1947

Jan. 29	47.50	June 5	49.00	Dec. 18	53.20
Mar. 18	47.55	Sept. 17	53.23		

268 (\*889-C, p. 185; \*947, p. 125; \*989, p. 141; 1019, p. 147; 1026, p. 141; 1074, p. 173). City of Houston test well 10-A. In Westfield.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	47.06	June 4	48.35	Nov. 3	52.82	Dec. 29	51.95
Mar. 18	47.28	Sept. 17	51.50	27	52.24		

269(\*889-C, p. 185; \*1019, p. 147-8; 1026, p. 141; 1074, p. 174). City of Houston test well 7. In Westfield.

Water level, in feet with reference to land-surface datum, 1947

Jan. 29	+5.1	June 4	+2.74	Nov. 3	+0.64	Dec. 29	-0.16
Mar. 18	+4.4	Sept. 17	+1.29	27	-.62		

280 (\*889-C, p. 185; \*989, p. 141; 1019, p. 148; 1026, p. 142; 1074, p. 174). Pan-American Pipe Line Co. 9 miles southeast of Humble.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	60.91	May 30	61.18	Dec. 10	64.48
Mar. 10	61.09	Sept. 17	63.30		

286 (\*889-C, p. 185; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). Jack Frazier Drilling Co. 10 miles northeast of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	66.26	June 5	67.28	Dec. 10	69.49
Mar. 10	66.65	Sept. 17	69.46		

287 (\*889-C, p. 185; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). Jack Frazier Drilling Co. 10 miles northeast of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	86.11	June 5	87.59	Dec. 10	91.90
Mar. 10	86.81	Sept. 17	90.45		

290 (\*889-C, p. 186; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). J. C. Townes. 5 miles southeast of Humble. Water levels, in feet below land-surface datum, 1947: Mar. 12, 48.09; June 5, 48.58; Sept. 17, 50.03; Dec. 12, 50.48.

291 (\*889-C, p. 186; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). A. T. McDannald. 4.5 miles south of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 44.30; Mar. 18, 44.62; June 5, 45.23; Sept. 17, 46.63.

302 (\*886, p. 704; \*889-C, p. 167; 909, p. 147; 939, p. 111; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). McDannald Oil Co. 3 miles southeast of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 58.30; June 5, 59.28; Sept. 17, 61.43; Dec. 12, 63.09.

305 (\*1074, p. 174). A. T. McDannald. 4.5 miles south of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 5.54; Mar. 18, 6.02; June 5, 6.58; Sept. 17, 9.26.

306 (\*1074, p. 174). Bender Estate. 4 miles southeast of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 54.40; Mar. 18, 55.46; June 5, 55.66; Dec. 12, 59.45.

331 (\*889-C, p. 188; \*1019, p. 148; 1026, p. 142; 1074, p. 174). Known as "Black Cat" oil test. 8.25 miles east of Humble. Water level, in feet below land-surface datum, 1947: June 5, 5.96.

352 (\*886, p. 704; \*889-C, p. 189; 909, p. 147; 939, p. 111; 947, p. 125; \*989, p. 142; 1019, p. 148; 1026, p. 142; 1074, p. 174). A. E. Thompson. 5.75 miles north of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 58.07.

357 (\*886, p. 705; \*889-C, p. 189; 909, p. 147; 939, p. 111; 947, p. 125; \*989, p. 142; 1019, p. 149; 1026, p. 142; 1074, p. 175). Owner's well 2. P. V. Cook. 4.5 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 55.77.

362 (\*886, p. 705; \*889-C, p. 189; 909, p. 147; 939, p. 111; 947, p. 125; \*989, p. 142; 1019, p. 149; 1026, p. 142; 1074, p. 175). Owner's well 2. E. G. Stockdick. 4 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 47.02.

367 (\*886, p. 705; \*889-C, p. 190; 909, p. 148; 939, p. 111; 947, p. 125; \*989, p. 142; 1019, p. 149; 1026, p. 142; 1074, p. 175). W. C. Hickman. 3.25 miles east of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 47.46.

371 (\*889-C, p. 190; 909, p. 148; 939, p. 111; 947, p. 125; \*989, p. 142; 1019, p. 149; 1026, p. 142; 1074, p. 175). L. E. Morrison. 3.5 miles southeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 45.43.

380 (\*889-C, p. 191; \*989, p. 142; 1019, p. 149; 1026, p. 142; 1074, p. 175). W. H. Hegar. 8 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 26.87.

381 (\*886, p. 705; \*889-C, p. 191; 909, p. 148; 939, p. 111; 947, p. 125; \*989, p. 143; 1019, p. 149; 1026, p. 142; 1074, p. 175). W. H. Hegar. 7.5 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 30.73.

382 (\*886, p. 705; \*889-C, p. 191; 909, p. 148; 939, p. 111; 947, p. 125; \*989, p. 143; 1019, p. 149; 1026, p. 142; 1074, p. 175). W. C. Stockdick. 6 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 44.31.

384 (\*886, p. 705; \*889-C, p. 191; 909, p. 148; 939, p. 111; 947, p. 125; \*989, p. 143; 1019, p. 149; 1026, p. 143; 1074, p. 175). A. J. Jordens. 6 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 49.27.

385 (\*886, p. 705; \*889-C, p. 191; 909, p. 148; 939, p. 111; 947, p. 126; \*989, p. 143; 1019, p. 149; 1026, p. 143; 1074, p. 175). A. J. Jordens. 6 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 44.37.

399 (\*886, p. 706; 909, p. 148; 939, p. 111; 947, p. 126; \*989, p. 143; 1019, p. 149; 1026, p. 143; 1074, p. 175). Gertie Rice Farm. 9.5 miles northeast of Katy. Water level, in feet below land-surface datum, 1947: Mar. 26, 33.30.

420 (\*889-C, p. 193; \*1074, p. 175). E. A. Showers. 4 miles northeast of Alief.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 4	47.06	July 2	51.56	Dec. 19	55.83
Mar. 14	47.15	Sept. 15	56.18		

422 (\*1074, p. 175). Cities Service Oil Co. 3 miles northeast of Alief.

Water level, in feet below land-surface datum, 1947

Feb. 4	46.57	July 2	52.58	Dec. 19	55.70
Mar. 14	46.42	Sept. 15	57.69		

424 (\*1074, p. 175). Buffalo Oaks. 2.0 miles north of Alief. Water levels, in feet below land-surface datum, 1947: Feb. 4, 54.27; Mar. 14, 54.22; July 2, 61.53; Dec. 19, 64.29.

456 (\*889-C, p. 194; \*909, p. 148; 939, p. 111; 947, p. 126; \*989, p. 143; 1019, p. 149; 1026, p. 143; 1074, p. 176). Frank Willberg. On U. S. Highway 290, 0.5 mile southeast of Fairbanks.

Water level, in feet below land-surface datum, 1947

Jan. 30	55.93	June 6	56.41	Dec. 16	63.93
Mar. 13	55.59	Sept. 16	63.12		

473 (\*889-C, p. 195; \*947, p. 136-7; \*989, p. 143; 1019, p. 149; 1026, p. 143; 1074, p. 176). H. W. Rasmussen. 8.5 miles west of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Feb. 4	62.48	July 2	67.73	Dec. 19	72.67
Mar. 14	62.93	Sept. 15	73.89		

480 (\*889-C, p. 195; \*989, p. 143; 1019, p. 150; 1026, p. 143; 1074, p. 176). John Pillot. 2 miles northeast of Clodine. Water level, in feet below land-surface datum, 1947: Mar. 28, 40.51.

489 (\*889-C, p. 196; \*947, p. 127; \*989, p. 143; 1019, p. 150; 1026, p. 143; 1074, p. 176). City of Houston test well 4a. 2 miles west of Alief.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 4	44.89	July 2	53.56	Dec. 19	53.88
Mar. 14	44.56	Sept. 15	59.05		

490 (\*889-C, p. 196; \*947, p. 127; \*989, p. 144; 1019, p. 150; 1026, p. 143; 1074, p. 176). City of Houston test well 5. In Alief.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	81.80	July 2	84.12	Nov. 3	92.88	Dec. 29	92.17
Mar. 14	82.10	Sept. 15	89.97	28	92.83		

496 (\*889-C, p. 196; \*947, p. 127; \*989, p. 144; 1019, p. 150; 1026, p. 143; 1074, p. 176). Diamond "I" Ranch. 13 miles southwest of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 46.92; June 3, 51.08.

498 (\*889-C, p. 197; \*947, p. 127; \*989, p. 144; 1019, p. 150; 1026, p. 143; 1074, p. 176). Brae Burn Country Club. 11 miles southwest of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 65.34; Mar. 11, 65.77; Sept. 15, 77.92; Dec. 15, 75.84.

504 (\*1074, p. 176). Dr. E. W. K. Andrau. 1.1 mile northeast of Alief. Water levels, in feet below land-surface datum, 1947: Feb. 4, 49.23; Mar. 14, 49.06; Sept. 15, 64.14; Dec. 19, 58.68.

512 (\*777, p. 210; 840, p. 438; 845, p. 502; 886, p. 706; \*889-C, p. 197; 909, p. 148; 939, p. 112; 947, p. 128; \*989, p. 144; 1019, p. 150; 1026, p. 143; 1074, p. 176). Joe Kowis. 8.5 miles northwest of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Jan. 30, 5.28; Mar. 13, 6.24; Dec. 16, 7.89.

519 (\*886, p. 706; \*889-C, p. 197; 909, p. 148; 939, p. 112; 947, p. 128; \*989, p. 144; 1019, p. 150; 1026, p. 143; 1074, p. 177). Felix Meyers. 6.75 miles northwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	6.51	June 6	17.17	Dec. 16	9.43
Mar. 13	11.36	Sept. 16	10.95		

538 (\*889-C, p. 198; \*989, p. 144; 1019, p. 150; 1026, p. 144; 1074, p. 177). The Bayou Club. 6 miles northwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	86.48	July 2	94.42	Dec. 8	95.92
Mar. 8	86.96	Sept. 18	99.70		

591 (\*889-C, p. 201; \*1019, p. 150; 1026, p. 144; 1074, p. 177). City of Houston well Heights 3. 4 miles northwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	155.90	June 3	157.09	Sept. 18	169.80
Mar. 8	154.07	Aug. 21	171.26	Dec. 8	164.23

602 (\*777, p. 211; 840, p. 438; 845, p. 502; 886, p. 706; \*889-C, p. 202; 909, p. 148; 939, p. 112; 947, p. 128; \*989, p. 144; 1019, p. 150; 1026, p. 144; 1074, p. 177). River Oaks Country Club well 1. 4 miles west of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Jan. 29, 116.12; Mar. 8, 115.11; July 3, 121.43; Dec. 8, 129.22.

604 (\*886, p. 706; \*889-C, p. 202; 909, p. 148; 939, p. 112; 947, p. 128; \*989, p. 144; 1019, p. 151; 1026, p. 144; 1074, p. 177). Horlock Ice Co. 2.2 miles northwest of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 96.32; Mar. 8, 97.28; Dec. 8, 98.18.

607 (\*889-C, p. 202; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 177). Henke & Pillot. 2 miles northwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	101.61	June 3	107.73	Dec. 8	108.00
Mar. 8	101.02	Sept. 18	113.82		

608 (\*886, p. 707; \*889-C, p. 202; 909, p. 149; 939, p. 112; 947, p. 128; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 177). Henke & Pillot. 2 miles northwest of Houston courthouse. Water level, in feet below land-surface datum, 1947: Feb. 3, 105.30. Measurements discontinued after Feb. 3.

609 (\*886, p. 707; \*889-C, p. 202; 909, p. 149; 939, p. 112; 947, p. 128; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 177). Henke & Pillot. 2 miles northwest of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 130.40; Mar. 8, 129.04. Measurements discontinued after Mar. 8.

619 (\*777, p. 212; 840, p. 438; 845, p. 503; 886, p. 707; \*889-C, p. 205; 909, p. 149; 939, p. 112; 947, p. 128; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 178). City of Houston. 1 mile west of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 31	132.20	June 3	135.58	Nov. 3	144.33	Dec. 29	137.53
Mar. 8	130.42	Sept. 18	146.62	28	144.03		

651a.649 (\*886, p. 708; \*889-C, p. 206; 909, p. 149; 939, p. 113; 947, p. 128-9; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 178). L. P. Mallett. 9 miles north of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	87.13	June 5	68.16	Dec. 12	94.08
Mar. 10	87.16	Sept. 17	93.98		

651b.232 (\*886, p. 708; \*889-C, p. 183; 909, p. 149; 939, p. 113; 947, p. 129; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 178). L. P. Mallett. 9 miles north of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	8.43	June 5	10.39	Dec. 12	14.94
Mar. 10	9.84	Sept. 17	17.24		

651d.650 (\*886, p. 708; \*889-C, p. 206; 909, p. 149; 939, p. 113; 947, p. 129; \*989, p. 145; 1019, p. 151; 1026, p. 144; 1074, p. 178). Joe Morales. 8 miles north of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	96.21	June 6	97.09	Dec. 12	102.44
Mar. 10	96.39	Sept. 17	102.00		

656 (\*777, p. 212; 840, p. 438; 845, p. 503; 886, p. 708; \*889-C, p. 206; 909, p. 150; 939, p. 113; 947, p. 129; \*989, p. 145; 1019, p. 152; 1026, p. 144; 1074, p. 178). Texas Creosoting Co. 4.5 miles north of Houston courthouse.

656--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	143.72	June 2	153.68	Dec. 8	149.70
Mar. 5	147.38	Sept. 18	152.20		

662 (\*886, p. 709; \*889-C, p. 207; 909, p. 150; 939, p. 113; 947, p. 129; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 178). South Texas Cotton Oil Co. well 2. 2.5 miles northeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 5, 142.45; June 2, 141.94. Measurements discontinued after June 2, well destroyed.

663 (\*886, p. 709; \*889-C, p. 207; 909, p. 150; 939, p. 113; 947, p. 129; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 178). South Texas Cotton Oil Co. well 1. 2.5 miles northeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 5, 91.00; June 2, 93.06; Dec. 8, 95.53.

664 (\*1074, p. 179). South Texas Cotton Oil Co. well 3. 2.5 miles northeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: June 2, 148.92; Dec. 8, 156.27.

666a.623 (\*886, p. 709; \*889-C, p. 203; 909, p. 150; 939, p. 113; 947, p. 129-30; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 179). Houston Foundry & Machine Co. At White and Weber Streets, Houston.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	116.56	June 3	119.52	Dec. 8	124.20
Mar. 8	114.65	Sept. 18	126.28		

711 (\*889-C, p. 209; \*947, p. 130; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 179). San Jacinto Hotel. At 820 Main Street, Houston. Water levels, in feet below land-surface datum, 1947: Jan. 30, 154.21; Mar. 6, 155.90; May 29, 164.72; Dec. 1, 166.58.

748 (\*889-C, p. 212; \*909, p. 151; 939, p. 114; 947, p. 130; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 179). Gulf Pipe Line Co. 5 miles northeast of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	134.91	June 2	135.59	Dec. 9	143.53
Mar. 4	134.93	Sept. 17	143.46		

751 (\*886, p. 710; \*889-C, p. 212; 909, p. 151; 939, p. 114; 947, p. 130; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 179). The Texas Pipeline Co. 5 miles northeast of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	141.92	June 2	142.66	Dec. 9	150.82
Mar. 4	141.97	Sept. 17	150.48		

757 (\*777, p. 213; 840, p. 439; 945, p. 503; \*889-C, p. 212; 909, p. 151; 939, p. 114; 947, p. 130; \*989, p. 146; 1019, p. 152; 1026, p. 145; 1074, p. 179). Layne-Bowler Co. 4 miles east of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	149.20	June 2	150.30	Dec. 10	159.46
Mar. 4	149.49	Sept. 17	156.92		

759 (\*777, p. 213; 840, p. 439; 845, p. 503; 886, p. 711; \*889-C, p. 212; 909, p. 151; 939, p. 114; 947, p. 130; \*989, p. 147; 1019, p. 152; 1026, p. 145; 1074, p. 179). Port City Compress & Warehouse Co. 4.75 miles east of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 4, 157.38; June 2, 158.39; Sept. 17, 165.65.

783 (\*777, p. 213; 840, p. 439; 845, p. 503; 886, p. 711; \*889-C, p. 215; 909, p. 151; 939, p. 114; 947, p. 131; \*989, p. 147; 1019, p. 152; 1026, p. 145; 1074, p. 180). John E. Green. No measurements made in 1947.

787 (\*886, p. 711; \*889-C, p. 215; 909, p. 151; 939, p. 114; 947, p. 131; \*989, p. 147; 1019, p. 153; 1026, p. 145; 1074, p. 180). American Service Co. No measurements made in 1947.

787a.779 (\*886, p. 711; \*889-C, p. 214; 909, p. 152; 939, p. 114; 947, p. 131; \*989, p. 147; 1019, p. 153; 1026, p. 145). American Service Co. Water levels, in feet below land-surface datum, 1947: Jan. 29, 112.12; Mar. 8, 107.04; July 3, 118.67; Sept. 18, 103.90.

790 (\*886, p. 712; \*889-C, p. 215; 909, p. 152; 939, p. 114; 947, p. 131; \*989, p. 147; 1019, p. 153; 1026, p. 145; 1074, p. 180). Southern United Ice Co. No measurements made in 1947.

798a.778 (\*886, p. 712; \*889-C, p. 216; 909, p. 152; 939, p. 115; 947, p. 131; \*989, p. 147; 1019, p. 152; 1026, p. 146; 1074, p. 180). H. C. Weiss. At South Main and Sunset Streets, Houston. Water levels, in feet below land-surface datum, 1947: Mar. 11, 96.69; Dec. 8, 102.65.

807a.840 (\*886, p. 713; 889-C, p. 216; 909, p. 152; 939, p. 115; 947, p. 131; \*989, p. 147; 1074, p. 180). City of Bellaire well 1.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	91.46	June 3	97.69	Dec. 8	104.85
Mar. 11	94.93	Sept. 18	105.32		

809 (\*886, p. 713; \*889-C, p. 216; 909, p. 152; 939, p. 115; 947, p. 131; \*989, p. 147; 1019, p. 153; 1026, p. 146; 1074, p. 180). Gem Electric & Ice Co. In Bellaire. Water level, in feet below land-surface datum, 1947: Jan. 29, 133.00. Measurements discontinued after Jan. 29.

812 (\*989, p. 147; 1019, p. 153; 1026, p. 146; 1074, p. 180). Harris County School for Girls. 7.75 miles southwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	76.07	July 2	81.95	Dec. 8	87.34
Mar. 11	76.26	Sept. 18	87.78		

853 (\*886, p. 713; \*889-C, p. 217; 909, p. 153; 939, p. 115; 947, p. 132; \*989, p. 148; 1019, p. 153; 1026, p. 146; 1074, p. 180). Houston Ice & Cold Storage Co. At 2715 McKinney Street, Houston.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	129.27	May 29	145.56	Dec. 1	147.85
Mar. 4	136.94	Sept. 16	151.46		

854 (\*886, p. 714; \*889-C, p. 218; 909, p. 153; 939, p. 115; 947, p. 132; \*989, p. 148; 1019, p. 153; 1026, p. 146; 1074, p. 180). Houston Ice & Cold Storage Co. At 2715 McKinney Street, Houston. Water levels, in feet below land-surface datum, 1947: Jan. 30, 143.10; Dec. 1, 154.97.

876 (\*886, p. 714; \*889-C, p. 220; 909, p. 153; 939, p. 115; 947, p. 132; \*989, p. 148; 1019, p. 153; 1026, p. 146; 1074, p. 181). Houston Country Club. 3.75 miles southeast of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	136.62	May 29	140.24	Dec. 1	146.56
Mar. 4	136.66	Sept. 16	147.32		

878 (\*886, p. 714; \*889-C, p. 220; 909, p. 153; 939, p. 115; 947, p. 132; \*989, p. 148; 1019, p. 154; 1026, p. 146; 1074, p. 181). Gulf Atlantic Warehouse Co. At Anderson Clayton turning basin, Houston. Water levels, in feet below land-surface datum, 1947: Mar. 4, 144.22; May 29, 145.35; Sept. 16, 152.20; Dec. 2, 153.01.

879 (\*889-C, p. 220; \*1026, p. 146; 1074, p. 181). City of Houston. Magnolia Park well 2. At 7300 Canal Street, Houston.



879--Continued.

## Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	153.61	May 29	155.70	Dec. 1	162.71
Mar. 4	153.28	Sept. 16	164.02		

881 (\*886, p. 715; \*889-C, p. 220; 909, p. 153; 939, p. 116; 947, p. 132; \*989, p. 148; 1019, p. 154; 1026, p. 146; 1074, p. 181). Terminal Compress & Warehouse Co. At 82d and Harrisburg Streets, Houston.

## Water level, in feet below land-surface datum, 1947

Jan. 30	153.45	May 29	158.82	Dec. 1	164.86
Mar. 4	154.64	Sept. 16	166.27		

883 (\*886, p. 715; \*889-C, p. 220; 909, p. 153; 939, p. 116; 947, p. 132; \*989, p. 148; 1019, p. 154; 1026, p. 147; 1074, p. 181). Tennessee Coal & Iron Railroad Co. well 1. U. S. Steel Co. 6.5 miles southeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 10, 187.34; June 2, 187.68; Sept. 17, 172.12; Dec. 9, 172.15.

898a.913 (\*886, p. 718; \*889-C, p. 222; 909, p. 154; 939, p. 116; 947, p. 133; \*989, p. 148; 1019, p. 154; 1026, p. 147; 1074, p. 181). Allen Estate. At Park Place and Popular Streets, Houston.

## Water level, in feet below land-surface datum, 1947

Jan. 20	144.15	May 29	145.30	Dec. 1	151.79
Mar. 5	143.28	Sept. 16	152.60		

905 (\*889-C, p. 221; \*909, p. 154; 1074, p. 181). City of Houston Prison Farm. 7.5 miles southeast of Houston courthouse. Unused since 1939. Water levels, in feet below land-surface datum, 1947: Feb. 3, 57.38; Mar. 11, 60.90; June 3, 63.39. Measurements discontinued after June 3.

909 (\*889-C, p. 222; \*947, p. 133; \*989, p. 148; 1019, p. 154; 1026, p. 147; 1074, p. 181). J. W. Madden. 9 miles southeast of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Feb. 3	53.57	June 3	55.14	Dec. 15	42.90
Mar. 11	52.61	Sept. 15	54.27		

933 (\*889-C, p. 223; \*947, p. 133; \*989, p. 149; 1019, p. 154; 1026, p. 147; 1074, p. 182). Champion Paper & Fibre Co. test well. 9 miles northeast of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Jan. 31	113.00	May 30	113.68	Dec. 10	119.84
Mar. 10	113.84	Sept. 17	119.91		

934 (\*889-C, p. 223; \*947, p. 133; \*989, p. 149; 1019, p. 154; 1026, p. 147; 1074, p. 182). Champion Paper & Fibre Co. 9 miles northeast of Houston courthouse.

## Water level, in feet below land-surface datum, 1947

Jan. 31	73.12	May 30	73.78	Dec. 10	76.27
Mar. 10	73.13	Sept. 17	75.12		

936 (\*889-C, p. 223; \*989, p. 149; 1019, p. 154-5; 1026, p. 147; 1074, p. 182). The Texas Co. well 2. At Camp Beatty, 9 miles northeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 10, 127.17; Sept. 17, 134.52.

939 (\*889-C, p. 223; \*989, p. 149; 1019, p. 154-5; 1026, p. 147; 1074, p. 182). San Jacinto Ordnance Depot construction well 2. 14 miles east of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 6, 130.02; May 30, 128.87; Dec. 10, 135.59.

940 (\*889-C, p. 224; \*989, p. 149; 1019, p. 155; 1026, p. 147; 1074, p. 182). San Jacinto Ordnance Depot construction well 1. 14.5 miles east of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 6, 125.12; May 30, 123.85; Dec. 10, 131.34.

943 (\*889-C, p. 224; \*989, p. 149; 1019, p. 155; 1026, p. 147; 1074, p. 182). Gulf Pipe Line Co. At Lynchburg pump station.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	93.40	May 30	94.04	Dec. 10	101.23
Mar. 6	93.66	Sept. 17	100.51		

947 (\*889-C, p. 224; \*989, p. 149; 1019, p. 155; 1026, p. 147; 1074, p. 182). Leon J. Vetrano. 11 miles northwest of Goose Creek. Water levels, in feet below land-surface datum, 1947: Jan. 31, 80.83; Mar. 10, 80.70; Dec. 10, 85.96.

1019 (\*886, p. 716; \*889-C, p. 230; 909, p. 154; 939, p. 116; 947, p. 134; \*989, p. 149; 1019, p. 155; 1026, p. 147; 1074, p. 182). Captain Chas. Crotty. At Morgans Point. Water levels, in feet below land-surface datum, 1947: Mar. 6, 94.84; May 30, 97.43

1101a, 1100 (\*886, p. 716; \*889-C, p. 230; 909, p. 154; 939, p. 116; 947, p. 134; \*989, p. 150; 1019, p. 155; 1026, p. 147; 1074, p. 182). M. M. Graves Estate. 8.5 miles west of Goose Creek.

Water level, in feet below land-surface datum, 1947

Jan. 22	135.27	May 30	134.58	Dec. 2	143.12
Mar. 6	137.75	Sept. 16	144.21		

1104 (\*889-C, p. 230; \*909, p. 154; 939, p. 116; 947, p. 134; \*989, p. 150; 1019, p. 155; 1026, p. 148; 1074, p. 183). City of La Porte well 1. At La Porte water plant.

Water level, in feet below land-surface datum, 1947

Jan. 22	114.90	May 30	117.08	Dec. 2	122.65
Mar. 6	114.28	Sept. 17	124.30		

1106 (\*1074, p. 183). West & Siabara. 4.5 miles west of La Porte. Water levels, in feet below land-surface datum, 1947: Mar. 5, 111.80; Dec. 1, 118.61.

1117 (\*889-C, p. 231; \*1019, p. 155; 1026, p. 148; 1074, p. 183). Humble Oil & Refining Co. 17 miles southeast of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Jan. 30	101.41	May 29	104.62	Dec. 1	108.60
Mar. 5	101.49	Sept. 16	111.93		

1121 (\*889-C, p. 231; \*989, p. 150; 1019, p. 155; 1026, p. 148; 1074, p. 183). W. H. Clark. On Spencer Highway, 17 miles southeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 5, 115.20; May 29, 126.21; Sept. 16, 128.02. Measurements discontinued after Sept. 16.

1152a, 1150 (\*886, p. 717; \*889-C, p. 235; 909, p. 154; 939, p. 116; 947, p. 134; \*989, p. 150; 1019, p. 156; 1026, p. 148; 1074, p. 183). City of Galena Park well 1. In Galena Park, at water works. Water levels, in feet below land-surface datum, 1947: Mar. 10, 186.42; Sept. 18, 192.48; Dec. 9, 198.33.

1161 (\*886, p. 717; \*889-C, p. 235; 909, p. 155; 939, p. 117; 947, p. 134; \*989, p. 150; 1019, p. 156; 1026, p. 148; 1074, p. 183). Sinclair Refining Co. well 6. 3 miles north of South Houston.

1161--Continued.

Highest daily water level, in feet below land-surface datum, 1947  
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	188.4	Feb. 5	190.7	June 4	190.0	July 8	187.7
2	188.4	6	189.3	5	189.8	9	187.4
3	188.4	7	189.0	6	189.6	10	187.3
4	188.9	8	189.2	7	189.5	11	187.3
5	189.3	9	189.0	8	189.5	12	187.2
6	189.8	10	188.6	9	189.5	13	187.2
7	190.1	11	188.6	10	189.5	14	187.2
8	190.1	12	189.1	11	189.3	15	186.8
9	190.4	13	189.3	12	189.3	16	186.4
10	190.4	14	189.4	13	189.9	17	186.3
11	190.5	15	189.4	14	190.3	18	186.3
12	190.5	16	189.4	15	191.5	19	185.7
13	190.5	17	189.5	16	191.6	20	185.5
14	190.8	18	189.5	17	192.5	21	185.0
15	190.9	19	189.4	18	192.1	22	185.3
16	191.0	20	189.5	19	191.6	23	185.4
17	190.8	21	189.5	20	191.0	24	186.6
18	191.0	22	189.4	21	190.6	25	187.0
19	190.9	23	189.5	22	190.4	26	186.5
20	191.1	24	189.7	23	189.9	27	186.0
21	191.4	25	189.8	24	189.7	28	185.8
22	191.1	26	189.7	25	189.5	29	185.6
23	190.9	27	189.6	26	189.1	30	185.2
24	190.7	28	189.4	27	189.0	31	185.1
25	190.7	Mar. 1	189.4	28	189.0	Dec. 22	200.0
26	190.9	2	189.7	29	188.9	23	200.1
27	190.9	3	189.7	30	188.8	24	200.0
28	190.9	4	189.9	July 1	188.5	25	199.6
29	190.8	5	190.0	2	188.4	26	197.7
30	190.8	6	190.2	3	188.3	27	198.4
31	191.1	May 30	190.5	4	188.0	28	199.4
Feb. 1	191.1	31	190.5	5	188.0	29	199.4
2	191.3	June 1	190.6	6	187.9	30	198.8
3	191.3	2	190.5	7	187.9	31	198.2
4	191.4	3	190.3				

1170 (\*886, p. 718; \*899-C, p. 237; 909, p. 155; \*989, p. 151; 1019, p. 156; 1026, p. 148; 1074, p. 184). Houston Lighting & Power Co. At Deepwater plant, 4.25 miles north of South Houston. Measurements by owner.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Sept. 16	190	Oct. 17	193	Dec. 16	202
Oct. 1	194	Nov. 1	194		

1181 (\*889-C, p. 237; \*1074, p. 184). Phillips Petroleum Co. well 1. 1.3 miles northeast of Pasadena at tank farm.

Water level, in feet below land-surface datum, 1947

Jan. 30	197.42	May 30	196.02	Dec. 2	211.89
Mar. 5	198.59	Sept. 17	199.80		

1182 (\*886, p. 719; \*889-C, p. 237; 909, p. 155; 939, p. 117; 947, p. 135; \*989, p. 151; 1019, p. 157; 1026, p. 149; 1074, p. 184). Port Terminal Railroad Co. At Pasadena, near southeast corner of Crown refinery.

Water level, in feet below land-surface datum, 1947

Jan. 30	206.20	May 30	203.19	Dec. 9	222.95
Mar. 5	206.48	Sept. 16	205.28		

1187 (\*886, p. 719; \*889-C, p. 238; 909, p. 156; 939, p. 117; 1019, p. 157; 1026, p. 149; 1074, p. 184). City of Pasadena well 1. South well of 3 at city hall in Pasadena. Water level, in feet below land-surface datum, 1947: Dec. 9, 212.73.

1204 (\*1074, p. 184). Harris County. At former reform school in South Houston. Water level, in feet below land-surface datum, 1947: Jan. 30, 150.94; Mar. 5, 150.41; May 29, 150.25; Sept. 16, 159.05.

1205 (\*889-C, p. 239; 909, p. 156; 939, p. 117; 947, p. 135; \*989, p. 151; 1019, p. 157; 1026, p. 149; 1074, p. 184). City of South Houston well 1. South well of 5 at city water works in South Houston.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	117.24	May 29	116.79	Dec. 1	118.47
Mar. 5	117.21	Sept. 16	118.21		

1209 (\*777, p. 214; 840, p. 439; 845, p. 503; \*889-C, p. 239; 909, p. 156; 939, p. 117; 947, p. 135; \*989, p. 151; 1019, p. 157; 1026, p. 149; 1074, p. 184). Texas Fireworks Distributing Co. At South Houston.

Water level, in feet below land-surface datum, 1947

Jan. 21	71.42	May 29	56.12	Dec. 1	39.14
Mar. 5	72.09	Sept. 16	43.90		

1229 (\*889-C, p. 239; \*947, p. 135-6; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of Houston test well 8. On Spencer Highway, 3 miles east of South Houston.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	152.58	May 29	153.81	Nov. 3	149.62	Dec. 29	149.45
Mar. 5	152.99	Sept. 16	154.93	28	149.99		

1230 (\*889-C, p. 239; \*947, p. 136; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of Houston test well 9. On Spencer Highway, 3 miles east of South Houston.

Water level, in feet below land-surface datum, 1947

Jan. 30	166.22	May 29	163.69	Nov. 3	174.10	Dec. 29	175.62
Mar. 5	165.83	Sept. 16	174.34	28	175.38		

1234 (\*889-C, p. 240; \*947, p. 136; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of South Houston well 3. At city water works, in South Houston. Water levels, in feet below land-surface datum, 1947: Jan. 30, 88.30; Mar. 5, 91.29; May 29, 89.91.

1266 (\*889-C, p. 242; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of South Side Place well 2. No measurements made in 1947.

1267 (\*889-C, p. 242; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of South Side Place well 3. At city water works in South Side Place. Water levels, in feet below land-surface datum, 1947: Jan. 29, 90.3; Mar. 11, 92.74; July 2, 95.76; Dec. 8, 101.18.

1302 (\*777, p. 214; 840, p. 439; 845, p. 504; \*889-C, p. 245; 947, p. 136; \*989, p. 152; 1019, p. 157; 1026, p. 149; 1074, p. 185). City of Genoa. In Genoa. Water levels, in feet below land-surface datum, 1947: Jan. 21, 134.00; Mar. 5, 134.20; May 29, 134.68. Measurements discontinued after May 29.

1360 (\*777, p. 214; 840, p. 439; 845, p. 504; \*889-C, p. 247; 947, p. 137; \*989, p. 153; 1019, p. 158; 1026, p. 149; 1074, p. 185). S. Siabara. About 0.25 mile east of Webster.

1360--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 21	87.21	May 29	89.40	Dec. 1	96.41
Mar. 5	87.52	Sept. 16	95.50		

1369 (\*889-C, p. 247; \*1019, p. 158; 1026, p. 150; 1074, p. 185). City of South Houston well 2. At city water works, in South Houston.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 30	162.02	May 29	161.40	Dec. 1	167.82
Mar. 5	161.24	Sept. 16	169.90		

1370 (\*1074, p. 185). Harris County Water Control & Improvement District well 2. No measurements made in 1947.

1374 (\*889-C, p. 248; \*989, p. 153; 1019, p. 158; 1026, p. 150). Harris County Fresh Water District No. 5. No measurements made in 1947.

1398 (\*889-C, p. 250; \*989, p. 153; 1019, p. 158; 1026, p. 150; 1074, p. 186). Mission Manufacturing Co. well 2. On U. S. Highway 59, 3.25 miles northeast of Houston courthouse. Water level, in feet below land-surface datum, 1947: June 2, 126.51.

1414 (\*889-C, p. 252; \*989, p. 153; 1019, p. 158; 1026, p. 150; 1074, p. 186). Harris County Water Control & Improvement District 3 well 2. At 816 Rosslyn Street, in Garden Oaks subdivision. Water levels, in feet below land-surface datum, 1947: Feb. 3, 120.44; June 3, 121.36; Dec. 8, 129.59.

1417 (\*1019, p. 158; 1026, p. 150; 1074, p. 186). Houston Lighting & Power Co. well 1. 9 miles southwest of Houston courthouse.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Feb. 3	94.06	June 3	96.56	Dec. 15	104.96
Mar. 11	94.10	Sept. 15	104.81		

1418 (\*1019, p. 158; 1026, p. 150; 1074, p. 186). W. B. Nelson. On Hall road, 13 miles southeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 128.46; Mar. 11, 128.68; Sept. 15, 142.88.

1419 (\*1019, p. 158; 1026, p. 150; 1074, p. 186). W. B. Nelson. On Hall road, 13 miles southeast of Houston courthouse. Water level, in feet below land-surface datum, 1947: Feb. 3, 7.70. Measurements discontinued after Feb. 3.

1420 (\*1019, p. 158; 1026, p. 150; 1074, p. 186). City of Galena Park well 2. At city water works, in Galena Park. Water levels, in feet below land-surface datum, 1947: Mar. 10, 188.58; Sept. 18, 195.00; Dec. 9, 200.02.

1421 (\*1074, p. 186). Tennessee Coal & Iron Railroad Co., U. S. Steel Co. well 2. At Clinton docks, 6.5 miles southeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Mar. 10, 177.35; June 2, 177.19; Sept. 17, 184.2; Dec. 9, 193.2.

1422 (\*1074, p. 186). Mission Manufacturing Co. well 1. About 50 feet west of well 1398. Water levels, in feet below land-surface datum, 1947: Mar. 5, 125.94; June 2, 125.94; Dec. 8, 132.43.

1423 (\*1074, p. 187). Clarence Nelson. 13 miles southeast of Houston courthouse. Water levels, in feet below land-surface datum, 1947: Feb. 3, 126.92; Mar. 11, 127.12; Sept. 15, 143.12.

1424 (\*1074, p. 187). Harris County Water Control & Improvement District 3 well 3. At Alba and Sue Barnett Streets, in Garden Oaks subdivision. Water levels, in feet below land-surface datum, 1947: June 3, 115.99; Dec. 8, 125.48.

1500 (\*1019, p. 159; 1026, p. 150; 1074, p. 187). Texas-Gulf Production Co. 8 miles west of Humble.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	32.13	June 5	45.28	Dec. 18	55.98
Mar. 18	33.98	Sept. 17	56.37		

1501 (\*1019, p. 159; 1026, p. 150; 1074, p. 187). A. T. McDannald. 4.75 miles south of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 36.61; Mar. 18, 36.29; June 5, 37.64; Sept. 17, 39.56.

1502 (\*1019, p. 159; 1026, p. 150; 1074, p. 187). Jack Frazier Drilling Co. 7.75 miles south of Humble. Water levels, in feet below land-surface datum, 1947: Jan. 29, 95.48; June 5, 92.25; Sept. 17, 92.67; Dec. 10, 93.74.

1503 (\*1019, p. 159; 1026, p. 150; 1074, p. 187). R. R. Michel test hole number O-1. 1.5 miles southwest of Tom Ball.

Water level, in feet below land-surface datum, 1947

Jan. 31	28.51	June 4	29.32	Dec. 18	31.54
Mar. 17	28.61	Sept. 18	30.59		

1504 (\*1019, p. 159; 1026, p. 150; 1074, p. 187). Bogs Estate test hole N-1. 1 mile north of Huffsmith.

Water level, in feet below land-surface datum, 1947

Jan. 31	19.49	June 4	21.74	Dec. 18	24.32
Mar. 17	20.52	Sept. 18	23.26		

1505 (\*1019, p. 160; 1026, p. 150; 1074, p. 187). Wm. Tautenhahn test hole U-1. 0.25 mile north of Westfield.

Water level, in feet below land-surface datum, 1947

Jan. 29	5.99	June 4	10.17	Dec. 18	14.80
Mar. 18	8.08	Sept. 17	15.57		

1506 (\*1019, p. 160; 1026, p. 150; 1074, p. 187). Sinclair-Prairie Oil Co. 3.5 miles northeast of Fairbanks.

Water level, in feet below land-surface datum, 1947

Jan. 31	60.51	June 6	61.67	Dec. 16	68.52
Mar. 19	60.05	Sept. 18	70.00		

1507 (\*1019, p. 160; 1026, p. 150; 1074, p. 187). Stanolind Oil & Gas Co. 3.75 miles northeast of Fairbanks.

Water level, in feet below land-surface datum, 1947

Jan. 31	63.78	June 6	64.56	Dec. 16	71.52
Mar. 19	62.69	Sept. 18	73.08		

### Hays County

106 (\*909, p. 157; 939, p. 118; 947, p. 137; \*989, p. 153; 1019, p. 160; 1026, p. 151; 1074, p. 188). Henry Armsbruster. 1.25 miles northwest of Buda. Water levels, in feet below land-surface datum, 1947: June 21, 104.67; Nov. 19, 112.83.

110 (\*909, p. 157; 939, p. 118; 947, p. 137; \*989, p. 153; 1019, p. 160; 1026, p. 151; 1074, p. 188). M. O. Rogers. No measurements made in 1947.

113 (\*989, p. 153; 1019, p. 160; 1026, p. 151). Otto Schwartz. No measurements made in 1947.

126 (\*909, p. 157; 939, p. 118; 947, p. 137; \*989, p. 153; 1019, p. 160; 1026, p. 151; 1074, p. 188). F. W. Zimmerman. No measurements made in 1947.

234a (\*909, p. 157; 939, p. 118; 947, p. 137; \*989, p. 153; 1019, p. 161; 1026, p. 151; 1074, p. 188). N. E. Hughes. No measurements made in 1947.

349 (\*909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 153; 1019, p. 161; 1026, p. 151; 1074, p. 188). E. Brooks. 1.75 miles northwest of San Marcos. Water level, in feet below land-surface datum, 1947: June 23, 159.8.

504 (\*840, p. 440; 845, p. 504; 886, p. 720; 909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). Glynn C. Key. No measurements made in 1947.

505 (\*840, p. 440; 845, p. 504; 886, p. 720; 909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). Glynn C. Key. No measurements made in 1947.

506 (\*840, p. 440; 845, p. 504; 886, p. 720; 909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). John L. Tinney. No measurements made in 1947.

507 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). John L. Tinney. No measurements made in 1947.

524 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 158; 939, p. 118; 947, p. 137; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). H. W. Hageman. 1.8 miles north of San Marcos. Water levels, in feet below land-surface datum, 1947: June 21, 31.60; Nov. 19, 32.99.

528 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 158; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). F. N. Whaley. 4.75 miles north of San Marcos. Water levels, in feet below land-surface datum, 1947: June 21, 94.80; Nov. 19, 96.57.

529 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). Nicholas Thiele. At south edge of Kyle. Water levels, in feet below land-surface datum, 1947: June 20, 140.67; Nov. 19, 140.95.

532 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). John Butler. 3.2 miles north of Kyle. Water levels, in feet below land-surface datum, 1947: June 20, 90.90; Nov. 19, 95.08.

534 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 151; 1074, p. 188). J. J. Horton. In Buda. Water levels, in feet below land-surface datum, 1947: June 20, 100.88; Nov. 18, 120.11.

535 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 152; 1074, p. 189). Thomas Yoe. On U. S. Highway 81, 0.2 mile south of Hays-Travis county line.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 29	22.66	Apr. 27	24.51	July 27	25.35	Oct. 31	25.76
Mar. 2	23.28	June 1	25.02	Sept. 1	25.59	Nov. 30	25.84
30	23.94	29	25.33	28	25.67	Dec. 30	25.87

543 (\*840, p. 440; 845, p. 505; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 154; 1019, p. 161; 1026, p. 152; 1074, p. 189). W. P. Donaldson. 2.6 miles southwest of San Marcos. Water levels, in feet below land-surface datum, 1947: June 23, 41.86; Nov. 19, 43.64.

553 (#840, p. 441; 845, p. 506; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 161; 1026, p. 152; 1074, p. 189).  
G. M. Jackson. 3 miles southwest of San Marcos. Water levels, in feet below land-surface datum, 1947: June 23, 117.78; Nov. 19, 119.85.

585 (#840, p. 441; 845, p. 506; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
R. F. Clayton. No measurements made in 1947.

586 (#840, p. 441; 845, p. 506; 886, p. 721; 909, p. 159; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
W. A. Leath. No measurements made in 1947.

590 (#840, p. 441; 845, p. 506; 886, p. 722; 909, p. 160; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
Fred Boyett. No measurements made in 1947.

591 (#840, p. 441; 845, p. 506; 886, p. 722; 909, p. 180; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
Fred Boyett. No measurements made in 1947.

614 (#840, p. 441; 845, p. 507; 886, p. 722; 909, p. 160; 939, p. 119; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
J. D. McCall. No measurements made in 1947.

615 (#840, p. 441; 845, p. 507; 886, p. 722; 909, p. 160; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
Wiley Roberts. No measurements made in 1947.

629 (#840, p. 441; 845, p. 507; 886, p. 722; 909, p. 160; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
J. N. Byler. No measurements made in 1947.

677a (#845, p. 507; 886, p. 722; 909, p. 160; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189). N. E. Hughes.  
No measurements made in 1947.

677 (#840, p. 442; 845, p. 507; 886, p. 722; 909, p. 160; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 189).  
J. E. Bryant. No measurements made in 1947.

678 (#840, p. 442; 845, p. 507; 886, p. 722; 909, p. 161; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 152; 1074, p. 190).  
J. E. Bryant. No measurements made in 1947.

706 (#840, p. 442; 845, p. 507; 886, p. 722; 909, p. 161; 939, p. 120; 947, p. 138; \*989, p. 155; 1019, p. 162; 1026, p. 153; 1074, p. 190).  
Jim Roberts. No measurements made in 1947.

#### Hockley County

5 (#840, p. 444; 845, p. 509; 886, p. 724; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 162; 1026, p. 153; 1074, p. 190).  
Santa Fe Railway Co. In Smyer. Water levels, in feet below land-surface datum, 1947: Jan. 16, 85.58; Mar. 5, 85.39.

7 (#840, p. 445; 886, p. 724; 909, p. 163; 939, p. 121; 947, p. 137; \*989, p. 156; 1019, p. 162; 1026, p. 153; 1074, p. 190). Mr. Pickard.  
South line of lab. 23, William Tubbs survey, 5.2 miles east of Levelland. Water levels, in feet below land-surface datum, 1947: Jan. 16, 83.45; Mar. 5, 83.32.

24 (#840, p. 446; 845, p. 510; 886, p. 724; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 162; 1026, p. 153; 1074, p. 190).  
R. Y. Hughen. SW $\frac{1}{4}$  sec. 99, blk. A, R. M. Thomson Survey, 2 miles southeast of railroad depot in Anton. Water levels, in feet below land-surface datum, 1947: Jan. 16, 22.31; Mar. 17, 22.51.



25 (\*840, p. 446; 845, p. 510; 886, p. 724; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 162; 1026, p. 153). Texas Highway Dept. Measurements discontinued.

28 (\*840, p. 446; 845, p. 510; 886, p. 725; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 163; 1026, p. 153; 1074, p. 190). Dan Jackson and Paul Whitfield. NW. corner SW $\frac{1}{4}$  sec. 106, blk. A. R. M. Thomson survey, 0.35 mile west and 0.5 mile south from railway station in Anton. Water levels, in feet below land-surface datum, 1947: Jan. 16, 34.49; Mar. 15, 34.11.

29 (\*840, p. 446; 845, p. 511; 886, p. 725; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 163; 1026, p. 153; 1074, p. 190). A. L. Lindsey. SE. corner SE $\frac{1}{4}$  sec. 124, blk. A, R. M. Thomson Survey, 1.7 miles west of railroad depot in Anton. Water level, in feet below land-surface datum, 1947: Jan. 16, 33.72. Measurements discontinued after Jan. 16.

126 (\*845, p. 511; 886, p. 725; 909, p. 163; 939, p. 121; 947, p. 139; \*989, p. 156; 1019, p. 163; 1026, p. 153; 1074, p. 190). W. M. Alexander. SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 89, blk. A, 3 miles south of Anton. Water levels, in feet below land-surface datum, 1947: Jan. 16, 21.03; Mar. 17, 20.64.

#### Howard County

(No measurements made in 1947.)

#### Jackson County

5 (\*840, p. 461; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 141; \*989, p. 159; 1019, p. 163; 1026, p. 153; 1074, p. 190). Jackson County. At Upper Cordele School. Water level, in feet below land-surface datum, 1947: Mar. 26, 35.60.

6 (\*840, p. 461; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 1074, p. 190). N. J. Marthiljohni. 1 mile south of Morales. Water level, in feet below land-surface datum, 1947: Mar. 26, 33.94.

7 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 153; 1074, p. 191). D. W. Schropshire. 1.25 mile north of Navidad. Water level, in feet below land-surface datum, 1947: Mar. 26, 41.15.

11a (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; 1019, p. 163; 1026, p. 153; 1074, p. 191). Nellie Miller Estate. About 5 miles south of Morales. Water level, in feet below land-surface datum, 1947: Mar. 26, 35.19.

14 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154; 1074, p. 191). Mrs. C. V. Watson. 2.3 miles north of Cordele. Water level, in feet below land-surface datum, 1947: Mar. 26, 34.38.

56 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154; 1074, p. 191). A. H. Nagel. At Cordele. Water level, in feet below land-surface datum, 1947: Mar. 26, 31.25.

57 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154; 1074, p. 191). S. G. Drushel. No measurements made in 1947.

64 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154). Wm. Clifford. 3.5 miles west of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 36.83.

66 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154; 1074, p. 191). S. J. and E. F. Swenson. 5 miles northeast of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 34.99.

69 (\*840, p. 462; 845, p. 514; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 159; 1019, p. 163; 1026, p. 154; 1074, p. 191). A. E. Westhoff. 2.5 miles northeast of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 32.54.

71 (\*840, p. 462; 845, p. 515; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 160; 1019, p. 163; 1074, p. 191). W. Rogers. 3.7 miles west of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 25.78.

78 (\*840, p. 463; 845, p. 515; 886, p. 727; 909, p. 167; 939, p. 125; 947, p. 142; \*989, p. 160; 1019, p. 164; 1026, p. 154; 1074, p. 191). Rose, Sample, Taylor, & Bagby. 2 miles east of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 27.41.

88 (\*840, p. 463; 845, p. 515; 947, p. 142; \*989, p. 160; 1019, p. 164; 1026, p. 154; 1074, p. 191). A. E. Westhoff. 6 miles southeast of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 20.42.

103 (\*840, p. 463; 845, p. 515; 886, p. 727; 909, p. 167; 939, p. 126; 947, p. 142; \*989, p. 160; 1019, p. 164; 1026, p. 154; 1074, p. 191). A. C. Wilbeck. 6 miles northwest of Ganado. Water level, in feet below land-surface datum, 1947: Mar. 26, 35.29.

105 (\*947, p. 142; \*989, p. 160; 1019, p. 164; 1026, p. 154; 1074, p. 191). A. M. Robinson. 4 miles north of Ganado. Water level, in feet below land-surface datum, 1947: Mar. 26, 31.67.

108a (\*840, p. 463; 845, p. 515; 886, p. 727; 909, p. 127; 939, p. 126; 947, p. 142; \*989, p. 160; 1019, p. 164; 1026, p. 154; 1074, p. 192). Sugarland Fig Growers Association. In Ganado. Water level, in feet below land-surface datum, 1947: Mar. 25, 25.99.

229 (\*840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; 947, p. 143; \*989, p. 160; 1019, p. 164; 1026, p. 155; 1074, p. 192). W. A. Utzman. 3 miles north of Vanderbilt. Water level, in feet below land-surface datum, 1947: Mar. 26, 33.03.

230 (\*840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; 947, p. 143; \*989, p. 160; 1019, p. 164; 1026, p. 155; 1074, p. 192). Royal Dedman. 5.5 miles northeast of Vanderbilt. Water level, in feet below land-surface datum, 1947: Mar. 26, 34.21.

304 (\*947, p. 143; \*989, p. 160). O. B. Fenner. 6 miles northeast of Morales. Water level, in feet below land-surface datum, 1947: Mar. 26, 42.12.

305 (\*947, p. 143). O. B. Fenner. 5 miles northeast of Morales. Water level, in feet below land-surface datum, 1947: Mar. 26, 44.53.

313 (\*947, p. 143; \*989, p. 161; 1019, p. 164; 1026, p. 155; 1074, p. 192). G. A. Harrison. 4 miles northeast of Edna. Water level, in feet below land-surface datum, 1947: Mar. 26, 28.58.

318 (\*947, p. 143; \*989, p. 161; 1019, p. 164; 1026, p. 155; 1074, p. 192). Geo. Carstien. 5 miles north of Ganado. Water level, in feet below land-surface datum, 1947: Mar. 26, 29.49.

322 (\*947, p. 143; \*989, p. 161; 1019, p. 164; 1026, p. 155; 1074, p. 192). Mrs. B. W. Martin. 2 miles northwest of Ganado. Water level, in feet below land-surface datum, 1947: Mar. 26, 29.39.

337 (\*947, p. 143; \*989, p. 161; 1019, p. 164; 1026, p. 155; 1074, p. 192). Rose & Sample. 9 miles southeast of Gsnado. Water level, in feet below land-surface datum, 1947: Mar. 25, 18.62.

357 (\*947, p. 143; \*989, p. 161; 1019, p. 165; 1026, p. 155; 1074, p. 192). A. V. Raplee. 10 miles south of Francitas. Water level, in feet below land-surface datum, 1947: Mar. 27, 11.65.

Jim Wells County

193 (\*777, p. 215; 840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 161; 1026, p. 155). M. Morales. 8.5 miles northwest of Ben Bolt. Water level, in feet below land-surface datum, 1947: Feb. 18, 21.15.

206 (\*777, p. 215; 840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 161; 1026, p. 155). Emilio Barrera. 6.5 miles west of El Par. Water level, in feet below land-surface datum, 1947: Feb. 18, 56.27.

207 (\*777, p. 215; 840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 161; 1026, p. 155). Roman Saenz. 6 miles west of El Par. Water level, in feet below land-surface datum, 1947: Feb. 18, 76.03.

221 (\*777, p. 215; 845, p. 516; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 161; 1026, p. 156). Felix Perez Cadena. 6 miles northwest of Wadoto. Water level, in feet below land-surface datum, 1947: Feb. 18, 49.27.

222 (\*777, p. 215; 840, p. 464; 845, p. 515; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 161; 1026, p. 156). Manuel Cadena. 6 miles northwest of Wadoto. Water level, in feet below land-surface datum, 1947: Feb. 18, 51.73.

242 (\*989, p. 161; 1019, p. 165; 1026, p. 156; 1074, p. 193). Hormigas. King Estate. 6.5 miles south of Ben Bolt. Water level, in feet below land-surface datum, 1947: Feb. 21, 86.75.

252 (\*777, p. 215; 840, p. 464; 845, p. 516; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 162; 1026, p. 156). Cerapio Hinojosa. 6.5 miles northwest of Ella. Water level, in feet below land-surface datum, 1947: Feb. 18, 57.00.

253 (\*777, p. 215; 840, p. 464; 845, p. 516; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 162; 1026, p. 156). San Juan Hinojosa. 6.5 miles southwest of Ella. Water level, in feet below land-surface datum, 1947: Feb. 18, 56.41.

269 (\*989, p. 162; 1019, p. 165; 1026, p. 156; 1074, p. 193). R. P. Wynne. 4 miles north of Premont. Water level, in feet below land-surface datum, 1947: Feb. 15, 77.84.

307 (\*989, p. 162; 1026, p. 156). A. R. Clarke. 5.75 miles west of Premont. Water level, in feet below land-surface datum, 1947: Feb. 15, 72.68.

316 (\*989, p. 162; 1019, p. 165; 1026, p. 156). C. T. Hewitt. 2.75 miles west of Premont. Water level, in feet below land-surface datum, 1947: Feb. 15, 86.30.

329 (\*1026, p. 156; 1074, p. 193). Texas & New Orleans Railroad Co. 0.5 mile south of Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 86.48.

346 (\*989, p. 162; 1019, p. 165). Charlie Premont. 6 miles southwest of Premont. Water level, in feet below land-surface datum, 1947: Feb. 15, 60.48.

357 (\*989, p. 162; 1019, p. 165; 1026, p. 156). Nelson English. 1.75 miles south of Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 77.68.

359 (\*989, p. 162; 1019, p. 165; 1026, p. 156). E. J. Corrigan. 3.25 miles south of Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 68.91.

374 (\*777, p. 216; 840, p. 464; 845, p. 516; 886, p. 728; 909, p. 168; 939, p. 126; \*989, p. 162; 1019, p. 165; 1026, p. 156; 1074, p. 193). E. G. Maun. 4.5 miles northwest of Falfurrias. Water level, in feet below land-surface datum, 1947: Feb. 15, 43.99.

377 (\*989, p. 162; 1019, p. 165; 1026, p. 157; 1074, p. 193). Dale Maun. 7 miles southwest of Premont. Water level, in feet below land-surface datum, 1947: Feb. 15, 26.10.

382 (\*989, p. 163; 1026, p. 157). J. H. Patzakowsky. 5 miles southwest of Premont. Water level, in feet below land-surface datum, 1947: Feb. 18, 63.08.

397 (\*989, p. 163; 1019, p. 165; 1026, p. 157; 1074, p. 193). John Minten. 5 miles southeast of Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 36.14.

399 (\*989, p. 163; 1019, p. 165; 1026, p. 157; 1074, p. 194). O. M. Boone. 5.25 miles south of Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 71.75.

418 (\*989, p. 163; 1019, p. 166; 1026, p. 157). City of Premont. In Premont. Water level, in feet below land-surface datum, 1947: Feb. 17, 89.2.

#### Kinney County

XK-1 (\*840, p. 464; 845, p. 516; 886, p. 728; 909, p. 168; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). Ethel Whitaker. 2 miles west of Cline. Water levels, in feet below land-surface datum, 1947: June 25, 73.91; Nov. 6, 74.16.

XK-5 (\*840, p. 465; 845, p. 515; 886, p. 728; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). Judge John Fritter. 6 miles east of Brackettville. Water levels, in feet below land-surface datum, 1947: June 25, 25.48; Nov. 7, 26.96.

XK-6 (\*840, p. 465; 845, p. 516; 886, p. 728; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1026, p. 157). Dr. B. F. Orr. 2.8 miles east of Brackettville. Water level, in feet below land-surface datum, 1947: June 25, 38.75.

XK-9 (\*840, p. 465; 845, p. 517; 886, p. 729; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). C. J. Foehler. 3.75 miles west of Brackettville. Water level, in feet below land-surface datum, 1947: Nov. 5, 35.09.

XK-11 (\*840, p. 466; 845, p. 517; 886, p. 729; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). J. F. Beidler. 7 miles west of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 27.26; Nov. 4, 26.83.

XK-12 (\*840, p. 466; 845, p. 517; 886, p. 729; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). J. F. Beidler. 12.5 miles west of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 5.37; Nov. 4, 7.15.

XK-13 (\*840, p. 466; 845, p. 517; 886, p. 729; 909, p. 169; 939, p. 127; 947, p. 144; \*989, p. 163; 1019, p. 166; 1026, p. 157; 1074, p. 194). Howard Roberts. 17.5 miles west of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 68.02; Nov. 4, 64.88.

XK-17 (\*909, p. 170; 939, p. 127; 947, p. 144; \*989, p. 164; 1019, p. 166; 1026, p. 157; 1074, p. 194). Jimmy Lowrance. 1 mile west of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 50.35; Nov. 5, 50.24.

XK-112 (\*886, p. 729; 909, p. 170; 939, p. 127; \*989, p. 164; 1019, p. 166; 1026, p. 157; 1074, p. 194). E. Webb. 7.65 miles north of Brackettville. Water levels, in feet below land-surface datum, 1947: July 1, 174.21; Nov. 6, 190.88.

XK-114 (\*886, p. 729; 909, p. 170; 939, p. 127; 947, p. 144; \*989, p. 164; 1019, p. 166; 1026, p. 157; 1074, p. 194). E. Webb. 7.5 miles north of Brackettville. Water levels, in feet below land-surface datum, 1947: June 27, 62.10; Nov. 6, 64.45.

XK-116 (\*886, p. 729; 909, p. 170; 939, p. 127; 947, p. 144; \*989, p. 164; 1019, p. 166; 1026, p. 158; 1074, p. 194). J. D. Harwood. 10 miles north of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 114.38; Nov. 6, 132.12.

XK-163 (\*886, p. 730; 909, p. 170; 939, p. 127; \*989, p. 164; 1026, p. 158). Edward May. No measurements made in 1947.

XK-170 (\*909, p. 170; 939, p. 127; 947, p. 144; 1026, p. 158). Nolan & Postell. 13 miles northeast of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 195.07; Nov. 6, 189.78.

XK-180 (\*886, p. 730; 909, p. 171; 939, p. 127; 947, p. 144; \*989, p. 164; 1026, p. 158; 1074, p. 195). N. P. Petersen. 1 mile south of Laguna-Brackettville road, 9.95 miles by road northeast of Brackettville post office. Water level, in feet below land-surface datum, 1947: Nov. 6, 175.58.

XK-187 (\*909, p. 171; 939, p. 128; 947, p. 144; \*989, p. 164; 1019, p. 166; 1026, p. 158; 1074, p. 195). Mrs. G. A. Garrison. 9.5 miles east of Brackettville. Water levels, in feet below land-surface datum, 1947: June 25, 79.47; Nov. 6, 78.38.

XK-196 (\*886, p. 730; 909, p. 171; 939, p. 128; 947, p. 144; \*989, p. 164; 1026, p. 158). Judge John Fritter. Measurements discontinued.

XK-198 (\*909, p. 171; 939, p. 128; 947, p. 144; \*989, p. 164; 1019, p. 167; 1026, p. 158; 1074, p. 195). Charley Zinsmeister. 5 miles west of Brackettville. Water levels, in feet below land-surface datum, 1947: June 24, 36.92; Nov. 5, 38.69.

XK-199 (\*909, p. 172-173; 939, p. 128; 947, p. 144; \*989, p. 164; 1026, p. 158). E. Webb. 1 mile north of Brackettville post office. Water levels, in feet below land-surface datum, 1947: June 24, 39.07; Nov. 6, 39.08.

#### Kleberg County

13 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 128; \*989, p. 164; 1019, p. 167; 1026, p. 158; 1074, p. 195). Tamalos. King Estate. 8 miles northwest of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 21, 83.91.

15 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 128; \*989, p. 164; 1019, p. 167; 1026, p. 158; 1074, p. 195). Puertos. King Estate. 5 miles northwest of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 21, 86.68.

23 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 128; \*989, p. 164; 1019, p. 167; 1026, p. 158; 1074, p. 195). Caldero. King Estate. 2.25 miles west-southwest of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 17, 97.92.

31 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 129; \*989, p. 165; 1019, p. 167; 1026, p. 158; 1074, p. 195). Liberty. King Estate. 2 miles south of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 21, 84.00.

35 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 129; \*989, p. 165; 1019, p. 167; 1026, p. 158; 1074, p. 195). Silo. King Estate. 1.5 miles southeast of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 21, 91.67.

64 (\*773-D, pp. 210, 221; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 129; \*989, p. 165; 1019, p. 167; 1026, p. 158). Rincon Caesar. King Estate. 18 miles southeast of Santa Gertrudis ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 21, 10.08.

73 (\*773-D, pp. 210, 222; 845, p. 517; 886, p. 730; 909, p. 173; 939, p. 129; \*989, p. 165; 1026, p. 158). Joe Stelzig. Measurements discontinued.

91 (\*773-D, pp. 210, 222; \*989, p. 165; 1026, p. 158). City of Kingsville well 2. In Kingsville. Water level, in feet below land-surface datum, 1947: Feb. 21, 125.

92 (\*773-D, pp. 210, 222; \*989, p. 165; 1019, p. 167; 1026, p. 159). City of Kingsville. Measurements discontinued.

127 (\*773-D, pp. 211, 222; \*989, p. 165; 1019, p. 167). Measurements discontinued.

188 (\*773-D, pp. 211, 223; 845, p. 518; 886, p. 731; 909, p. 174; 939, p. 129; \*989, p. 165; 1019, p. 167; 1026, p. 159; 1074, p. 196). J. R. Trussell. 3.5 miles south of Kingsville. Water level, in feet below land-surface datum, 1947: Feb. 21, 64.44.

190 (\*773-D, pp. 211, 223; 845, p. 518; 886, p. 731; 909, p. 174; 939, p. 129; \*989, p. 165; 1019, p. 167; 1026, p. 159). L. E. Flato and others. 4.5 miles south of Kingsville. Water level, in feet below land-surface datum, 1947: Feb. 21, 52.28.

217 (\*773-D, pp. 211, 223; 845, p. 518; 886, p. 731; 909, p. 174; 939, p. 129; \*989, p. 166; 1026, p. 159). J. R. Trussell. Measurements discontinued.

257 (\*773-D, pp. 211, 224; 845, p. 518; 886, p. 731; 909, p. 174; 939, p. 129; \*989, p. 166; 1019, p. 168; 1026, p. 159). Mrs. J. Talty. Measurements discontinued.

278 (\*773-D, pp. 211, 224; \*989, p. 166). H. Andrews. Measurements discontinued.

282 (\*773-D, pp. 211, 224; 845, p. 518; 886, p. 731; 909, p. 174; \*989, p. 166; 1019, p. 168; 1026, p. 159). Pete Christensen. 3 miles north of Riviera. Water level, in feet below land-surface datum, 1947: Feb. 21, 15.60.

283 (\*773-D, pp. 211, 224; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1019, p. 168; 1026, p. 159). W. H. Bensman. 3 miles north of Riviera. Water level, in feet below land-surface datum, 1947: Feb. 21, 16.52.

375 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1019, p. 168; 1026, p. 159; 1074, p. 196). Noria Honda. King Estate. 12 miles west of Laureles Ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 20, 32.60.

380 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1019, p. 168; 1026, p. 159; 1074, p. 196). Telephone 1. King Estate. 13 miles southwest of Laureles Ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 20, 31.24.

382 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1026, p. 159). King Estate. Measurements discontinued.

383 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1019, p. 168; 1026, p. 159). Quantitos. King Estate. 8.5 miles southwest of Laureles ranch headquarters. Water levels, in feet below land-surface datum: Mar. 15, 1946, 4.38; Feb. 20, 1947, 18.28.

384 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1026, p. 159; 1074, p. 196). Aljibes. King Estate. 7 miles west of Laureles Ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 20, 20.69.

385 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 129; \*989, p. 166; 1026, p. 159). Palacios. King Estate. 8 miles west of Laureles Ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 20, 21.18.

406 (\*773-D, pp. 211, 226; 845, p. 518; 909, p. 174; 939, p. 140; \*989, p. 166; 1026, p. 160). Mujeres Chiquitas. King Estate. About 0.5 mile south of Laureles Ranch headquarters. Water level, in feet below land-surface datum, 1947: Feb. 20, 20.27. Measurements discontinued.

#### Lamb County

(No measurements made in 1947.)

#### Lubbock County

3a (\*845, p. 522; 886, p. 735; 909, p. 177; 939, p. 133; 947, p. 147; \*989, p. 169; 1019, p. 170; 1026, p. 161; 1074, p. 198). E. E. Winters. No measurements made in 1947.

37 (\*909, p. 177; 939, p. 133; 947, p. 148; \*989, p. 169; 1019, p. 170; 1026, p. 161; 1074, p. 198). L. K. Fowler. NW $\frac{1}{4}$  sec. 149, blk. C, 17 miles northeast of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 21, 74.16; Mar. 6, 74.11.

64a (\*845, p. 522; 886, p. 735; 909, p. 178; 939, p. 133; 947, p. 148; \*989, p. 169; 1019, p. 170; 1026, p. 161; 1074, p. 198). W. O. Fortenberry. NE $\frac{1}{4}$  sec. 30, blk. D, 0.4 mile east of U. S. Highway 87, 10.5 miles north of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 86.81; Mar. 19, 86.55.

74a (\*845, p. 522; 886, p. 735; 909, p. 178; 939, p. 133; 947, p. 148; \*989, p. 169; 1019, p. 170; 1026, p. 162; 1074, p. 198). J. S. George. SW $\frac{1}{4}$  sec. 37, blk. A, 1.5 miles west of U. S. Highway 85, 6.5 miles north of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 33.03; Mar. 19, 33.25.

74b (\*886, p. 735; 909, p. 178; 939, p. 133; \*989, p. 169; 1019, p. 170; 1026, p. 162; 1074, p. 198). J. S. George. Measurements discontinued.

77a (\*845, p. 522; 886, p. 735; 909, p. 178; 947, p. 148; \*989, p. 169; 1019, p. 170; 1026, p. 162; 1074, p. 198). J. H. Felton. NE $\frac{1}{4}$  sec. 35, blk. A, 6 miles north of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 19, 71.69.

81 (\*840, p. 470; 845, p. 522; 886, p. 735; 909, p. 178; 939, p. 133; 947, p. 148; \*989, p. 169; 1019, p. 170; 1026, p. 162; 1074, p. 198). J. E. Vickers. NE $\frac{1}{4}$  sec. 27, blk. A, 0.2 mile west of U. S. Highway 87, 5 miles north of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 42.14; Mar. 20, 42.26.

- 99 (#840, p. 470; 845, p. 522; 909, p. 178; 947, p. 148; #989, p. 169; 1019, p. 171; 1026, p. 162; 1074, p. 199). R. B. Gray. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, blk. P, 4 miles northwest of Shallowater. Water levels, in feet below land-surface datum, 1947: Jan. 20, 31.12; Mar. 20, 30.85.
- 101 (#840, p. 470; 845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1026, p. 162). J. E. Armes. Formerly owned by O. P. Bowser. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 38, blk. P, 4 miles west of Shallowater. Water level, in feet below land-surface datum, 1947: Mar. 20, 65.09.
- 107 (#840, p. 470; 845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). B. G. Lockey. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 27, blk. D5, on north side of U. S. Highway 84, in Shallowater. Water level, in feet below land-surface datum, 1947: Mar. 8, 44.46.
- 118 (#845, p. 523; 886, p. 736; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). T. C. James. Formerly owned by W. P. Martin. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 17, blk. JS, 9 miles west of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 84.68; Mar. 20, 84.89.
- 121 (#840, p. 470; 845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162). Mr. Brown. SE $\frac{1}{4}$  sec. 1, blk. D6, north of Carlisle public school and north of State Highway 24. Water levels, in feet below land-surface datum, 1947: Jan. 20, 77.21; Mar. 20, 80.13.
- 123 (#845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). Travis Tubbs. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, blk. JS, 6 miles west of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 68.40; Mar. 20, 65.75.
- 128 (#845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). Rufus Rush. West line of SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 3, blk. E2, 0.6 mile north of State Highway 24, 2.5 miles west of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 28, 45.26; Mar. 20, 44.88.
- 138 (#845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1026, p. 162; 1074, p. 199). Edith Collie. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 25, blk. JS, 7 miles northwest of Lubbock. Water level, in feet below land-surface datum, 1947: Jan. 20, 36.95.
- 139 (#840, p. 470; 845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 148; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). J. W. Ellis. Formerly owned by O. C. Ballard. NE $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 23, blk. JS, 7 miles northwest of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 25.48; Mar. 8, 25.66.
- 150a (#845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 149; #989, p. 170; 1019, p. 171; 1026, p. 162; 1074, p. 199). M. C. Gibson. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, blk. A, between U. S. Highway 84 and Panhandle & Santa Fe Railway, 5.5 miles northwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 20, 27.65.
- 151 (#840, p. 470; 845, p. 523; 886, p. 736; 909, p. 178; 939, p. 134; 947, p. 149; #989, p. 170; 1019, p. 171; 1026, p. 163; 1074, p. 199). Broadview School. SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 14, blk. A, on south side of U. S. Highway 84, 3 miles northwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 20, 26.80.
- 154 (#886, p. 736; 909, p. 178; 939, p. 134; 947, p. 149; #989, p. 170; 1019, p. 171; 1026, p. 163; 1074, p. 199). John King. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 22, blk. A, 4 miles west of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 20, 42.49.



156 (\*845, p. 523; 886, p. 736; 909, p. 179; 939, p. 134; 947, p. 149; \*989, p. 170; 1019, p. 171; 1026, p. 163; 1074, p. 199). J. M. Phillips. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 18, blk. A, 0.6 mile south of U. S. Highway 84, 3 miles northwest of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 20, 51.26; Mar. 20, 51.18.

185 (\*886, p. 737; 909, p. 179; 939, pp. 134; \*1019, p. 171; 1026, p. 163; 1074, p. 200). W. H. Massey. Measurements discontinued.

188 (\*840, p. 471; 845, p. 524; 886, p. 737; 909, p. 179; 939, p. 134; 947, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). State Experiment Farm. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, blk. 0, 3 miles east of Lubbock. Water level, in feet below land-surface datum, 1947: Jan. 17, 75.98.

219 (\*886, p. 737; 909, p. 179; 939, p. 134; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). Ed Harrison. NW corner sec. 5, blk. RG, 9.5 miles east of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 17, 42.38; Mar. 19, 41.87.

221 (\*840, p. 471; 845, p. 524; 886, p. 737; 909, p. 179; 939, p. 134; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). Bill Turner. Measurements discontinued.

222 (\*845, p. 524; 886, p. 737; 909, p. 179; 939, p. 134; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). R. T. Groves. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 10, blk. RG, 1.2 miles south of U. S. Highway 62, 12 miles east of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 17, 52.10; Mar. 10, 51.05.

223 (\*845, p. 524; 886, p. 737; 909, p. 179; 939, p. 134; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). W. C. Grimes. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 11, blk. PG, 12 miles east of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 17, 42.21; Mar. 19, 42.24.

301 (\*886, p. 738; 909, p. 180; 939, p. 135; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). S. D. Stewart. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 68, blk. S, 8 miles south of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 21, 53.57; Mar. 19, 53.11.

314 (\*840, p. 471; 845, p. 525; 886, p. 738; 909, p. 180; 939, p. 135; 947, p. 149; \*989, p. 171; 1019, p. 172; 1026, p. 163; 1074, p. 200). T. B. Zelner. SW corner SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 17, blk. B, 4 miles southwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 21, 47.10.

316 (\*840, p. 471; 845, p. 525; 886, p. 738; 947, p. 149; \*989, p. 171; 1026, p. 163; 1074, p. 200). E. A. Hankins. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 6, blk. E2, 4.75 miles southwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 20, 61.54.

336a (\*845, p. 525; 886, p. 738; 909, p. 180; 939, p. 135; 947, p. 140; \*989, p. 171; 1019, p. 172; 1026, p. 164; 1074, p. 200). Mrs. Mary Coons. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 28, blk. AK, 0.8 mile south of U. S. Highway 62, 10 miles southwest of Lubbock. Water level, in feet below land-surface datum, 1947: Jan. 21, 78.32. Measurements discontinued after Jan. 21.

339 (\*909, p. 180; 939, p. 135; 947, p. 150; \*989, p. 171; 1019, p. 172; 1026, p. 164; 1074, p. 200). J. E. Hinson. NW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 34, blk. AK, 8.5 miles west of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 21, 63.56; Mar. 20, 63.11.

355 (\*840, p. 471; 845, p. 525; 886, p. 738; 909, p. 180; 939, p. 135; 947, p. 150; \*989, p. 172; 1019, p. 172; 1026, p. 164; 1074, p. 200). J. A. Medlock. SW $\frac{1}{4}$ NE $\frac{1}{4}$  sec. 26, blk. CB, 0.5 mile west of U. S. Highway 62, 14 miles south of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 21, 84.15; Mar. 20, 83.85.

369 (\*840, p. 471; 845, p. 525; 909, p. 180; 947, p. 150; \*989, p. 172; 1019, p. 172; 1026, p. 164; 1074, p. 201). A. D. Thomas. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 26, blk. 20, 0.5 mile west of U. S. Highway 87, 9.5 miles south of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 21, 80.01; Mar. 19, 79.72.

376 (\*886, p. 738; 947, p. 150; \*989, p. 172; 1019, p. 172; 1026, p. 164; 1074, p. 201). Union public school. Measurements discontinued.

383 (\*840, p. 472; 845, p. 525; 886, p. 738; 909, p. 180; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164; 1074, p. 201). H. B. Hobgood. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 21, blk. CB, 0.2 mile east of U. S. Highway 62, 14 miles southwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 19, 72.15.

387 (\*840, p. 472; 845, p. 525; 886, p. 738; 909, p. 180; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164; 1074, p. 201). W. J. Garrett. No measurements made in 1947.

388 (\*840, p. 472; 845, p. 525; 886, p. 739; 909, p. 180; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164). D. D. Taylor. Measurements discontinued.

389 (\*840, p. 472; 845, p. 525; 886, p. 739; 909, p. 180; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164). E. Scott Jones. Measurements discontinued.

391 (\*840, p. 472; 845, p. 526; 886, p. 739; 909, p. 180; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173). C. R. Moore. Measurements discontinued.

392 (\*840, p. 472; 845, p. 526; 886, p. 739; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164). Mrs. Betty Lindsey and others. NE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 13, blk. D6, on south side of State Highway 24, 10.25 miles west of its junction with U. S. Highway 62. Water levels, in feet below land-surface datum, 1947: Jan. 20, 90.25; Mar. 20, 90.02.

395 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164). H. W. Stanton. No measurements made in 1947.

397 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 164). C. L. Dean. Measurements discontinued.

398 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 150; \*989, p. 172; 1019, p. 173; 1026, p. 165; 1074, p. 201). E. E. Ireland. SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 36, blk. D5, 8.5 miles northwest of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 21, 15.66.

401 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 150; \*989, p. 173; 1019, p. 173; 1026, p. 165; 1074, p. 201). Virginia Bacon. SE corner SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 39, blk. D, 0.6 mile west of U. S. Highway 87 and 8 miles north of Lubbock. Water level, in feet below land-surface datum, 1947: Mar. 19, 72.60.

402 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 150; \*989, p. 173; 1019, p. 173; 1026, p. 165; 1074, p. 201). Fort Worth & Denver City Railway Co. No measurements made in 1947.

403 (\*840, p. 473; 845, p. 526; 886, p. 739; 909, p. 181; 939, p. 136; 947, p. 151; \*989, p. 173; 1019, p. 173; 1026, p. 165; 1074, p. 201). J. E. Smiley. SW corner SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 56, blk. A, 8 miles northeast of Lubbock. Water levels, in feet below land-surface datum, 1947: Jan. 17, 40.05; Mar. 19, 39.61.

Lynn County

(No measurements made in 1947.)

Matagorda County

(No measurements made in 1947.)

Medina County

I-2-7 (\*678, p. 118; 840, p. 479; 845, p. 529; 886, p. 741; 909, p. 184; 939, p. 138; 947, p. 151; \*989, p. 174; 1019, p. 174; 1026, p. 166). Alfred Schlantz. 8.2 miles northwest of Hondo. Water level, in feet below land-surface datum, 1947: July 2, 192.16.

I-3-3 (\*678, p. 118; 840, p. 479; 845, p. 529; 886, p. 471; 909, p. 184; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 174; 1026, p. 166; 1074, p. 202). Gus Britch. 4.7 miles northeast of Hondo. Water level, in feet below land-surface datum, 1947: July 2, 182.98.

I-3-4 (\*678, p. 118; 840, p. 480; 845, p. 529; 909, p. 184; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 174; 1026, p. 166; 1074, p. 202). H. W. McClain. 7.2 miles northeast of Hondo. Water levels, in feet below land-surface datum, 1947: July 2, 177.03; Nov. 7, 181.87.

I-4-18 (\*678, p. 120; 840, p. 480; 845, p. 530; 886, p. 741; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 174; 1026, p. 166; 1074, p. 202). Ross Kennedy Estate. 3.7 miles east of Sabinal. Water levels, in feet below land-surface datum, 1947: June 28, 212.59; Nov. 7, 220.01.

I-4-29 (\*678, p. 120; 840, p. 480; 845, p. 530; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 175; 1026, p. 166; 1074, p. 202). Will Kelly. 6.3 miles southwest of D'Hanis. Water levels, in feet below land-surface datum, 1947: June 28, 202.20; Nov. 7, 212.13.

I-4-30 (\*678, p. 120; 840, p. 480; 845, p. 530; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 175; 1026, p. 166; 1074, p. 202). Virgil Johnson. 12 miles southeast of D'Hanis. Water levels, in feet below land-surface datum, 1947: June 28, 38.38; Nov. 7, 44.90.

XM-1 (\*840, p. 480; 845, p. 530; 886, p. 741; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 174; 1019, p. 175; 1026, p. 166; 1074, p. 202). Lenard Otto. 1 mile east of Castroville. Water levels, in feet below land-surface datum, 1947: July 2, 68.94; Nov. 7, 55.11.

XM-2 (\*845, p. 530; 886, p. 741; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 166; 1074, p. 202). F. C. Stinson. Measurements discontinued.

XM-3 (\*840, p. 480; 845, p. 530; 886, p. 741; 909, p. 185; 939, p. 138; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 166). John Krenmueller. 7 miles east of Castroville. Water levels, in feet below land-surface datum, 1947: July 1, 62.24; Nov. 7, 61.40.

Montgomery County

22 (\*909, p. 187; 939, p. 129; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 166; 1074, p. 202). City of Conroe. In Conroe.

Water level, in feet with reference to land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	-5.87	June 4	-0.64	Dec. 18	-0.98
Mar. 17	+5.1	Sept. 18	-2.63		

29 (\*840, p. 481; 845, p. 532; 886, p. 742; 909, p. 187; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 166; 1074, p. 203). Brown Estate. 1.8 miles south of Conroe.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 31	15.98	June 4	18.74	Dec. 18	24.75
Mar. 17	18.21	Sept. 18	24.17		

45 (\*840, p. 482; 845, p. 532; 886, p. 742; 909, p. 187; 939, p. 139; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 166; 1074, p. 203). Blair & Sons. At Tamina.

Water level, in feet below land-surface datum, 1947

Jan. 31	12.73	June 4	13.24	Dec. 18	15.45
Mar. 17	12.50	Sept. 18	15.16		

46 (840, p. 482; 845, p. 532; 886, p. 742; 909, p. 187; 939, p. 140; 947, p. 153; \*989, p. 175; 1019, p. 175; 1026, p. 167; 1074, p. 203). E. W. Castleschout. 9.5 miles south of Conroe.

Water level, in feet below land-surface datum, 1947

Jan. 31	28.04	June 4	27.92	Dec. 18	29.76
Mar. 17	27.96	Sept. 18	28.08		

57 (\*909, p. 187; 939, p. 140; 947, p. 152; \*989, p. 175; 1019, p. 175; 1026, p. 167; 1074, p. 203). R. E. Hicks. 2.25 miles northwest of Conroe.

Water level, in feet below land-surface datum, 1947

Jan. 31	40.09	June 4	40.24	Dec. 18	42.22
Mar. 17	40.39	Sept. 18	41.41		

140 (\*1019, p. 175; 1026, p. 167; 1074, p. 203). J. M. Liles test hole R-2. 1 mile north of Conroe.

Water level, in feet below land-surface datum, 1947

Jan. 31	5.21	June 4	6.99	Dec. 18	9.43
Mar. 17	7.07	Sept. 18	10.41		

Nacogdoches County

322 (\*947, p. 154; \*989, p. 177; 1019, p. 176; 1026, p. 167). Southland Paper Mills, Inc. well C-7-O, formerly C-1-CS. 10 miles south of Nacogdoches.

Water level, in feet below land-surface datum, 1947

Feb. 9, 1945	56.81	Feb. 25, 1946	71.89	June 17, 1947	81.32
May 25	59.88	Sept. 10	77.12	July 1	81.67
Nov. 23	71.72	Dec. 5	76.83	17	81.90
28	71.77	11	77.38		

324 (\*947, p. 155; \*989, p. 178; 1019, p. 177; 1026, p. 167). Southland Paper Mills, Inc. well W3-Oa, formerly W-1-AL. 11 miles southeast of Nacogdoches. Water levels, in feet below land-surface datum: Nov. 17, 1945, 78.00; Nov. 28, 78.00; Feb. 25, 1946, 78.52. Measurements discontinued.

325 (\*947, p. 155; \*989, p. 178; 1019, p. 177; 1026, p. 168). Southland Paper Mills, Inc. well C9-O, formerly C-1-AL. 11 miles southeast of Nacogdoches.

Water level, in feet below land-surface datum, 1946-47

Feb. 25, 1946	88.37	Dec. 17, 1946	129.42	June 17, 1947	130.86
Sept. 10	127.32	18	129.75	July 1	131.00
Nov. 22	128.75	19	129.94	17	131.72
Dec. 5	129.00	Feb. 2, 1947	128.97	Aug. 21	133.59
11	128.63				

331 (\*947, p. 155; \*989, p. 178; 1019, p. 177; 1026, p. 168). Southland Paper Mills, Inc. well W4-0, formerly W-4-AL. 8 miles southeast of Nacogdoches.

Water level, in feet below land-surface datum, 1946-47

Date	Water level	Date	Water level	Date	Water level
Feb. 25, 1946	83.04	Dec. 5, 1946	88.75	July 1, 1947	96.82
Sept. 20	87.45	June 17, 1947	90.23	17	92.30

Parmer County

6 (\*840, p. 485; 845, p. 534; 947, p. 157; \*989, p. 179; 1026, p. 168). Mrs. K. Hamlin. No measurements made in 1947.

15 (\*840, p. 486; 845, p. 535; 886, p. 745; 947, p. 157; \*989, p. 180). A. C. Hays. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 20, T. 1 N., R. 5 E., 1 mile southeast of Black. Water level, in feet below land-surface datum, 1947: Mar. 27, 138.54.

Randall County

6a (\*845, p. 535; 886, p. 746; 909, p. 190; 939, p. 141; 947, p. 157; \*989, p. 180; 1074, p. 203). Measurements discontinued.

76 (\*840, p. 487; 845, p. 536; 909, p. 190; 939, p. 141; 947, p. 157; \*989, p. 180; 1074, p. 203). C. H. Ray. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 33, blk. 1, T. T. R. R. Survey, 4.75 miles north of Canyon. Water level, in feet below land-surface datum, 1947: Mar. 26, 108.24.

83a (\*845, p. 536; 886, p. 746; 909, p. 190; 939, p. 141; 947, p. 157; \*989, p. 180; 1074, p. 204). Owner unknown. SE corner NE $\frac{1}{4}$  sec. 28, blk. 85, 2 miles west of Canyon. Water levels, in feet below land-surface datum, 1947: Jan. 20, 79.36; Mar. 25, 78.92.

103 (\*840, p. 487; 845, p. 536; 886, p. 746; 909, p. 190; 939, p. 141; 947, p. 157; \*989, p. 180; 1074, p. 204). W. H. Bush Estate. SW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 64, blk. 85, 1.2 miles south of Canyon. Water level, in feet below land-surface datum, 1947: Mar. 25, 9.38.

117 (\*845, p. 536; 886, p. 746; 909, p. 191; 939, p. 142; 947, p. 158; \*989, p. 180; 1074, p. 204). Melton Dooley. NE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 128, blk. B5, 4.75 miles south of Canyon. Water levels, in feet below land-surface datum, 1947: Jan. 20, 40.06; Mar. 26, 40.34.

145a (\*845, p. 536; 886, p. 746; 909, p. 191; 939, p. 142; 947, p. 158; \*989, p. 180; 1074, p. 204). Owner unknown. SE corner NE $\frac{1}{4}$  sec. 10, blk. B5, 7.5 miles west of Canyon. Water levels, in feet below land-surface datum, 1947: Jan. 20, 111.36; Mar. 26, 111.27.

160a (\*845, p. 536; 886, p. 746; 909, p. 191; 939, p. 142; \*989, p. 190). Measurements discontinued.

167a (\*845, p. 536; 886, p. 746; 909, p. 191; \*989, p. 180). Measurements discontinued.

172a (\*845, p. 536; 886, p. 746; 909, p. 191; 939, p. 142; 947, p. 158; \*989, p. 180; 1074, p. 204). Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 107, blk. B5, H. & G. N. R. R. Survey, 9.5 miles west of Canyon. Water level, in feet below land-surface datum, 1947: Mar. 26, 108.44. Measurements discontinued after Mar. 26.

189a (\*845, p. 536; 886, p. 746; 909, p. 191; 939, p. 142; \*989, p. 180). W. F. Miller. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 109, blk. M8, 16 miles south of Canyon. Water level, in feet below land-surface datum, 1947: Mar. 25, 91.47.

Reeves County

(No measurements made in 1947.)

San Patricio County

58 (\*909, p. 193; 939, p. 155; 947, p. 165). J. D. Mills. 2.5 miles west of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 9.15.

68 (\*909, p. 193; 939, p. 155; 947, p. 165; 1026, p. 169). F. N. Edwards. 4 miles southwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 18.87.

69 (\*909, p. 193; 939, p. 155; 947, p. 165; 1026, p. 169). O. V. Coopender. 4 miles west of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 14.19.

80 (\*909, p. 193; 939, p. 155; 947, p. 168; 1026, p. 169). Lewis Caldwell. 3.25 miles southwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 13.46.

85 (\*909, p. 193; 939, p. 155; 947, p. 168; 1026, p. 169). W. H. Bryan. 3.25 miles west of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 22, 14.81.

86 (\*909, p. 193; 939, p. 155; 947, p. 168; 1026, p. 169). T. H. Bennight. 3.25 miles west of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 22, 15.73.

107 (\*909, p. 193; 939, p. 155; 947, p. 168; 1026, p. 169). L. S. Lane. 2.5 miles northwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 20, 6.08.

119 (\*909, p. 194; 939, p. 155; 947, p. 165). R. E. Farley. Measurements discontinued.

129 (\*909, p. 194; 939, p. 155; 947, p. 165; 1026, p. 169). B. A. Linderman. 0.5 mile northwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 20, 12.11.

140 (\*909, p. 194; 939, p. 155; 947, p. 165; 1026, p. 169). Bruce Hannah. 3 miles southwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 22, 16.03.

144 (\*909, p. 194; 939, p. 155; 947, p. 165; 1026, p. 169). Fred McMullen. 3.25 miles southwest of Aransas Pass. Water level, in feet below land-surface datum, 1947: Nov. 21, 15.79.

Swisher County

2 (\*840, p. 491; 845, p. 539; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 165; \*989, p. 180; 1019, p. 177; 1026, p. 169; 1074, p. 204). I. Irlbeck. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 63, blk. M8, 3 miles south of Happy. Water levels, in feet below land-surface datum, 1947: Jan. 15, 77.88; Mar. 17, 78.85.

16 (\*840, p. 491; 845, p. 540; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 177; 1026, p. 169; 1074, p. 204). Tulia Wheat Growers. Formerly owned by C. M. Brant. SW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 117, blk. M8, 8 miles south of Happy. Water levels, in feet below land-surface datum, 1947: Jan. 15, 63.26; Mar. 10, 63.39.

36 (\*840, p. 491; 845, p. 540; 886, p. 749; 909, p. 196; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170; 1074, p. 204). W. C. Cowan. Formerly owned by Foster Klous. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 3, blk. W1, 4.5 miles northwest of Tulia. Water levels, in feet below land-surface datum, 1947: Jan. 18, 56.78; Mar. 10, 56.65.

255 (\*840, p. 492; 845, p. 540; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170; 1074, p. 205). Dr. H. H. Hicks. Formerly owned by Charles Inman. NW $\frac{1}{4}$  sec. 2, blk. B6, 7.5 miles east of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 16, 49.56; Mar. 13, 49.15.

258 (\*840, p. 492; 845, p. 540; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170; 1074, p. 205). B. A. Dubbert. NW $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 25, blk. M14, 8 miles east of Kress. Water level, in feet below land-surface datum, 1947: Jan. 16, 61.14.

301 (\*840, p. 492; 845, p. 540; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170). W. T. Adams. Measurements discontinued.

302 (\*840, p. 492; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170; 1074, p. 205). J. D. Vaughn. SW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 23, blk. W1, 1.5 miles southwest of Tulia. Water levels, in feet below land-surface datum, 1947: Jan. 15, 63.73; Mar. 10, 63.61.

305 (\*840, p. 493; 845, p. 541; 886, p. 749; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1026, p. 170; 1074, p. 205). J. L. Cantrell. NW, corner NE $\frac{1}{4}$  sec. 25, blk. W1, 1.75 miles southeast of Tulia. Water level, in feet below land-surface datum, 1947: Mar. 14, 38.75.

323 (\*840, p. 493; 845, p. 541; 886, p. 750; 909, p. 196; 939, p. 156; 947, p. 166; \*989, p. 181; 1019, p. 178; 1026, p. 170; 1074, p. 205). J. L. Guest. Measurements discontinued.

332 (\*840, p. 493; 845, p. 541; 886, p. 750; 909, p. 197; 939, p. 157; 947, p. 166; \*989, p. 182; 1019, p. 178; 1026, p. 170; 1074, p. 205). W. F. Kerr. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 28, blk. M13, 4 miles north of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 75.78; Mar. 12, 73.62.

354 (\*840, p. 494; 845, p. 541; 886, p. 750; 909, p. 197; 939, p. 157; 947, p. 166; \*989, p. 182; 1019, p. 178; 1026, p. 170; 1074, p. 205). V. A. Beck. NW $\frac{1}{4}$ SW $\frac{1}{4}$  sec. 52, blk. M13, at west edge of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 66.56; Mar. 10, 66.73.

359 (\*886, p. 750; 909, p. 197; 939, p. 157; 947, p. 167; \*989, p. 182; 1019, p. 178; 1026, p. 170; 1074, p. 205). E. E. Formway. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 57, blk. M13, 2.75 miles west of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 82.10; Mar. 13, 81.84.

368 (\*840, p. 494; 845, p. 540; 886, p. 750; 909, p. 197; 939, p. 157; 947, p. 167; \*989, p. 182; 1019, p. 178; 1026, p. 170; 1074, p. 205). C. F. Harris. Formerly owned by L. B. White. About 0.3 mile west of south-east corner sec. 62, blk. M13, on R. F. Hudgins survey, 2.75 miles south of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 86.89; Mar. 10, 86.70.

370 (\*840, p. 494; 845, p. 541; 886, p. 750; 909, p. 197; 939, p. 157; 947, p. 167; \*989, p. 182; 1019, p. 178; 1026, p. 170; 1074, p. 205). Neeley Culp. Formerly owned by Texas Land & Development Co. About 0.33 mile east of SE, corner sec. 62, blk. M13, on R. F. Hudgins survey, 2.7 miles south of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 84.97; Mar. 10, 84.26.

383 (\*840, p. 495; 845, p. 542; 886, p. 750; 909, p. 197; 939, p. 157; 947, p. 167; \*989, p. 182; 1019, p. 179; 1026, p. 171; 1074, p. 205). S. R. Golden. Formerly owned by Texas Land & Development Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 54, blk. M14, 4.5 miles southeast of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 16, 81.83; Mar. 14, 81.54.

421 (#947, p. 167; #989, p. 182; 1019, p. 179; 1026, p. 171; 1074, p. 205). A. V. Perryman. NW $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 9, blk. K3, 19.5 miles southwest of Tullia. Water levels, in feet below land-surface datum, 1947: Jan. 21, 64.59; Mar. 12, 64.42.

429 (#886, p. 751; 909, p. 197; 939, p. 157; 947, p. 167; #989, p. 182; 1019, p. 179; 1026, p. 171; 1074, p. 206). Clifton Reed. NW. corner strip sec. 66, J. A. Ward survey, 5.5 miles west of Kress. Water levels, in feet below land-surface datum, 1947: Jan. 15, 104.25; Mar. 12, 103.73.

#### Terry County

(No measurements made in 1946.)

#### Travis County

256 (#947, p. 168; #989, p. 183; 1019, p. 170; 1026, p. 171; 1074, p. 206). Mr. Robinson. No measurements made in 1947.

261 (#939, p. 158; 947, p. 168; #989, p. 183; 1019, p. 179; 1026, p. 171; 1074, p. 206). H. C. Warren. No measurements made in 1947.

266 (#939, p. 158; 947, p. 168; #989, p. 183; 1019, p. 179; 1026, p. 171; 1074, p. 206). J. D. Dillingham. No measurements made in 1947.

280 (#947, p. 168; #989, p. 183; 1019, p. 179; 1026, p. 171; 1074, p. 206). Travis County. No measurements made in 1947.

284 (#939, p. 158; 947, p. 168; #989, p. 183; 1019, p. 180; 1026, p. 172; 1074, p. 206). Robinson Bros. No measurements made in 1947.

318 (#947, p. 168; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). R. R. Sanson. No measurements made in 1947.

322 (#939, p. 158; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). John Teagle. No measurements made in 1947.

323 (#939, p. 158; 947, p. 168; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). Fred Parsons. No measurements made in 1947.

327 (#939, p. 148; 947, p. 168; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). Walling Estate. No measurements made in 1947.

328 (#939, p. 158; 947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). Walling Estate. No measurements made in 1947.

331 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). J. C. Campbell, Jr. No measurements made in 1947.

343 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). Travis County Water District No. 2. No measurements made in 1947.

392 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 206). Tom Williams. No measurements made in 1947.

400 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 207). Mrs. S. D. Williams. No measurements made in 1947.

414 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 207). J. R. McElroy. No measurements made in 1947.

460 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 207). Rosa Dellanna. 2 miles southwest of State Capitol. Water levels, in feet below land-surface datum, 1947: June 20, 75.38; Nov. 18, 79.69.

483 (#947, p. 169; #989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 207). S. N. Allred. 5 miles southwest of State Capitol.



483--Continued.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level
Jan. 29	211.70	Oct. 31	236.31	Dec. 30	239.01
Mar. 30	209.40	Nov. 30	237.41		

502 (\*840, p. 496; 845, p. 543; 886, p. 751; 909, p. 198; 939, p. 158; 947, p. 169; \*989, p. 184; 1019, p. 180; 1026, p. 172; 1074, p. 207).  
H. S. Lawson heirs. 6.5 miles south of State Capitol.

Water level, in feet with reference to land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	+0.5	Apr. 27	-2.72	July 27	-7.91	Oct. 31	-12.16
29	+9	May 1	-4.41	Sept. 1	-8.51	Nov. 30	-13.34
Mar. 2	-.88	June 29	-6.56	28	-10.45	Dec. 30	-13.87
30	-.72						

508 (\*840, p. 497; 845, p. 543; 886, p. 751; 909, p. 199; \*989, p. 185; 1019, p. 181; 1026, p. 173). Barge Renoe. No measurements made in 1947.

509 (\*840, p. 497; 845, p. 543; 886, p. 751; 909, p. 199; 939, p. 159; 947, p. 170; \*989, p. 185; 1019, p. 181; 1026, p. 173; 1074, p. 207).  
Erlene Patton. 9.4 miles west of State Capitol. Water levels, in feet below land-surface datum, 1947: Jan. 12, 34.82; Jan. 29, 34.87; Mar. 2, 35.34; Mar. 30, 35.38. Measurements discontinued.

527 (\*840, p. 497; 845, p. 544; 886, p. 752; 909, p. 199; 939, p. 159; 947, p. 170; \*989, p. 185; 1019, p. 181; 1026, p. 173; 1074, p. 207).  
Sarah Moore. About 100 yards south of Cedar Valley post office.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	2.37	Apr. 27	5.08	July 27	6.31	Oct. 31	8.99
29	2.72	June 1	5.02	Sept. 1	7.09	Nov. 30	9.85
Mar. 2	4.33	29	5.44	28	8.47	Dec. 30	10.54
30	4.68						

616 (\*840, p. 497; 845, p. 544; 886, p. 752; 909, p. 199; 939, p. 159; 947, p. 170; \*989, p. 185; 1019, p. 181; 1026, p. 173; 1074, p. 207).  
J. R. Moore. No measurements made in 1947.

618 (\*840, p. 497; 845, p. 544; 886, p. 752; 909, p. 199; 939, p. 159; 947, p. 170; \*989, p. 185; 1019, p. 181; 1026, p. 173; 1074, p. 207).  
Homer Heep. About 50 feet east of U. S. Highway 81, 1 mile north of Travis-Hays county line.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	9.81	Apr. 27	16.47	July 27	23.60	Oct. 31	26.58
29	9.23	June 1	19.06	Sept. 1	24.23	Nov. 30	27.11
Mar. 2	13.12	29	22.37	28	25.29	Dec. 30	26.89
30	13.95						

687 (\*947, p. 170; \*989, p. 186; 1019, p. 181; 1026, p. 173; 1074, p. 208). Mrs. Elizabeth Gentsch. No measurements made in 1947.

858 (\*947, p. 170; \*989, p. 186; 1019, p. 181; 1026, p. 173; 1074, p. 208). B. R. Payton. Measurements discontinued.

860 (\*947, p. 170; \*989, p. 186; 1019, p. 181; 1026, p. 173; 1074, p. 208). Mrs. B. Hamann. No measurements made in 1947.

884 (\*947, p. 170; \*989, p. 186; 1019, p. 182; 1026, p. 173; 1074, p. 208). H. A. Townsley. 7.5 miles northwest of Creedmoor. Water levels, in feet below land-surface datum, 1947: June 20, 168.08; Nov. 18, 202.91.

885 (\*947, p. 171; \*989, p. 186; 1019, p. 182; 1026, p. 173; 1074, p. 208). F. B. Polk. 7.25 miles northwest of Creedmor. Water level, in feet below land-surface datum, 1947: June 20, 128.75.

890 (\*947, p. 171; \*989, p. 186; 1019, p. 182; 1026, p. 174; 1074, p. 208). Russell C. Faulkner. No measurements made in 1947.

892 (\*947, p. 171; \*989, p. 186; 1019, p. 182; 1026, p. 174; 1074, p. 208). Russell C. Faulkner. No measurements made in 1947.

895 (\*947, p. 171; \*989, p. 186; 1019, p. 182; 1026, p. 174; 1074, p. 208). Joe C. Carrington. 5 miles northwest of Creedmor.

Water level, in feet below land-surface datum, 1947

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	24.32	Apr. 27	22.83	July 27	33.36	Oct. 31	52.63
29	21.87	June 1	24.10	Sept. 1	40.91	Nov. 30	57.20
Mar. 2	21.44	29	27.70	28	47.00	Dec. 30	59.63
30	21.55						

Uvalde County

H-2-4 (\*678, pp. 102, 128; 840, p. 498; 845, p. 545; 886, p. 753; 909, p. 199; 939, p. 159; 947, p. 171; \*989, p. 177; 1019, p. 182; 1026, p. 174; 1074, p. 208). H. I. Holmes. 13.7 miles north of Uvalde. Water levels, in feet below land-surface datum, 1947: July 1, 143.82; Nov. 7, 146.33.

H-2-5 (\*678, pp. 102, 128; 840, p. 498; 845, p. 545; 886, p. 753; 909, p. 200; 939, p. 159; 947, p. 171; \*989, p. 187; 1019, p. 182; 1026, p. 174; 1074, p. 208). Mrs. W. E. Fitzgerald. 18 miles north of Uvalde. Water levels, in feet below land-surface datum, 1947: July 1, 47.00; Nov. 7, 88.36.

H-4-6 (\*678, pp. 104, 128; 840, p. 498; 845, p. 545; 886, p. 753; 909, p. 200; 939, p. 159; 947, p. 171; \*989, p. 187; 1019, p. 182; 1026, p. 174; 1074, p. 208). Briscoe, Fenley & Spangler. 4.5 miles northwest of Uvalde. Water levels, in feet below land-surface datum, 1947: July 1, 67.22; Nov. 7, 68.85.

H-4-28 (\*678, pp. 104, 129; 840, p. 499; 845, p. 545; 886, p. 753; 909, p. 200; 939, p. 160; 947, p. 172; \*989, p. 187; 1019, p. 182; 1026, p. 174; 1074, p. 209). J. R. Ingraham. 7.2 miles west of Uvalde. Water levels, in feet below land-surface datum, 1947: June 26, 20.23; Nov. 7, 21.31.

H-4-34 (\*909, p. 200; 939, p. 160; 947, p. 172; \*989, p. 187; 1019, p. 182; 1026, p. 174; 1074, p. 209). John Rosenow. 13.5 miles northwest of Uvalde. Water levels, in feet below land-surface datum, 1947: July 1, 158.28; Nov. 7, 164.12.

H-4-35 (\*909, p. 200; 939, p. 160; 947, p. 172; \*989, p. 187; 1019, p. 182; 1026, p. 174). John Rosenow. 12.4 miles west of Uvalde. Water levels, in feet below land-surface datum, 1947: June 25, 56.64; Nov. 7, 70.08.

H-5-1 (\*678, pp. 106, 129; 840, p. 499; 845, p. 549; 886, p. 753; 909, p. 201; 939, p. 160; 947, pp. 172, 173; \*989, p. 187; 1019, pp. 182-3; 1074, p. 209). City of Uvalde. 2 blocks south of Uvalde County courthouse.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.77	37.42	36.55	35.95	35.67	35.67	35.04	34.50	34.21	34.75	35.27	35.68
2	37.75	37.39	36.52	35.95	35.66	35.70	35.01	34.42	34.25	34.76	35.25	35.70
3	37.77	37.34	36.48	35.94	35.65	35.77	34.95	34.35	34.27	34.79	35.25	35.71
4	37.76	37.34	36.45	35.89	35.63	35.77	34.91	34.32	34.29	34.82	35.28	35.73
5	37.75	37.30	36.45	35.94	35.63	35.79	34.92	34.27	34.29	34.82	35.31	35.77

## H-5-1--Continued.

Daily noon water level, in feet below land-surface datum, 1947

(From recorder charts)												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	37.72	37.24	36.43	35.93	35.66	35.80	34.88	34.27	34.32	34.84	35.35	35.78
7	37.70	37.21	36.40	35.94	35.69	35.83	34.86	34.30	34.31	34.86	35.38	35.79
8	37.69	37.20	36.37	35.94	35.68	35.83	34.84	34.32	34.34	34.87	35.39	35.82
9	37.69	37.18	36.35	35.90	35.71	35.84	34.79	34.32	34.35	34.90	35.40	35.84
10	37.68	37.14	36.32	35.90	35.66	35.88	34.78	34.30	34.37	34.92	35.39	35.87
11	37.65	37.08	36.30	35.93	35.63	35.89	34.76	34.31	34.39	34.92	35.42	35.90
12	37.62	37.07	36.28	35.90	35.63	35.90	34.75	34.27	34.42	34.93	35.43	35.92
13	37.62	37.05	36.29	35.88	35.63	35.95	34.70	34.25	34.41	34.97	35.45	35.97
14	37.61	37.00	36.26	35.84	35.64	35.94	34.70	34.22	34.41	34.98	35.44	35.98
15	37.60	37.00	36.27	35.35	35.63	35.91	34.68	34.25	36.43	34.98	35.50	35.98
16	37.62	36.92	36.23	35.89	35.62	35.93	34.66	34.28	34.40	35.00	35.52	36.02
17	37.64	36.89	36.23	35.89	35.63	35.94	34.66	34.28	34.42	35.03	35.52	36.05
18	37.63	36.85	36.15	35.87	35.60	35.98	34.65	34.30	34.47	35.06	35.52	36.07
19	37.60	36.82	36.14	35.87	35.58	35.87	34.56	34.33	34.50	35.06	35.52	36.09
20	37.59	36.80	36.13	35.87	35.57	35.73	34.48	34.34	34.51	35.09	35.52	36.13
21	37.62	36.77	36.10	35.88	35.61	35.68	34.49	34.22	34.53	35.12	35.53	36.15
22	37.61	36.73	36.10	35.88	35.62	35.65	34.50	34.18	34.58	35.13	35.54	36.17
23	37.57	36.70	36.10	35.89	35.62	35.66	34.51	34.15	34.60	35.17	35.54	36.20
24	37.56	36.70	36.10	35.89	35.63	35.40	34.52	34.13	34.61	35.21	35.56	36.24
25	37.55	36.67	36.11	35.87	35.63	35.18	34.54	34.13	34.64	35.25	35.58	36.27
26	37.53	36.62	36.07	35.82	35.64	35.11	34.54	34.12	34.67	35.23	35.60	36.29
27	37.51	36.60	36.05	35.77	35.67	35.07	34.52	34.12	34.69	35.26	35.61	36.31
28	37.49	36.55	36.04	35.72	35.68	35.06	34.50	34.14	34.69	35.29	35.65	36.37
29	37.45		35.99	35.69	35.70	35.03	34.51	34.18	34.71	35.24	35.65	36.37
30	37.45		35.99	35.68	35.70	35.04	34.51	34.20	34.73	35.21	35.67	36.40
31	37.45		35.95		35.68		34.50	34.20		35.23		36.41

H-5-22 (\*678, pp. 108, 128; 840, p. 499; 845, p. 546; 886, p. 753; 909, p. 201; 939, p. 160; 947, p. 173; \*989, p. 188; 1019, p. 183; 1026, p. 174; 1074, p. 210). Jack Dean. 2 miles north of Uvalde. Water levels, in feet below land-surface datum, 1947: June 30, 63.17; Nov. 7, 63.87.

H-5-26 (\*678, pp. 108, 130; 840, p. 499; 845, p. 546; 909, p. 201; 939, p. 160; 947, p. 173; \*989, p. 188; 1019, p. 183; 1074, p. 210). George Kennedy. 7.2 miles northeast of Uvalde. Water levels, in feet below land-surface datum, 1947: June 30, 163.43; Nov. 7, 166.23.

H-5-51 (\*678, pp. 110, 130; 840, p. 499; 845, p. 546; 886, p. 753; 909, p. 201; 939, p. 260; 947, p. 173; \*989, p. 188; 1019, p. 183; 1026, p. 175; 1074, p. 210). O. T. Caldwell. 2.5 miles southwest of Uvalde. Water levels, in feet below land-surface datum, 1947: July 1, 38.01; Nov. 7, 38.41.

H-6-8 (\*678, pp. 112, 131; 840, p. 500; 845, p. 546; 886, p. 753; 909, p. 201; 939, p. 160; 947, p. 173; \*989, p. 188; 1019, p. 183; 1026, p. 175; 1074, p. 210). K. K. Woodley. 1.5 mile east of Knippa. Water levels, in feet below land-surface datum, 1947: June 28, 70.07; Nov. 7, 69.88.

H-6-10 (\*678, pp. 112, 131; 840, p. 500; 845, p. 546; 886, p. 754; 909, p. 202; 939, p. 160; 947, p. 173; \*989, p. 188; 1019, p. 183; 1074, p. 210). Herbert Stevens. 3 miles west of Sabinal. Water levels, in feet below land-surface datum, 1947: June 28, 66.69; Nov. 7, 67.35.

H-6-16 (\*678, pp. 114, 131; 840, p. 500; 845, p. 546; 909, p. 202; 939, p. 160; 947, p. 173; \*989, p. 188; 1019, p. 183; 1074, p. 210). Cecil Reagan. 3 miles southeast of Knippa. Water level, in feet below land-surface datum, 1947: June 28, 169.44.

XU-9 (\*840, p. 501; 845, p. 546; 886, p. 754; 909, p. 202; 939, p. 160; 947, p. 174; \*989, p. 188; 1019, p. 184; 1026, p. 175; 1074, p. 210). Frank Kirchgraber. 16.5 miles west of Uvalde. Water levels, in feet below land-surface datum, 1947: June 25, 52.58; Nov. 7, 62.07.

XU-10 (\*840, p. 501; 845, p. 546; 886, p. 754; 909, p. 202; 939, p. 160; 947, p. 174; \*989, p. 188; 1019, p. 184; 1026, p. 175; 1074, p. 211). Texas & New Orleans Railroad Co. At Cline. Water levels, in feet below land-surface datum, 1947: June 25, 45.79; Nov. 6, 46.75.

#### Val Verde County

XV-2 (\*840, p. 501; 845, p. 547; 886, p. 754; 909, p. 202; 939, p. 161; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 175; 1074, p. 211). Otto Koog. 2.8 miles east of Del Rio. Water levels, in feet below land-surface datum, 1947: June 24, 77.65; Nov. 3, 76.60.

XV-3 (\*840, p. 501; 845, p. 547; 886, p. 754; 909, p. 203; 939, p. 161; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 175; 1074, p. 211). Patricio Confreres. 1.5 miles east of Del Rio. Water levels, in feet below land-surface datum, 1947: June 24, 41.48; Nov. 3, 41.07.

#### Waller County

152 (\*840, p. 502; 845, p. 548; 886, p. 755; \*889-C, p. 258; 909, p. 203; 939, p. 161; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 175; 1074, p. 211). Mr. Meyers. 1.5 miles east of Prairie View railroad station. Water levels, in feet below land-surface datum, 1947: Jan. 30, 1.94; Mar. 13, 2.10; June 6, 3.58.

154 (\*840, p. 502; 845, p. 548; 886, p. 755; \*889-C, p. 258; 909, p. 203; 939, p. 161; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 175; 1074, p. 211). W. D. Weaver. About 0.6 mile west of Waller. Water levels, in feet below land-surface datum, 1947: Jan. 30, 8.49; Mar. 13, 26.13; June 6, 9.67; Sept. 16, 13.08.

223 (\*889-C, p. 258; 909, p. 204; 939, p. 161; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 176; 1074, p. 211). T. B. Tucker. 6.75 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 63.03.

225 (\*889-C, p. 259; \*989, p. 189; 1019, p. 184; 1026, p. 176; 1074, p. 211). Owner's well 2. L. E. Morrison. 6 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 65.81.

235 (\*889-C, p. 259; \*909, p. 204; 939, p. 162; 947, p. 174; \*989, p. 189; 1019, p. 184; 1026, p. 176; 1074, p. 211). John Cope. 2 miles west of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 65.52.

239 (\*889-C, p. 259; \*989, p. 189; 1019, p. 184; 1026, p. 176; 1074, p. 211). Lyn Hebert. 12 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 54.51.

240 (\*889-C, p. 259; \*989, p. 190; 1019, p. 184; 1026, p. 176; 1074, p. 211). B. Ray Woods. No measurements made in 1947.

242 (\*889-C, p. 260; \*989, p. 190; 1019, p. 184; 1026, p. 176; 1074, p. 211). Robichaux & Thompson. 8 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 62.03.

245 (\*889-C, p. 260; \*989, p. 190; 1019, p. 184; 1026, p. 176; 1074, p. 211). Owner's well 2. G. P. Nelson. 10 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 28, 58.88.

246 (\*889-C, p. 260; \*989, p. 190; 1019, p. 185; 1026, p. 176; 1074, p. 212). A. E. Thompson. No measurements made in 1947.

247 (\*889-C, p. 260; \*989, p. 190; 1019, p. 185; 1026, p. 176; 1074, p. 212). Owner's well 5. T. B. Tucker. 6.5 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 64.30.

252 (\*889-C, p. 260; \*989, p. 190; 1019, p. 185; 1026, p. 176; 1074, p. 212). J. A. Kimball. 2.25 miles northwest of Katy. Water level, in feet below land-surface datum, 1947: Mar. 24, 64.36.

Wharton County

1.A-1 (\*947, p. 178; \*989, p. 190; 1019, p. 185; 1026, p. 176; 1074, p. 212). Otto Michelson. 11 miles west of Hahn. Water level, in feet below land-surface datum, 1947: Mar. 25, 39.05.

8.A-8 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 174; 947, p. 178; \*989, p. 190; 1019, p. 185; 1026, p. 176; 1074, p. 212). J. W. Wyer. About 0.7 mile west of Round Mott school. Water level, in feet below land-surface datum, 1947: Mar. 25, 38.24.

31.A-31 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 176; 1074, p. 212). Tom Thomas. 6.5 miles north of Louise. Water levels, in feet below land-surface datum, 1947: Mar. 16, 25.78; Mar. 25, 25.82.

32.A-32 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 176; 1074, p. 212). Harfst Bros. About 0.7 mile south of Cobbler Creek school. Water level, in feet below land-surface datum, 1947: Mar. 14, 30.40.

33.B-33 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 178; 1026, p. 176; 1074, p. 212). Harfst Bros. No measurement made in 1947.

57.C-57 (\*939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). W. A. Harrison. 3.25 miles north of Glen Flora. Water level, in feet below land-surface datum, 1947: Mar. 27, 13.34.

66.C-66 (\*939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). J. J. Pendegrass. 2.5 miles west of Bonus. Water level, in feet below land-surface datum, 1947: Mar. 27, 21.27.

70a.C-70a (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). J. J. Vacek. 3.2 miles west of East Bernard. Water level, in feet below land-surface datum, 1947: Mar. 27, 7.25.

70b.C-70b (\*840, p. 503; 845, p. 548; 886, p. 775; 909, p. 204; 939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). J. J. Vacek. About 275 feet south of well 70a. Water level, in feet below land-surface datum, 1947: Mar. 27, 4.15.

81.C-81 (\*939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177). William J. Corman. In Lissie. Water level, in feet below land-surface datum, 1947: Mar. 27, 21.50.

84.C-84 (\*947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). Fred Fotjek. 5 miles west of East Bernard. Water level, in feet below land-surface datum, 1947: Mar. 27, 18.28.

96.C-96 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 178; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). Frank Bucek. 8 miles north of Wharton. Water level, in feet below land-surface datum, 1947: Mar. 27, 20.95.

108.D-108 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 204; 939, p. 175; 947, p. 179; \*989, p. 191; 1019, p. 185; 1026, p. 177; 1074, p. 212). City of Wharton. In Wharton. Water level, in feet below land-surface datum, 1947: Mar. 27, 21.24.

109.D-109 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 205; 939, p. 175; 947, p. 179; \*989, p. 191; 1019, p. 186; 1026, p. 177). City of Wharton. In Wharton. Water level, in feet below land-surface datum, 1947: Mar. 27, 26.87.

148.E-148 (\*947, p. 179; \*989, p. 191; 1019, p. 186; 1026, p. 177; 1074, p. 213). Central Power & Light Co. In El Campo, southwest of ice plant. Water level, in feet below land-surface datum, 1947: Apr. 6, 35.20.

165.A-165 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 205; 939, p. 175; 947, p. 179; \*989, p. 191; 1019, p. 186; 1026, p. 177; 1074, p. 213). H. P. Stockton. 1.4 miles northwest of Louise. Water level, in feet below land-surface datum, 1947: Mar. 25, 22.87.

173.F-173 (\*840, p. 503; 845, p. 548; 886, p. 755; 909, p. 205; 939, p. 175; 947, p. 179; \*989, p. 191; 1019, p. 186; 1026, p. 177; 1074, p. 213). Stoval & Appling. 8.25 miles south of Louise. Water level, in feet below land-surface datum, 1947: Mar. 25, 15.85.

178.F-178 (\*845, p. 549; 886, p. 756; 909, p. 205; 939, p. 175; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 177; 1074, p. 213). Adrian Johnson. 8 miles southwest of El Campo. Water level, in feet below land-surface datum, 1947: Mar. 26, 17.03.

181.F-181 (\*845, p. 549; 886, p. 756; 909, p. 205; 939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). T. E. Appling. 7 miles southeast of El Campo. Water level, in feet below land-surface datum, 1947: Mar. 26, 21.25.

186.F-186 (\*840, p. 204; 845, p. 549; 886, p. 756; 909, p. 205; 939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). Otto Mickelson. 2.5 miles north of Danevang. Water level, in feet below land-surface datum, 1947: Mar. 26, 14.91.

200.F-200 (\*939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). J. L. Myatt. 4.25 miles west of Danevang. Water level, in feet below land-surface datum, 1947: Mar. 26, 20.23.

209.F-209 (\*845, p. 549; 886, p. 756; 909, p. 205; 939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). J. C. Allen. 7 miles southeast of El Campo. Water level, in feet below land-surface datum, 1947: Mar. 26, 11.32.

239.D-239 (\*840, p. 504; 845, p. 549; 886, p. 756; 909, p. 205; 939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). Gulf, Colorado & Santa Fe Railway Co. Water level, in feet below land-surface datum, 1947: Mar. 27, 27.30.

241.D-241 (\*845, p. 549; 886, p. 756; 909, p. 205; 939, p. 176; 947, p. 179; \*989, p. 192; 1019, p. 186; 1026, p. 178; 1074, p. 213). Texas Gulf Sulphur Co. At New Gulf, 400 feet northeast of timekeeper's office. Water level, in feet below land-surface datum, 1947: Mar. 27, 23.01.

#### Williamson County

(No measurements made in 1947.)

#### Zavala County

H7-20 (\*777, p. 217; 840, p. 504; 845, p. 549; 886, p. 756; 909, p. 205; 939, p. 177; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179; 1074, p. 214). W. A. Butler. 5.5 miles north of La Pryor. Water level, in feet below land-surface datum, 1947: July 25, 75.66.

M6-9 (\*777, p. 218; 840, p. 504; 845, p. 549; 886, p. 756; 909, p. 205; 939, p. 177; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179). Plumly Ranch. Measurements discontinued.

M6-10 (\*777, p. 218; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179; 1074, p. 214). W. M. Van Cleve. No measurements made in 1947.

M6-16 (\*777, p. 218; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179; 1074, p. 214). J. S. Steward. 6 miles northwest of Cometa. Water level, in feet below land-surface datum, 1947: July 23, 49.41.

M6-18 (\*777, p. 218; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179; 1074, p. 214). N. E. Ware. 4 miles northeast of Cometa. Water level, in feet below land-surface datum, 1947: July 23, 56.43.

M6-19 (\*777, p. 219; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 180; \*989, p. 193; 1019, p. 187; 1026, p. 179; 1074, p. 214). L. D. Van Cleve. 3 miles northeast of Cometa. Water level, in feet below land-surface datum, 1947: July 23, 66.98.

M9-1 (\*777, p. 219; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 180; \*989, p. 194; 1019, p. 187; 1026, p. 179; 1074, p. 214). T. B. Mear. In Cometa. Water level, in feet below land-surface datum, 1947: July 23, 79.54.

N1-24 (\*777, p. 219; 840, p. 504; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 181; \*989, p. 194; 1019, p. 187; 1026, p. 179; 1074, p. 214). J. C. Williams. 2.5 miles northwest of La Pryor. Water level, in feet below land-surface datum, 1947: July 24, 159.74.

N1-40 (\*777, p. 220; 840, p. 504; 845, p. 550; 909, p. 206; 939, p. 177; 947, p. 181; \*989, p. 194; 1019, p. 188; 1026, p. 179; 1074, p. 214). I. T. Pryor. 2 miles west of La Pryor. Water level, in feet below land-surface datum, 1947: July 24, 146.68.

N5-39 (\*777, p. 221; 840, p. 505; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 177; 947, p. 181; \*989, p. 194; 1019, p. 188; 1026, p. 179; 1074, p. 214). C. R. Jarrett. 2 miles northeast of Crystal City. Water level, in feet below land-surface datum, 1947: July 24, 105.15.

N5-40 (\*777, p. 221; 840, p. 505; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 178; 947, p. 181; \*989, p. 194; 1019, p. 188; 1026, p. 180; 1074, p. 214). C. R. Jarrett. 2.5 miles east of Crystal City. Water level, in feet below land-surface datum, 1947: July 24, 102.46.

N5-55 (\*777, p. 222; 840, p. 505; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 178; 947, p. 181; \*989, p. 194; 1019, p. 188; 1026, p. 180; 1074, p. 214). Cribbs & Davidson. 2.5 miles east of Crystal City. Water level, in feet below land-surface datum, 1947: July 24, 107.50.

N5-60 (\*777, p. 222; 840, p. 505; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 178; \*989, p. 194; 1019, p. 188; 1026, p. 180; 1074, p. 214). E. L. Reedy. 4 miles east of Crystal City. Water level, in feet below land-surface datum, 1947: July 24, 116.17.

N8-7 (\*777, p. 222; 840, p. 505; 845, p. 550; 886, p. 756; 909, p. 206; 939, p. 178; 947, p. 181; \*989, p. 194; 1019, p. 188; 1026, p. 180; 1074, p. 214). Dr. Watler Biedelsbach. 3 miles southeast of Crystal City. Water level, in feet below land-surface datum, 1947: July 24, 102.50.

