

Water Levels and Artesian Pressure in Observation Wells in the United States in 1948

Part 4. South-Central States

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

GEOLOGICAL SURVEY WATER-SUPPLY PAPER 1129

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



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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 1948

Part 4. SOUTH-CENTRAL STATES

INTRODUCTION

By A. N. Sayre and others

The ground-water investigations of the United States Geological Survey are primarily concerned with the location and appraisal of the ground-water resources of the Nation. They are carried on principally in financial cooperation with States and municipalities, or at the request of other Federal agencies. Most of the investigations have to do with the availability of usable water supplies, but a few deal with drainage, flood control, construction of waterways and dams, mine drainage, and other problems to which the principles of ground-water geology are pertinent. Water-Supply Paper 992 lists about 1,800 papers and reports describing ground-water investigations made by the Survey in cooperation with States and municipalities through 1945.

Significance of records of water level and artesian pressure

An essential part of the ground-water investigations is the measurement of fluctuations of water level and artesian pressure in wells. 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 indicate 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 waterworks, irrigation, or industrial uses, and the extent to which they are replenished in seasons of abundant rainfall or melting snow. The recorded changes of pressure in flowing wells indicate depletion or replenishment of the artesian supplies.

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. This series of water-supply papers is in a sense an inventory of ground-water supplies. Prior to 1940 the records were published in a single volume. 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 introduction to the chapter on each State contains an outline of the general program of work and special features of the program in the current year, such as preliminary reports issued or put on file during the year or of work done in preparation for such a report. A general discussion of the fluctuations of water level and statements in regard to precipitation, pumpage, and other factors affecting water level are included. The following table gives the numbers of water-level reports from 1935 through 1948.

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
1948	1126	1127	1128	1129	1130	1131

Scope of present volume

The present volume covers the south-central States and gives records of water level and artesian pressure in about 1,465 observation wells of the Geological Survey and cooperating agencies in Arkansas, Louisiana, Oklahoma, and Texas. Of these wells, 52 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 or the well number and a brief description are given in this report. This report includes about 6,250 individual determinations of water level and artesian pressure.

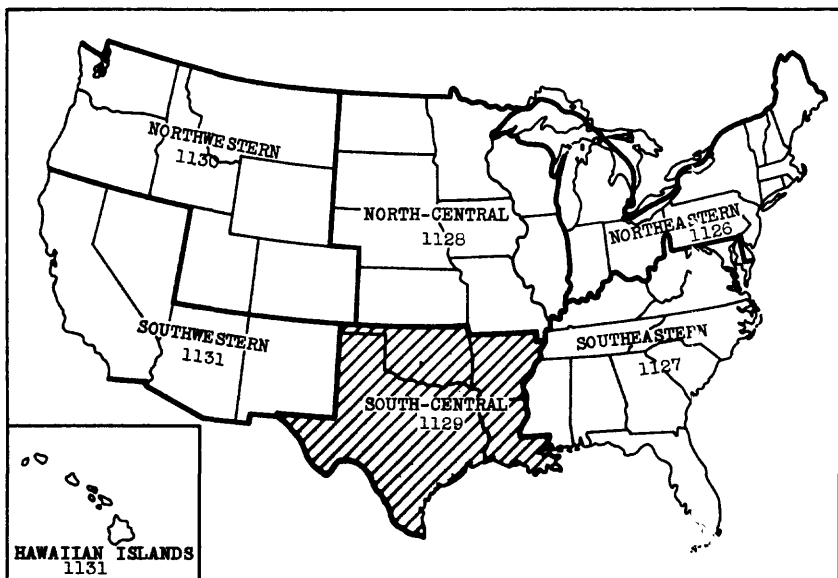


Figure 1.--Outline map of the United States showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1948. The shaded section represents the part of the country covered by this volume.

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. In 1943, it was decided that uniform practice should be adopted. Accordingly, a precise datum plane was established approximating the land surface at each well. The water levels and artesian heads for all wells listed in this report are given in feet below land-surface datum unless preceded by a plus (+) sign, or otherwise indicated in the descriptive text for each State. When 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.

Network of Federal observation wells

In 1942 and 1943 the Geological Survey established a network of 60 Federal observation wells. These wells were selected because the fluctuations of water level in them are believed to be typical and represent the fluctuations that occur in the parts of the country in which the wells are situated. At the end of 1948 the network comprised about 360 wells in 45 States, including 300 wells measured regularly in connection with cooperative ground-water investigations.

Changes in ground-water level in 1948 in the south-central part of the United States

In 1948 the precipitation in the south-central section of the country was below normal with the exception of Arkansas and Louisiana. In Arkansas, the total rainfall for 1948 was 50.09 inches, which is 1.64 inches above the 58-year average. In Louisiana, precipitation averaged 56.80 inches, above normal by 0.28 inch. The State average precipitation for Oklahoma was 31.88 inches, which is 1.01 inches below the average for the past 57 years. The average amount of precipitation in Texas was 24.16 inches, or 6.09 inches below normal. This was the driest year since 1924 in Texas. 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

Miss Dorothy M. Ireland and, later, Miss Verda M. Dougherty had general charge of the assembling of the several reports and did the editing; Mr. Rodney Hart edited the illustrations; and Mrs. Nauvoo Ragland, Mrs. Frances Dowell, and Miss Beulah B. Brunson did the offset typing.

Penn P. Livingston had general supervision of the observation-well program. The measurements were made under the direction of the district supervisors of the Ground Water Branch in the several States.

ARKANSAS

GRAND PRAIRIE REGION

,By J. H. Criner

PROGRAM OF WORK

Measurements of depth to water levels in wells in the Grand Prairie region were made in April 1948 in cooperation with the State Agricultural Experiment Station, the Federal Land Bank of St. Louis, and the Corps of Engineers, U. S. Army. The measurements were made by Professor Kyle Engler and Mr. Patterson. Measurements of water levels in the Grand Prairie region have been made for 22 successive years. The first measurements were 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 part of the water used for riceland 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.¹ Later reports bring these records up to date and include the records of other wells as measurements 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.²

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

² Engler, Kyle, Thompson, D. G., and Lazmann, 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.

FLUCTUATIONS OF WATER LEVEL

The fluctuations of water level in wells in the Grand Prairie 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 of the 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 caused by differences in the stage of 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 begins, then decline during the period of pumping, the rate of decline being large at first, then decreasing. 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 begins. 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 1948.

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

Measurements have been discontinued and will not be reported in subsequent years from the following wells: Arkansas County: 205, 293, 362, 412, 475, 492, 501, B 87, B 110, B 171; Lonoke County: 1, 10; Prairie County: 100.

Ashley County

A program of annual spring water-level measurements in riceland irrigation wells in Ashley County was started in 1946, and was continued in 1948 in cooperation with the University of Arkansas, Bureau of Research.

The riceland irrigated with ground water increased from 175 acres from 1 well in 1942 to over 5,000 acres from more than 20 wells in 1947.

There are three areas in Ashley County devoted chiefly to growing rice, the largest of which is in Pine Prairie, about 8 miles northeast of Hamburg. Another area is $4\frac{1}{2}$ miles southwest of Hamburg, and the other area extends northwestward from Hamburg for a distance of about 5 miles.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Arkansas County

280. 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. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	96.31	Apr. 17	96.21	July 10	99.02	Oct. 10	97.35
11	96.60	24	95.92	18	98.02	16	97.28
18	96.70	May 1	95.58	26	97.83	23	97.41
31	96.35	8	95.72	Aug. 2	97.75	31	97.12
Feb. 7	95.98	15	96.95	7	98.98	Nov. 7	97.58
15	96.38	22	97.34	14	98.02	13	97.41
21	96.09	29	97.02	27	99.16	22	97.28
Mar. 5	96.32	June 5	97.41	Sept. 4	97.98	29	97.49
14	95.95	14	98.30	11	97.99	Dec. 6	97.29
21	95.76	19	97.62	18	97.75	17	97.20
Apr. 4	96.15	27	98.72	25	97.80	29	97.00
11	95.52	July 5	98.27	Oct. 3	97.69		

The following table gives the highest and lowest water levels reached during the period 1938-48. The high stages are due partly to extremely low atmospheric pressure. The water levels given below 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
1948	July 7	99.60	Apr. 11	95.52

205. D. F. Fowler. Near NW. corner sec. 4, T. 2 S., R. 5 W. Records available: 1935-45. Measurements discontinued in 1946.

205 A. D. F. Fowler. Near NW. corner sec. 4, T. 2 S., R. 5 W., 30 feet north of well 205. Measuring point, top of casing, 0.4 foot above land-surface datum. Records available: 1946-48. Apr. 25, 1946, 98.32; May 6, 1947, 101.32; Apr. 21, 1948, 101.05.

210. W. H. Kornbaum. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 2 S., R. 5 W. Records available: 1938-44, 1947-48. Apr. 22, 96.09.

245. J. W. Darrough. Near NW. corner sec. 22, T. 2 S., R. 4 W. Records available: 1940-42, 1947-48. Apr. 17, 85.93.
261. W. M. Trice. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 2 S., R. 3 W. Records available: 1935-42, 1945, 1947-48. Apr. 17, 66.10.
274. W. W. Crum. NW $\frac{1}{4}$ sec. 29, T. 3 S., R. 6 W. Records available: 1940-44, 1947-48. Apr. 6, 30.05.
293. J. C. Gleason. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 3 S., R. 5 W., short distance south of railroad. Records available: 1938. Measurements discontinued.
305. Pearl Clow. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 3 S., R. 5 W. Records available: 1940-42, 1947-48. Apr. 6, 53.71.
311. W. J. Schrock. NW $\frac{1}{4}$ sec. 5. T. 3 S., R. 4 W. Records available: 1938-46, 1948. Apr. 7, 103.65.
318. University of Arkansas. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 3 S., R. 4 W. Records available: 1935-48. Apr. 7, 89.67.
344. F. T. Hill. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 3 S., R. 4 W. Records available: 1938-48. Apr. 7, 96.62.
353. R. L. Mitchell. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 3 S., R. 3 W. Records available: 1938-42, 1947-48. Apr. 7, 82.60.
355. W. A. Fehrenbaker. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 3 S., R. 3 W. Records available: 1940-42, 1945-48. Apr. 7, 76.39.
362. H. Bothe Estate. NW $\frac{1}{4}$ sec. 22, T. 3 S., R. 2 W. Records available: 1939-42. Measurements discontinued.
364. J. T. McWilliams. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 35, T. 3 S., R. 2 W. Records available: 1940-42, 1947-48. Apr. 14, 56.40.
- 374A. C. W. McDougall. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 4 S., R. 5 W. Records available: 1939-42, 1945, 1947-48. Apr. 6, 44.09.
378. Yeske. Near SE. corner sec. 13, T. 4 S., R. 5 W. Records available: 1939-42, 1945, 1947-48. Apr. 16, 91.35.
- 392A. F. E. Hillman. SW $\frac{1}{4}$ sec. 1, T. 4 S., R. 4 W. Records available: 1939-42, 1945-48. Apr. 7, 85.38.
412. Fred Dupslaff. NW $\frac{1}{4}$ sec. 5, T. 4 S., R. 2 W. Records available: 1938-42. Measurements discontinued.
414. J. T. McWilliams. Near NE. corner sec. 11, T. 4 S., R. 2 W. Records available: 1938-42, 1945-48. Apr. 14, 61.56.
415. J. W. Watkins. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 4 S., R. 2 W. Records available: 1940-42, 1945-48. Apr. 14, 70.52.
437. B. L. Williams. Near SW. corner sec. 7, T. 5 S., R. 4 W. Records available: 1939-42, 1947-48. Apr. 16, 78.05.
440. American Southern Trust Co. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, T. 5 S., R. 4 W. Records available: 1938-42, 1945-48. Apr. 15, 90.70.
456. E. W. McCuskey. Near NW. corner NE $\frac{1}{4}$ sec. 16, T. 5 S., R. 3 W. Records available: 1935-42, 1945-48. Apr. 15, 87.51.
- 457A. Missouri State Insurance Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 31, T. 5 S., R. 3 W. Records available: 1940-42, 1944-48. Apr. 15, 76.38.
461. Dewitt Bank & Trust Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 5 S., R. 2 W. Records available: 1939-44, 1947-48. Apr. 15, 58.12.

475. Ben Lowe. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 6 S., R. 3 W. Records available: 1938-41. Measurements discontinued.
491. Cunningham & Felt. Spanish grant 2358, equivalent to sec. 24, T. 7 S., R. 4 W. Records available: 1940-42, 1948. Apr. 8, 35.75.
492. A. M. Lowe. SE corner sec. 3, T. 7 S., R. 3 W. Records available: 1940-42, 1945-47. Measurements discontinued.
499. Quandt & Lowe. Spanish grant 2300, equivalent to sec. 27 or 34, T. 7 S., R. 3 W. Records available: 1935-42; 1947-48. Apr. 8, 40.32.
501. W. J. Bohnert. SW $\frac{1}{4}$ (?) sec. 32, T. 7 S., R. 3 W. Records available: 1935-37. Measurements discontinued.
506. J. M. Satchfield. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 7 S., R. 2 W. Records available: 1938-42, 1947-48. Apr. 8, 39.31.
507. J. M. Satchfield. Near SW corner sec. 16, T. 7 S., R. 2 W. Records available: 1935-42, 1947-48. Apr. 8, 40.34.
514. J. M. Satchfield. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 7 S., R. 2 W. Records available: 1940-42, 1947-48. Apr. 8, 38.01.
- B87. W. E. Boyd. Center north side sec. 31, T. 2 S., R. 5 W. Records available: 1940-42. Measurements discontinued.
- B91. Enders. SE $\frac{1}{4}$ sec. 10, T. 2 S., R. 4 W. Records available: 1940-42, 1945-48. Apr. 17, 87.35.
- B110. N $\frac{1}{2}$ sec. 20, T. 3 S., R. 5 W. Records available: 1940-42. Measurements discontinued.
- B133. Snow Wilson (Goetz). SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 4 S., R. 5 W. Records available: 1940-42, 1945-48. Apr. 6, 71.94.
- B171. South side sec. 13, T. 5 S., R. 3 W. Records available: 1940. Measurements discontinued.
- B189. W. J. Bohnert. NW $\frac{1}{4}$ sec. 32, T. 7 S., R. 3 W. Records available: 1940-42, 1947-48. Apr. 8, 30.44.
- B192. Sec. 5, T. 8 S., R. 3 W. Records available: 1940-42, 1948. Apr. 8, 29.82. Owner: W. J. Bohnert.

Ashley County

3. F. Harbinson. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 16, T. 16 S., R. 6 W. Records available: 1946-48. Apr. 2, 71.56.
4. F. Harbinson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 16 S., R. 6 W. Records available: 1947-48. Apr. 2, 70.23.
5. F. Harbinson. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 16 S., R. 6 W. Records available: 1946-48. Apr. 2, 70.54.
9. Daniels. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 16 S., R. 6 W. Records available: 1948. Apr. 2, 67.49.
11. Herbert Davis. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, T. 16 S., R. 6 W. Records available: 1946-48. Apr. 2, 64.01.
16. Fred Blank. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 17 S., R. 7 W. Records available: 1946-48. Apr. 2, 68.67.
17. Fred Blank. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 17 S., R. 7 W. Records available: 1946-48. Apr. 2, 66.03.

24. Miller, & Harris. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 17 S., R. 8 W. Records available: 1946-48. Apr. 2, 72.19.

33. Miller & Harris. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 18 S., R. 8 W. Records available: 1946-48. Apr. 2, 71.62.

34. Miller & Harris. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 1, T. 18 S., R. 8 W. Records available: 1946-48. Apr. 2, 71.97.

Jefferson County

270. V. D. Harlan. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 3 S., R. 7 W. Records available: 1938-42, 1948. Apr. 6, 20.99.

Lonoke County

1. NW. corner sec. 11, T. 2 N., R. 9 W. Records available: 1938-39. Measurements discontinued.

5. Carl Lilly. SE. corner SW $\frac{1}{4}$ sec. 31, T. 3 N., R. 7 W. Records available: 1940-42, 1944-48. Apr. 20, 67.45.

8. Near NW. corner sec. 4, T. 2 N., R. 8 W. Records available: 1938-48. Apr. 20, 58.05.

10. G. G. Fitch. Near NW. corner NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 2 N., R. 8 W. Records available: 1935-40. Measurements discontinued.

19. C. G. Miller. SW $\frac{1}{4}$ sec. 26, T. 2 N., R. 8 W. Records available: 1940-48. Apr. 20, 59.61.

27. J. T. Kelly. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 2 N., R. 7 W. Records available: 1940-42, 1944, 1947-48. Apr. 21, 72.08.

28. G. Koch. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 2 N., R. 7 W. Records available: 1938-44, 1947-48. Apr. 20, 77.92.

37. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 2 N., R. 7 W. Records available: 1940-48. Apr. 20, 63.77. Owner unknown.

61. Lonoke County Bank, Bishop farm. 15 miles north of SW. corner SW $\frac{1}{4}$ sec. 4, T. 1 N., R. 8 W. Records available: 1939-44, 1947-48. Apr. 20, 54.92.

126. Vennum & Patterson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 1 S., R. 7 W. Records available: 1935-44, 1947-48. Apr. 20, 43.13.

127. Vennum & Patterson. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 1 S., R. 7 W. Records available: 1938-48. Apr. 20, 39.86.

Monroe County

178. Kreimeir Estate. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 1 S., R. 4 W. Records available: 1940-48. Apr. 22, 76.20.

193. H. H. Burns. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 19, T. 1 S., R. 3 W. Records available: 1939-42, 1948. Apr. 17, 70.80.

Prairie County

45. Frank Dvorak. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 2 N., R. 6 W. Records available: 1940-45, 1948. Apr. 21, 49.00.

55. George Jensen. Near SW. corner sec. 13, T. 2 N., R. 5 W. Records available: 1935-48. Apr. 19, 62.34.

88. Herman Hardke. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 1 N., R. 6 W. Records available: 1939-44, 1947-48. Apr. 21, 59.92.

97. J. A. Papan. SW. corner sec. 20, T. 1 N., R. 6 W. Records available: 1940-44, 1946-48. Apr. 21, 66.25.

100. George Ballo. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 1 N., R. 6 W. Records available: 1938-41. Measurements discontinued.

110. F. W. Sickel. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 1 N., R. 5 W. Records available: 1940-44, 1946-48. Apr. 19, 82.22.

122. George Randall. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 1 N., R. 4 W. Records available: 1939-44. No measurements made in 1948.

135. C. D. Yohs. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 27, T. 1 S., R. 6 W. Records available: 1935-45, 1947-48. Apr. 21, 49.83.

144. Powell. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 1 S., R. 5 W. Records available: 1935-39, 1945. No measurements made in 1948.

201. N $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 14, T. 2 S., R. 6 W., short distance south of old railroad grade. Records available: 1938-48. Apr. 21, 52.05.

LOUISIANA

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

PROGRAM OF WORK

Ground-water investigations in Louisiana were continued in 1948 in cooperation with the Geological Survey, Louisiana Department of Conservation, and the Louisiana Department of Public Works. The State-wide investigations, which have been conducted on a cooperative basis since May 1938, include the periodic measurement of water levels and artesian pressures in a number of key wells, and the operation of automatic water-stage recorders on several others. In 1948, 10 wells in Louisiana were selected for measurement under the Federal observation-well program. These wells tap aquifers important as sources of supply at government-owned hospitals, army camps, etc.; at industrial plants considered of primary importance in time of war; or in interstate areas where the obligation to maintain water-level records cannot be fairly assigned to either State.

The observation-well program in Louisiana for 1948 included 299 wells in 28 parishes. Automatic water-stage recorders were in operation on 39 of these. Of the recorders operated on key wells, 25 were of the weekly type and 14 of the continuous type. A total of 1,674 individual measurements of water level was made in 260 wells during the year. Measurements were made on a weekly basis in 12 wells, at monthly intervals in 77 wells, at bimonthly intervals in 4 wells, and at quarterly intervals in 99 wells. The remainder, 68 wells, were measured at irregular intervals.

All water-level measurements are given in feet below land-surface datum unless otherwise indicated.

The locations of all observation wells in Louisiana for which records were obtained are shown on the map, figure 2. All measurements were made by members of the technical staff except those for Sc-6, at Norco, which were made through the cooperation of officials of the Shell Oil Company.

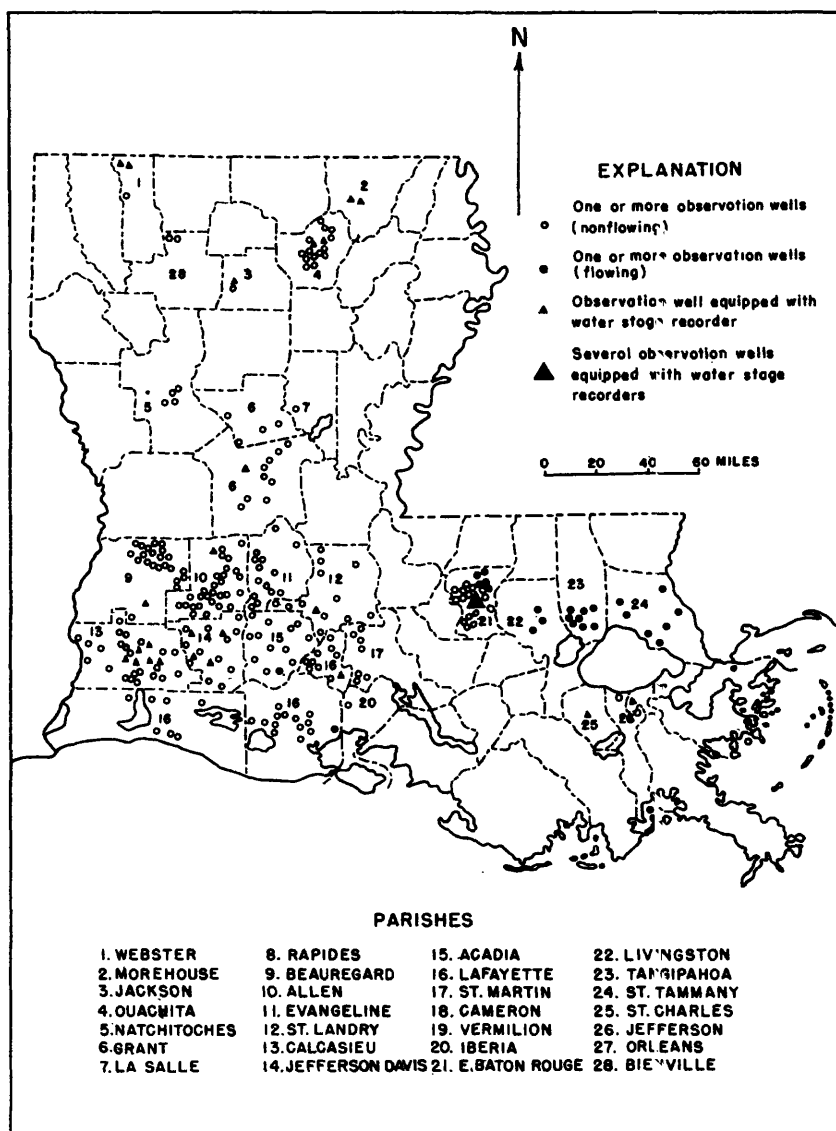


Figure 2.--Map of Louisiana showing locations of observation wells, 1948.

The investigational program was directed primarily toward solution of the irrigation water-supply problem of southwestern Louisiana. Numerous local exploratory projects for cities and towns required considerable attention. No important technical reports were published by the Louisiana district in 1948.

FLUCTUATIONS OF WATER LEVEL

Northern Louisiana.--Levels in observation wells in the vicinities of Bastrop, in Morehouse Parish, Monroe, in Ouachita Parish, Springhill, in Webster Parish, and Hodge, in Jackson Parish, where paper mills obtain water supplies principally from wells, continued to decline in 1948. At Monroe, where all industrial wells tap the Sparta sands, the lowest level in 3 years of record for well Ou-77 was reached on October 1--223 feet below land surface, 3.4 feet below the lowest level in 1947. At Bastrop, well Mo-9, which taps deep Sparta sands (890 feet) showed a decline of 16 feet from the lowest level in 1947. (Fig. 3 .)

Levels in shallower (100-foot) wells at Bastrop showed no significant change during the year, although pumpage from the shallow sand has partially dewatered the aquifer.

Conditions in the deeper sands (250 to 400 feet) at Springhill remained about the same as in 1947, but pumpage from a Ranney collector caused a decline of about 3 feet in water level in nearby wells tapping the shallow (100 to 150 feet) sands. Supply conditions remain critical in this area.

Records for well Ja-13, at Hodge (fig. 4), showed no marked change in water-level conditions from 1947.

Central Louisiana.--A total of 132 measurements of water level was made in 16 wells in Grant, LaSalle, Natchitoches, and Rapides Parishes during 1948. Of these wells, 13 were measured at monthly intervals and 1, R-26 at Alexandria, was equipped with an automatic water-stage recorder. Records for well R-26, which taps the 1,100-foot sand in the Alexandria area, show a decline of about 4 feet from the lowest level in 1947, but conditions are much less critical than in 1943 and 1944 (fig. 5).

Artesian pressures recorded for two wells, which tap an aquifer in the Wilcox formation in the vicinity of the Natchitoches well field about 5 miles south of the city, show a slight rise during 1948. One of the nearby city wells taps this sand.

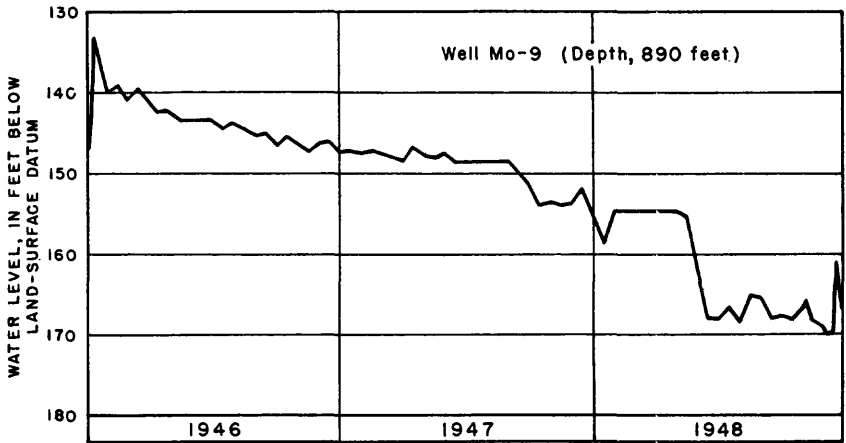


Figure 3.--Graph showing fluctuations of water level in well Mo-9 in Bastrop, La., 1946-48

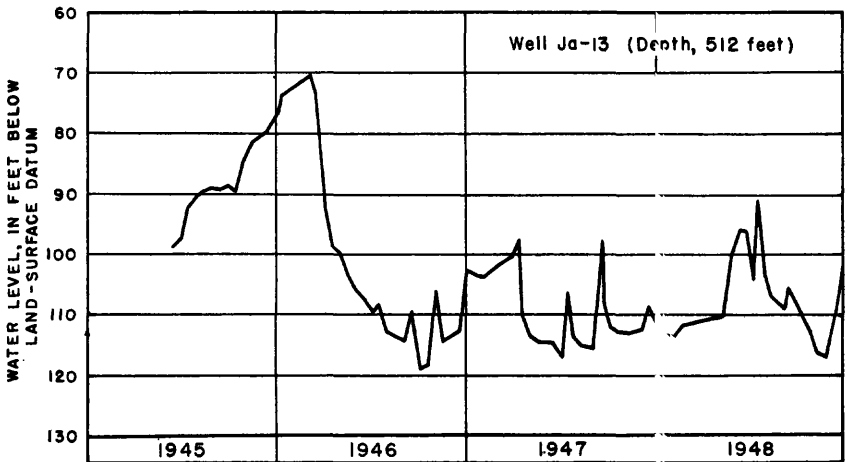


Figure 4.--Graph showing fluctuations of water level in well JA-13, in Hodge, La., 1945-48.

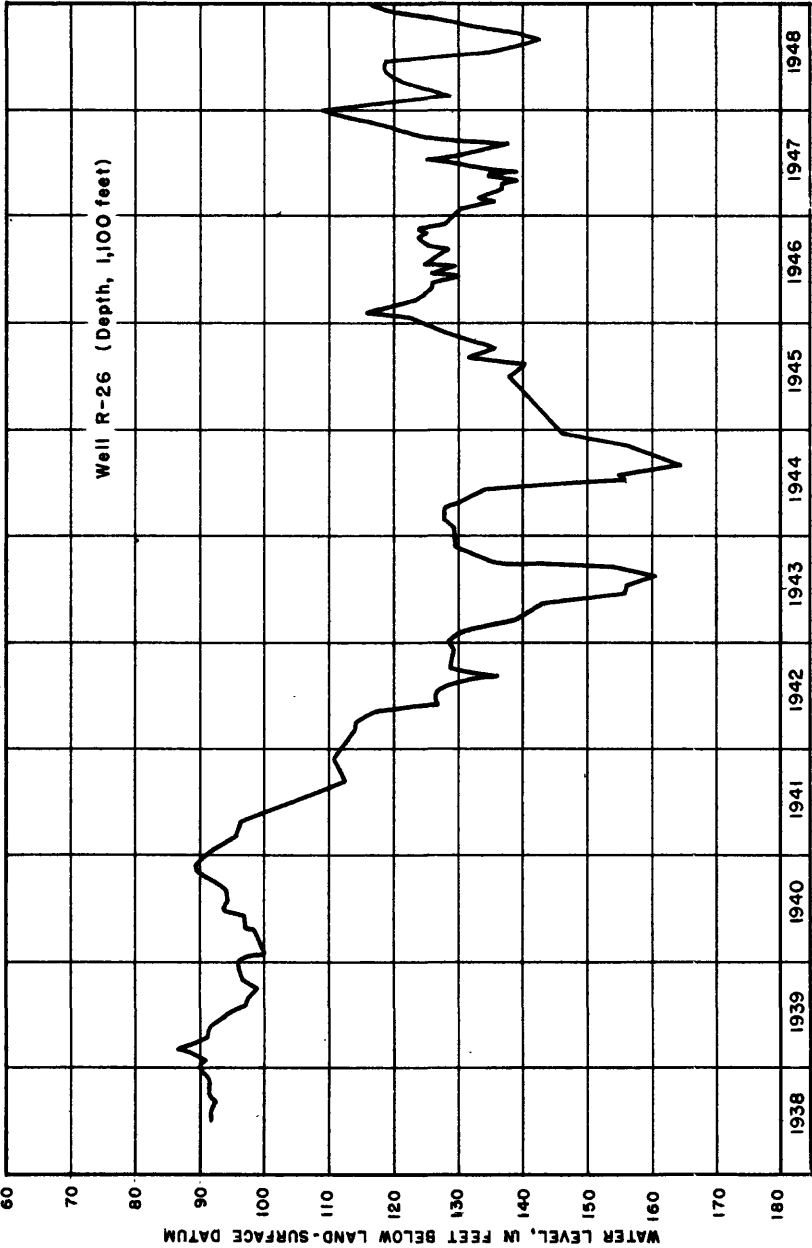


Figure 5.--Graph showing fluctuations of water level in Well R-26 in Alexandria, La., 1938-48

All supply wells of the town of Colfax now tap a sand and gravel aquifer of Pleistocene age in the uplands about 4 miles east of the town. Water levels in wells which tap this source indicate no serious decline since pumping began in April 1947.

Southwestern Louisiana.--During 1948, 1,231 measurements of water level were made in 181 wells in 12 parishes. Automatic water-stage recorders were operated on 17 additional wells. Measurements were made at erratic intervals in 24 wells, at weekly intervals in 10 wells, at monthly intervals in 50 wells, and at quarterly intervals in 97 wells. Water levels fell to the lowest points on record for all observation wells in the area. Especially large declines were recorded in the Lake Charles area; levels in wells which tap the "200-foot" sand fell 8 feet below the 1947 low; in the "500-foot" sand, 13 feet below the 1947 low; and in the "700-foot" sand, 14 feet below the 1947 low.

Wells in the northern part of Cameron Parish showed declines of 8 feet, and those along the Gulf of Mexico, near Cameron, declined 2.2 feet below the 1947 low. In Vermilion Parish, near the Intracoastal Canal, the decline was about 1 foot; at Erath it was 2.8 feet; and at Gueydan it was 6 feet below the 1947 low. In Jefferson Davis Parish, near Fenton, the decline was 6.5 feet; near Iowa Junction it was 13.5 feet; and in the vicinity of Welsh it was 4 feet below the 1947 low. North of Crowley, in Acadia Parish, the decline was less than 2 feet.

These declines resulted from the largest withdrawal on record for irrigation of rice in southwestern Louisiana, an estimated 590,000 acre-feet of water. This was due partly to a record irrigated acreage total, and partly to a severe mid-season drought. Figures 6 and 7 illustrate water-level fluctuations in selected key wells in the area.

Southeastern Louisiana.--205 measurements of water level or artesian pressure were made in 48 wells in 5 parishes in this area during 1948. In addition, automatic recorders were operated on 1 well in Orleans Parish, 1 well in St. Charles Parish, and 11 wells in East Baton Rouge Parish.

Water levels in key wells tapping the "cooling water" sands in the Baton Rouge industrial area fell as much as 29 feet below the low of 1947, and were about the same as in 1944, the lowest on record. Well EB-22, about 700 feet deep, taps both the "400-foot" and "600-foot" sands. In July and August water levels in this well reached a low of 232 feet below

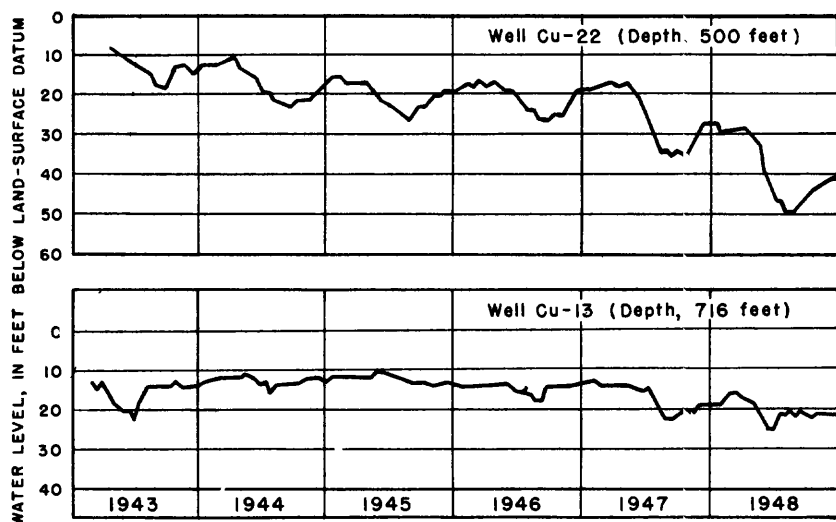


Figure 6.--Graphs showing fluctuations of water levels in two wells in the Lake Charles industrial area, Calcasieu Parish, La., 1943-48.

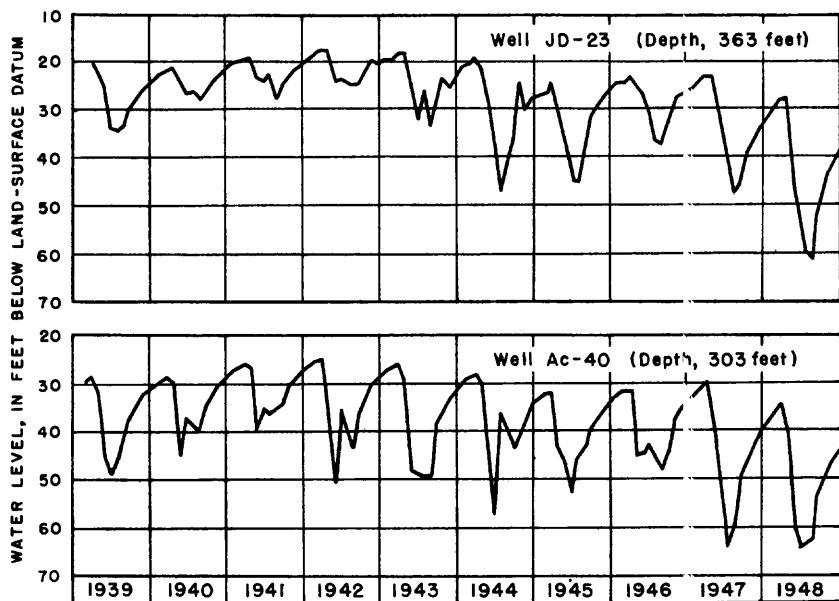


Figure 7.--Graphs showing fluctuations of water levels in two wells in the rice-farming area of southwestern Louisiana, 1939-48.

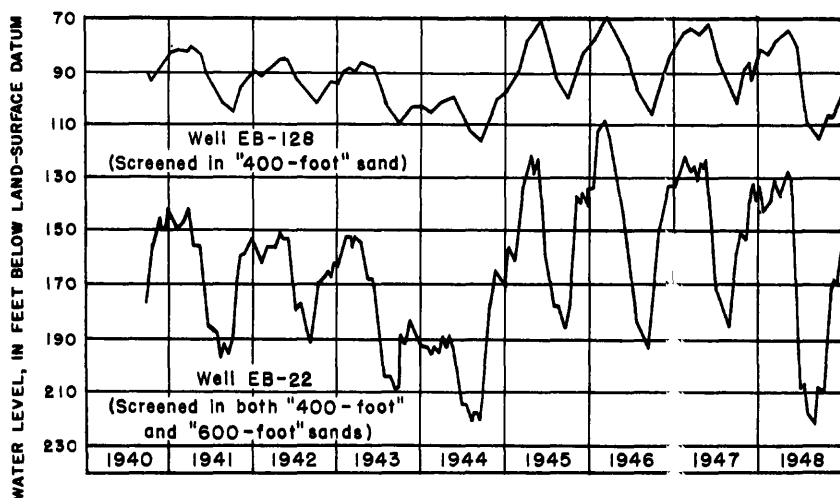


Figure 8.--Graphs showing the influence of pumpage on water levels in wells which tap the "shallow" aquifers at Baton Rouge, La., 1940-48.

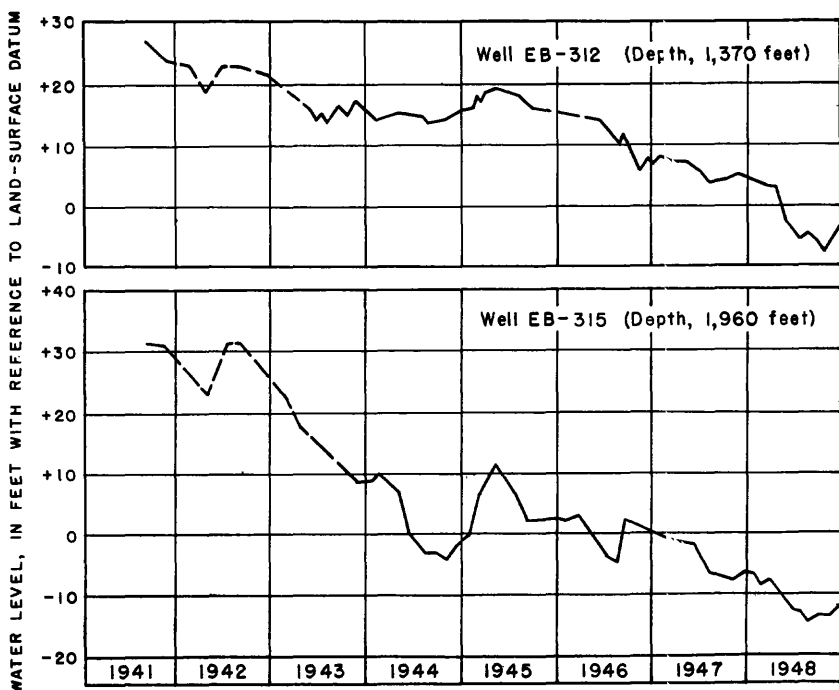


Figure 9.--Graphs showing fluctuations of water level in two wells which tap the "deep" aquifers at Baton Rouge, La., 1941-48.

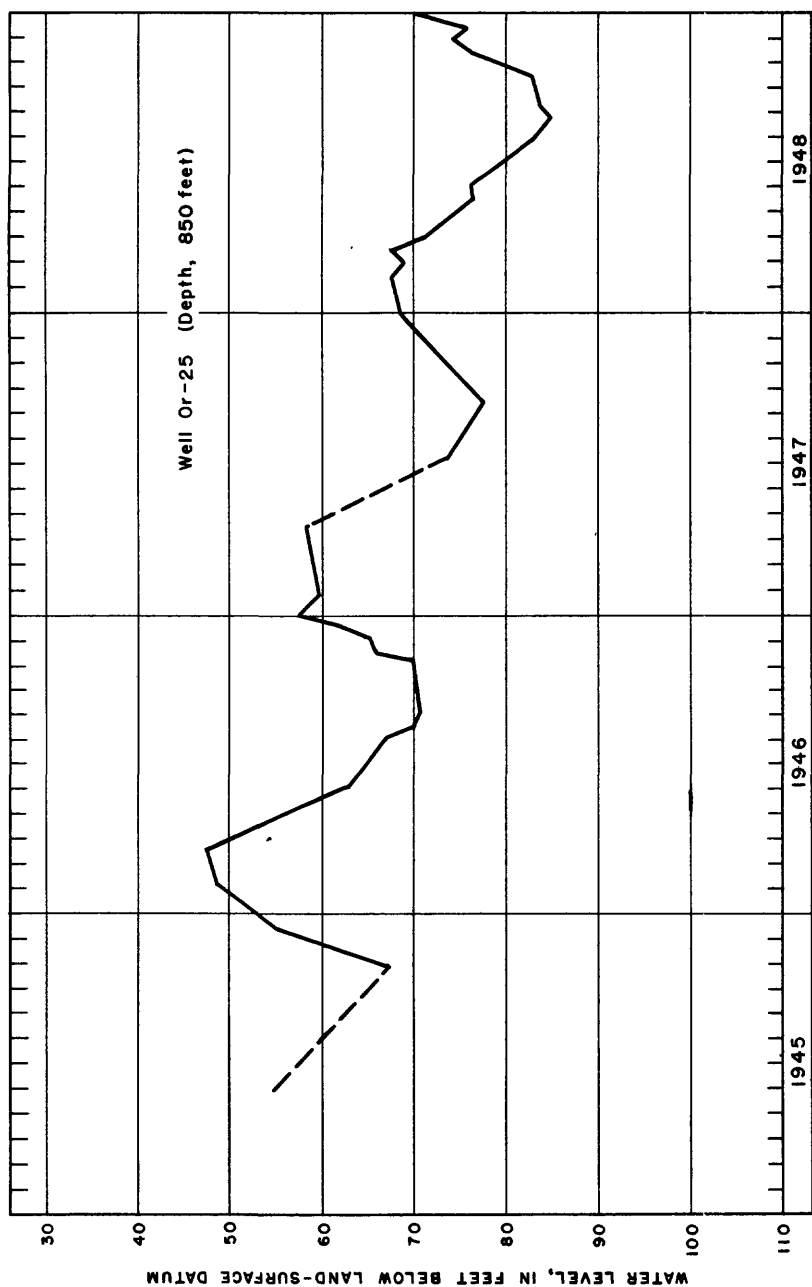


Figure 10.--Graph showing fluctuation of water level in well Or-25, New Orleans, La., 1945-48.

the land surface. Figures 8 and 9 illustrate conditions during the past 8 years.

The water level in well Sc-6, at Norco in St. Charles Parish, reached a record low in 1948, about 73 feet below land-surface datum. The accelerated decline of 1947 appears to have run its course, although at the end of 1948 the level was more than 2 feet below that at the beginning of the year.

Records for well Or-25, which taps the "800-foot" sand in the New Orleans area, show a steady decline in water level since observation began in April 1945 (fig. 10). The lowest level on record occurred in late July 1948 and was 85 feet below the land surface--7 feet below the low of 1947.

No significant changes in the artesian pressures of flowing wells in southeastern Louisiana were apparent in 1948. Seasonal declines of a few feet during the irrigating season for strawberries and other truck crops were offset by recovery in the fall.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Acadia Parish

Ac-7. Lozen Leger. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 10 S., R. 2 E. Records available: 1939-40, 1942-48. Jan. 6, 36.22; Apr. 6, 31.60; Sept. 9, 45.11; Dec. 8, 47.49.

Ac-22. Harry Frey. S $\frac{1}{2}$ sec. 19, T. 7 S., R. 1 E. Records available: 1939-48. Jan. 7, 53.83; Dec. 8, 61.07.

Ac-34. F. N. Hayes. SW $\frac{1}{4}$ sec. 10, T. 7 S., R. 2 W. Records available: 1939-48. Sept. 7, 67.20.

Ac-35. Onezime Doucet. NW $\frac{1}{4}$ sec. 22, T. 8 S., R. 2 W. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	46.87	July 8	57.43	Dec. 8	39.29
Apr. 7	42.48	Sept. 7	42.97		

Ac-40. H. A. Kerr. NE $\frac{1}{4}$ sec. 1, T. 9 S., R. 1 W. Records available: 1939-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	39.0	37.3	35.0	34.4	40.4	61.1	66.0	62.5	57.1	....	47.8	....
2	38.9	37.2	35.4	34.4	40.6	63.5	65.5	64.3	56.8	....	47.7	....
3	38.9	37.2	35.4	34.4	41.0	64.9	65.3	64.6	56.8	....	47.6	....
4	38.9	37.1	35.4	34.4	46.7	62.4	68.1	65.0	56.7	....	47.5	....
5	38.8	37.1	35.2	34.4	....	62.1	67.2	65.2	56.2	....	47.4	....
6	38.8	37.1	35.2	34.4	45.1	64.6	66.8	65.2	55.8	....	47.3	....
7	38.7	37.0	35.2	34.6	45.9	63.4	66.7	65.2	55.7	....	47.3	....
8	38.7	37.0	35.2	34.9	47.8	62.7	68.7	62.5	55.6	....	47.2	....
9	38.6	36.9	35.0	35.1	47.6	61.9	68.6	64.4	55.3	....	47.1	44.4
10	38.6	36.9	35.0	35.4	49.8	61.4	67.8	64.6	54.9	....	47.1	44.5
11	38.6	36.8	35.1	35.4	51.5	60.8	66.8	64.8	54.6	....	47.0	44.4
12	38.4	36.7	35.1	35.3	52.3	60.3	65.7	63.3	54.2	49.7	46.9	....
13	38.4	36.4	35.1	35.3	52.8	63.3	64.9	63.4	54.0	49.7	46.9	....

Ac-40--Continued.

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	38.4	36.4	35.0	35.3	53.8	64.3	64.1	62.8	53.7	49.8	46.8	....
15	38.3	36.4	34.9	35.3	54.5	64.8	63.5	62.1	53.5	49.5	46.7	....
16	38.3	36.3	34.9	35.3	54.7	65.0	63.0	63.1	53.3	49.4	46.5	....
17	38.2	36.3	34.9	35.2	54.9	65.3	62.5	63.6	53.1	49.3	46.6	....
18	38.1	36.3	34.8	35.2	56.1	65.8	62.0	63.9	52.8	49.2	46.3	....
19	38.1	36.2	34.8	35.2	57.7	66.1	62.0	61.7	52.7	49.0	46.1	....
20	37.9	36.2	34.8	35.2	58.8	65.4	62.4	61.2	52.7	48.9	46.0	....
21	37.9	36.1	34.7	35.2	59.6	64.8	62.4	60.8	52.2	48.9	45.9	....
22	37.8	36.0	34.7	35.3	60.3	66.2	62.7	60.5	52.0	48.8	45.7	....
23	37.7	36.0	34.7	35.7	60.2	67.0	62.7	60.2	50.0	48.7	45.7	....
24	37.7	35.8	34.7	37.0	60.4	69.9	62.8	60.2	50.0	48.7	45.6	....
25	37.7	35.8	34.6	37.8	61.7	70.8	61.8	59.8	....	48.5	45.5	....
26	37.6	35.7	34.6	37.4	62.8	71.2	61.2	59.2	....	48.6	45.0	....
27	37.5	35.7	34.5	37.4	61.2	69.4	63.7	58.7	....	48.5	45.3	....
28	37.5	35.6	34.5	38.0	61.5	67.3	64.2	58.6	....	48.4	45.2	....
29	37.4	35.6	34.5	38.7	61.6	66.6	64.6	58.1	....	48.3	45.3	....
30	37.3		34.9	39.6	61.1	65.8	64.9	57.7	....	48.2	....	....
31	37.3		34.3		60.4		65.0	57.4		48.0		....

Ac-56. Henry Bieber. NW $\frac{1}{4}$ sec. 36, T. 7 S., R. 1 E. Records available: 1939-48. Jan. 7, 55.41; Apr. 7, 52.02; Dec. 8, 61.03.

Ac-103. H. L. Habetz. NE $\frac{1}{4}$ sec. 10, T. 9 S., R. 1 E. Records available: 1947. No measurements made in 1948.

Ac-104. Hanle Hartwell. SW $\frac{1}{4}$ sec. 2, T. 9 S., R. 1 E. Records available: 1939; 1944-48. Jan. 8, 42.20; Apr. 7, 38.61; Dec. 8, 47.65.

Ac-115. C. A. Savoy. South corner of irregular sec. 77, T. 8 S., R. 2 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	54.80	July 8	69.81	Dec. 9	59.59
Apr. 7	51.57	Sept. 7	66.17		

Ac-147. Ed Faulk. SW $\frac{1}{4}$ sec. 34, T. 10 S., R. 1 E. Records available: 1939; 1944-48.

Jan. 8	22.00	July 9	38.48	Dec. 8	26.34
Apr. 8	19.19	Sept. 9	32.91		

Ac-152. L. W. Hoyt. NW $\frac{1}{4}$ sec. 4, T. 11 S., R. 1 W. Records available: 1939; 1944-48. Jan. 8, 21.46; Apr. 8, 18.26; Sept. 9, 33.26; Dec. 10, 26.35.

Ac-175. Leon P. Lapleau. North line sec. 46, T. 10 S., R. 2 W. Records available: 1939-48. Jan. 8, 17.09; Apr. 8, 13.81; July 9, 31.92; Sept. 9, 37.04.

Ac-179. Dr. F. N. Hayes. NW $\frac{1}{4}$ sec. 34, T. 8 S., R. 1 W. Records available: 1939-48. Jan. 7, 42.82; Sept. 7, 61.73.

Ac-188. Jules Baronet. SE $\frac{1}{4}$ sec. 9, T. 10 S., R. 1 E. Records available: 1944-48. Jan. 8, 39.52; Apr. 8, 29.64; Sept. 9, 41.52; Dec. 6, 33.27.

Allen Parish

Al-7. M. Carroll. NW $\frac{1}{4}$ sec. 36, T. 4 S., R. 4 W. Records available: 1940-47. Measurements discontinued.

Al-11. Onezie Vincent. SE $\frac{1}{4}$ sec. 8, T. 5 S., R. 3 W. Records available: 1944-48.

Jan. 9	51.12	July 9	43.37	Dec. 6	53.18
Apr. 5	50.69	Sept. 7	54.92		

Al-15. Ben Daigle. SW $\frac{1}{4}$ sec. 27, T. 5 S., R. 3 W. Records available: 1944-48. Jan. 9, 54.19; Apr. 5, 53.92; Sept. 7, 56.78; Dec. 6, 56.23.

Al-16. O. Lejeune. Formerly owned by Mr. Lausanne. SE $\frac{1}{4}$ sec. 22, T. 5 S., R. 4 W. Records available: 1940-48. Jan. 9, 39.98; Apr. 5, 39.57; Sept. 9, 41.72; Dec. 6, 41.48.

Al-17. Town of Kinder. Near south wall of water works building, in Kinder. Records available: 1940-47. Measurements discontinued.

Al-18. Kinder Canal Co. Formerly owned by Fred Rostrum. NE $\frac{1}{4}$ sec. 6, T. 6 S., R. 4 W. Records available: 1944-48. Jan. 9, 30.69; Apr. 5, 30.05; Sept. 9, 37.02; Dec. 6, 32.22.

Al-20. C. I. Kuntz. SW $\frac{1}{4}$ sec. 14, T. 7 S., R. 8 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	40.20	July 9	43.92	Dec. 10	44.09
Apr. 7	38.10	Sept. 9	44.60		

Al-21. Frank Odom. NE $\frac{1}{4}$ sec. 28, T. 6 S., R. 4 W. Records available: 1944-48.

Jan. 9	39.14	May 12	41.38	Sept. 9	41.90
Apr. 7	37.80	July 9	41.88	Dec. 6	41.57

Al-22. Frank Odom. SW $\frac{1}{4}$ sec. 20, T. 6 S., R. 4 W. Records available: 1944-48.

Jan. 9	33.89	July 9	36.26	Dec. 6	36.04
Apr. 7	32.99	Sept. 9	36.59		

Al-25. R. R. McClelland. SE $\frac{1}{4}$ sec. 30, T. 6 S., R. 4 W. Records available: 1946-48. Jan. 9, 54.76; Apr. 5, 53.43; Sept. 7, 59.08; Dec. 6, 58.56.

Al-29. Calcasieu Sulphate Paper Co. In Elizabeth, east of paper mill. Records available: 1940-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	38.32	Apr. 8	34.35	July 14	44.84	Oct. 18	47.31
Feb. 3	32.32	May 3	38.65	Aug. 16	46.28	Nov. 16	46.25
Mar. 2	29.37	June 10	32.61	Sept. 14	47.20	Dec. 28	43.84

Al-33. M. Carroll. NE $\frac{1}{4}$ sec. 35, T. 4 S., R. 4 W. Records available: 1947-48.

Jan. 9	40.54	Mar. 2	39.74	Sept. 9	42.99	Nov. 17	42.20
13	40.70	Apr. 7	39.81	14	42.90	Dec. 7	42.06
Feb. 13	40.34	July 6	43.97	Oct. 19	42.54	27	42.05
18	40.26	14	43.52	Nov. 16	42.23		

Al-40. Industrial Lumber Co. NW $\frac{1}{4}$ sec. 8, T. 3 S., R. 3 W. Records available: 1945-48.

Jan. 13	6.21	Apr. 8	5.40	July 14	10.21	Oct. 18	12.62
Feb. 3	3.00	May 3	6.80	Aug. 16	11.08	Nov. 16	12.17
18	2.62	June 10	8.82	Sept. 14	11.60	Dec. 28	9.74
Mar. 2	1.76						

Al-41. Lucindy Rodriguez. NE $\frac{1}{4}$ sec. 29, T. 2 S., R. 3 W. Records available: 1945-48. Jan. 13, 2.11; Sept. 14, 17.31.

Al-42. Oak Hill Church. NW $\frac{1}{4}$ sec. 20, T. 2 S., R. 3 W. Records available: 1945-48.

Jan. 13	8.21	Mar. 2	4.22	June 10	12.52	Sept. 14	14.83
Feb. 3	5.59	Apr. 8	9.87	July 14	13.63	Oct. 18	15.27
18	5.79	May 3	11.05	Aug. 16	14.18	Dec. 28	11.89

Al-43. S. P. McDaniel. SE $\frac{1}{4}$ sec. 32, T. 2 S., R. 4 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	25.20	Apr. 8	25.50	July 14	25.42	Oct. 18	26.00
Feb. 3	25.01	May 3	25.17	Aug. 16	25.85	Nov. 16	26.62
18	24.79	June 10	25.59	Sept. 14	25.87	Dec. 28	26.15
Mar. 2	23.35						

Al-54. Kinder Canal Co. SE $\frac{1}{4}$ sec. 19, T. 5 S., R. 4 W. Records available: 1945-48. Jan. 9, 27.39; Apr. 5, 26.62; May 12, 27.32; Dec. 6, 28.56.

Al-65. Matt Johnson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 6 S., R. 6 W. Records available: 1945-47. Measurements discontinued.

Al-75. Olin McGee. NE $\frac{1}{4}$ sec. 34, T. 6 S., R. 5 W. Records available: 1946-48.

Jan. 13	32.64	Apr. 7	31.85	July 13	34.48	Oct. 19	35.52
Feb. 2	31.72	May 10	32.84	Aug. 16	35.12	Nov. 17	35.68
18	31.30	June 10	34.32	Sept. 14	35.29	Dec. 27	34.85
Mar. 2	29.60						

Al-84. Leon Manuel. SE $\frac{1}{4}$ sec. 19, T. 4 S., R. 2 W. Records available: 1948. Used dug domestic well, diameter 3 feet, depth 36 feet. Measuring point, top of board on west side of wooden curb, 2.40 feet above land-surface datum. Dec. 18, 26.43; Dec. 28, 26.88.

Al-86. Olin McGee. NW $\frac{1}{4}$ sec. 34, T. 6 S., R. 5 W. Records available: 1946-48. Jan. 13, 32.95.

Al-87. D. S. Kingrey. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 6 S., R. 5 W. Records available: 1946-48.

Jan. 13	9.74	Mar. 2	8.31	June 10	13.50	Sept. 14	18.59
Feb. 2	9.02	Apr. 7	10.72	July 13	13.97	Oct. 19	14.89
18	9.17	May 10	17.03	Aug. 16	16.10	Dec. 27	18.25

Al-88. Amos Ceaser. SW $\frac{1}{4}$ sec. 29, T. 6 S., R. 5 W. Records available: 1946-48.

Jan. 13	23.73	Apr. 7	23.50	July 13	26.62	Oct. 19	27.79
Feb. 2	21.66	May 10	24.36	Aug. 16	27.29	Nov. 17	27.81
18	21.29	June 10	25.86	Sept. 14	27.49	Dec. 27	25.41
Mar. 2	21.23						

Al-90. Randolph Hutcheson. NW $\frac{1}{4}$ sec. 25, T. 6 S., R. 6 W. Records available: 1946-48. Jan. 13, 15.24.

Al-91. J. M. Ritchie. NE $\frac{1}{4}$ sec. 26, T. 6 S., R. 6 W. Records available: 1946-48.

Jan. 13	2.65	May 10	8.49	Aug. 16	23.44	Nov. 16	25.86
Feb. 18	2.84	June 10	12.10	Sept. 15	22.96	17	25.47
Mar. 2	1.66	July 13	14.45	Oct. 19	24.48	Dec. 27	21.52
Apr. 7	8.06						

Al-92. J. A. Rohner. NW $\frac{1}{4}$ sec. 21, T. 3 S., R. 3 W. Records available: 1946-48.

Jan. 13	18.61	Apr. 7	15.70	July 13	18.45	Oct. 19	20.58
Feb. 3	17.61	May 10	16.48	Aug. 16	19.38	Nov. 17	21.04
18	16.89	June 10	17.49	Sept. 15	19.96	Dec. 27	20.08
Mar. 3	16.10						

Al-93. Mrs. J. E. Hollingsworth. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 3 S., R. 3 W. Records available: 1946-48.

A1-93--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	16.82	Apr. 7	14.30	July 13	15.94	Oct. 19	18.18
Feb. 3	16.42	May 10	14.64	Aug. 16	16.93	Nov. 17	18.42
18	15.80	June 10	15.43	Sept. 15	17.37	Dec. 27	18.68
Mar. 3	14.76						

A1-94. Clyde Whitley. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 3 S., R. 3 W. Records available: 1946-48. Jan. 13, 9.46.

A1-95. Clyde Whitley. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 4 S., R. 3 W. Records available: 1946-48.

Jan. 13	12.07	Apr. 7	8.72	July 13	11.98	Oct. 19	13.83
Feb. 3	10.44	May 10	9.83	Aug. 16	12.89	Nov. 17	14.14
18	7.92	June 10	11.01	Sept. 15	13.89	Dec. 27	13.32
Mar. 2	5.98						

A1-96. Clarise McGee. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 4 S., R. 3 W. Records available: 1946-48.

Jan. 13	25.25	Apr. 7	24.53	July 13	25.46	Oct. 19	27.81
Feb. 3	25.04	May 10	25.15	Aug. 16	27.33	Nov. 17	28.90
18	24.74	June 10	24.60	Sept. 15	26.55	Dec. 27	27.26
Mar. 2	24.33						

A1-97. Horace Reed. NE $\frac{1}{4}$ sec. 13, T. 4 S., R. 4 W. Records available: 1946-48. Jan. 13, 22.34.

A1-98. V. Montou. Formerly owned by Alcin Veronie. SE $\frac{1}{4}$ sec. 13, T. 4 S., R. 4 W. Records available: 1946-48.

Jan. 13	10.11	Apr. 7	13.63	July 13	13.41	Oct. 19	18.23
Feb. 3	11.10	May 10	19.88	Aug. 16	14.57	Nov. 17	15.75
18	13.30	June 10	17.48	Sept. 15	14.10	Dec. 27	16.95

A1-100. A. C. Easterling. NE $\frac{1}{4}$ sec. 26, T. 4 S., R. 4 W. Records available: 1946-48.

Jan. 13	24.74	Apr. 7	31.01	July 13	32.15	Oct. 19	32.99
Feb. 3	27.74	May 10	31.09	Aug. 16	32.75	Nov. 17	33.05
18	28.29	June 10	32.36	Sept. 15	33.05	Dec. 27	32.71
Mar. 2	17.85						

A1-101. Jerome Sonnier. NW $\frac{1}{4}$ sec. 26, T. 4 S., R. 4 W. Records available: 1946-48.

Jan. 13	34.36	Apr. 7	39.72	July 13	41.20	Oct. 19	43.92
Feb. 3	37.73	May 10	39.08	Aug. 16	40.90	Nov. 17	40.32
18	38.63	June 10	41.02	Sept. 15	41.58	Dec. 27	40.43
Mar. 2	34.28						

A1-102. L. S. Sonnier. SW $\frac{1}{4}$ sec. 26, T. 4 S., R. 4 W. Records available: 1946-48.

Jan. 13	22.80	Apr. 7	22.55	July 13	23.89	Oct. 19	24.71
Feb. 3	22.30	May 10	22.02	Aug. 16	24.40	Nov. 17	24.80
18	21.81	June 10	23.08	Sept. 15	29.45	Dec. 27	23.84
Mar. 2	21.42						

A1-103. Mrs. S. L. Carpenter. SW $\frac{1}{4}$ sec. 5, T. 5 S., R. 4 W. Records available: 1946-48.

Jan. 13	23.00	Apr. 7	21.94	July 13	22.84	Oct. 19	23.81
Feb. 3	22.93	May 10	22.02	Aug. 16	23.12	Nov. 17	24.16
18	22.78	June 10	22.27	Sept. 15	23.38	Dec. 27	24.51
Mar. 2	22.08						

Al-104. Louis Durio. SE $\frac{1}{4}$ sec. 32, T. 4 S., R. 4 W. Measuring points: (1) Top of south side of wood curbing, 2.70 feet above land-surface datum; (2) since Oct. 19, 1948, top of south side of wood curbing, 1.25 feet above land-surface datum; (3) since Dec. 27, 1948, top of south side of wood curbing, 3.09 feet above land-surface datum. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	13.27	Apr. 7	10.53	July 13	12.70	Oct. 19	14.67
Feb. 3	12.96	May 10	11.14	Aug. 16	13.16	Nov. 17	14.92
18	11.71	June 10	10.89	Sept. 15	13.80	Dec. 27	15.11
Mar. 2	10.91						

Al-105. Walter Henry. SW $\frac{1}{4}$ sec. 33, T. 4 S., R. 4 W. Records available: 1946-48. Jan. 13, 15.94.

Al-106. King Corporation. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 7 S., R. 5 W. Records available: 1946-48.

Jan. 5	33.42	Mar. 26	31.08	May 28	36.20	July 16	38.65
12	33.35	Apr. 7	31.41	June 11	37.31	Sept. 9	38.35
26	32.89	9	31.38	18	37.67	17	38.24
Feb. 2	32.62	16	31.40	25	38.18	Nov. 12	37.90
9	32.19	23	31.47	July 2	38.51	19	37.68
16	32.02	30	31.75	9	38.60	Dec. 10	37.25
Mar. 1	31.48						

Al-120. City of Oakdale. In northwestern part of city, at North 6th Street. Used drilled public-supply well, diameter 16 inches, depth 910 feet. Equipped with turbine pump. Records available: 1948. Measuring point, base plate of bottom, at land-surface datum. May 10, 19.90; July 14, 35.00; Nov. 17, 37.50.

Al-124. Pierre Nevils. Sec. 11, T. 7 S., R. 5 E. Records available: 1947-48.

Jan. 13	23.96	Apr. 7	23.07	Aug. 16	28.70	Oct. 19	28.61
Feb. 2	22.03	May 10	24.10	Sept. 9	28.88	Nov. 16	28.49
18	21.52	July 12	27.58	15	28.54	Dec. 27	26.02
Mar. 2	21.24						

Al-125. M. D. Hargrove. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 3 S., R. 3 W. Records available: 1947-48.

Jan. 13	32.56	Apr. 7	31.99	July 13	33.82	Oct. 19	34.42
Feb. 3	32.11	May 3	32.29	Aug. 16	34.01	Nov. 16	34.40
18	31.68	June 10	33.28	Sept. 14	34.11	Dec. 27	33.84
Mar. 2	31.39						

Al-127. State of Louisiana. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 6 S., R. 7 W. Records available: 1947-48.

Jan. 5	49.44	Mar. 15	49.50	May 14	49.39	Aug. 6	50.06
12	49.49	22	49.44	21	49.40	13	50.12
19	49.54	26	49.43	28	49.44	20	50.17
26	49.55	Apr. 9	49.39	June 11	49.51	Sept. 3	50.35
Feb. 9	49.56	16	49.38	18	49.56	23	50.56
23	49.56	23	49.43	25	49.62	30	50.62
Mar. 1	48.60	30	49.37	July 2	49.66	Oct. 7	50.67
8	49.53	May 8	49.38	23	49.87	14	50.76

Al-136. Hanton Keathley. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 6 S., R. 6 W. Used drilled irrigation well, diameter 8 inches, depth 223 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 3.70 feet. Records available: 1948. Dec. 9, 20.13.

Beauregard Parish

Be-2. Southern Pacific Railroad. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 6 S., R. 8 W.
Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	44.2	44.2	43.8	43.6	43.8	45.8	47.6	47.5	....	47.2	46.9	46.7
2	44.3	44.3	43.8	43.8	43.9	45.9	47.6	47.6	....	47.3	46.8	46.7
3	44.3	44.2	43.8	....	43.9	46.1	47.7	47.7	....	47.3	46.8	46.7
4	44.3	44.1	43.9	....	43.9	46.1	47.6	47.8	....	47.2	46.8	46.7
5	44.3	44.1	43.9	....	44.1	46.1	47.6	47.9	....	47.2	....	46.6
6	44.3	44.1	43.8	....	44.1	46.2	47.5	48.0	....	47.1	46.8	46.7
7	44.3	44.1	43.9	....	44.2	46.3	47.3	....	....	47.1	46.9	46.6
8	44.3	44.1	43.8	....	44.2	46.4	....	....	....	47.1	46.8	46.6
9	44.3	44.1	43.7	43.9	44.2	46.4	47.4	....	....	47.1	46.8	46.7
10	44.3	44.2	43.7	43.8	44.3	46.4	47.4	....	47.6	47.1	46.8	46.8
11	44.3	44.1	43.8	43.7	44.4	46.6	47.3	....	47.6	47.0	46.8	46.7
12	44.3	44.0	44.0	43.7	44.5	46.7	47.3	....	47.6	47.0	46.8	46.6
13	44.3	44.0	44.0	43.7	44.6	46.7	47.3	....	47.6	47.1	46.8	46.7
14	44.4	43.9	43.9	43.9	44.7	46.8	47.3	....	47.6	47.0	46.8	46.7
15	44.4	44.1	43.7	44.0	44.7	46.8	47.4	....	47.6	47.0	46.8	46.6
16	44.3	44.2	43.6	44.0	44.8	46.9	47.4	....	47.6	47.0	46.7	46.5
17	44.3	44.2	43.8	44.0	44.8	46.9	47.5	....	47.5	47.0	46.7	46.6
18	44.3	44.1	43.8	44.0	44.9	47.0	47.5	....	47.5	47.1	46.7	46.6
19	44.3	44.0	43.8	43.9	45.0	47.0	47.5	....	47.4	47.0	46.7	46.6
20	44.2	44.0	43.8	44.0	45.1	47.1	47.4	....	....	47.0	46.8	46.6
21	44.2	44.0	43.8	44.0	45.1	47.1	47.4	....	....	47.0	46.7	46.6
22	44.1	44.0	43.6	43.9	45.1	47.1	47.4	....	....	....	46.7	46.6
23	44.1	44.0	43.8	43.9	45.2	47.1	47.5	....	47.9	47.0	46.7	46.7
24	44.2	44.0	43.8	43.9	45.3	47.1	47.4	....	47.9	46.9	46.7	....
25	44.3	44.0	43.8	43.8	45.4	47.0	47.4	....	47.8	46.9	46.7	....
26	44.3	44.0	43.7	43.8	45.5	47.1	47.2	....	....	46.9	46.7	....
27	44.2	44.2	43.7	43.8	45.6	47.2	47.2	....	....	46.9	46.6	....
28	44.2	44.2	43.8	43.8	45.7	47.3	47.2	....	....	46.9	46.6	....
29	44.2	44.2	43.8	43.8	45.8	47.4	47.3	....	....	46.9	46.8	....
30	44.2		43.7	43.8	45.8	47.5	47.4	....	....	46.9	46.8	....
31	44.2		43.5		45.9		47.5	....		46.9		46.7

a Tape measurement at odd hour.

Be-13. W. E. McFatter. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 7 S., R. 9 W. Used drilled domestic well, diameter 6 inches, depth 360 feet. Measuring point, top of 6-inch casing, 0.4 foot above land-surface datum. Records available: 1948. Jan. 8, 45.10; July 8, 48.94; Sept. 9, 51.11; Dec. 9, 49.56.

Be-29. Travis Hamilton. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 4 S., R. 6 W. Used dug domestic well, diameter 3 $\frac{1}{2}$ feet, depth 42 feet. Measuring point, top of north side of brick curbing, 3.0 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	40.70	June 14	41.29	Sept. 16	42.50	Nov. 15	42.88
Apr. 8	40.48	July 14	41.61	Oct. 18	42.78	Dec. 28	42.62
May 5	40.94	Aug. 17	42.19				

Be-32. J. A. Harper. S $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 13, T. 4 S., R. 7 W. Used dug domestic well, diameter 2 $\frac{1}{2}$ feet, depth 36 feet. Measuring point, top brick curb at edge of letter "S", 3.55 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	22.02	June 14	25.04	Sept. 16	26.70	Nov. 15	26.54
Apr. 8	23.58	July 14	25.79	Oct. 18	26.41	Dec. 28	25.00
May 5	24.18	Aug. 17	27.21				

Be-33. C. A. Tramel. Center of sec. 23, T. 4 S., R. 7 W. Used dug domestic well, diameter 8 inches, depth 47 feet. Measuring point, top inside edge of concrete tile, 4.50 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	36.09	June 14	39.29	Sept. 16	40.55	Nov. 15	41.08
Apr. 8	37.65	July 14	39.80	Oct. 18	40.88	Dec. 28	39.53
May 5	38.40	Aug. 17	40.32				

Be-34. Cecil Jones. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 4 S., R. 7 W. Used dug domestic well, diameter 3 $\frac{1}{2}$ feet, depth 33 feet. Measuring point, top south inside edge of board curbing, 3.80 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	23.74	June 14	27.57	Sept. 16	28.97	Nov. 15	29.41
Apr. 8	25.83	July 14	28.20	Oct. 18	29.22	Dec. 28	27.52
May 5	26.63	Aug. 17	28.93				

Be-35. Gus Cole. N $\frac{1}{2}$ SE $\frac{1}{4}$ sec. 16, T. 4 S., R. 7 W. Used bored domestic well, diameter 8 inches, depth 57 feet. Measuring point, top of inside of concrete curbing, 4.95 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	42.53	June 14	42.66	Sept. 16	43.39	Nov. 15	43.88
Apr. 8	42.56	July 14	42.83	Oct. 18	43.71	Dec. 28	44.39
May 5	42.39	Aug. 17	43.05				

Be-36. O. Moses. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 3 S., R. 7 W. Used bored domestic well, diameter 6 inches, depth 43 feet. Measuring point, top of south inside edge of board curbing, 3.00 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	33.59	June 14	33.25	Sept. 16	35.16	Nov. 15	36.09
Apr. 8	32.50	July 14	33.93	Oct. 18	35.66	Dec. 28	35.79
May 5	32.57	Aug. 17	34.70				

Be-37. W. B. Welborn. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 3 S., R. 8 W. Used dug domestic well, diameter 3 feet, depth 29 feet. Measuring point, top of east inside edge of board curbing, 2.80 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 4	22.02	June 14	22.42	Sept. 16	24.85	Nov. 15	25.67
Apr. 8	21.04	July 14	23.27	Oct. 18	25.33	Dec. 28	24.65
May 5	21.42	Aug. 17	24.20				

Be-39. Odis Hester. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 28, T. 3 S., R. 8 W. Used bored domestic well, diameter 8 inches, depth 17 feet. Measuring point, top of south side of curbing, 2.00 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 5	5.72	June 14	7.54	Sept. 16	8.89	Nov. 15	9.40
Apr. 8	6.21	July 14	7.94	Oct. 18	9.22	Dec. 28	8.50
May 5	6.58	Aug. 17	8.58				

Be-40. W. H. Downs. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 3 S., R. 8 W. Used bored domestic well, diameter 8 inches, depth 27 feet. Measuring point, top of inside edge of tile crook, 0.20 foot above land-surface datum. Records available: 1948. Apr. 8, 15.12; May 5, 15.74; June 14, 16.83; Oct. 18, 18.04.

Be-41. Burkitt Shirley. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 3 S., R. 9 W. Used dug domestic well, diameter 24 inches, depth 22 feet. Measuring points: (1) Top of east side of board curbing, 3.50 feet above land-surface datum; (2) since Oct. 18, 1948, top of east side of board curbing, 3.80 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 5	2.38	June 14	11.10	Sept. 16	12.37	Nov. 15	14.30
Apr. 8	5.02	July 14	10.48	Oct. 18	12.76	Dec. 28	6.18
May 5	6.30	Aug. 17	11.64				

Be-42. Paul Stille. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 3 S., R. 9 W. Used bored domestic well, diameter 8 inches, depth 23 feet. Measuring point, top of west side of tile curbing, at land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 8	6.45	June 14	12.42	Aug. 16	14.28	Nov. 11	16.13
Apr. 8	9.15	July 14	13.06	Sept. 16	14.51	Dec. 28	10.93
May 5	10.48						

Be-44. H. B. Thigpen. N $\frac{1}{2}$ SW $\frac{1}{4}$ sec. 10, T. 3 S., R. 9 W. Used dug domestic well, diameter 3 feet, depth 28 feet. Measuring point, top of north inside edge of concrete tile, 2.20 feet above land-surface datum. Records available: 1948.

Mar. 6	17.12	June 14	20.77	Sept. 16	24.77	Nov. 15	23.97
Apr. 8	18.58	July 14	22.02	Oct. 18	24.38	Dec. 28	22.65
May 5	19.57	Aug. 16	23.85				

Be-45. J. H. Carroll. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 2 S., R. 9 W. Used bored domestic well, diameter 8 inches, depth 28 feet. Measuring point, top of lower inside edge of cement tile, 1.30 feet above land-surface datum. Records available: 1948. Apr. 8, 17.45; May 5, 17.85. Measurements discontinued after May 5, 1948.

Be-46. Edward Unrech. S $\frac{1}{2}$ sec. 22, T. 2 S., R. 9 W. Abandoned bored well, diameter 8 inches, depth 27 feet. Measuring point, inside lower edge of concrete tile curbing, 2.00 feet above land-surface datum. Records available: 1948.

Apr. 6	18.21	July 14	19.58	Sept. 16	20.73	Nov. 16	21.59
May 5	18.48	Aug. 16	20.15	Oct. 18	21.26	Dec. 28	21.08
June 14	19.09						

Be-47. Ohros Cooley. NW $\frac{1}{4}$ NL $\frac{1}{4}$ sec. 8, T. 3 S., R. 8 W. Used dug domestic well, diameter 30 inches, depth 18 feet. Measuring point, top of south side of brick curbing, 3.80 feet above land-surface datum. Records available: 1948.

Apr. 12	12.63	July 14	15.10	Sept. 16	17.75	Nov. 16	17.56
May 5	12.30	Aug. 16	26.05	Oct. 13	17.29	Dec. 28	14.95
June 14	13.35						

Be-48. Garnet S. Bailey. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 5, T. 3 S., R. 8 W. Used bored domestic well, diameter 40 inches, depth 17 feet. Measuring point, top of north side of board curbing, 2.50 feet above land-surface datum. Records available: 1948.

Apr. 12	12.40	July 14	15.04	Sept. 16	16.11	Nov. 15	16.76
May 5	13.19	Aug. 16	15.30	Oct. 18	16.46	Dec. 28	13.49
June 14	14.31						

Be-50. Shady Grove Church. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 14, T. 3 S., R. 8 W. Used bored domestic well, diameter 8 inches, depth 51 feet. Measuring point, top of inside edge of glazed-tile curbing, 2.50 feet above land-surface datum. Records available: 1948.

Apr. 12	40.82	June 14	41.63	Aug. 16	42.35	Nov. 15	42.99
May 5	41.06	July 14	41.98	Sept. 16	42.55	Dec. 28	42.21

Be-51. Allen Wagley. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 3 S., R. 7 W. Used bored domestic well, diameter 8 inches, depth 22 feet. Measuring points: (1) Top of inside edge of glazed-tile curbing, 6.00 feet above land-surface datum; (2) since July 14, 1948, top of inside edge of glazed-tile curbing, 4.25 feet above land-surface datum. Records available: 1948.

Apr. 13	8.20	July 14	9.56	Sept. 16	10.45	Nov. 15	10.79
May 5	8.42	Aug. 17	10.75	Oct. 18	10.50	Dec. 28	10.43
June 14	9.13						

Be-53. Luther Ford. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, T. 4 S., R. 7 W. Used bored domestic well, diameter 8 inches, depth 20 feet. Measuring point, top of inside edge of glazed-tile curbing, 3.50 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 13	13.62	July 14	16.27	Sept. 16	18.45	Nov. 15	19.34
May 5	14.27	Aug. 17	13.23	Oct. 18	18.54	Dec. 28	15.79
June 14	15.47						

Be-54. A. J. Lanman. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 20, T. 3 S., R. 7 W. Used dug domestic well, diameter 4 $\frac{1}{2}$ feet, depth 23 feet. Measuring point, top of concrete platform, 0.35 foot above land-surface datum. Records available: 1948.

Apr. 13	14.83	July 14	16.62	Sept. 16	17.84	Nov. 15	18.62
May 5	16.57	Aug. 17	17.87	Oct. 18	18.24	Dec. 28	17.58

Be-56. Harris Everts. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 2 S., R. 8 W. Used bored domestic well, diameter 8 inches, depth 46 feet. Measuring point, top of inside edge, south side glazed-tile curbing, 2.50 feet above land-surface datum. Records available: 1948.

Apr. 13	32.43	July 14	33.18	Sept. 16	32.58	Nov. 15	35.09
May 5	32.01	Aug. 17	34.82	Oct. 18	33.04	Dec. 28	37.52
June 14	35.28						

Be-57. W. Wilson. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 2 S., R. 8 W. Used bored domestic well, diameter 8 inches, depth 23 feet. Measuring point, top of inside edge of concrete tile, 1.25 feet above land-surface datum. Records available: 1948.

Apr. 13	13.21	July 14	14.65	Sept. 16	15.40	Nov. 15	15.88
May 5	13.47	Aug. 17	15.10	Oct. 18	15.85	Dec. 28	13.82
June 14	14.25						

Be-58. J. D. Lambert. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 1 S., R. 8 W. Used dug domestic well, diameter 2 $\frac{1}{2}$ feet, depth 21 feet. Measuring point, top of east side of brick curbing, 2.74 feet above land-surface datum. Records available: 1948.

Apr. 21	16.52	July 14	18.47	Sept. 16	19.06	Nov. 15	20.27
June 14	18.08	Aug. 17	19.28	Oct. 18	20.03	Dec. 28	19.80

Be-59. A. Robertson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 26, T. 4 S., R. 7 W. Used bored domestic well, diameter 8 inches, depth 41 feet. Measuring point, top of edge of tile curbing, 4.32 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
June 14	33.62	Aug. 17	35.31	Nov. 15	35.10
July 14	34.25	Oct. 18	35.91	Dec. 28	35.35

Be-60. C. W. James. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 3 S., R. 8 W. Used dug domestic well, diameter 2-3/4 feet, depth 40 feet. Measuring point, top inside edge of brick curbing, 0.43 foot above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 14	37.19	Aug. 17	39.37	Oct. 18	38.54	Dec. 28	38.98
July 14	37.37	Sept. 16	38.07	Nov. 15	38.88		

Bienville Parish

Bi-2. Town of Gibsland. In Gibsland, behind water plant. Records available: 1940-41, 1948.

Date	Water level	Date	Water level	Date	Water level
Feb. 5	48.38	June 3	47.92	Oct. 28	50.92
Mar. 31	46.87	30	48.43	Dec. 20	48.91

Bi-18. Woodward-Walker Lumber Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 18 N., R. 8 W., at Ada. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 5	46.04	June 3	45.40	Sept. 30	49.82	Dec. 20	49.62
Mar. 31	43.78	30	46.41	Oct. 28	50.40		

Calcasieu Parish

Cu-13. Magnolia Petroleum Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 10 S., R. 9 W. Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.5	19.3	16.6	17.5	19.1	21.8	24.6	....	21.3	21.9	21.1	21.4
2	19.5	19.3	16.5	17.5	19.1	21.9	24.0	....	21.4	22.1	21.2	21.5
3	19.5	19.2	16.5	17.6	19.2	22.0	23.6	....	21.5	22.3	21.2	21.5
4	19.5	19.1	16.5	17.7	19.2	22.1	23.3	....	21.5	22.5	21.2	21.5
5	19.6	19.0	16.5	17.7	19.3	....	23.0	....	21.6	22.6	21.2	21.6
6	19.6	18.9	16.5	17.8	19.4	....	22.8	21.5	21.6	22.9	21.3	21.6
7	19.6	18.7	16.6	17.8	19.5	....	22.7	21.5	21.6	22.9	21.3	21.6
8	19.6	18.6	16.6	17.9	19.7	....	22.5	21.5	21.6	22.6	21.3	21.7
9	19.6	18.4	16.6	17.9	19.8	....	22.4	21.5	21.5	22.4	21.3	21.7
10	19.6	18.3	16.6	18.0	19.9	....	22.2	21.5	21.2	22.1	21.3	21.7
11	19.6	18.1	16.7	18.0	19.9	23.2	22.1	21.4	21.2	21.9	21.4	21.7
12	19.6	18.0	16.7	18.1	20.0	23.4	22.0	21.3	21.1	21.8	21.4	21.7
13	19.6	17.8	16.7	18.1	20.1	23.6	21.9	21.1	21.0	21.8	21.5	21.7
14	19.6	17.7	16.8	18.2	20.1	23.8	21.9	20.9	21.0	21.8	21.5	21.7
15	19.6	17.5	16.8	18.3	20.1	24.0	21.8	20.8	21.1	21.8	21.6	21.7
16	19.6	17.4	16.8	18.3	20.2	24.2	21.8	20.7	21.3	22.0	21.6	21.6
17	19.6	17.3	16.9	18.4	20.3	24.4	21.7	20.7	21.3	21.9	21.6	21.6
18	19.6	17.2	16.9	18.4	20.4	24.6	21.7	20.6	21.3	22.0	21.6	21.6
19	19.6	17.1	16.9	18.4	20.5	24.8	21.7	20.7	21.3	22.0	21.5	21.6
20	19.6	17.0	17.0	18.5	20.5	25.0	21.7	20.8	21.3	21.8	21.5	21.6
21	19.6	17.0	17.0	18.5	20.6	25.2	21.6	20.9	21.3	21.7	21.4	21.5
22	19.6	16.9	17.1	18.5	20.7	25.3	21.6	21.0	21.3	21.5	21.4	21.5
23	19.6	16.9	17.1	18.6	20.8	25.4	21.6	21.0	21.3	21.5	21.4	21.3
24	19.6	16.9	17.2	18.7	20.9	25.5	21.6	21.0	21.3	21.4	21.4	21.3
25	19.6	16.8	17.2	18.7	21.0	25.6	21.5	21.0	21.3	21.3	21.4	21.3
26	19.5	16.8	17.3	18.8	21.1	25.6	21.5	20.9	21.3	21.2	21.4	21.2
27	19.5	16.7	17.3	18.8	21.2	25.7	21.5	21.1	21.4	21.1	21.3	21.2
28	19.5	16.6	17.4	18.9	21.2	25.6	21.5	21.1	21.5	21.1	21.3	21.2
29	19.5	16.6	17.5	18.9	21.5	25.6	21.5	21.2	21.6	21.0	21.3	21.1
30	19.5	....	19.0	21.6	25.2	21.5	21.2	21.2	21.8	21.0	21.4	21.1
31	19.4	....	....	21.7	....	....	21.3	....	....	21.1	....	....

Cu-19. Bell Estate. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 10, T. 10 S., R. 10 W. Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.3	24.1	24.4	24.4	24.3	....	33.4	37.0	39.4	37.7	36.3	34.3
2	24.3	24.1	24.4	24.4	24.4	....	33.6	37.1	39.4	37.6	36.3	34.3
3	24.3	24.2	24.4	24.4	24.5	....	33.8	37.2	39.4	37.6	36.2	34.3
4	24.3	24.2	24.4	24.4	24.5	29.1	33.9	37.3	39.4	37.5	36.2	34.2
5	24.3	24.3	24.4	24.4	24.6	29.2	34.1	37.4	39.4	37.5	36.1	34.2
6	24.3	24.3	24.4	24.4	24.6	29.4	34.2	37.5	39.4	37.4	36.0	34.1
7	24.3	24.3	24.4	24.4	24.7	29.6	34.3	37.6	39.3	37.4	36.0	34.1

Cu-19--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
8	24.3	24.4	....	24.3	24.8	29.8	34.5	37.7	39.3	37.3	35.9	34.1
9	24.2	24.4	....	24.3	24.9	30.0	34.6	37.7	39.3	37.3	35.8	34.1
10	24.2	24.4	....	24.3	25.0	30.1	34.7	37.9	39.2	37.3	35.8	34.1
11	24.2	24.4	....	24.2	25.1	30.3	34.8	38.0	39.2	37.2	35.7	34.0
12	24.2	24.4	....	24.1	25.1	....	34.9	38.1	39.1	37.2	35.7	34.0
13	24.2	24.4	....	24.1	25.2	....	35.1	38.2	39.1	37.2	35.6	33.9
14	24.2	24.4	....	24.1	25.4	....	35.2	38.3	39.0	37.1	35.5	33.9
15	24.2	24.4	a24.47	24.0	25.5	....	35.3	38.4	39.0	37.1	35.5	33.8
16	24.1	24.4	....	....	25.7	....	35.5	38.5	38.9	37.1	35.4	33.8
17	24.1	24.4	....	24.0	25.8	31.2	35.6	38.6	38.8	37.1	35.3	33.8
18	24.0	24.4	....	24.0	26.0	31.3	35.7	38.7	38.7	37.0	35.2	33.7
19	24.0	24.4	....	24.0	26.1	31.5	35.8	38.8	38.6	37.0	....	33.7
20	24.0	24.4	....	24.1	26.2	31.6	35.9	38.8	38.5	36.9	35.1	33.6
21	24.0	24.4	....	24.1	26.4	31.7	35.9	38.9	38.4	36.9	35.1	33.6
22	24.0	24.4	a24.42	24.1	26.6	31.9	35.9	39.0	38.3	36.9	35.0	33.6
23	24.0	24.4	24.4	24.1	26.8	32.0	36.1	39.0	38.2	36.8	34.9	33.6
24	23.9	24.4	24.4	24.1	27.0	32.2	36.1	39.1	38.0	36.8	34.8	33.5
25	23.9	24.4	24.4	24.2	27.1	32.4	36.2	39.2	38.0	36.7	34.7	33.5
26	23.9	24.4	24.4	24.2	27.3	32.5	36.3	39.2	37.9	36.7	34.6	33.5
27	23.8	24.4	24.4	24.2	27.5	32.7	36.4	39.3	37.8	36.6	34.6	33.5
28	23.9	24.4	24.4	24.2	27.7	32.9	36.5	39.3	37.8	36.8	34.4	33.4
29	23.9	24.4	24.4	24.2	....	33.1	36.6	39.4	37.7	36.5	34.4	33.4
30	23.9	....	24.4	24.3	....	33.3	36.7	39.4	37.7	36.4	34.3	33.4
31	24.0	....	....	....	....	....	36.9	39.4	....	36.4	....	....

a Tape measurement at odd hour.

Cu-20. Magnolia Oil Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 4, T. 10 S., R. 9 W. Unused drilled oil-field supply well, diameter 6 inches, depth 290 feet. Measuring point, top of 6-inch casing, 0.50 foot above land-surface datum. Records available: 1948. Sept. 23, 39.90; Oct. 1, 40.51.

Cu-21. Continental Oil Co. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 10 S., R. 9 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	35.66	Apr. 23	35.56	July 30	42.18	Oct. 15	42.67
12	35.06	30	35.80	Aug. 6	42.60	22	42.42
26	34.79	May 14	36.52	13	42.81	29	42.16
Feb. 2	34.77	28	38.02	20	47.40	Nov. 6	42.01
9	34.74	June 11	38.36	Sept. 3	43.59	13	41.80
16	34.68	18	39.02	10	43.72	20	42.49
23	34.63	25	39.64	17	43.41	27	40.61
Mar. 1	34.61	July 2	40.25	24	43.12	Dec. 4	40.35
26	35.21	16	41.28	30	43.20	11	40.91
Apr. 9	35.63	23	41.55	Oct. 8	42.98	31	40.51
16	35.64						

Cu-22. Magnolia Petroleum Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 8, T. 10 S., R. 9 W. Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.7	29.5	29.4	29.2	29.6	37.8	44.6	48.5	49.6	45.9	43.2	41.3
2	28.9	29.6	29.5	29.4	29.9	37.8	44.7	48.6	49.5	45.7	43.3	41.1
3	28.9	29.6	29.6	29.3	30.2	37.9	45.1	40.7	49.3	45.5	43.3	41.2
4	28.9	29.6	29.7	29.2	30.6	38.1	45.3	48.8	49.2	45.3	43.1	41.1
5	28.9	29.6	29.6	29.1	30.9	38.4	45.5	48.8	49.3	45.3	43.0	40.8
6	28.8	29.6	28.4	29.0	30.8	38.7	45.7	48.9	49.2	45.0	43.1	40.8
7	28.5	29.6	29.3	28.8	31.0	38.9	45.5	49.0	48.9	45.0	43.0	40.7
8	28.4	29.5	29.2	28.7	31.0	....	45.4	49.1	48.7	45.0	42.7	40.9
9	28.3	29.4	29.1	28.6	31.1	....	45.7	49.2	48.6	45.1	42.6	41.0
10	28.5	29.5	29.2	28.4	31.3	....	46.1	49.2	48.4	44.9	42.6	41.1
11	28.6	29.4	29.4	28.2	31.6	....	46.1	49.3	48.2	44.7	42.4	40.7
12	27.5	29.2	29.6	28.2	31.8	....	46.2	49.5	48.1	44.9	42.1	40.6
13	27.7	29.2	29.5	28.4	32.1	....	46.2	49.6	48.0	44.9	42.3	40.6

Cu-22--Continued.

Daily noon water level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	27.8	29.2	29.2	28.6	32.4	....	46.2	49.9	47.9	44.8	42.3	40.5
15	27.4	29.4	28.9	28.9	32.4	....	46.1	49.9	47.5	44.8	42.1	40.5
16	27.2	29.4	28.9	28.8	32.5	40.4	46.2	50.0	47.5	44.8	42.1	40.5
17	27.5	29.3	29.1	29.0	32.8	40.5	46.3	50.1	46.9	44.7	42.2	40.6
18	27.6	29.3	29.0	29.0	33.1	40.6	46.3	50.1	46.6	44.8	41.9	40.6
19	27.6	29.3	29.1	28.9	33.5	41.0	46.2	50.3	46.4	44.6	42.0	40.4
20	27.8	29.3	29.2	28.9	33.8	41.3	46.1	50.4	46.2	44.2	41.8	40.4
21	27.8	29.4	29.0	29.0	34.2	41.5	46.1	50.3	46.1	44.0	41.4	40.4
22	27.6	29.4	29.1	29.0	34.6	41.8	46.2	50.2	45.9	43.8	41.3	40.5
23	27.6	29.4	29.4	28.8	34.9	42.2	46.4	50.3	45.7	43.7	41.2	40.5
24	27.8	29.2	29.3	28.9	35.3	42.8	46.6	50.3	45.8	43.4	41.1	40.5
25	28.2	29.1	29.1	28.9	35.7	43.1	46.8	50.2	46.0	43.2	41.1	40.5
26	28.3	29.2	28.9	29.1	36.1	43.5	46.9	50.2	46.1	43.2	40.9	40.6
27	28.5	29.2	29.1	29.2	36.5	43.8	47.1	50.2	46.1	43.1	41.7	40.4
28	29.0	29.4	29.3	29.3	36.8	44.1	47.6	50.2	46.0	43.1	41.1	40.1
29	29.0	29.5	29.1	29.5	37.0	44.4	47.8	50.0	46.0	43.2	41.3	40.0
30	29.1		28.9	29.6	37.2	44.5	48.7	49.8	45.9	43.4	41.3	40.2
31	29.2		29.0		37.5		48.4	49.7		43.3		40.4

Cu-25. Lake Charles Country Club. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 10 S., R. 9 W.
Records available: 1944-47. Measurements discontinued.

Cu-34. Gulf States Utilities. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 9 S., R. 8 W.
Records available: 1945-48.

Daily noon water level, from recorder charts												
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	22.0	23.6	a22.00	....	23.0	29.7	37.7	34.0	41.0	36.8	33.6	33.4
2	22.3	24.2	.....	a19.06	21.8	30.6	38.4	36.3	40.9	36.6	34.0	34.0
3	22.5	24.5	.....	.....	22.5	30.9	37.7	35.3	40.8	35.6	34.0	34.3
4	22.6	23.8	.....	.....	23.0	30.8	37.4	38.5	40.6	36.3	34.0	34.2
5	23.2	23.9	.....	.....	22.7	30.8	37.6	38.0	40.6	36.0	33.0	31.9
6	22.3	23.8	.....	.....	22.1	29.6	37.8	37.7	40.5	36.0	34.2	32.5
7	22.6	21.9	.....	.....	22.6	30.5	37.9	38.3	40.4	35.7	32.8	32.8
8	22.6	21.9	.....	.....	21.0	31.8	39.1	37.3	40.2	35.8	34.8	32.7
9	22.5	23.9	a21.36	20.1	21.4	32.2	37.3	38.9	40.1	35.3	33.8	32.4
10	22.6	23.8	.....	19.9	21.8	....	37.7	38.9	39.9	35.5	34.2	32.4
11	22.0	23.4	.....	19.8	21.9	30.7	37.3	39.3	39.7	35.1	34.3	31.3
12	21.6	23.6	.....	19.7	21.7	32.1	38.1	....	38.8	35.4	32.4	31.5
13	22.3	23.0	.....	19.8	22.6	31.8	38.1	40.6	39.2	35.2	....	32.2
14	22.4	....	.....	20.7	22.6	32.7	37.6	39.7	39.3	35.1	....	31.5
15	22.3	....	a22.32	20.7	25.0	33.1	38.7	40.3	39.0	35.2	....	32.2
16	22.3	....	.....	20.8	24.8	33.3	38.9	42.0	38.7	35.1	....	32.1
17	22.7	....	.....	20.7	25.8	33.3	38.7	40.0	36.5	....	....	30.8
18	24.1	....	.....	20.7	27.1	33.6	38.6	39.5	38.6	....	....	31.8
19	23.6	....	.....	20.7	26.7	33.7	38.7	40.0	38.3	35.3	....	32.1
20	23.4	....	.....	21.8	27.0	32.2	39.4	41.5	38.1	33.8	34.7	32.8
21	22.6	....	.....	21.7	27.3	34.0	39.3	42.5	37.8	34.2	33.0	32.8
22	22.7	....	a18.38	21.1	27.5	34.4	38.8	40.8	37.5	34.5	34.0	31.0
23	22.8	a22.39	.....	20.7	27.5	34.6	36.1	41.5	37.5	34.3	34.5	31.1
24	27.2	.....	.....	20.6	27.8	34.9	35.6	41.0	36.6	32.1	....	30.9
25	27.2	.....	.....	20.3	29.0	35.8	37.0	40.9	37.4	34.3	....	31.8
26	26.1	.....	.....	21.3	29.0	35.7	35.3	41.1	35.9	34.0	....	30.9
27	24.8	.....	.....	20.8	26.8	35.1	35.9	41.0	36.7	33.6	32.8	31.0
28	25.7	.....	.....	21.2	29.0	36.7	35.4	41.0	36.6	34.0	32.0	31.5
29	25.6	.....	.....	22.8	28.9	37.2	34.8	40.8	36.7	33.7	34.0	30.3
30	25.4	.....	.....	23.0	29.0	37.1	36.5	42.7	36.7	33.6	34.5	32.4
31	24.8	.....	.....	....	29.9	....	34.8	41.0	....	31.8	....	31.0

a Tape measurement at odd hour.

Cu-42. Long-Bell Lumber Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 9 S., R. 8 W.
Records available: 1944-47. Measurements discontinued.

Cu-48. LaGrange School. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 10 S., R. 8 W. Unused drilled public-supply well, diameter 3 inches, depth about 500 feet. Measuring point, top of 3/4-inch plug in 3-inch tee, 0.40 foot above land-surface datum. Records available: 1948.

Cu-48--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	22.37	Oct. 8	37.17	Nov. 13	38.21	Dec. 11	37.76
Apr. 20	22.68	22	37.51	20	38.05	16	37.69
Sept. 16	37.43	29	38.05	27	37.50	23	37.68
23	37.55	Nov. 6	38.13	Dec. 4	36.69	31	37.58
24	36.51						

Cu-50. John McNeese Junior College. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 19, T. 10 S., R. 8 W. Abandoned drilled domestic well, diameter 4 inches, depth about 600 feet. Measuring point, lower inside edge of 2-inch nipple, 1.00 foot above land-surface datum. Records available: 1948.

Jan. 20	8.22	May 7	9.64	Sept. 12	10.29	Oct. 4	10.04
Feb. 13	9.23	June 11	9.56	16	13.98	11	9.90
Mar. 14	9.05	July 9	9.72	20	10.36	17	9.98
Apr. 16	9.34	Aug. 6	9.92	27	10.02	25	9.90

Cu-109. Vinton Petroleum Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, T. 10 S., R. 12 W. Records available: 1946-48. Jan. 7, 3.85; Apr. 8, 3.01; July 8, 6.86. Measurements discontinued after July 8, 1948.

Cu-115. Krause & Managan. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, T. 9 S., R. 10 W. Records available: 1944-48. Jan. 8, 5.87; Apr. 8, 4.27; Sept. 8, 11.30; Dec. 9, 11.84.

Cu-120. Mathieson Alkali Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 11 S., R. 10 W. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	14.87	July 7	25.52	Dec. 7	21.73
Apr. 6	13.92	Sept. 8	26.66		

Cu-125. Cooper Patterson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 10 S., R. 10 W. Measuring point, top of 24-inch pit casing, 0.70 foot above land-surface datum. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	24.81	Sept. 24	37.95	Oct. 29	36.14	Dec. 4	33.30
Apr. 6	24.75	30	37.80	Nov. 6	35.85	8	33.87
July 8	37.49	Oct. 8	37.36	13	36.39	16	33.77
Sept. 8	39.42	15	36.92	20	34.91	23	33.38
17	38.85	22	36.78	27	34.06		

Cu-128. W. D. Jones. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 9 S., R. 8 W. Records available: 1944-48. Jan. 6, 22.35; July 8, 38.66; Sept. 7, 39.70. Measurements discontinued after Sept. 7, 1948.

Cu-161. Calcasieu-Marine National Bank. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 26, T. 11 S., R. 7 W. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 1.41 feet; (2) since Dec. 7, 1948, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 3.10 feet. Records available: 1944-48. Jan. 6, 20.15; Apr. 6, 16.21; Sept. 7, 46.36; Dec. 7, 27.92.

Cu-205. Paul Bellon. Formerly owned by Frank Gibson. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 8 S., R. 8 W. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 3.92 feet; (2) since July 1, 1948, top of 24-inch casing, 1.80 feet below land-surface datum. Records available: 1944; 1946-48.

Cu-205--Continued.

Daily noon water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	25.40	Sept. 21	36.7	Nov. 2	33.6	Dec. 2	31.8
Apr. 8	23.70	22	36.6	3	33.5	3	31.8
July 8	38.51	23	36.4	4	33.5	4	31.7
Aug. 13	41.14	24	36.4	5	33.4	5	31.7
20	43.87	25	36.3	6	33.4	6	31.7
25	44.2	26	36.2	7	33.4	7	31.7
26	42.2	27	36.1	8	33.4	8	31.7
27	43.7	28	36.0	9	33.3	9	31.7
28	42.7	29	35.9	10	33.3	10	31.7
29	40.8	30	35.9	11	33.3	11	31.7
30	42.7	Oct. 1	36.0	12	33.2	12	31.7
31	42.8	2	38.2	13	33.2	13	31.7
Sept. 3	41.0	3	37.5	14	33.1	14	31.6
4	40.1	4	36.4	15	33.0	15	31.6
5	39.6	5	36.0	16	32.8	16	31.5
6	39.3	6	35.8	17	32.8	17	31.5
7	39.1	7	35.6	18	32.7	18	31.4
8	38.9	8	35.5	19	32.7	19	31.4
9	38.9	9	34.9	20	32.7	20	31.4
10	38.6	10	34.8	21	32.6	21	31.3
11	38.4	11	34.7	22	32.5	22	31.3
12	38.2	12	34.6	23	32.5	23	31.3
13	38.0	13	34.5	24	32.4	24	31.3
14	37.8	14	34.4	25	32.4	25	31.3
15	37.7	21	34.44	26	32.3	26	31.3
16	37.5	28	33.94	27	32.2	27	31.3
17	37.3	29	33.9	28	32.1	28	31.2
18	37.2	30	33.8	29	32.1	29	31.1
19	37.0	31	33.8	30	32.1	30	31.1
20	36.8	Nov. 1	33.7	Dec. 1	32.0		

Cu-208. W. L. Caldwell. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 8 S., R. 8 W. Records available: 1946-48. Jan. 5, 26.32; Apr. 8, 24.60; Dec. 9, 31.33.

Cu-209. J. P. Tucker. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 14, T. 9 S., R. 9 W. Records available: 1946-48. Jan. 8, 45.68; July 8, 47.66; Sept. 9, 49.75.

Cu-219. Humble Oil Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 7 S., R. 10 W. Records available: 1946-48. Jan. 8, 32.64; Apr. 8, 31.83; Dec. 8, 37.60.

Cu-222. Hardy Johnson. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, T. 9 S., R. 13 W. Records available: 1943-48.

Jan. 8	7.63	Apr. 23	6.65	Aug. 6	12.11	Nov. 1	12.25
Feb. 9	7.34	May 28	8.62	Sept. 8	13.25	Dec. 8	11.38
23	6.81	July 2	10.79	Oct. 4	12.68	31	11.11
Mar. 26	7.08	8	11.20	5	12.39		

Cu-228. R. Boyer. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, T. 9 S., R. 12 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	16.93	July 8	26.06	Dec. 8	22.05
Apr. 8	16.37	Sept. 8	29.51		

Cu-240. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 9 S., R. 11 W. Measuring points: (1) Top of 6-inch casing, 1.00 foot above land-surface datum; (2) since Dec. 8, 1948, top edge of 3-inch pipe, at land-surface datum. Records available: 1944-48.

Jan. 7	17.24	July 8	23.68	Dec. 8	23.10
Apr. 8	16.46	Sept. 8	29.12		

Cu-245. W. R. Keever. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 8 S., R. 10 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	10.49	July 8	11.68	Dec. 9	14.86
Apr. 8	8.91	Sept. 8	14.59		

Cu-262. Calcasieu Parish School Board. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 11 S., R. 10 W. Records available: 1944-48. Jan. 7, 14.48; Apr. 6, 14.00; Dec. 8, 21.37.

Cu-267. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 11 S., R. 8 W. Records available: 1944-48. Jan. 6, 21.14; Apr. 6, 18.20; July 7, 23.80; Dec. 7, 25.99.

Cu-347. Amy Wait Estate. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 9 S., R. 7 W. Records available: 1946-48. Jan. 6, 28.64; Apr. 6, 24.28.

Cu-440. Calcasieu Parish Police Jury. Formerly owned by 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. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	26.31	Sept. 30	44.62	Oct. 29	39.62	Nov. 27	36.64
Apr. 6	24.32	Oct. 8	43.63	Nov. 6	38.90	Dec. 8	35.36
July 8	44.65	15	42.38	13	37.38	23	34.73
Sept. 7	45.11	22	39.15	20	37.11	31	34.34

Cu-445. Cities Service Refining Corporation. Formerly owned by War Assets Administration. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 10 S., R. 9 W. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.0	45.1	44.8	45.1	46.6	54.2	58.6	63.8	64.6	60.8	58.6	56.4
2	41.8	45.3	44.8	45.3	46.8	53.0	58.6	63.9	64.3	59.7	58.4	56.3
3	42.2	45.2	45.1	45.1	47.4	54.2	60.7	64.1	64.1	59.1	58.0	56.1
4	41.8	45.2	45.3	44.4	47.6	54.5	60.8	64.2	63.9	58.9	58.3	55.5
5	41.9	44.9	44.4	44.2	46.4	54.9	60.9	64.3	63.7	59.7	57.4	55.4
6	41.1	44.7	43.8	44.3	46.3	55.1	61.0	64.3	63.6	59.3	57.3	54.8
7	41.9	44.4	43.9	43.8	46.8	55.6	58.9	64.4	63.1	59.4	57.1	55.3
8	40.8	44.3	43.8	43.1	46.8	55.8	58.9	64.6	63.0	60.3	57.0	55.9
9	40.9	44.4	44.0	42.9	47.2	55.9	60.5	64.9	63.1	60.3	56.9	55.4
10	40.8	44.1	45.0	41.8	47.8	56.4	61.4	65.1	63.1	60.1	55.7	55.4
11	41.9	44.1	44.5	42.2	47.9	56.4	61.5	65.5	63.0	59.9	56.0	54.6
12	42.0	43.2	....	42.5	48.3	56.5	61.0	65.3	62.9	59.9	56.2	54.4
13	42.3	43.7	....	42.5	48.6	56.6	61.0	65.8	62.9	60.0	56.6	54.4
14	42.4	43.7	....	43.1	48.5	56.2	61.4	65.9	62.5	60.1	56.4	54.9
15	42.4	43.8	44.47	44.6	48.5	56.4	60.8	65.4	62.5	60.0	56.8	55.1
16	40.6	43.0	....	44.7	48.5	56.6	60.8	65.6	61.1	58.9	57.1	55.3
17	40.2	43.5	....	43.8	48.8	56.5	60.9	65.4	60.5	59.7	57.2	47.0
18	40.5	43.5	....	44.0	49.4	56.3	60.7	65.7	59.1	59.7	57.0	46.9
19	41.4	43.5	....	43.9	49.6	....	60.7	66.1	59.9	59.5	56.8	46.9
20	41.9	43.6	....	44.5	50.3	....	60.6	66.0	59.7	59.2	54.9	46.8
21	41.2	43.5	....	44.6	50.8	....	60.6	65.1	59.5	59.3	54.8	46.7
22	41.1	43.8	44.57	45.0	51.0	....	60.9	64.7	58.4	59.3	54.4	46.8
23	41.0	44.2	45.2	45.1	51.1	....	61.2	64.9	58.3	59.1	54.3	46.8
24	41.1	43.2	45.3	45.2	51.6	....	61.8	65.0	59.5	58.7	54.4	46.8
25	42.3	43.0	45.5	45.4	51.8	....	61.7	65.3	60.6	58.6	54.7	46.8
26	42.6	43.6	44.8	44.3	52.1	59.0	61.9	65.3	60.7	58.8	54.5	46.9
27	43.6	43.8	44.9	45.5	53.0	59.4	62.1	65.1	60.7	58.5	55.7	47.3
28	43.9	43.9	45.0	44.5	53.1	56.1	63.7	65.3	60.8	58.4	55.8	48.1
29	44.0	44.1	44.8	45.1	53.1	56.1	63.5	65.1	60.7	58.7	56.2	48.2
30	43.7	....	44.9	46.6	53.6	55.8	64.1	64.8	60.4	58.8	56.3	49.0
31	44.7	....	44.8	....	54.4	....	63.9	64.6	....	58.6	....	....

a Tape measurement at odd hour.

Cu-446. Cities Service Refining Corporation. Formerly owned by War Assets Administration. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, T. 10 S., R. 9 W. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.2	36.3	35.4	36.4	37.5	43.1	53.3	54.6	55.7	51.9	49.6	47.6
2	36.4	36.5	35.4	36.6	37.7	44.8	53.5	54.8	55.5	51.8	49.6	47.6
3	36.4	36.6	35.5	36.6	37.9	45.0	51.9	54.9	55.4	51.7	49.7	47.6
4	36.5	36.6	35.5	36.4	37.9	45.0	51.8	55.0	55.2	51.6	49.6	47.5
5	36.5	36.6	35.5	36.5	38.3	45.2	51.9	55.1	55.2	51.4	49.5	48.5
6	34.8	36.2	36.5	36.4	38.4	45.5	52.0	55.2	55.1	51.3	49.6	47.7
7	34.7	36.5	36.5	33.8	38.6	45.7	53.8	55.3	55.0	51.3	49.6	47.6
8	34.4	36.5	36.5	32.6	38.8	45.9	54.3	55.5	54.8	51.3	49.4	47.1
9	34.3	36.4	36.4	35.1	38.9	46.2	52.8	55.5	54.7	51.3	48.2	47.1
10	34.3	36.6	36.4	34.7	39.1	46.5	52.6	55.7	54.8	51.2	49.8	47.5
11	34.3	35.5	36.6	34.1	38.6	46.7	52.6	55.9	54.6	51.0	48.5	47.3
12	34.2	36.2	36.8	34.5	38.8	46.8	51.9	55.9	54.4	51.1	48.7	47.2
13	34.2	36.3	36.7	35.4	39.0	47.0	51.9	56.0	54.3	51.0	48.7	47.2
14	35.1	36.5	36.6	35.8	39.2	47.1	51.8	56.1	51.9	51.1	48.8	47.1
15	34.7	36.4	36.4	35.8	39.2	47.4	50.2	56.1	51.9	50.9	48.7	47.0
16	34.4	36.4	36.3	35.9	39.3	47.4	51.3	56.2	53.4	50.9	48.6	46.9
17	34.7	36.5	36.3	36.0	39.5	47.5	52.0	56.8	53.4	50.8	48.6	55.2
18	35.2	36.5	36.3	36.0	39.8	47.6	52.3	56.5	53.3	51.0	48.5	54.9
19	35.3	36.4	36.2	36.0	40.1	47.8	52.3	56.5	53.0	50.6	48.4	54.6
20	....	36.4	36.2	36.0	40.3	48.1	52.3	56.6	52.8	50.5	48.9	54.5
21	....	36.4	36.2	36.0	40.8	48.3	52.2	56.6	52.7	50.5	48.2	54.8
22	....	36.4	36.1	36.3	41.1	48.5	52.1	56.6	52.5	50.4	48.1	54.9
23	....	35.4	36.4	36.2	41.4	48.8	52.2	56.6	52.4	50.3	47.9	55.4
24	....	35.2	36.4	36.3	41.8	49.1	52.4	57.0	52.3	50.1	47.8	55.4
25	....	35.2	36.3	36.3	43.5	49.5	52.6	57.1	52.3	49.9	47.7	55.0
26	....	35.3	36.2	36.4	43.5	50.0	52.8	56.6	52.3	49.7	47.6	55.0
27	35.6	35.2	36.3	36.6	43.8	50.3	52.6	56.4	52.2	49.3	47.6	54.5
28	36.1	35.3	36.5	37.2	44.1	50.4	53.2	56.4	52.1	49.2	47.5	53.8
29	36.1	35.4	36.5	37.4	43.4	51.6	53.4	56.3	52.1	51.6	47.7	53.6
30	36.2	....	36.3	37.5	43.3	52.9	54.2	56.0	52.1	50.0	47.0	53.8
31	36.3	....	36.2	....	43.1	....	54.5	55.8	....	49.7	....	....

Cu-448. Town of Maplewood. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 9 S., R. 9 W. Records available: 1945-48. Measurements discontinued after July 2, 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	35.57	Mar. 1	35.59	Apr. 30	35.20	June 18	45.32
9	35.46	Apr. 9	35.33	May 28	40.42	25	47.33
16	35.66	16	35.01	June 11	43.73	July 2	48.27
23	35.72	23	35.67				

Cu-449. Mathieson Alkali Co. Sec. 34, T. 9 S., R. 9 W. Records available: 1947. Measurements discontinued.

Cu-451. Stanolind Oil & Gas Co. SW $\frac{1}{4}$ sec. 3, T. 11 S., R. 7 W. Records available: 1946-48. Jan. 6, 30.34; Apr. 6, 29.53; Sept. 7, 60.16; Dec. 7, 41.99.

Cu-453. Cooper Patterson. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 10 S., R. 10 W. Used drilled irrigation well, diameter 9 inches, depth 340 feet. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 3.80 feet. Records available: 1948.

Sept. 17	41.08	Oct. 15	36.81	Nov. 13	35.49	Dec. 8	34.33
24	39.20	22	36.82	20	35.09	16	34.13
Oct. 1	38.10	29	36.05	27	34.44	23	34.03
8	37.55	Nov. 6	35.64	Dec. 4	34.18		

Cu-468. J. R. Stevens. Sec. 3, T. 10 S., R. 8 W. Abandoned drilled domestic well, diameter 5 inches, depth 412 feet. Measuring point, top of 5-inch casing, at land-surface datum. Records available: 1948.

Cu-468--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 23	36.55	Oct. 15	36.79	Oct. 29	36.21	Nov. 13	36.21
30	36.09	22	36.36	Nov. 6	36.09	20	36.02
Oct. 8	36.90						

Cameron Parish

Cn-4. Union Sulphur Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 12 S., R. 10 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	7.32	July 7	7.65	Dec. 7	8.84
Apr. 6	6.47	Sept. 8	9.02		

Cn-8. Broussard Estate. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 13, T. 12 S., R. 9 W. Records available: 1943-48.

Jan. 7	9.73	July 7	20.40	Dec. 7	16.10
Apr. 6	8.19	Sept. 7	21.24		

Cn-10. Hebert, Helms & Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, T. 12 S., R. 7 W. Records available: 1945-48. Jan. 7, 15.28; Apr. 6, 12.23; Dec. 7, 21.94.

Cn-16. Maple Hughes. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, T. 12 S., R. 4 W. Records available: 1946-48. Jan. 6, 11.44; Apr. 2, 8.72; Sept. 9, 23.88; Dec. 10, 16.72.

Cn-17. John Predia. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 4, T. 15 S., R. 8 W. Records available: 1946-48.

Jan. 7	5.34	July 7	4.74	Dec. 7	7.76
Apr. 6	4.58	Sept. 7	7.37		

Cn-19. Warren Miller. NW $\frac{1}{4}$ sec. 32, T. 14 S., R. 7 W. Records available: 1946-48.

Jan. 7	5.11	July 7	5.11	Dec. 7	8.24
Apr. 6	4.06	Sept. 7	9.38		

Cn-20. Julian East. SE $\frac{1}{4}$ SE $\frac{1}{4}$ irregular sec. 40, T. 14 S., R. 6 W. Measuring points: (1) Top of 2-inch pipe, 1.10 feet above land-surface datum; (2) since Sept. 7, 1948, top of 1 $\frac{1}{2}$ -inch reducer on top of pipe, 1.85 feet above land-surface datum. Records available: 1946-48.

Jan. 7	7.59	July 7	7.48	Dec. 7	8.43
Apr. 6	7.43	Sept. 7	9.37		

East Baton Rouge Parish

EB-4. Esso Standard Oil Co., Louisiana Division. N $\frac{1}{4}$ irregular sec. 44, T. 7 S., R. 1 W. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	132.0	131.6	.....	125.1	212.2	227.6	224.4	208.3	177.2	177.8	
2	131.3	129.4	.....	126.1	213.1	227.3	226.8	209.7	180.9	175.6	
3	143.7	136.3	128.9	.....	127.7	213.0	228.2	226.8	209.5	182.3	174.4
4	143.1	135.6	128.6	126.5	128.3	212.2	226.4	227.3	211.2	180.7	174.2
5	139.9	132.7	129.1	126.9	126.8	212.2	226.7	227.7	211.6	.....	173.5
6	130.3	142.4	131.7	130.1	124.0	125.6	212.9	227.8	227.4	211.5	183.5	174.4
7	142.5	134.9	130.5	124.2	125.3	214.9	224.6	225.2	211.4	179.6	173.6
8	142.4	134.0	130.1	125.5	126.2	215.8	223.1	220.2	214.2	177.2	175.1
9	141.7	133.0	130.0	125.9	126.8	214.9	222.6	218.2	212.2	175.7	173.3

EB-4--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	.....	142.0	132.4	126.5	126.2	.....	212.4	220.9	219.6	209.6	175.4	172.6
11	.....	141.9	130.9	125.0	126.4	133.9	215.2	220.4	217.7	208.6	179.3	171.2
12	.....	141.8	130.2	124.6	125.3	141.0	215.8	221.1	218.8	207.4	178.2	172.2
13	129.6	141.7	126.1	127.0	125.8	149.5	216.3	222.9	219.0	212.0	177.9	174.6
14	129.5	141.6	126.0	127.3	124.8	153.4	219.0	221.8	215.7	211.2	177.5	173.0
15	129.2	141.3	124.0	124.6	123.0	162.2	.....	223.6	211.0	212.7	178.3	172.6
16	.....	139.0	124.0	124.5	123.2	165.3	.....	225.6	211.0	.....	178.9	173.8
17	.....	138.9	.....	127.0	125.6	172.2	221.2	224.8	210.6	.....	179.0	172.6
18	.....	137.1	127.5	126.7	126.7	178.0	223.5	223.6	208.7	212.3	178.0	173.4
19	.....	136.9	127.7	127.0	126.6	182.9	222.8	222.9	207.8	213.6	177.0	173.8
20	131.8	136.9	128.0	126.2	126.5	185.5	220.7	222.6	209.5	212.6	175.3	174.7
21	131.3	135.7	130.4	124.9	125.7	187.0	222.7	225.3	206.1	204.1	173.4	177.0
22	130.7	134.5	128.0	124.0	124.3	191.5	224.5	227.2	208.1	191.0	175.8	.....
23	130.4	131.4	128.2	123.6	126.3	194.1	227.5	227.3	209.7	189.7	175.8	173.6
24	.....	132.0	129.5	122.9	121.9	195.1	223.7	227.4	207.5	187.2	174.2	173.3
25	.....	129.8	129.6	119.2	122.7	198.9	223.3	227.2	205.9	185.8	174.8	173.8
26	.....	130.9	129.5	118.2	122.0	200.6	225.2	226.2	205.7	181.3	175.4	174.1
27	145.6	131.6	129.4	.....	123.5	202.4	225.9	227.5	207.6	177.3	175.5	174.8
28	146.0	133.6	129.4	.....	123.6	204.6	223.9	225.9	205.0	.....	175.5	175.2
29	141.7	132.3	129.3	.....	122.7	208.3	227.6	225.3	204.2	176.4	175.5	175.3
30	141.5	.....	129.6	.....	124.3	210.9	227.3	226.0	204.9	177.5	177.5	175.6
31	144.0	.....	131.1	.....	125.4	.....	225.4	224.0	.....	176.0	.....	175.7

EB-10. Esso Standard Oil Co., Louisiana Division. No irregular sec. 44, T. 7 S., R. 1 W. Records available: 1944, 1947. Measurements discontinued.

EB-15. Esso Standard Oil Co., Louisiana Division. At Baton Rouge refinery, southeast of tank 67. Records available: 1940-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	144.6	143.4	135.3	130.3	126.3	128.4	.....	209.9	211.2	199.1	172.6	.....
2	145.2	143.2	134.3	130.3	127.2	129.5	200.1	209.9	212.1	199.2	172.7	.....
3	145.2	143.6	136.6	129.7	128.1	.....	200.3	210.7	212.7	200.4	173.5	164.1
4	145.0	142.7	135.5	130.1	130.9	130.5	200.1	210.4	212.6	200.4	173.2	163.6
5	144.2	142.1	147.7	131.1	129.6	130.6	199.5	211.7	212.3	201.6	172.7	164.1
6	144.2	141.9	154.2	131.7	127.6	129.6	200.4	212.6	.....	200.3	172.1	162.0
7	140.5	142.6	134.8	131.5	129.1	128.8	202.0	211.0	.....	203.8	171.9	164.1
8	140.4	142.9	.....	130.3	128.2	128.2	201.8	210.0	.....	201.6	170.7	163.0
9	139.9	141.0	134.3	129.8	.....	.....	202.2	208.4	.....	201.5	169.8	162.1
10	140.2	141.9	132.6	129.6	.....	.....	201.0	207.6	.....	200.4	169.6	161.7
11	139.9	141.3	132.1	128.7	130.0	136.8	201.7	208.0	.....	199.0	168.8	162.0
12	140.5	141.3	132.0	128.5	130.0	140.7	201.7	208.9	.....	199.0	168.7	162.3
13	140.5	140.6	131.2	129.4	128.3	149.4	202.1	210.2	.....	199.6	167.3	163.2
14	139.5	140.2	130.4	128.7	129.5	153.0	202.1	209.7	.....	199.9	168.4	162.3
15	139.6	139.8	129.5	129.1	127.6	158.8	203.9	210.6	203.8	201.9	168.1	162.1
16	140.3	139.3	128.1	128.6	126.3	163.0	203.6	211.3	202.9	201.3	168.2	162.1
17	140.1	138.2	128.3	128.4	126.3	167.8	203.7	211.3	202.2	201.3	168.3	162.6
18	139.7	138.7	129.0	130.0	125.5	172.4	204.9	210.7	201.1	202.0	167.1	163.7
19	141.2	137.1	130.4	130.8	126.6	175.8	204.9	210.6	202.1	201.2	166.5	164.1
20	141.1	136.3	130.2	130.6	126.7	178.0	203.7	209.5	212.6	201.2	166.5	164.3
21	141.7	136.7	130.6	128.9	125.8	180.3	205.1	211.6	.....	196.8	166.1	164.6
22	141.8	136.5	129.4	127.9	126.6	183.3	206.2	212.5	.....	193.7	164.0	164.0
23	141.9	135.6	130.1	128.6	126.6	185.7	207.1	213.0	.....	186.8	165.8	162.3
24	142.8	134.5	131.2	127.4	126.3	186.8	204.8	212.7	.....	184.1	166.9	162.2
25	142.7	134.7	130.1	126.6	126.3	189.3	205.2	213.1	.....	181.2	167.0	162.0
26	143.0	134.9	129.7	125.9	126.8	191.2	205.1	212.0	.....	179.3	165.6	162.8
27	143.3	134.8	129.2	125.9	128.2	192.7	206.8	212.2	198.3	178.7	166.5	163.1
28	143.1	136.3	128.7	125.1	127.9	193.9	205.3	212.5	197.0	176.1	166.7	162.8
29	143.1	135.5	128.9	126.2	126.8	194.8	208.3	212.2	197.1	173.7	.....	163.2
30	143.4	.....	129.8	126.7	127.8	.....	208.6	212.6	197.0	172.4	.....	163.4
31	143.2	.....	130.3	.....	128.0	.....	207.9	212.0	.....	172.7	.....	163.4

EB-20. Esso Standard Oil Co., Louisiana Division. Irregular sec. 43, T. 7 S., R. 1 W. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	132.7	.....	.....	.....	125.4	129.6
2	136.0	145.0	132.6	.....	127.0	.....
3	137.6	144.5	136.3	.....	128.7	.....
4	136.5	144.3	136.0	.....	133.1	133.6
5	136.3	143.6	134.1	.....	130.0	132.6
6	135.3	143.7	134.1	.....	127.9	131.9
7	131.6	143.8	.....	.....	130.6	131.4
8	130.8	143.7	.....	.....	132.3	133.9
9	130.7	143.0	.....	.....	132.7	135.1
10	131.4	143.2	.....	.....	133.6	138.9
11	129.1	143.1	.....	.....	133.8	142.0
12	129.4	143.0	.....	.....	132.2	152.6
13	131.1	.....	.....	129.7	134.0	160.3
14	131.3	.....	.....	130.0	131.7	164.2
15	131.3	.....	.....	128.7	129.8	171.9
16	131.4	139.9	125.8	128.5	129.4	175.2
17	131.7	139.3	127.7	130.0	129.0	181.8
18	131.8	138.2	.....	130.4	130.8	188.4
19	132.1	137.5	.....	129.7	130.6	192.5
20	132.2	139.1	.....	129.4	130.6	194.9
21	131.3	136.9	.....	128.3	130.8	197.0
22	130.7	136.5	.....	127.5	128.4	200.9
23	130.4	133.6	.....	127.2	130.5	202.3
24	.....	132.6	.....	126.4	128.0	204.1
25	.....	132.5	.....	123.8	128.5	198.0
26	.....	132.8	.....	122.8	127.8	209.8
27	145.0	134.1	.....	124.0	129.7	211.5
28	146.0	.....	.....	124.1	129.7	213.3
29	.....	.....	a 129.71	124.9	128.0	216.3
30	.....	.....	.....	124.6	128.8	218.6
31	.....	.....	.....	.....	128.5	.....

a Tape measurement at odd hour.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	219.4	234.2	231.3	.....	177.0	176.6
2	220.3	234.0	233.4	.....	177.1	174.2
3	221.2	234.1	233.3	.....	176.7	173.2
4	219.6	233.1	233.9	.....	177.6	172.8
5	219.6	233.8	233.4	.....	176.7	172.1
6	220.5	234.1	233.5	.....	176.9	172.9
7	223.5	233.0	227.8	.....	176.6	172.2
8	224.0	231.3	223.2	.....	176.0	172.5
9	222.7	230.3	220.8	.....	177.9	172.0
10	221.6	229.7	221.8	.....	180.9	171.4
11	222.3	228.4	221.4	.....	180.1	169.9
12	222.6	230.1	221.1	.....	180.2	170.8
13	222.9	230.8	221.3	.....	182.3	172.1
14	224.9	230.5	218.5	.....	177.9	171.5
15	226.6	230.4	214.9	.....	176.5	172.7
16	227.6	231.5	214.0	.....	174.5	171.0
17	228.3	230.7	213.4	.....	175.5	172.3
18	230.3	230.3	211.8	214.6	176.6	172.9
19	229.7	229.6	212.0	215.2	175.6	173.3
20	228.0	229.4	211.5	208.3	174.2	173.4
21	228.3	232.1	209.8	203.1	172.8	174.9
22	231.0	234.5	210.4	195.6	172.6	173.3
23	233.3	234.5	211.8	190.6	174.1	172.7
24	230.5	234.2	210.4	188.1	173.4	172.4
25	230.5	233.4	209.6	186.8	173.2	172.0
26	230.8	232.2	209.2	185.1	173.2	171.7
27	232.2	232.4	209.4	181.9	174.0	172.2
28	230.2	231.8	.....	176.0	173.7	172.4
29	232.9	231.3	.....	174.0	173.8	172.6
30	233.6	231.3	.....	174.6	175.3	172.8
31	233.0	230.5	.....	174.9	.....	173.6

EB-22. Esso Standard Oil Co., Louisiana Division. At Baton Rouge refinery, southwest of tank 784. Records available: 1940-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	136.3	.....	137.6	133.1	125.4	129.6
2	136.9	.....	136.2	132.2	126.0	130.2
3	136.1	.....	137.3	133.8	126.6	132.3
4	136.0	.....	137.1	133.6	127.8	134.0
5	137.8	.....	136.0	a 134.14	128.5	134.3
6	138.9	.....	135.7	136.0	126.6	134.3
7	138.7	.....	136.4	137.0	128.0	138.5
8	137.0	.....	136.2	136.1	129.0	142.8
9	138.6	.....	134.6	136.2	129.3	145.2
10	138.0	140.3	134.4	134.3	129.6	147.1
11	136.7	140.5	133.4	134.0	129.3	151.6
12	136.4	140.4	133.5	134.6	127.8	156.6
13	137.0	140.2	132.3	135.9	127.6	159.8
14	136.3	141.7	131.9	136.2	127.1	165.7
15	136.3	140.1	131.9	135.2	129.0	168.3
16	136.4	141.5	131.1	134.9	129.0	173.8
17	136.7	142.6	131.4	136.1	128.5	.....
18	139.5	142.1	131.6	135.9	129.3	179.0
19	140.7	141.6	132.0	135.4	129.5	180.2
20	141.1	140.1	132.0	134.5	.....	181.7
21	142.4	139.2	132.2	134.2	.....	183.5
22	143.2	138.3	131.8	133.8	.....	187.0
23	144.0	139.0	132.0	131.4	.....	189.0
24	141.9	139.3	131.4	130.8	.....	190.6
25	149.1	139.9	132.7	128.9	128.7	192.6
26	149.4	139.4	132.5	130.6	129.0	197.7
27	148.4	138.8	132.0	129.1	130.1	199.5
28	.....	137.7	131.7	129.0	130.0	201.3
29	.....	137.3	131.4	127.3	129.7	205.3
30	.....	.....	132.3	125.3	129.6	207.6
31	.....	.....	132.9	.....	129.7	.....

a Tape measurement at odd hour.

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	208.3	218.8	220.0	210.3	176.2	171.6
2	209.1	218.8	220.1	209.7	173.8	170.5
3	206.5	219.3	221.7	209.7	174.2	169.8
4	206.6	219.4	221.9	209.3	173.0	169.6
5	206.9	216.1	222.0	209.6	173.9	169.3
6	206.6	218.2	221.6	210.8	174.7	169.5
7	208.4	217.0	221.9	210.5	173.3	169.0
8	208.6	217.5	218.2	208.9	172.5	169.2
9	208.0	217.4	215.8	210.3	172.0	168.8
10	207.9	217.4	214.4	209.6	172.8	168.3
11	208.0	217.1	215.2	.....	173.5	167.1
12	208.3	217.8	215.9	.....	173.1	167.8
13	208.5	218.3	216.2	.....	173.4	168.1
14	211.8	218.5	215.0	.....	172.7	168.7
15	212.9	218.9	212.6	.....	172.7	168.2
16	213.8	219.2	211.0	.....	170.8	167.1
17	213.6	219.2	211.0	.....	170.4	165.6
18	214.9	219.1	210.4	208.9	171.5	166.1
19	215.1	218.9	210.3	210.4	171.5	166.1
20	214.8	219.1	209.5	204.5	169.0	168.5
21	215.5	220.0	209.1	199.7	168.2	169.4
22	216.2	221.7	208.9	193.8	167.8	169.2
23	217.2	221.7	208.3	188.3	168.1	169.8
24	215.0	220.2	209.1	185.0	167.7	168.3
25	215.9	220.4	210.1	183.5	167.8	168.2
26	215.9	220.0	209.2	179.3	168.3	168.3
27	216.3	220.0	209.5	178.4	167.0	167.3
28	215.9	220.3	208.0	176.4	167.6	167.3
29	217.2	220.0	209.8	176.4	167.9	168.2
30	217.7	219.2	210.6	176.5	170.3	167.5
31	218.0	219.6	.....	176.7	.....	167.4

EB-28. Esso Standard Oil Co., Louisiana Division. At Baton Rouge refinery, southwest of tank 177. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	16.3	20.4	17.5	17.0	18.1	22.0	22.5	24.0	....	26.0	25.6	23.2
2	16.4	19.9	17.9	17.1	18.1	22.2	22.5	23.9	....	26.2	25.4	23.1
3	16.5	19.8	17.3	17.1	17.9	22.5	22.6	23.9	....	26.3	25.5	23.1
4	16.5	19.5	17.3	17.1	18.1	22.7	22.4	23.8	....	26.4	25.3	23.1
5	16.6	19.4	17.4	17.0	18.5	23.0	22.1	23.8	....	26.5	25.3	23.1
6	16.5	19.2	17.2	17.0	18.8	23.1	22.1	23.8	a24.59	26.7	25.2	23.1
7	16.6	19.1	17.2	17.0	18.5	23.3	22.1	23.7	....	26.8	25.2	23.1
8	16.6	19.0	17.1	17.0	18.7	23.6	22.0	23.6	....	26.9	24.9	22.9
9	16.5	18.9	17.1	17.1	18.7	23.8	22.2	23.6	....	27.0	25.0	22.9
10	16.5	19.0	17.1	17.2	18.3	22.9	22.5	23.0	....	27.2	25.0	22.9
11	16.4	18.9	17.1	17.4	18.6	23.2	22.6	23.0	....	27.1	25.1	22.8
12	16.4	18.8	17.2	17.1	19.2	23.5	22.4	23.1	....	27.2	25.1	22.7
13	16.5	18.7	17.2	17.3	19.5	22.7	22.7	23.3	24.1	27.3	24.9	22.7
14	16.7	18.6	17.2	17.2	20.0	22.0	22.9	23.7	24.1	27.3	24.8	22.7
15	16.6	18.6	17.2	17.1	20.3	22.2	23.0	24.0	24.1	27.3	24.5	22.7
16	16.7	18.5	17.1	17.1	20.4	22.3	23.2	23.8	24.3	27.4	24.3	22.8
17	16.7	18.3	17.2	17.3	20.4	22.3	22.4	23.8	24.5	27.6	24.1	....
18	17.0	18.2	17.2	17.3	20.4	23.8	22.3	24.0	24.7	27.6	23.8	....
19	17.5	18.2	17.2	17.2	20.3	22.5	22.1	24.0	24.8	27.0	23.8	....
20	18.5	18.2	17.2	17.4	20.5	22.4	22.4	24.2	24.4	26.7	23.8	....
21	18.0	18.1	17.3	17.6	20.8	21.9	22.5	24.3	24.7	26.5	23.9	....
22	17.7	17.9	17.3	17.7	21.0	21.8	23.5	24.6	24.7	26.6	23.8	....
23	17.5	17.8	17.3	17.9	21.2	22.0	24.3	24.7	24.9	26.9	23.7	....
24	18.2	17.8	17.4	18.0	21.3	22.1	24.5	24.6	25.0	26.5	23.6	a22.97
25	19.8	17.7	17.4	18.0	21.4	22.2	24.5	....	25.0	26.0	23.6	....
26	20.5	17.6	17.4	17.6	21.5	22.6	24.3	....	25.1	26.0	23.3	....
27	20.4	17.5	17.4	17.6	21.6	22.7	24.4	....	25.1	26.1	23.2	....
28	20.8	17.5	17.4	17.8	21.4	22.5	24.4	....	25.1	26.2	23.1	....
29	21.3	17.6	17.2	18.1	21.5	22.6	24.2	....	25.2	25.3	23.1	....
30	21.4	....	17.1	18.1	21.8	22.6	24.1	a25.33	25.6	26.6	23.1	....
31	21.2	....	17.0	....	21.9	....	24.1	....	....	26.2	....	a22.56

a Tape measurement at odd hour.

EB-29. Esso Standard Oil Co., Louisiana Division. At Baton Rouge refinery, southwest of tank 754. Abandoned drilled industrial well, diameter 8 inches, depth 1,640 feet. Measuring point, inside edge of 1-inch hole atop 8-inch plug, 2.70 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 23	19.99	Apr. 19	19.26	Sept. 20	26.16	Dec. 3	24.02
Mar. 22	19.83	May 24	20.35	Nov. 5	24.77	10	23.80
29	19.73	28	20.53	12	24.84	24	24.46
Apr. 12	19.34	June 18	21.56	19	24.30	31	23.96

EB-45. Esso Standard Oil Co., Louisiana Division. At Baton Rouge refinery, east well on dock approach. Records available: 1940-48. Feb. 3, 97.48; Feb. 23, 88.92; Mar. 12, 80.97.

EB-83. 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. Records available: 1943-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.8	31.0	27.3	28.1	33.6	36.4	....	33.4	34.0	34.2	35.6	35.9
2	23.8	31.0	27.6	29.2	29.7	35.2	35.8	34.9	34.5	33.9	35.4	36.0
3	23.9	31.4	27.6	29.4	32.2	....	35.6	36.4	34.0	32.0	36.1	36.4
4	23.4	31.4	27.3	27.1	33.2	....	34.0	37.2	33.7	33.7	35.8	36.2
5	24.0	31.5	27.1	29.0	33.6	....	34.1	37.6	33.7	33.4	36.3	34.5
6	24.5	31.7	26.2	29.8	....	....	34.8	37.9	31.9	33.6	36.0	35.3
7	24.5	....	26.9	30.4	....	....	35.2	36.3	32.0	33.7	35.7	35.5
8	24.6	....	26.8	31.4	....	....	35.3	....	33.7	33.5	34.1	36.3
9	25.3	....	27.0	31.9	....	....	35.0	....	34.2	33.8	....	36.7

EB-83--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
10	24.6	30.1	27.2	31.3	32.9	....	35.3	....	35.3	32.4	....	36.3
11	22.8	30.1	27.3	28.9	....	....	33.4	....	34.5	....	35.4	36.0
12	23.5	29.8	27.1	30.4	....	....	34.1	....	33.3	....	35.5	34.1
13	23.3	30.0	27.1	31.3	....	....	35.1	....	33.0	....	36.3	35.0
14	22.3	29.9	27.1	31.6	....	....	35.4	....	33.4	....	....	35.1
15	22.5	30.0	26.5	30.6	....	....	35.7	....	33.7	a31.57	....	35.3
16	22.9	27.3	26.4	31.0	....	....	35.6	37.2	34.6	....	....	35.4
17	22.1	27.8	27.7	30.9	34.3	....	35.6	37.2	34.7	....	35.9	35.3
18	23.2	27.9	27.8	29.5	34.9	35.8	34.2	37.3	34.4	....	36.1	35.1
19	25.3	28.0	28.3	30.5	34.5	36.8	35.9	37.6	33.5	....	35.8	32.9
20	24.8	28.0	27.8	31.3	34.8	34.9	37.0	37.2	34.1	....	36.8	....
21	25.3	27.7	28.0	31.7	35.7	36.2	36.8	37.5	35.0	....	35.3	....
22	25.3	27.7	28.3	32.1	33.7	36.3	36.4	35.8	35.2	....	36.8	....
23	25.4	27.3	28.9	32.3	34.1	35.9	35.7	35.3	35.3	....	36.6	....
24	28.2	27.9	29.4	32.7	35.2	36.0	35.6	35.5	35.6	....	36.7	....
25	29.3	28.7	29.5	30.7	35.7	35.1	34.3	35.0	35.8	....	36.3	....
26	29.3	28.5	28.7	31.4	35.5	36.4	35.5	....	34.1	....	35.5	....
27	31.7	28.3	28.5	31.9	35.0	34.7	35.6	....	34.5	....	35.5	....
28	32.3	28.2	28.6	32.6	34.0	35.7	36.1	....	34.7	....	34.0	....
29	32.7	26.8	27.0	33.2	....	36.8	36.3	....	35.0	....	34.7	....
30	31.2	....	27.5	33.4	....	36.5	36.3	33.3	34.5	....	35.5	....
31	31.0	....	28.0	....	....	....	36.5	33.8	....	34.9	....	33.3

a Tape measurement at odd hour.

EB-89. Baton Rouge Water Works Co., well 3. At Lula Avenue pump station. Records available: 1947-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.2	....	11.2	10.9	....	24.2	17.5	16.1	23.5	26.5	25.3	....
2	23.3	....	11.1	11.0	....	24.4	16.6	16.0	22.2	26.7	25.4	....
3	23.2	13.3	11.1	11.0	a17.59	24.4	22.3	16.0	22.5	26.9	25.4	15.5
4	23.3	12.8	11.2	10.9	....	24.2	16.4	16.0	17.5	27.0	25.2	15.5
5	23.4	12.6	11.1	10.8	....	24.9	20.7	15.7	16.7	27.2	24.7	15.2
6	23.4	12.9	11.0	10.8	....	25.1	20.4	15.7	16.4	27.3	24.8	15.3
7	23.5	12.3	11.0	10.8	....	25.3	16.1	15.0	....	27.4	17.7	15.2
8	23.5	12.2	10.9	10.9	....	25.4	16.0	14.9	....	27.6	24.4	15.0
9	23.5	12.1	10.8	11.0	....	26.0	16.1	14.9	....	27.8	24.4	15.2
10	23.5	12.3	10.8	16.3	a18.11	26.0	22.5	14.9	16.8	27.8	24.6	15.3
11	23.4	12.1	10.9	11.4	20.2	25.3	16.2	14.9	16.4	27.7	24.7	15.2
12	23.4	12.0	11.0	16.5	20.7	25.5	20.8	....	16.1	27.8	24.5	14.9
13	23.5	11.9	11.0	11.5	22.7	17.5	21.4	....	15.7	28.0	24.5	15.1
14	23.6	12.0	10.9	11.3	23.2	....	20.6	....	15.6	28.0	17.4	15.0
15	23.6	11.9	10.8	11.2	23.5	....	20.8	....	22.6	28.0	17.1	15.0
16	23.6	11.7	10.9	....	21.5	17.3	20.0	22.8	23.2	28.0	16.8	15.0
17	23.5	11.8	10.8	....	22.6	18.0	22.4	22.6	23.3	28.1	16.4	15.0
18	....	11.7	10.9	....	23.0	18.5	16.7	22.4	23.6	....	16.2	14.8
19	....	11.6	11.0	a18.08	23.2	22.4	21.0	21.3	16.5	....	16.2	14.6
20	13.1	11.6	10.9	17.9	23.3	21.3	21.0	21.0	23.0	....	....	14.8
21	11.3	11.5	10.8	16.3	23.6	22.3	16.8	19.5	23.4	....	....	14.8
22	10.7	11.4	10.8	16.4	23.8	22.2	16.9	25.6	23.4	27.5	....	14.7
23	10.6	11.4	10.8	16.6	24.0	21.9	17.4	24.0	23.6	27.8	....	14.7
24	....	11.4	10.9	16.6	24.2	22.0	23.2	26.1	23.8	19.2	....	14.6
25	....	11.3	10.9	16.2	24.2	23.0	17.2	26.6	23.8	25.3	....	14.6
26	....	11.3	10.8	a16.16	24.3	22.8	22.2	22.2	23.5	25.4	....	14.6
27	a21.18	11.2	10.8	....	24.4	16.8	22.2	21.5	23.7	27.2	15.4	14.4
28	....	11.2	10.9	....	23.3	20.5	17.0	18.2	23.9	25.8	15.3	14.3
29	....	11.2	10.9	....	24.1	19.7	16.6	18.1	24.1	27.5	15.3	14.3
30	....	....	10.8	....	24.1	16.6	16.5	24.0	26.0	27.8	....	14.4
31	....	....	10.7	....	24.3	....	16.2	23.7	....	19.5	....	14.4

a Tape measurement at odd hour.

EB-90. Baton Rouge Water Works Co., well 8. At Lula Avenue pump station. Records available: 1947-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	23.3	27.4	25.2	25.2	28.4	30.6	33.6	34.4	32.7	29.9	29.7	31.7
2	23.2	27.1	25.3	25.6	28.3	30.6	33.7	33.8	33.1	30.0	29.6	31.9
3	23.3	27.2	25.3	25.8	28.1	...	33.4	34.3	32.8	29.8	29.7	31.9
4	23.3	27.2	25.3	25.8	28.4	27.5	33.0	34.6	32.8	29.1	29.7	32.0
5	23.1	27.2	25.1	25.6	28.6	27.6	32.9	34.8	31.6	28.9	29.7	32.2
6	23.4	27.5	24.9	25.8	28.6	27.7	32.8	35.1	31.1	28.9	29.9	31.3
7	23.8	27.3	24.7	26.0	28.0	27.5	33.1	35.1	...	28.8	29.7	31.3
8	23.9	27.2	24.2	26.3	28.8	27.5	33.1	30.0	...	29.0	29.7	31.5
9	23.8	26.8	24.2	26.5	28.6	27.4	33.1	...	...	29.0	29.8	31.7
10	23.9	27.1	24.4	26.6	28.73	27.4	33.1	...	29.9	28.9	30.1	32.0
11	23.6	27.0	24.6	26.4	28.8	31.3	32.9	...	29.8	28.2	30.1	31.8
12	23.1	26.8	24.7	26.3	28.9	31.1	...	...	29.7	28.3	30.0	29.0
13	23.3	26.6	24.8	26.4	28.9	...	...	...	29.1	28.4	30.1	31.2
14	23.5	26.8	24.6	26.5	29.0	...	...	...	29.1	28.4	29.7	31.2
15	23.7	26.8	24.1	26.6	29.0	...	...	...	29.4	28.4	31.8	31.2
16	23.7	26.8	24.2	26.8	28.9	...	...	34.9	29.8	28.3	31.1	31.3
17	23.6	26.7	24.5	26.8	30.0	...	33.7	34.9	29.9	28.4	31.1	31.2
18	...	26.8	24.5	26.8	30.5	33.3	33.5	35.0	30.0	28.0	31.4	31.1
19	...	26.7	24.8	26.8	33.0	33.6	33.7	35.1	29.6	28.0	32.2	28.3
20	24.9	26.6	24.9	27.1	33.1	33.7	34.1	35.1	29.7	28.2	32.7	29.8
21	24.3	26.5	25.1	27.4	33.2	33.7	34.1	34.7	32.3	28.6	30.0	29.8
22	24.2	26.1	24.9	27.4	31.9	33.7	34.2	34.5	33.3	28.9	32.3	27.8
23	24.4	25.6	25.5	27.7	30.2	33.7	34.3	33.6	33.4	29.2	32.3	27.6
24	...	25.8	25.8	27.9	32.1	33.7	34.5	33.6	33.5	27.8	32.4	27.6
25	...	25.9	25.9	27.7	30.4	33.8	34.5	33.6	33.7	29.0	30.1	27.5
26	...	25.9	25.8	27.5	30.6	34.0	34.5	33.3	33.6	29.3	29.4	27.0
27	27.6	25.7	25.7	27.8	28.6	34.1	34.6	33.4	30.2	29.6	29.2	26.5
28	27.7	25.7	25.6	28.0	30.17	33.6	34.5	33.4	30.1	29.7	29.0	26.7
29	30.9	25.6	25.0	28.2	30.2	34.0	34.6	33.3	30.1	29.8	31.5	26.8
30	28.8	...	25.0	28.3	27.9	33.7	34.8	32.9	30.0	29.6	31.6	27.0
31	27.8	...	25.0	...	27.9	...	34.7	32.9	...	29.0	...	27.2

a Tape measurement at odd hour.

EB-117. Westdale Country Club. 50 feet east of swimming pool. Used drilled public-supply well, diameter 8 inches, depth 1,402 feet. Measuring point, top of 2½-inch nipple, at land-surface datum. Records available: 1948. Aug. 30, 2.15; Sept. 23, 2.27; Dec. 17, 2.41.

EB-123. City of Baton Rouge. At City Park swimming pool. Records available: 1947-48. Feb. 1, 86.69; Dec. 17, 103.24.

EB-125. Peoples Ice & Fuel Co. In Baton Rouge, at 1931 Railroad Avenue. Records available: 1940-48. Aug. 28, 153.47; Nov. 6, 135.64; Nov. 20, 132.02.

EB-128. Ice Service, Inc. In Baton Rouge, at 135 S. 15th Street. Records available: 1940-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	80.8	81.0	79.9	76.9	74.2	74.1	...	107.8	113.6	114.3	105.5	103.0
2	80.6	81.2	79.6	77.0	73.9	74.1	90.8	108.1	113.8	114.2	104.9	102.9
3	80.4	81.3	79.4	77.0	73.8	74.1	91.8	108.4	114.0	...	103.2	102.8
4	80.3	81.7	79.4	76.9	73.5	74.2	92.5	108.6	114.0	...	102.8	102.8
5	80.1	82.0	79.3	76.8	73.4	74.2	93.5	108.7	114.3	114.0	102.3	102.7
6	80.1	82.3	79.2	76.8	73.2	74.2	94.2	108.9	114.6	114.0	107.8	102.6
7	81.1	82.5	78.9	76.7	73.2	74.5	95.0	109.2	114.7	114.1	107.6	...
8	81.1	82.6	78.8	76.7	73.2	74.6	95.6	109.4	114.9	...	107.2	...
9	81.1	82.7	78.6	76.7	73.1	74.8	96.4	109.6	115.0	...	106.8	...
10	81.1	82.7	78.5	76.6	73.1	75.4	97.0	109.6	115.1	...	106.6	102.2
11	80.9	82.8	79.4	76.4	73.1	76.4	97.5	109.8	115.1	...	106.4	102.0
12	80.8	82.8	78.4	76.2	73.2	76.6	...	109.9	115.1	...	106.2	101.9
13	80.8	82.8	78.2	76.1	73.3	76.8	...	110.1	115.1	...	106.0	101.7
14	80.9	82.9	78.0	75.9	73.4	77.2	...	110.3	...	...	105.8	101.6
15	80.7	83.0	77.9	75.9	73.5	77.2	...	110.4	...	...	105.6	101.5
16	80.7	82.8	78.0	75.8	73.5	77.2	100.6	110.6	...	...	105.4	101.4

EE-128--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
17	80.8	82.8	78.1	75.7	73.6	77.8	101.1	110.8	.....	.....	105.2	101.3
18	80.9	82.7	78.0	75.5	....	78.4	.....	111.1	.....	.....	105.0	101.2
19	80.9	82.6	78.0	75.4	....	79.3	.....	111.3	.....	.....	104.8	101.1
20	80.4	82.5	77.7	75.4	....	79.8	.....	111.6	115.6	.....	104.8	101.1
21	80.5	82.5	77.4	75.3	....	80.5	.....	111.7	115.4	.....	104.6	101.1
22	80.4	82.3	77.3	75.3	....	81.3	.....	111.9	115.2	111.0	104.4	100.9
23	80.4	81.9	77.2	75.3	....	82.1	104.5	112.0	115.1	110.8	104.3	100.9
24	80.5	81.4	77.1	75.3	74.4	83.4	105.1	112.1	115.0	110.6	104.2	100.9
25	80.8	81.3	77.0	75.0	74.5	84.5	105.5	112.3	115.0	108.3	104.1	100.8
26	80.8	....	77.0	74.8	74.5	85.6	105.9	112.5	114.9	107.8	103.8	100.8
27	80.6	....	76.9	74.8	74.5	....	106.2	112.8	114.8	107.2	103.6	100.5
28	80.6	....	77.1	74.8	74.5	....	106.5	113.1	114.6	106.7	103.4	100.4
29	80.6	....	77.2	74.5	74.4	....	106.9	113.3	114.5	106.5	103.3	100.2
30	80.6	....	77.1	74.5	74.3	....	107.2	113.4	114.5	106.0	103.1	100.2
31	80.8	....	77.0	....	74.2	....	109.4	113.4	.....	.....	....	100.1

EE-165. W. T. Baker Co. Sec. 74, T. 6 S., R. 1 W. Records available: 1946-48. Apr. 4, +5.5.

EE-172. East Baton Rouge Recreation Commission. Sec. 54, T. 5 S., R. 1 E. Abandoned drilled public-supply well, diameter 4 inches, depth 239 feet. Measuring point, top of 4-inch casing, 0.50 foot above land-surface datum. Records available: 1948.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a51.07	51.0	46.9	44.6	43.8	....	....	55.2	58.7	59.9	58.0
2	50.8	46.8	44.5	43.8	....	....	55.2	58.7	59.8	57.9
3	50.6	46.8	44.5	43.9	....	....	55.3	....	59.8	57.9
4	50.6	46.6	44.4	44.0	....	....	55.4	58.8	59.7	57.8
5	50.5	46.6	44.4	44.0	....	....	55.5	58.8	....	57.7
6	50.2	46.5	44.2	44.0	....	....	55.6	58.8	....	57.6
7	50.2	46.4	44.2	44.0	a48.65	53.5	57.0	58.8	....	57.2
8	a51.20	50.1	46.4	44.1	44.0	48.9	53.5	57.1	58.5	....	57.2
9	49.9	46.3	a44.03	44.1	49.2	53.6	57.1	58.5	....	57.2
10	49.8	46.2	44.0	44.1	49.3	53.7	57.5	58.5	....	57.2
11	49.8	46.1	44.0	44.6	49.5	53.9	57.5	58.5	....	57.2
12	49.6	46.0	43.9	44.6	49.6	54.0	57.6	58.5	....	....
13	49.5	45.9	43.9	44.8	49.6	54.1	57.6	58.5	....	....
14	49.3	45.8	43.9	44.8	49.8	54.3	57.6	58.5	....	....
15	a51.53	a51.21	49.2	45.7	43.9	44.9	50.0	54.3	57.7	....	....	....
16	49.2	45.6	43.9	44.9	50.2	54.4	57.8	....	....	....
17	49.1	45.6	43.8	44.9	50.4	54.5	57.9	....	....	....
18	a52.26	a51.17	49.0	45.5	43.8	44.9	50.4	54.6	58.0	....	....	....
19	51.7	48.8	45.4	43.8	....	50.6	54.7	58.1	....	....	....
20	51.7	48.6	45.4	43.8	....	50.7	54.8	58.2	....	....	....
21	51.7	48.5	45.3	43.8	....	50.8	55.0	58.2	....	59.0	56.3
22	51.6	48.4	45.2	43.8	....	50.9	....	58.3	....	58.7	56.3
23	51.6	48.4	45.2	43.8	....	54.2	55.3	58.3	....	57.8	56.2
24	51.5	48.3	45.1	43.8	....	54.2	55.3	58.3	....	58.7	56.1
25	51.4	48.2	45.0	43.8	a46.11	54.4	55.3	58.3	....	58.6	56.0
26	51.2	48.0	44.9	43.8	....	54.5	55.1	....	....	58.2	55.9
27	51.2	47.9	44.9	43.8	....	54.7	55.1	....	....	58.1	55.9
28	51.1	47.8	44.8	43.9	....	54.9	55.1	58.7	....	58.1	55.8
29	51.1	47.6	44.7	43.8	....	55.0	55.1	58.7	....	58.1	55.6
30	47.0	44.7	43.8	....	....	55.1	58.7	60.0	58.1	55.6
31	46.9	....	43.8	....	....	55.2	....	60.0	....	55.5

a Tape measurement at odd hour.

EB-242. Louisiana State University. Sec. 74, T. 8 S., R. 1 W. Under tree in farmyard, 0.6 mile south of Arlington. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	16.58	Apr. 3	+4.30	June 30	15.19	Sept. 30	19.35
22	12.08	20	+4.25	July 14	9.74	Oct. 6	19.46
Feb. 3	11.33	30	+4.55	20	12.18	19	20.20
16	10.77	May 23	1.79	29	13.67	Nov. 6	20.91
Mar. 9	+3.44	June 11	10.63	Aug. 30	16.14	Dec. 2	14.45
13	+4.22	21	14.66	Sept. 19	18.48	17	10.49
15	+4.63						

EB-282. Town of Zachary. N $\frac{1}{2}$ sec. 40, T. 5 S., R. 1 E. Records available: 1943-46. Measurements discontinued.

EB-283. Town of Zachary. N $\frac{1}{2}$ sec. 40, T. 5 S., R. 1 E. Records available: 1943-47. Measurements discontinued.

EB-293. Consolidated Chemical Industries, Inc. Sec. 37, T. 6 S., R. 1 W., in pumphouse at plant. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	101.4	110.6	101.4	98.2	.....	97.2	.....	190.2	193.8	175.1	141.0	137.2
2	102.0	110.5	101.0	98.4	.....	96.9	175.6	190.4	184.2	175.8	142.7	137.4
3	103.1	110.3	101.0	98.0	.....	96.9	176.9	190.6	194.5	176.5	144.3	137.2
4	103.8	110.2	101.8	97.7	.....	97.4	177.4	191.7	194.8	176.8	144.8	136.8
5	104.1	110.0	101.6	97.6	.....	98.1	177.7	192.9	194.5	178.9	143.5	136.4
6	104.0	109.7	101.1	98.1	.....	98.3	178.3	193.4	196.7	179.1	143.7	136.3
7	103.0	109.6	100.8	98.6	.....	98.4	179.7	191.2	191.9	179.9	142.8	136.1
8	102.8	109.6	100.9	98.8	.....	98.7	200.4	190.2	188.3	180.5	141.8	136.0
9	102.5	109.4	100.6	98.9	.....	.....	178.6	189.2	185.5	180.2	141.0	135.9
10	102.6	109.4	100.4	98.8	.....	.....	178.2	189.3	183.9	181.3	141.0	135.7
11	102.4	109.2	100.2	98.3	104.2	108.4	177.3	189.4	183.8	181.3	141.0	135.1
12	101.9	109.2	99.7	97.6	101.6	114.6	177.2	190.0	183.3	180.6	141.0	134.9
13	102.0	109.0	99.1	97.0	100.3	120.1	177.8	190.3	182.9	.....	140.9	134.8
14	102.3	108.9	99.2	97.0	100.0	124.4	178.1	190.1	182.1	.....	140.8	134.9
15	102.5	108.8	99.1	97.0	99.3	129.1	179.4	190.0	181.1	.....	140.5	134.8
16	102.7	108.6	98.7	96.6	98.3	132.3	182.2	190.6	179.2	.....	140.3	134.7
17	102.8	108.1	98.5	96.5	97.3	135.6	183.6	190.2	178.7	.....	140.2	134.6
18	102.8	107.7	98.6	96.8	97.1	143.6	186.0	190.9	178.4	.....	140.2	134.2
19	102.9	107.0	98.7	96.6	97.6	147.6	186.9	191.1	178.1	180.6	139.9	134.2
20	103.0	106.4	98.9	96.6	97.3	150.1	187.2	191.0	177.5	172.2	139.6	134.2
21	104.0	106.0	98.9	96.4	97.2	152.8	187.3	191.6	177.1	167.1	139.8	134.7
22	104.6	105.4	99.1	96.1	97.5	156.8	188.0	.....	176.7	159.2	137.8	135.0
23	105.1	104.8	99.3	95.8	97.3	159.6	189.4	192.7	176.5	156.4	137.6	134.9
24	106.2	104.2	102.8	95.5	97.1	161.9	189.6	193.2	176.5	154.5	137.6	.....
25	107.8	103.2	101.6	94.9	97.0	163.8	189.5	193.2	176.2	152.7	137.5	134.4
26	109.1	102.6	100.6	94.1	96.7	.....	189.8	193.1	175.8	150.4	136.9	134.3
27	109.6	101.9	100.0	.....	96.6	.....	189.5	193.2	175.3	147.2	137.0	134.2
28	109.1	101.7	99.6	.....	96.8	.....	189.4	193.3	175.2	144.6	136.6	134.2
29	109.3	101.7	99.1	.....	96.8	.....	189.4	193.2	175.0	144.3	136.5	134.3
30	109.8	.....	97.2	.....	96.6	.....	189.7	193.1	174.7	142.9	136.7	134.4
31	110.3	.....	97.8	.....	96.7	.....	190.1	193.8	.....	141.9	.....	.....

EB-299. Staring & Kirby. In Baton Rouge, at the corner of Istrouma Avenue and Haber Streets, Capitol Heights. Records available: 1943-48. May 7, +5.9; Oct. 16, +0.8.

EB-301. H. B. Witter. At Baton Rouge, in W $\frac{1}{2}$ sec. 91, T. 7 S., R. 1 E., behind barn at Cedar Land Plantation on Jefferson Highway. Records available: 1943-48. May 7, +4.7.

EB-302. H. A. Bozeman. NW corner sec. 3, T. 7 S., R. 2 E., 3.5 miles east of intersection of U. S. Highways 61 and 190, on south side of Highway 190. Records available: 1943-48. May 12, +21.4.

EB-305. Dr. I. M. Lee. SW. corner sec. 66, T. 6 S., R. 1 E., on south side of Greenwell Springs road, behind house. Records available: 1943-44; 1947. Measurements discontinued.

EB-306. A. Wickenstad. NW $\frac{1}{4}$ sec. 66, T. 6 S., R. 1 E. Records available: 1943-48. May 12, +8.7.

EB-307. W. W. Bynum. Center of sec. 48, T. 6 S., R. 1 E. Records available: 1943-48. May 12, +13.9.

EB-312. Baton Rouge Water Works Co. North Highlands subdivision, Baton Rouge. Measuring point, top of 4-inch casing, 1.20 feet above land-surface datum. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 6	+3.4	May 16	0.29	July 11	5.69	Oct. 1	6.49
15	+3.2	31	2.94	28	4.92	15	7.46
28	+3.3	June 16	4.94	Aug. 15	4.47	Nov. 14	6.18
Apr. 11	+3.0	21	4.33	28	6.05	Dec. 31	3.21
May 1	+2.0	25	4.39				

EB-314. 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. Records available: 1943-47. Measurements discontinued.

EB-315. E. J. Morgan. Center of sec. 93, T. 6 S., R. 1 E., at Zion City. Records available: 1943-48.

Jan. 7	6.71	Apr. 11	8.15	July 11	12.93	Sept. 20	20.25
13	6.65	May 16	10.45	28	13.67	Oct. 1	13.68
Feb. 18	8.92	31	11.27	Aug. 15	14.51	Nov. 14	13.61
Mar. 29	7.88	June 25	12.83	28	14.17	Dec. 31	11.75

EB-317. 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. Records available: 1943-48. May 12, +12.3.

EB-318. Tom Morgan. North side sec. 24, T. 6 S., R. 1 E., west side of Joor road, 0.25 mile north of Comite River. Records available: 1943-46; 1948. May 7, +13.2.

EB-321. J. B. Carney. On east side of sec. 89, T. 5 S., R. 1 W. Records available: 1943-47. Measurements discontinued.

EB-322. T. E. Charlton. SE $\frac{1}{4}$ sec. 29, T. 5 S., R. 1 E. Records available: 1943-48. May 13, +43.8.

EB-323. Standard Ice Box Co. On west side of sec. 42, T. 7 S., R. 1 W., between Third Street extension and Illinois Central Railroad. Records available: 1943-44; 1946-48.

Feb. 16	8.54	May 1	7.53	July 16	10.77	Oct. 11	12.72
23	7.57	12	8.09	Aug. 14	11.71	15	13.00
Mar. 1	7.29	24	8.39	28	12.26	Nov. 14	11.88
9	7.00	June 16	9.58	Sept. 6	12.53	Dec. 10	10.79
29	7.70	21	9.72	20	12.72	24	11.55
Apr. 12	7.25	July 14	10.37	Oct. 1	12.68	31	11.02
18	7.12						

EB-345. Leland College. Sec. 39, T. 5 S., R. 1 W. Records available: 1944-47. 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. Records available: 1947. Measurements discontinued.

EB-432. Negro Industrial School. SW $\frac{1}{4}$ sec. 86, T. 5 S., R. 1 W. Records available: 1947. Measurements discontinued.

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. Records available: 1947. Measurements discontinued.

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. Records available: 1947. Measurements discontinued.

EB-454. Consolidated Chemical Corporation. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 37, T. 6 S., R. 1 W. Records available: 1947. Measurements discontinued.

EB-461. Granberry Nursery. Irregular sec. 97, T. 6 S., R. 1 E. Records available: 1947-48. Measurements discontinued after Apr. 4, 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	69.45	Feb. 18	68.76	Mar. 15	64.91	Mar. 29	64.52
Jan. 13	69.25	Mar. 1	68.07	22	65.14	Apr. 4	64.11
Feb. 15	68.88						

EB-462. Jennings Stock Yard Co. Sec. 39, T. 6 S., R. 1 E. Records available: 1947. Measurements discontinued.

EB-468. A. M. Holden. East $\frac{1}{2}$ sec. 53, T. 5 S., R. 1 E. Used drilled domestic well, diameter 4 inches, depth 2,430 feet. Measuring point, edge of concrete curbing at swimming pool, at land-surface datum. Records available: 1948. May 13, +64.7.

EB-469. A. M. Holden. East $\frac{1}{2}$ sec. 53, T. 5 S., R. 1 E. Unused drilled domestic well, diameter 2 inches, depth 920 feet. Measuring point, top of 2-inch casing, 0.40 foot above land-surface datum. Records available: 1948.

Mar. 15	5.26	May 28	6.37	Sept. 20	8.63	Dec. 3	9.66
29	5.58	June 11	12.46	Oct. 1	7.82	10	8.64
Apr. 25	5.45	July 11	6.95	Nov. 12	9.36	31	8.42
May 10	5.56						

EB-474. Geological Survey, U. S. Dept. of Interior. Watson farm. Sec. 57, T. 5 S., R. 2 E. Drilled observation well, diameter 6 inches, depth 58 feet. Measuring point, top of 3/4-inch nipple in top of plug in 6-inch casing, at land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
June 20	10.65	Aug. 15	10.90	Sept. 21	11.16
Aug. 1	10.40	29	11.15	Oct. 3	11.43

EB-500. Cotton's Bakery. In rear of bakery on Convention Street, 20 feet from curbing. Used drilled industrial well, diameter 6 inches, depth about 700 feet. Measuring point, top of 6-inch coupling on 6-inch casing, 1.00 foot above land-surface datum. Measurements discontinued after Dec. 31, 1948, pump installed. Records available: 1948.

Oct. 16	145.67	Nov. 12	130.50	Dec. 10	125.10
Nov. 5	132.69	Dec. 3	126.37	31	138.40

Evangeline Parish

Ev-1. John LaHaye. SW $\frac{1}{4}$ sec. 20, T. 4 S., R. 1 E. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 2.00 feet; (2) since Sept. 7, 1948, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.15 feet. Records available: 1939-48. Jan. 7, 59.50; Apr. 7, 54.48; Sept. 7, 84.69; Dec. 6, 67.49.

Ev-2. John Reed. Formerly owned by Dorestant Ardoin. North line sec. 37, T. 6 S., R. 1 W. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 2.00 feet; (2) since July 8, 1948, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.00 feet. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	68.82	July 8	95.82	Dec. 6	75.41
Apr. 7	60.00	Sept. 7	93.47		

Ev-3. Civilian Conservation Corps Camp 1427 (abandoned). SE $\frac{1}{4}$ sec. 33, T. 2 S., R. 2 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	32.26	Apr. 25	31.98	July 29	32.70	Nov. 1	33.70
27	32.28	May 31	32.27	Sept. 7	33.37	Dec. 6	33.58
Feb. 24	32.05	July 5	32.77	Oct. 4	33.54	30	33.54
Mar. 29	31.86						

Ev-4. Rock Island Railway. SW $\frac{1}{4}$ sec. 31, T. 1 S., R. 1 E. Records available: 1940-47. Measurements discontinued.

Ev-14. 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. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 7.10 feet. Records available: 1944-48. Jan. 7, 51.64; Apr. 7, 47.23; Sept. 7, 68.33; Dec. 6, 58.91.

Ev-18. 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, the distance from measuring point to land-surface datum along pipe being 3.52 feet; (2) since Sept. 7, 1948, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 4.15 feet. Records available: 1944-48. Jan. 7, 47.20; Apr. 7, 42.42; Sept. 7, 66.07; Dec. 6, 55.02.

Ev-23. Mrs. A. Swallow. Sec. 26, T. 5 S., R. 2 W. Records available: 1946-48. Sept. 7, 63.76; Dec. 6, 52.98.

Ev-31. Eddie Manuel. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, T. 5 S., R. 1 W. Records available: 1944-48. Dec. 6, 66.71.

Ev-37. Gordon Micks. SW $\frac{1}{4}$ sec. 15, T. 3 S., R. 2 W. Records available: 1945-48.

Jan. 13	28.67	Mar. 2	19.77	June 10	27.68	Sept. 14	30.18
Feb. 3	27.60	Apr. 7	27.22	July 13	29.29	Oct. 19	30.50
18	27.12	May 3	26.83	Aug. 16	29.84	Dec. 27	30.63

Ev-39. P. E. Fontenot. SE $\frac{1}{4}$ sec. 23, T. 3 S., R. 2 W. Records available: 1945-48. Jan. 13, 20.57; Dec. 27, 21.89.

Ev-41. Harvey Vidrine. NE $\frac{1}{4}$ sec. 14, T. 3 S., R. 2 W. Records available: 1945-48.

Jan. 13	18.79	Mar. 2	17.93	June 10	18.89	Sept. 14	19.86
Feb. 3	18.64	Apr. 7	18.31	July 13	19.24	Oct. 19	20.09
18	18.53	May 3	18.45	Aug. 16	19.64	Dec. 27	20.30

Ev-46. Gordon Micks. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 15, T. 3 S., R. 2 W. Records available: 1945-48.

Jan. 13	30.21	Mar. 2	28.59	June 10	30.69	Sept. 14	32.17
Feb. 3	29.56	Apr. 7	29.17	July 13	30.99	Oct. 19	32.25
18	29.25	May 3	29.67	Aug. 16	31.84	Dec. 27	32.30

Ev-51. Eugalie Guillory. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 3 S., R. 2 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	7.48	Mar. 2	1.36	June 10	18.12	Sept. 14	18.69
Feb. 3	11.91	Apr. 7	17.48	July 13	18.36	Oct. 19	19.12
18	13.98	May 3	17.67	Aug. 16	19.32		

Ev-70. C. Guillory. Center line sec. 1, T. 6 S., R. 1 E. Records available: 1947-48. Jan. 7, 65.65; Apr. 7, 62.25; Sept. 7, 88.45; Dec. 10, 73.90.

Ev-76. W. Vidrine. Irregular sec. 59, T. 5 S., R. 2 E. Records available: 1947-48. Jan. 7, 63.39; Apr. 7, 61.35; Sept. 7, 74.58; Dec. 10, 70.84.

Ev-90. Haas Estate. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 36, T. 4 S., R. 1 W. Records available: 1947-48. Jan. 7, 41.48; Apr. 7, 37.48; Sept. 7, 71.52; Dec. 6, 50.77.

Ev-200. Continental Oil Co. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, T. 4 S., R. 1 W. Abandoned drilled oil-field supply well, diameter 4 inches, depth 240 feet. Measuring point, top of 4-inch casing, 4.00 feet above land-surface datum. Automatic water-stage recorder installed Aug. 20, 1948. Records available: 1948.

Aug. 20	48.6	Sept. 28	42.3	Oct. 31	38.7	Dec. 1	35.0
21	48.5	29	42.2	Nov. 1	38.7	2	35.2
22	49.2	30	42.1	2	38.5	3	35.3
23	49.6	Oct. 1	42.0	3	38.4	4	35.3
24	49.2	2	41.9	4	38.2	5	35.2
25	48.5	5	41.6	5	38.1	6	35.1
26	47.8	6	41.6	6	38.0	7	35.0
27	47.4	7	41.5	7	37.9	8	34.9
28	46.9	8	41.4	8	37.8	9	34.8
29	46.6	9	41.3	9	37.6	10	34.7
30	46.3	10	41.2	10	37.5	11	34.6
31	46.1	11	41.0	11	37.4	12	34.5
Sept. 1	45.9	12	40.9	12	37.3	13	34.4
2	45.6	13	40.8	13	37.2	14	34.4
3	45.2	14	40.7	14	37.1	15	34.3
4	45.2	15	40.6	15	37.0	16	34.1
5	45.1	16	40.5	16	36.8	17	34.0
6	45.1	17	40.4	17	36.7	18	33.8
7	45.1	18	40.3	18	36.5	19	33.7
8	45.1	19	40.2	19	36.3	20	33.7
9	44.9	20	40.1	20	36.2	21	33.7
10	43.3	21	40.0	21	36.2	22	33.7
18	43.2	22	39.8	22	36.0	23	33.6
19	43.1	23	39.7	23	36.0	24	33.5
20	43.1	24	39.6	24	36.0	25	33.4
21	42.9	25	39.4	25	35.9	26	33.4
22	42.8	26	39.3	26	35.7	27	33.3
23	42.7	27	39.2	27	35.5	28	33.2
24	42.6	28	39.1	28	35.0	29	33.1
26	42.5	29	39.0	29	34.3	30	33.1
27	42.4	30	38.9	30	34.7	31	33.0

Grant Parish

G-21. U. S. Dept. of Agriculture. In Pollock, at Catahoula Fire Tower. Records available: 1938; 1940-48.

Date	Water level	Date	Water level	Date	Water level
Mar. 1	3.29	Oct. 1	2.75	Dec. 2	3.04
Apr. 26	3.15	25	2.76		

G-27. 4-H Club Camp. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, T. 6 N., R. 1 E. Records available: 1938; 1940-47. No measurements made in 1948.

G-112. Town of Colfax. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 6 N., R. 3 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	26.88	Apr. 1	69.30	July 15	68.57	Oct. 1	69.04
26	69.98	May 4	69.14	Sept. 2	69.00	Nov. 2	69.07

G-113. Town of Colfax. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 2, T. 6 N., R. 3 W. Records available: 1947-48. Nov. 2, 90.65.

G-121. John Humberlin. At Boyce. Records available: 1947-48.

Feb. 4	0.03	May 4	3.95	June 30	6.49	Nov. 2	11.44
26	.05	June 7	5.05	Oct. 1	10.78	Dec. 29	6.55
Apr. 1	2.53						

G-122. G. G. Smith. At Boyce. Used drilled domestic well, diameter 4-inches, depth 320 feet. Measuring point, top of 4-inch coupling, 0.60 foot above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
Feb. 4	18.21	Apr. 1	18.81	June 7	19.89
26	17.58	May 4	20.21	30	21.82

Iberia Parish

I-19. Jefferson Island Planting Co. Irregular sec. 59, T. 12 S., R. 5 E. Records available: 1944-48. Jan. 6, 6.70; Apr. 6, 6.01; Sept. 8, 9.15; Dec. 8, 8.35.

Jackson Parish

Ja-12. Southern Advance Bag & Paper Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 15 N., R. 4 W. Records available: 1946-47. Measurements discontinued.

Ja-13. Southern Advance Bag & Paper Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 15 N., R. 4 W. Records available: 1946-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112.0	113.5	111.4	107.7	109.9	96.2	104.6	106.2	109.4	110.7	115.9	118.2
2	112.3	113.5	111.4	108.6	109.8	96.1	104.8	106.4	109.5	110.8	116.0	118.3
3	112.6	113.5	111.4	109.3	109.7	96.0	105.2	106.5	109.6	111.0	116.0	.....
4	112.8	113.5	111.3	109.7	109.6	95.9	105.3	106.6	109.6	111.0	116.0	.....
5	112.9	112.5	111.3	110.2	109.5	95.8	103.2	106.8	109.7	111.1	116.1	.....
6	113.1	112.5	111.2	110.4	109.4	95.7	99.4	107.0	109.8	111.1	116.2	.....
7	113.2	112.6	111.2	110.6	109.3	95.6	96.3	107.1	108.4	111.2	116.4	118.9
8	113.2	112.6	111.1	110.7	109.2	95.5	93.8	107.2	104.8	111.2	116.4	118.1
9	113.3	112.6	111.1	110.8	108.3	95.4	91.9	107.3	104.8	111.3	116.5	116.6
10	113.3	112.6	111.1	110.9	106.2	95.2	90.2	107.4	105.6	111.3	116.6	115.4
11	113.3	112.4	111.1	110.9	104.5	95.1	88.8	107.5	106.4	110.9	116.7	114.5
12	113.4	112.1	111.1	110.9	103.3	95.0	90.4	107.6	107.2	110.4	116.9	113.6
13	113.4	112.0	111.1	110.8	102.9	95.1	93.0	107.6	107.9	109.9	117.0	113.1
14	113.4	111.9	111.1	110.8	101.3	95.1	95.4	107.7	108.4	109.4	117.1	112.8
15	113.4	111.6	111.0	110.5	101.1	95.1	97.5	107.8	108.8	109.7	117.2	112.3
16	113.5	111.6	111.0	110.3	100.5	95.1	99.1	107.9	109.2	110.3	117.2	111.7
17	113.5	111.6	111.0	110.4	110.0	95.1	100.4	107.9	109.5	111.1	117.3	111.2
18	113.5	111.6	111.0	110.4	99.5	95.1	101.5	108.0	109.7	111.8	117.3	110.7
19	113.5	111.7	111.1	110.5	99.1	95.4	102.4	108.1	109.9	112.4	117.3	110.3
20	113.5	111.7	111.1	110.5	98.8	96.0	103.0	108.2	110.1	113.0	117.4	109.9
21	113.5	111.7	111.1	110.5	98.9	97.1	103.6	108.3	110.2	113.4	117.4	109.6
22	113.5	111.7	111.1	110.6	98.1	98.5	104.1	108.3	110.3	113.8	117.4	109.4
23	113.4	111.7	111.1	110.6	97.8	99.5	104.4	108.4	110.4	114.2	117.5	109.2
24	113.4	111.7	111.1	110.5	97.6	100.9	104.6	108.5	110.5	114.5	117.5	106.3

Ja-13--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
25	113.4	111.7	111.1	110.5	97.4	101.9	104.9	108.5	110.6	114.8	117.6	102.9
26	113.4	111.6	111.1	110.4	97.2	102.7	105.2	108.5	110.7	116.0	117.6	100.6
27	113.4	111.6	110.9	110.4	96.8	103.3	105.3	108.5	110.8	115.2	117.7	98.7
28	113.5	111.5	107.3	110.3	96.6	103.7	105.5	109.0	110.7	115.5	117.7	99.6
29	113.5	111.5	104.6	110.3	96.4	104.0	105.6	109.1	110.7	115.6	117.8	100.6
30	113.5		105.6	110.1	96.3	104.4	105.8	109.1	110.7	115.7	117.9	101.4
31	113.5		106.7		96.2		106.0	109.2		115.9		102.7

Jefferson Parish

Jf-8. Gretna Ice Service, Inc. Sec. 5, T. 13 S., R. 24 E. Records available: 1947-48. Feb. 27, 71.26; Aug. 20, 87.69; Oct. 18, 86.24; Nov. 26, 75.47.

Jf-12. Fourth Jefferson Drainage District. At New Orleans pumping station 1, about 1.25 miles west of Parish line on Lake Pontchartrain. Records available: 1942-48. Feb. 27, 35.84; Aug. 20, 29.81; Oct. 17, 29.91; Nov. 28, 29.08.

Jefferson Davis Parish

JD-6. H. Aguiard. Formerly owned by Latreille Estate. NW $\frac{1}{4}$ sec. 22, T. 8 S., R. 4 W. Measuring points: (1) Bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 2.00 feet; (2) since Jan. 12, 1948, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum being 4.45 feet; (3) since Jan. 26, 1948, top of 24-inch pit casing, at land-surface datum. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	50.60	Feb. 9	48.43	Mar. 26	46.23	Apr. 16	46.68
12	49.96	16	48.24	Apr. 5	46.43	30	52.17
26	49.44	Mar. 1	47.33	9	46.55	Dec. 10	57.98
Feb. 2	49.03						

JD-8. William Koll. SW $\frac{1}{4}$ sec. 3, T. 9 S., R. 3 W. Records available: 1938-48. Jan. 6, 41.28; Apr. 5, 36.92; Dec. 10, 48.34.

JD-9. Calcasieu-Marine National Bank. NW $\frac{1}{4}$ sec. 34, T. 9 S., R. 4 W. Records available: 1938-48.

Jan. 6	33.92	June 18	66.83	Sept. 17	56.06	Nov. 12	47.39
Mar. 26	28.09	25	69.42	23	54.55	19	46.34
Apr. 6	30.95	July 29	67.18	30	53.33	26	45.09
16	32.30	Aug. 5	67.30	Oct. 7	52.05	Dec. 3	44.38
23	32.47	12	67.48	14	50.85	10	43.56
30	33.09	19	64.21	21	49.75	23	41.96
May 24	63.35	26	63.20	28	48.92	30	41.27
June 11	65.74	Sept. 10	58.07	Nov. 5	48.36		

JD-11. Mrs. T. L. Linscomb. NE $\frac{1}{4}$ sec. 28, T. 7 S., R. 3 W. Records available: 1938-48. Jan. 6, 52.43; Apr. 5, 48.85; Sept. 8, 63.89; Dec. 10, 58.61.

JD-14. Calcasieu-Marine National Bank. NE $\frac{1}{4}$ sec. 21, T. 7 S., R. 4 W. Records available: 1938-39; 1944-48. Jan. 6, 48.68; Apr. 5, 45.78; Sept. 9, 55.17; Dec. 10, 53.68.

JD-23. Calcasieu-Marine National Bank. NE $\frac{1}{4}$ sec. 4, T. 10 S., R. 6 W. Records available: 1938-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.0	31.0	29.3	28.0	27.8	46.5	55.7	60.8	56.7	49.3	44.5	41.5
2	32.9	30.9	29.2	28.0	28.0	46.7	55.7	60.7	56.3	49.1	44.4	41.3
3	32.9	30.8	29.2	28.0	28.2	47.1	55.8	60.8	56.5	48.9	44.3	41.3
4	32.8	30.7	29.1	28.0	28.6	47.6	55.9	60.9	55.5	48.7	44.1	41.2
5	32.8	30.7	29.0	27.9	29.1	....	56.0	61.0	55.4	48.5	....	41.0
6	32.7	30.6	29.0	27.9	29.7	....	56.1	61.0	54.9	48.2	44.0	41.0
7	32.6	30.6	29.0	27.9	30.3	....	56.2	61.0	54.6	48.2	44.0	40.8
8	32.5	30.5	28.9	27.9	31.2	....	56.3	60.9	54.5	48.0	43.8	40.7
9	32.5	30.5	28.8	27.9	32.1	....	56.4	60.8	54.4	47.9	43.6	40.7
10	32.4	30.4	28.8	27.8	32.8	....	56.5	60.8	54.2	47.6	43.6	40.8
11	32.3	30.3	28.8	27.8	33.4	....	56.8	60.8	53.9	47.4	43.6	40.6
12	32.2	30.2	28.8	27.8	33.9	50.0	57.1	60.9	53.6	47.3	43.4	40.5
13	32.2	30.2	28.7	27.7	34.5	50.1	57.5	61.0	53.2	47.2	43.3	40.4
14	32.2	30.2	28.7	27.7	35.38	50.2	57.8	61.2	53.0	47.0	43.2	40.3
15	32.1	30.2	28.5	27.7	36.0	50.4	58.1	61.3	52.8	46.8	43.1	40.2
16	32.0	30.1	28.5	27.7	37.0	50.7	58.1	61.1	52.5	46.7	42.9	40.0
17	31.9	30.1	28.5	27.6	38.0	51.1	....	60.9	52.3	46.6	42.8	40.0
18	31.9	30.0	28.5	27.6	40.0	51.5	....	60.8	52.0	46.5	42.6	39.9
19	31.8	29.9	28.5	27.6	....	52.0	....	60.6	51.8	46.3	42.6	39.8
20	31.7	29.9	28.4	27.6	....	52.5	....	60.4	51.6	46.1	42.5	39.7
21	31.6	29.8	28.4	27.6	41.9	52.9	....	60.1	51.3	46.0	42.4	39.6
22	31.5	29.7	28.3	27.6	42.7	53.3	....	59.9	51.0	45.9	42.3	39.6
23	31.5	29.7	28.3	27.7	43.4	53.7	60.3	59.7	50.8	45.8	42.2	39.6
24	31.4	29.6	28.3	27.7	44.3	54.0	60.3	59.5	50.7	45.6	42.1	39.5
25	31.4	29.6	28.3	27.6	44.7	54.3	60.3	59.2	50.5	45.5	42.1	39.4
26	31.3	29.5	28.2	27.5	45.3	54.7	60.3	58.7	50.4	45.3	41.8	39.5
27	31.2	29.5	28.2	27.6	45.7	55.0	60.5	58.5	50.2	45.2	41.8	39.3
28	31.2	29.4	28.2	27.6	46.0	55.2	60.8	58.2	49.9	45.1	41.6	39.1
29	31.2	29.4	28.1	27.7	46.2	55.4	60.9	57.8	49.7	44.9	41.7	39.0
30	31.0	....	28.1	27.7	46.4	55.6	61.1	57.4	49.4	44.8	41.6	39.1
31	31.0	....	28.0	....	46.5	....	61.0	57.0	....	44.7	....	39.0

a Tape measurement at odd hour.

JD-26. I. L. Hebert. NE $\frac{1}{4}$ sec. 21, T. 10 S., R. 3 W. Records available: 1939-48. Jan. 6, 28.37; Apr. 5, 24.43; July 9, 43.68; Dec. 10, 34.65.

JD-33. Joe Petitjean. NW $\frac{1}{4}$ sec. 18, T. 11 S., R. 4 W. Records available: 1944-48. Jan. 6, 16.59; Apr. 7, 12.63; Sept. 8, 35.67; Dec. 10, 23.88.

JD-43. Colon Leger. NE $\frac{1}{4}$ sec. 24, T. 8 S., R. 6 W. Records available: 1939-48.

Daily noon water level, from recorder charts

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	37.1	33.63	32.8	41.0	51.9	59.3	54.6	50.7	48.0	45.9	44.3
2	37.1	33.5	32.9	41.6	52.8	59.5	54.8	50.6	48.0	45.9	44.2
3	37.0	....	33.0	42.2	53.3	59.6	55.0	50.4	47.9	45.8	44.2
4	37.0	33.5	33.0	42.8	53.7	59.1	55.1	50.3	48.3	45.7	44.2
5	37.0	33.5	32.9	44.0	54.0	59.0	55.0	50.2	48.3	....	44.0
6	36.9	33.5	32.9	44.0	54.0	59.1	57.2	50.1	47.8	46.3	44.0
7	36.9	33.4	32.8	44.3	54.0	59.3	57.3	49.9	47.7	45.8	43.9
8	36.8	33.4	32.8	44.8	54.4	59.4	57.2	49.8	47.6	45.7	43.8
9	36.7	33.3	32.8	44.5	54.9	59.5	57.2	49.8	47.6	45.6	43.8
10	36.7	33.2	32.8	45.3	54.2	59.5	57.2	49.7	47.4	45.6	43.9
11	36.7	33.2	32.7	46.6	54.1	59.0	57.1	49.6	47.2	45.6	43.8
12	36.6	33.3	32.7	47.3	54.7	58.9	56.9	49.5	47.2	45.4	43.7
13	36.5	33.4	32.5	48.5	54.8	58.4	57.3	49.2	47.2	45.4	43.7
14	36.6	33.3	32.6	49.3	55.1	57.9	58.0	49.2	47.2	45.4	43.6
15	36.5	33.1	32.7	49.8	55.9	57.6	56.2	49.2	47.1	45.3	43.5
16	36.4	33.0	32.6	50.0	56.4	57.3	55.9	49.1	47.0	45.1	43.4
17	36.4	33.0	32.6	50.3	56.6	57.2	54.9	49.0	47.0	45.0	43.4
18	36.3	33.0	32.6	51.0	54.6	57.1	54.5	48.9	47.0	44.9	43.3
19	....	32.9	32.6	51.5	56.9	57.4	54.0	48.8	46.8	44.9	43.2

a Tape measurement at odd hour.

JD-43--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
20	32.9	32.6	52.0	57.2	58.0	53.7	48.7	46.8	44.9	43.2
21	32.9	32.6	52.2	57.1	58.6	53.4	48.6	46.6	44.8	43.1
22	32.8	32.6	52.6	57.5	57.5	54.0	48.5	46.5	44.8	43.1
23	32.9	32.7	52.5	57.8	....	54.4	48.4	46.6	44.7	43.1
24	32.9	34.5	52.6	58.1	58.6	54.6	48.4	46.4	44.7	43.1
25	32.9	33.2	52.9	58.3	58.4	53.3	48.4	46.4	44.6	43.0
26	32.8	36.1	53.0	58.6	58.3	52.3	48.3	46.3	44.5	43.1
27	32.9	37.3	51.8	58.6	58.6	51.9	48.2	46.3	44.4	43.1
28	32.9	38.0	52.0	58.6	58.2	51.7	48.1	46.2	44.3	42.9
29	32.9	38.8	49.3	58.9	57.7	51.4	48.0	46.2	44.5	42.8
30	32.8	39.7	48.0	59.0	57.4	51.1	48.1	46.2	44.4	42.9
31	50.8	....	55.0	50.9	....	46.1	....	42.8

JD-78. E. A. Lyons & Sons. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 24, T. 11 S., R. 5 W.
Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	12.11	July 6	36.57	Dec. 10	18.82
Apr. 7	8.42	Sept. 8	29.59		

JD-115. Calcasieu-Marine National Bank. NE $\frac{1}{4}$ sec. 34, T. 9 S., R. 5 W. Records available: 1939-48. Jan. 5, 40.43; Apr. 6, 35.52; Sept. 10, 67.81; Dec. 10, 50.68.

JD-126. Ralph Hayes. NW $\frac{1}{4}$ sec. 2, T. 10 S., R. 5 W. Automatic water-stage recorder removed and measurements discontinued Jan. 19, 1948. Records available: 1946-48.

Daily noon water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	37.2	Jan. 6	37.0	Jan. 11	36.6	Jan. 16	36.2
2	37.2	7	36.9	12	36.4	17	36.1
3	37.2	8	36.8	13	36.4	18	36.1
4	37.1	9	36.7	14	36.5	19	36.0
5	37.1	10	36.7	15	36.3		

JD-221. John Ardoin. One mile north of overpass on U. S. Highway 165 near Iowa Junction. Records available: 1942-43; 1945-47. Measurements discontinued.

JD-222. Lacassine Co., Inc. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, T. 11 S., R. 5 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	13.38	July 6	28.34	Dec. 10	20.40
Apr. 7	9.96	Sept. 8	31.80		

JD-223. Lacassine Co., Inc. SW $\frac{1}{4}$ sec. 27, T. 11 S., R. 4 W. Records available: 1945-48.

Jan. 6	13.14	July 6	32.68	Dec. 10	19.04
Apr. 7	9.94	Sept. 9	27.57		

JD-224. Latreille Estate. Sec. 10, T. 8 S., R. 4 W. Records available: 1946-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	48.2	46.7	45.0	44.0	50.4	68.3	73.6	70.2	64.5	60.3	57.7	55.7
2	48.2	46.6	44.9	44.2	50.8	68.5	73.9	70.0	64.3	60.2	57.5	55.5
3	48.2	46.5	44.8	44.2	51.0	68.6	74.0	70.0	....	60.2	57.5	55.5
4	48.2	46.4	44.7	44.2	52.2	68.7	73.9	68.9	63.7	60.1	57.4	55.4
5	48.2	46.3	44.8	44.2	53.2	69.0	73.7	68.8	63.6	60.1	....	55.3

JD-224--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
6	48.1	46.3	44.8	44.2	53.6	69.1	73.9	68.6	63.6	60.0	57.5	55.3
7	48.1	46.2	44.8	44.2	54.5	69.1	73.9	68.5	63.5	59.9	57.4	55.1
8	48.0	46.2	44.7	44.2	55.5	69.8	74.0	68.2	63.3	59.8	57.2	55.1
9	47.9	46.1	44.6	44.3	55.9	70.3	74.2	67.9	63.2	59.7	57.1	55.1
10	47.9	46.1	44.5	44.2	56.1	69.8	72.6	67.9	63.5	59.5	57.2	55.2
11	47.9	46.0	44.6	44.2	58.0	69.9	72.8	68.7	63.5	59.3	57.2	54.9
12	47.7	45.9	44.7	44.2	59.4	70.3	72.6	69.2	63.3	59.3	57.1	54.8
13	47.7	45.8	44.7	44.2	60.3	70.2	72.4	69.1	62.5	59.3	57.0	54.8
14	47.8	45.8	44.6	44.3	...	69.9	72.1	69.6	62.5	59.1	56.9	54.7
15	47.7	45.8	44.4	44.3	61.8	70.8	72.0	69.8	62.3	59.0	56.9	54.6
16	47.6	45.8	44.4	44.3	62.1	71.2	72.3	69.7	62.2	58.9	56.7	54.5
17	47.5	45.8	44.5	44.4	62.1	71.3	72.3	68.7	62.1	58.8	56.7	54.4
18	47.5	45.8	44.3	44.4	63.6	70.2	71.8	68.5	61.9	58.8	56.4	54.3
19	47.4	45.6	44.3	44.8	64.7	71.8	71.3	68.6	61.7	58.7	56.5	54.3
20	47.3	45.6	44.3	44.5	65.4	71.7	71.5	68.5	61.6	58.6	56.5	54.2
21	47.2	45.5	44.3	44.9	66.0	71.3	71.0	68.5	61.3	58.4	56.3	54.2
22	47.0	45.5	44.2	45.6	66.7	71.8	69.9	67.9	61.3	58.4	56.3	54.2
23	46.9	45.4	44.1	46.2	67.0	72.3	69.3	67.5	61.0	58.3	56.2	54.1
24	47.0	45.4	44.2	47.0	67.4	72.4	69.1	67.3	60.9	58.2	56.1	54.1
25	47.0	45.4	44.2	47.0	67.9	72.9	68.8	67.0	60.9	58.1	56.0	54.2
26	47.0	45.3	44.1	46.6	68.3	73.1	69.9	66.5	60.9	58.0	55.8	54.1
27	46.8	45.2	44.1	47.0	68.6	73.2	71.1	66.0	60.7	57.9	55.7	53.9
28	46.8	45.1	44.2	47.8	68.8	72.9	70.5	65.7	60.6	57.9	55.8	53.8
29	46.8	45.1	44.2	48.8	69.0	72.9	70.6	65.3	60.5	57.9	55.8	53.9
30	46.6		44.1	49.8	68.5	73.5	70.2	65.0	60.4	57.9	55.7	53.9
31	46.7		44.0		68.0		70.5	64.7		57.9		53.7

JD-317. H. Aguiard. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 8 S., R. 4 W. Used drilled irrigation well, diameter of pit casing 20 inches, depth 289 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 4.95 feet. Records available: 1948. Sept. 10, 66.20; Sept. 17, 64.99; Nov. 5, 59.84.

Lafayette Parish

Lf-6. Southwestern Louisiana Institute Horticultural Farm. Irregular sec. 68, T. 9 S., R. 4 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 5	22.73	July 6	29.46	Dec. 9	24.29
Apr. 5	27.30	Sept. 8	30.26		

Lf-129. Claude Hanks. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, T. 10 S., R. 3 E. Records available: 1944-48. Jan. 6, 33.87; Apr. 6, 27.48; Sept. 7, 32.02; Dec. 9, 30.36.

Lf-164. Gaston Gordon. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 10 S., R. 5 E. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	24.1	....	21.7	20.4	27.0	21.8	23.2	....	26.5	27.0	27.3	26.6
2	24.2	23.2	21.6	....	27.4	21.6	23.6	....	26.5	27.0	27.3	26.5
3	24.2	23.3	21.4	....	27.6	21.4	23.5	....	26.5	27.1	27.4	26.5
4	24.2	23.3	21.3	....	27.9	21.3	23.7	....	26.6	27.1	27.4	26.5
5	24.2	23.3	21.0	....	28.2	21.0	23.8	....	26.6	27.1	27.5	26.4
6	24.3	23.6	20.2	21.0	28.2	20.7	....	....	26.6	27.1	27.5	26.4
7	24.3	23.2	19.6	21.4	28.7	20.6	25.2	....	26.6	27.1	27.5	26.4
8	24.3	23.2	19.2	22.0	28.7	20.4	25.0	....	26.7	27.1	27.5	26.4
9	24.3	23.2	18.7	22.5	28.7	20.2	24.8	....	26.7	27.1	27.5	26.4
10	24.3	23.2	18.7	22.7	29.1	20.0	24.7	....	26.8	27.2	27.6	26.4
11	24.3	23.1	18.7	22.8	29.2	19.7	24.6	....	26.8	27.1	27.6	26.4
12	24.3	23.1	18.7	23.1	....	19.6	24.6	....	26.8	27.2	27.6	26.3
13	24.4	23.0	18.7	23.6	....	19.5	24.3	....	26.7	27.2	27.6	26.3

Lf-164--Continued.

Daily noon water level, from recorder charts											
Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov. Dec.
14	24.4	23.0	18.7	23.9	....	19.8	....	....	26.8	27.2	27.6 26.3
15	24.4	23.0	18.6	24.1	....	19.9	....	....	26.8	27.2	27.6 26.3
16	24.4	23.0	18.7	24.2	....	20.1	....	....	26.8	27.2	27.6 26.3
17	24.4	22.9	18.8	24.6	....	20.4	....	....	26.8	27.3	27.6 26.1
18	24.4	22.9	18.9	24.8	....	20.6	....	....	26.8	27.3	27.6 26.0
19	24.4	22.8	19.0	25.1	....	20.9	....	26.4	26.9	27.3	27.6 25.9
20	24.4	22.8	19.1	25.5	....	21.0	....	26.3	26.9	27.3	27.6 25.8
21	24.4	22.8	19.1	25.6	....	21.2	....	26.3	26.9	27.3	27.6 25.7
22	24.4	22.7	19.3	25.8	....	21.4	....	26.4	26.9	27.3	27.6 25.7
23	24.4	22.5	19.4	26.0	....	21.7	....	26.4	26.9	27.3	27.6 25.7
24	24.4	22.4	....	26.3	....	21.9	....	26.4	26.9	27.4	27.6 25.6
25	24.4	22.3	19.7	26.4	23.4	22.0	....	26.4	26.9	27.4	27.6 25.6
26	....	22.1	19.8	26.2	23.6	22.2	....	26.4	26.9	27.4	27.3 25.6
27	....	21.9	20.0	26.6	23.6	22.5	....	26.4	27.0	27.4	27.0 25.5
28	....	21.8	20.2	26.7	23.0	21.6	....	26.5	27.0	27.4	26.8 25.4
29	....	21.8	20.2	26.9	22.7	21.8	....	26.5	27.0	27.5	26.7 25.3
30	....	....	20.2	26.9	22.4	23.0	....	26.5	27.0	27.5	26.6 25.4
31	....	....	20.2	....	22.1	....	....	26.5	....	27.5	25.3

Lf-201. Cleveland Leger. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 10 S., R. 2 E. Measurements discontinued after July 7, 1948. Records available: 1944-48. July 7, 65.78.

Lf-210. B. W. Spell. Irregular sec. 24, T. 10 S., R. 2 E. Records available: 1944-48. Jan. 6, 27.31; Apr. 6, 25.08; Sept. 9, 36.13; Dec. 8, 30.54.

Lf-405. Mary's Syrup Mill. Irregular sec. 40, T. 11 S., R. 4 W. Records available: 1946-48. Apr. 9, 38.77; July 9, 39.13; Sept. 7, 39.87; Dec. 9, 41.14.

Lf-437. Southern Pacific Railroad Co. Irregular sec. 40, T. 11 S., R. 4 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	15.35	July 7	16.32	Dec. 8	16.91
Apr. 6	13.86	Sept. 9	16.73		

Lf-478. Charles Bradford. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 31, T. 9 S., R. 3 E. Records available: 1944-48. Jan. 6, 33.71; Apr. 6, 29.34; Sept. 8, 40.37; Dec. 8, 35.07.

LaSalle Parish

La-41. Louisiana Delta Hardwood Lumber Co. NE $\frac{1}{4}$ sec. 8, T. 8 N., R. 2 E. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 2	27.02	June 1	24.74	Sept. 2	28.20	Oct. 25	33.54
Apr. 1	26.06	28	25.99	Oct. 1	33.57	Dec. 2	31.75
26	24.82	July 28	26.98				

Livingston Parish

Li-10. McCarroll Lumber Co. In Frost, on north side of mill pond. Records available: 1940-48. May 4, +1.2; Sept. 22, +1.7.

Li-11. Sharp Civilian Conservation Corps Camp. In Springville. Records available: 1940-48. May 4, +1.3; Sept. 22, +1.6.

Li-15. Hammond Lumber Co. Sec. 14, T. 7 S., R. 6 E., south of road at Springville fire tower. Records available: 1947-48. May 4, +6.6; Sept. 22, +7.4.

Li-16. J. F. McCarroll. In Holden, 200 feet west of residence. Records available: 1940-48. Sept. 22, 105.3.

Li-38. J. F. McCarroll. In Holden, 100 feet east of well Li-16. Records available: 1947-48. May 4, 8.6; Sept. 22, 8.8.

Morehouse Parish

Mo-9. International Paper Co., Southern Kraft Division. Sec. 24, T. 21 N., R. 5 E. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	152.9	154.5	154.4	154.1	154.4	.....	168.0	167.1	165.2	167.7	166.8	169.3
2	153.4	154.5	154.2	154.4	154.5	166.8	168.2	166.9	164.8	167.8	166.5	169.2
3	153.5	154.4	154.4	154.5	154.5	167.4	168.2	167.1	165.2	167.8	166.0	169.5
4	153.6	154.3	154.6	154.5	154.4	167.6	160.3	.....	165.4	167.8	165.8	169.4
5	153.8	154.4	154.6	154.0	154.6	167.7	171.8	.....	165.5	167.8	165.7	169.5
6	153.8	154.5	154.5	154.0	154.7	168.1	174.5	.....	155.4	167.9	165.7	170.6
7	153.9	153.0	154.6	154.2	154.8	167.6	178.1	.....	163.8	168.0	166.6	169.7
8	153.9	154.2	154.5	154.3	154.8	167.6	170.3	.....	157.8	167.7	166.6	170.0
9	153.9	154.3	154.2	154.5	154.8	167.7	166.7	.....	167.0	168.0	166.5	171.2
10	154.1	154.4	154.6	154.4	154.7	168.1	168.2	.....	167.5	167.9	166.7	169.8
11	154.2	154.4	154.8	154.3	154.9	168.1	166.1	.....	167.7	167.9	166.8	169.9
12	154.2	154.2	154.8	154.4	.....	167.9	166.0	.....	167.8	168.0	167.0	169.9
13	154.1	154.2	154.8	154.3	155.1	168.0	166.0	.....	168.0	167.9	167.1	169.8
14	159.4	154.5	154.0	154.2	155.1	168.0	166.2	.....	167.9	167.3	168.4	169.7
15	159.0	154.5	154.5	154.3	155.1	168.0	166.4	.....	167.9	168.0	168.2	169.8
16	156.7	154.4	154.3	154.3	156.3	168.2	167.0	165.6	168.0	168.0	169.3	169.7
17	156.4	154.4	154.6	154.3	156.8	168.1	163.8	165.0	167.9	167.8	168.7	169.5
18	155.7	154.3	154.4	154.3	157.1	168.1	163.5	165.9	168.0	167.8	168.8	169.6
19	154.9	154.3	154.5	154.3	157.4	168.1	165.0	164.9	167.7	167.9	169.4	169.6
20	154.8	154.4	154.5	154.2	157.7	168.1	165.2	164.6	167.7	167.8	169.4	169.8
21	154.7	154.4	154.4	154.4	157.8	168.0	166.0	164.9	167.8	167.4	169.3	169.6
22	154.7	154.5	154.4	154.4	158.0	167.9	166.1	164.7	167.9	167.1	169.2	169.5
23	154.9	154.5	154.2	154.4	158.2	167.9	166.7	165.0	167.5	167.1	169.5	169.4
24	154.2	154.5	154.5	154.5	158.3	168.1	166.6	164.9	167.6	166.8	169.7	167.4
25	154.4	154.5	154.5	154.5	.....	168.1	167.0	164.7	167.6	166.8	169.9	154.2
26	154.3	154.4	154.4	154.4	.....	168.2	167.0	165.0	167.7	166.8	169.6	163.7
27	154.3	154.3	154.5	154.4	.....	168.2	167.2	165.0	167.6	166.6	169.3	160.7
28	154.3	154.4	154.6	154.4	.....	168.1	167.2	165.0	167.6	166.6	169.3	164.0
29	154.3	154.5	154.5	154.5	.....	167.6	167.1	165.0	167.7	166.8	169.3	164.4
30	154.3	.....	154.4	154.4	.....	168.1	167.2	164.8	167.8	166.8	169.2	166.4
31	154.4	.....	154.4	.....	.....	.....	168.3	165.1	.....	166.7	.....	166.7

Mo-15. International Paper Co., Southern Kraft Division. Sec. 24, T. 21 N., R. 5 E. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	76.9	77.0	.....	75.6	76.1	76.4	76.5	.....	77.5	77.8	77.9	78.0
2	77.1	76.9	.....	75.1	76.2	76.2	76.5	.....	77.5	77.8	77.8	78.1
3	77.1	76.9	.....	75.2	76.3	76.1	76.4	.....	77.5	77.8	77.9	78.1
4	77.2	76.6	.....	75.8	76.3	76.1	76.4	77.0	77.4	77.7	77.7	77.9
5	77.0	76.7	.....	76.8	76.3	76.2	76.3	77.1	77.5	77.6	78.0	77.9
6	77.0	77.0	.....	75.9	76.2	76.3	.....	77.0	77.7	77.6	78.2	78.1
7	76.9	.....	.....	76.0	76.4	76.2	.....	77.0	77.6	77.9	78.1	77.9
8	76.7	.....	.....	75.8	76.2	76.1	.....	77.0	77.5	77.9	77.8	78.0
9	76.8	.....	.....	75.8	76.2	76.2	.....	77.1	77.5	77.9	77.8	78.3
10	77.2	.....	.....	75.9	76.2	76.3	.....	77.2	77.5	77.7	78.1	78.2
11	76.8	.....	.....	76.2	76.2	76.3	.....	77.2	77.5	77.9	78.0	77.8
12	76.6	.....	.....	76.0	76.2	76.3	.....	77.2	77.5	78.0	77.9	77.9
13	77.1	.....	.....	.....	76.4	76.9	.....	77.2	77.6	77.9	78.0	78.1
14	77.1	.....	.....	.....	76.3	76.3	.....	77.2	77.6	77.8	77.9	78.0
15	76.7	.....	.....	.....	76.1	76.3	.....	77.3	77.6	77.8	77.9	78.0
16	76.7	.....	.....	75.8	76.1	76.4	.....	77.2	77.7	77.8	77.7	78.1
17	76.9	.....	.....	75.8	76.2	76.3	.....	77.3	77.7	78.0	78.0	78.2
18	76.7	.....	.....	75.8	76.3	76.4	.....	77.3	77.6	77.8	77.7	77.9
19	76.7	.....	.....	75.8	76.3	76.4	.....	77.3	77.5	77.7	78.0	78.0
20	76.4	.....	.....	75.8	76.3	76.3	.....	77.3	77.6	77.8	77.9	78.0
21	76.4	.....	.....	75.8	76.1	76.3	.....	77.3	77.5	77.8	78.0	78.0

Mo-15--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	76.3	....	....	76.0	76.1	76.4	....	77.4	77.5	77.9	77.9	77.7
23	77.0	....	....	76.0	76.2	76.5	....	77.4	77.6	77.9	78.0	77.8
24	77.1	....	....	76.0	76.2	76.5	....	77.4	77.8	77.9	77.9	78.1
25	76.9	....	....	76.0	76.3	76.4	....	77.4	77.9	77.9	77.9	77.5
26	77.2	....	....	76.0	76.2	76.4	....	77.4	77.8	77.8	77.9	77.9
27	77.1	....	....	76.3	76.2	76.4	....	77.5	77.7	77.8	78.0	77.8
28	76.8	....	....	76.3	76.2	76.4	....	77.5	77.5	77.9	78.0	77.5
29	76.7	....	....	76.2	76.3	76.4	....	77.4	77.7	77.9	78.3	78.2
30	76.6	....	75.9	76.1	76.3	76.4	....	77.4	77.8	77.9	78.1	78.4
31	76.9	....	75.9	....	76.3	....	....	77.4	....	77.9	....	78.2

Natchitoches Parish

Na-53. City of Natchitoches. Sec. 87, T. 9 N., R. 7 W. Records available: 1945-47. Measurements discontinued.

Na-54. S. Rhodes. SW $\frac{1}{4}$ irregular sec. 105, T. 9 N., R. 7 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	11.30	Apr. 1	11.70	July 1	11.40	Oct. 2	10.35
Feb. 4	11.60	May 4	11.30	July 28	10.55	Nov. 3	10.95
26	11.70	June 7	11.35	Sept. 2	10.05	Dec. 30	10.70

Na-58. H. J. Taylor. NE $\frac{1}{4}$ sec. 10, T. 8 N., R. 7 W. Records available: 1944-48. Nov. 3, 22.33.

Na-69. City of Natchitoches. NE $\frac{1}{4}$ sec. 15, T. 8 N., R. 7 W., at pumping plant. Records available: 1944-46. Measurements discontinued.

Orleans Parish

Or-25. Morgan Ice Co. plant No. 1. 1215 Magnolia Street, New Orleans. Records available: 1945-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	68.2	68.2	68.6	71.2	74.8	77.2	79.8	82.5	....	83.5	79.1	74.8
2	67.8	67.6	69.0	71.2	73.9	77.6	80.0	82.3	....	83.5	78.7	74.6
3	67.9	67.7	69.2	71.1	73.4	77.9	....	82.9	85.1	82.0	78.4	75.1
4	68.2	68.1	69.4	71.8	74.4	78.1	78.7	83.3	83.9	82.0	78.5	75.5
5	....	68.4	68.9	71.1	74.9	78.3	78.3	83.4	82.6	82.7	78.4	74.8
6	....	....	68.4	71.9	75.1	77.9	78.2	83.5	82.3	83.1	78.4	73.4
7	....	69.4	68.1	....	75.3	77.5	79.1	83.5	82.7	82.4	79.8	73.2
8	....	....	67.4	....	75.4	77.9	79.4	82.2	85.9	83.4	80.4	73.7
9	....	68.5	67.7	....	....	78.1	....	82.2	84.4	83.4	79.6	74.2
10	....	67.9	68.1	....	....	78.2	....	83.1	84.6	82.9	....	74.2
11	....	66.9	68.2	....	....	78.4	....	83.5	84.6	82.7	....	74.4
12	67.1	....	68.0	....	75.5	78.4	....	83.8	83.5	82.5	....	73.9
13	68.0	....	67.9	....	75.4	77.4	....	84.2	83.5	82.4	76.8	73.9
14	68.1	....	67.7	....	76.1	77.1	....	....	84.0	82.8	76.5	74.7
15	68.2	....	67.5	....	76.5	77.8	....	....	84.1	83.1	76.2	75.6
16	68.2	67.4	68.5	72.9	75.9	78.3	....	....	84.5	82.9	76.8	75.9
17	68.1	68.2	68.9	73.2	75.6	78.6	....	84.5	84.5	81.7	....	76.1
18	67.7	69.1	69.2	72.5	76.4	78.8	81.9	84.5	84.5	80.7	....	76.1
19	67.4	69.3	69.2	72.2	76.7	78.8	81.8	84.8	....	80.2	....	75.4
20	67.3	69.4	70.0	73.0	77.0	77.9	82.4	84.8	81.6	80.2	76.3	74.5
21	67.5	69.4	69.4	73.4	77.2	77.7	82.7	84.6	....	80.1	75.5	74.5
22	67.6	....	69.1	73.8	77.4	77.9	83.1	83.5	....	80.3	74.5	75.0
23	67.6	....	69.8	74.0	76.4	78.4	83.0	83.4	....	80.6	....	74.7
24	67.9	....	70.2	74.1	76.5	78.8	83.1	84.0	....	79.5	....	74.6
25	67.7	....	70.6	74.4	....	78.9	82.0	84.4	....	78.5	....	72.9
26	67.5	68.1	71.1	73.1	....	79.1	81.8	84.7	82.5	78.1	74.4	70.9
27	67.9	68.5	70.7	73.8	....	78.3	82.4	85.1	82.5	78.4	....	70.0

Or-25--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
28	68.2	69.0	72.2	74.3	....	78.2	82.8	....	82.8	....	a75.50	70.2
29	68.4	69.2	73.0	74.5	a77.93	78.8	83.1	....	83.3	....	74.4	70.8
30	68.3		72.5	74.7	76.6	79.2	83.4	....	83.5	....	74.7	70.8
31	68.5		71.3		76.3		83.5	....		78.7		70.7

a Tape measurement at odd hour.

Ouachita Parish

Ou-26. Fred Fudickar. S $\frac{1}{2}$ sec. 81, T. 18 N., R. 4 E. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 30	74.14	June 1	74.83	Sept. 28	77.06	Dec. 22	77.09
Apr. 26	74.22	29	75.57	Oct. 26	77.51		

Ou-30. G. B. Cooley Sanitarium. SW $\frac{1}{4}$ sec. 3, T. 18 N., R. 3 E., 7 miles northwest of Monroe. Measurements discontinued after June 2, 1948. Records available: 1946-48. Mar. 30, 134.32; June 2, 141.36.

Ou-73. Tennessee Gas & Transmission Co. well 1. Off Old Arkansas road. Records available: 1947-48. Mar. 30, 173.97; June 2, 171.88; June 29, 180.08; Dec. 22, 185.86.

Ou-76. H. H. Holliday. At Monroe Sand & Gravel Co., West Monroe. Records available: 1946-47. Measurements discontinued.

Ou-77. Brown Paper Co. In back of spray pond. Records available: 1946-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	213.9	213.7	212.7	210.7	212.2	215.3
2	213.9	213.5	212.7	210.9	212.2	....
3	213.9	213.5	212.7	210.0	211.4	215.2
4	213.9	213.6	212.9	211.0	211.2	216.4
5	213.8	213.6	212.6	210.7	211.6	215.7
6	213.4	....	....	210.7	211.4	215.4
7	213.5	213.3	....	210.7	212.8	215.4
8	213.5	213.3	....	210.8	212.9	216.0
9	213.5	213.5	....	210.8	212.9	218.5
10	213.5	213.4	213.0	210.8	213.4	219.1
11	213.5	213.3	213.0	210.8	213.4	219.6
12	213.5	213.1	212.8	210.8	213.6	220.1
13	213.5	213.2	212.5	210.8	213.8	220.2
14	213.5	213.2	212.2	210.8	213.5	220.4
15	213.5	213.3	212.0	210.8	213.8	220.8
16	213.5	211.6	212.0	210.8	214.0	220.9
17	213.5	213.2	211.8	210.7	214.2	220.9
18	213.5	213.2	211.5	210.6	214.3	220.8
19	213.5	212.6	210.8	210.8	214.6	220.6
20	213.5	213.0	210.8	210.8	214.6	220.6
21	213.4	213.0	210.7	210.8	214.7	220.5
22	213.3	213.0	210.9	210.8	214.8	220.4
23	213.4	213.0	210.9	210.7	214.8	220.2
24	213.5	213.2	....	210.8	215.0	219.9
25	213.8	213.0	210.2	210.8	214.9	219.9
26	213.6	212.8	210.6	211.5	215.2	221.7
27	213.6	212.6	210.6	....	215.1	221.3
28	213.7	212.8	210.7	211.8	215.3	221.5
29	213.6	212.8	210.6	213.3	215.3	221.8
30	213.7		210.5	212.6	215.3	220.5
31	213.7		210.6		215.4	

Ou-77--Continued.

Daily noon water level, from recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	222.1	.....	.....	223.0	221.3	.....
2	222.1	.....	.....	220.3	221.4	.....
3	222.0	214.5	.....	220.1	221.6	.....
4	214.9	.....	219.9	221.6	.....
5	215.1	.....	219.5	221.7	.....
6	215.4	.....	219.6	221.9	.....
7	216.7	.....	219.3	221.7	.....
8	219.2	221.8	.....
9	219.2	221.9	.....
10	221.3	222.1	.....
11	222.2	.....
12	222.3	.....
13	222.4	.....
14	219.4	.....	.....
15	219.4	.....	.....
16	219.2	.....	.....
17	219.0	.....	.....
18	219.0	.....	.....
19	218.4	.....	.....
20	218.1	.....	217.8
21	218.0	.....	217.7
22	217.6	.....	217.7
23	217.4	.....	218.0
24	217.1	.....	.....
25	218.9	.....	.....
26	219.8	.....	.....
27	220.2	.....	.....
28	220.6	.....	2181.0
29	222.6	220.7	.....	.....
30	222.7	221.0	.....	.....
31	221.2	.....	.....

a Tape measurement at odd hour.

Ou-87. Louisville Cooperaage. Jackson Street, Monroe. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 29	123.93	June 1	128.50	Sept. 28	131.01	Dec. 22	101.00
Apr. 26	123.66	29	130.45	Oct. 25	130.05		

Ou-88. Fred Peters. Irregular sec. 52, T. 17 N., R. 3 E., 0.25 mile west of U. S. Highway 165. Records available: 1947-48.

Feb. 7	50.04	Apr. 26	48.02	June 29	52.63	Oct. 25	53.91
Mar. 29	47.43	June 1	49.95	Sept. 28	53.61	Dec. 22	52.13

Ou-89. James A. Noe. Sec. 59, T. 17 N., R. 3 E., old Columbia road. Records available: 1946-47. Measurements discontinued.

Ou-94. Angels Tourist Court. S $\frac{1}{2}$ irregular sec. 38, T. 18 N., R. 4 E., near Highway 80, east of Monroe, near Angels Tourist Court. Records available: 1946-48.

Mar. 9	82.99	June 1	83.64	Sept. 28	86.11	Dec. 22	84.22
Apr. 26	82.80	29	85.69	Oct. 26	86.74		

Ou-96. Department of the Air Force. Selman Field No. 2, Monroe. Records available: 1946-48.

Mar. 29	84.86	June 1	82.08	Sept. 28	86.50	Dec. 22	83.36
Apr. 26	85.92	29	83.25	Oct. 26	86.10		

Ou-100. City of Monroe. NE $\frac{1}{4}$ sec. 67, T. 18 N., R. 4 E., east end of Howard Street. Records available: 1946-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	99.4	99.2	98.3	97.8	98.2	99.8	101.8	100.9	102.1	103.0	103.3	103.2
2	99.5	99.2	98.2	97.9	98.2	99.9	101.9	100.8	102.1	103.0	103.2	103.1
3	99.5	99.2	98.2	97.9	98.3	100.0	101.9	100.8	102.1	103.1	103.2	103.1
4	99.6	99.1	98.3	97.9	98.4	100.0	101.9	100.9	102.1	103.1	103.2	103.1
5	99.5	99.1	98.3	97.8	98.4	100.1	101.9	101.0	102.2	103.1	103.2	102.9
6	99.5	99.2	98.2	97.8	98.5	100.2	101.9	101.0	102.2	103.0	103.3	103.0
7	99.5	99.1	98.2	97.8	98.6	100.2	101.8	101.0	102.3	103.1	103.5	102.9
8	99.4	99.2	98.2	97.8	98.6	100.3	101.8	101.1	102.3	103.2	103.4	102.9
9	99.4	99.1	98.1	97.9	98.7	100.3	101.6	101.1	102.3	103.2	103.4	102.9
10	99.4	99.1	98.1	97.8	98.7	100.5	101.4	101.1	102.2	103.2	103.5	103.0
11	99.4	99.1	98.2	97.8	98.7	100.6	101.2	101.2	102.2	103.1	103.6	102.8
12	99.3	99.0	98.3	97.8	98.9	100.6	100.9	101.2	102.2	103.3	103.6	102.8
13	99.3	98.8	98.3	97.9	99.0	100.7	100.9	101.2	102.2	103.3	103.7	102.8
14	99.4	99.0	98.1	97.9	99.1	100.7	100.9	101.3	102.1	103.2	103.7	102.7
15	99.3	99.0	97.9	97.9	99.1	100.8	100.9	101.3	102.1	103.2	103.7	102.7
16	99.2	98.9	97.9	97.9	99.2	100.9	100.9	101.3	102.3	103.3	103.5	102.5
17	99.3	98.9	98.0	97.9	99.2	100.9	100.9	101.4	102.3	103.4	103.6	102.7
18	99.2	98.8	97.9	97.9	99.3	101.0	100.9	101.5	102.3	103.4	103.4	102.6
19	99.2	98.7	97.9	97.9	99.4	101.0	100.9	101.5	102.3	103.4	103.4	102.6
20	99.1	98.7	97.9	97.0	99.4	101.0	100.9	101.5	102.3	.....	103.5	102.6
21	99.1	98.6	97.9	98.0	99.4	101.2	100.9	101.6	102.3	.....	103.4	102.5
22	98.9	98.6	97.8	98.0	99.4	101.2	100.9	101.6	102.3	.....	103.4	102.6
23	99.1	98.6	97.9	98.0	99.4	101.3	100.9	101.7	102.4	.....	103.4	102.6
24	99.1	98.6	97.9	98.0	99.5	101.4	100.9	101.7	102.5	.....	103.4	102.5
25	99.2	98.5	97.9	98.0	99.5	101.5	100.9	101.8	102.6	.....	103.4	102.7
26	99.2	98.5	97.8	98.0	99.6	101.6	100.9	101.8	102.7	103.3	103.3	102.8
27	99.2	98.3	97.9	98.1	99.6	101.6	100.9	101.9	102.8	103.3	103.3	102.7
28	99.2	98.3	97.9	98.2	99.4	101.7	100.9	102.0	102.8	103.3	103.2	102.5
29	99.1	98.4	97.9	98.2	99.5	101.8	100.9	102.0	102.8	103.3	103.3	102.4
30	99.1		97.7	98.2	99.6	101.8	100.9	102.1	102.9	103.3	103.3	102.4
31	99.1		97.7		99.7		100.9	102.1		103.3		102.2

Ou-102. City of Monroe. NW. corner sec. 6, T. 18 N., R. 4 E. Records available: 1946-48. Mar. 30, 83.62; June 1, 86.04; Sept. 27, 88.68; Oct. 25, 89.36.

Ou-103. City of Monroe. NE. corner sec. 49, T. 18 N., R. 4 E. Records available: 1946-48. Mar. 30, 80.15; June 1, 82.20; Sept. 27, 84.93; Dec. 26, 85.52.

Ou-120. S. H. Thatcher. SE. corner sec. 39, T. 19 N., R. 3 E., 501 Speed Drive, Monroe. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 30	80.30	June 29	83.99	Sept. 27	84.06	Dec. 28	84.36
June 2	81.46	Aug. 3	81.88	Oct. 26	84.76		

Ou-133. Southern Carbon Co. Sec. 37, T. 19 N., R. 4 E. Records available: 1947-48.

Feb. 7	10.99	June 1	10.74	Sept. 27	12.91	Dec. 28	12.72
Mar. 30	9.89	June 29	11.34	Oct. 26	13.20		

Rapides Parish

R-15. City of Alexandria. West of pump station, in City Park. Drilled public-supply well, diameter 12 inches, depth 1,202 feet. Measuring point, top inside edge of flange on 12-inch casing, 1.5 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
June 9	118.38	Sept. 2	114.05	Nov. 3	118.35
July 15	120.46	Oct. 1	110.84	Dec. 2	114.70

R-21. City of Alexandria. In Alexandria, at Fourth and St. James Streets. Records available: 1938-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	118.08	June 9	94.56	Sept. 2	147.35	Nov. 3	115.09
27	106.32	July 15	127.45	Oct. 1	137.04	Dec. 2	107.33
Apr. 2	98.43						

R-26. Missouri Pacific Railroad Co. In Alexandria, at abandoned roadhouse on North 13th Street. Records available: 1938-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	112.9	120.7	126.9	121.4	119.2	118.4	129.5	138.8	142.9	134.4	127.0	.....
2	113.2	121.0	126.6	121.6	119.2	118.3	129.7	137.2	143.2	134.4	126.7	121.1
3	113.2	130.3	126.4	121.5	119.3	118.3	130.4	138.7	143.6	134.3	126.5	121.1
4	113.3	131.0	126.2	121.4	119.2	118.3	130.3	139.6	143.7	134.1	126.3	121.1
5	113.3	131.0	126.0	121.3	119.3	118.3	128.8	140.2	143.4	133.8	125.5	121.0
6	113.3	130.8	125.8	121.0	119.2	118.4	128.2	140.5	141.7	133.6	125.6	121.0
7	113.4	130.7	125.6	120.9	119.2	118.4	129.8	140.7	142.5	133.4	125.5	120.9
8	113.5	130.4	125.4	120.8	119.2	118.3	130.8	140.6	143.1	133.2	125.3	120.9
9	113.5	130.4	125.7	120.9	119.1	118.4	131.6	141.2	143.6	132.6	125.0	120.9
10	113.8	130.4	124.9	120.9	118.9	118.5	132.5	140.2	143.9	131.7	124.9	120.9
11	113.8	130.2	124.7	120.8	118.8	118.6	132.6	141.1	143.8	131.3	124.8	120.8
12	113.7	130.0	124.6	120.7	118.7	118.7	131.4	141.4	142.8	131.1	124.6	120.8
13	113.7	129.8	124.4	120.6	118.7	118.7	132.3	141.9	141.5	130.9	134.4	120.7
14	113.9	129.7	124.1	120.5	118.7	118.9	132.8	142.2	142.4	130.6	124.2	.....
15	115.1	129.5	123.7	120.4	118.7	119.0	133.7	142.1	142.8	130.4	124.0	.....
16	115.4	129.3	123.6	120.5	118.6	119.1	134.1	141.6	143.2	130.2	123.6	.....
17	115.4	129.1	123.4	120.6	118.6	119.2	134.5	141.6	143.5	130.0	123.5	.....
18	115.4	128.9	123.1	120.3	118.5	119.4	132.2	142.0	142.6	129.7	.....	.....
19	116.4	128.8	123.0	120.0	118.5	119.5	133.0	142.0	140.1	129.4	.....	.....
20	116.2	128.6	122.8	119.8	118.6	119.7	134.0	142.4	137.8	129.1	.....	.....
21	116.3	128.4	122.8	119.8	118.6	119.8	134.7	142.8	136.7	128.9	.....	.....
22	116.2	128.2	122.6	119.8	118.6	119.9	135.8	142.6	136.0	128.8	.....	.....
23	116.2	127.9	122.5	119.8	118.6	120.0	136.6	141.1	135.6	127.7	.....	.....
24	118.5	127.7	122.4	119.8	118.7	120.2	137.0	142.4	135.4	127.5	.....	.....
25	117.5	127.5	122.3	119.7	118.7	122.5	136.8	142.7	135.3	128.2	.....	.....
26	117.3	127.4	122.2	119.5	118.7	124.6	135.3	143.3	135.1	127.9	.....	.....
27	117.2	127.3	122.1	119.4	118.7	126.2	136.7	142.7	135.0	127.8	.....	.....
28	118.9	127.2	122.0	119.4	118.7	125.0	137.5	143.2	134.7	127.6	.....	.....
29	120.8	127.1	121.8	119.3	118.7	127.2	138.6	143.2	134.7	127.5	.....	118.8
30	121.2		121.5	119.2	118.6	128.5	138.8	141.4	134.6	127.4	.....	118.8
31	121.2		121.4		118.5		139.2	142.4		127.2		118.8

R-35. Pine Products Co. In Alexandria. Records available: 1938-48

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	131.15	May 4	129.67	Sept. 2	133.88	Nov. 4	129.49
27	132.11	June 9	131.21	Oct. 1	132.48	Dec. 2	126.86
Apr. 2	130.72	July 15	128.88				

R-43A. Missouri Pacific Railroad Co. In Alexandria. Records available: 1946-48.

Feb. 8	53.49	May 4	51.17	Sept. 2	54.31	Nov. 3	52.67
27	52.71	June 9	52.23	Oct. 1	53.50	Dec. 2	51.92
Apr. 2	51.69	July 15	54.21				

R-135. Arbuthnot sawmill. In Zimmerman, adjacent to State Highway 20. Records available: 1947-48.

Feb. 4	6.37	May 4	8.02	July 1	9.01	Nov. 2	10.72
26	5.52	June 7	7.84	Oct. 2	11.02	Dec. 29	8.87
Mar. 1	6.13						

R-318. Camp Claiborne. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 1 N., R. 2 W., test hole at tent theater. Records available: 1944-47. Measurements discontinued.

R-344. Camp Livingston. NW. corner sec. 3, T. 5 N., R. 1 E. Records available: 1941-47. Measurements discontinued.

R-347. Camp Claiborne. About 200 feet north of South Street and 75 feet west of I Street. Records available: 1941-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	64.04	May 4	63.40	July 28	63.90	Nov. 2	64.72
26	63.94	June 1	63.55	Sept. 3	64.55	Dec. 2	64.50
Apr. 26	63.62	July 1	63.77	Oct. 1	64.52	29	64.43

R-366. Camp Claiborne observation well 11a. At Camp Claiborne. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 4	57.39	May 4	57.10	July 28	56.84	Nov. 2	57.15
26	57.40	June 1	57.02	Sept. 3	56.89	Dec. 2	57.29
Mar. 2	57.52	July 1	56.87	Oct. 1	57.07	29	57.42

R-381. Camp Livingston. About 100 feet west and 60 feet north of well 3NW(U. S. Geological Survey well 355). Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	67.81	Apr. 26	67.32	July 28	67.24	Oct. 25	67.82
26	67.76	June 1	67.27	Sept. 2	67.53	Dec. 2	67.92
Apr. 1	67.64	28	67.14	Oct. 1	67.70	29	67.94

St. Charles Parish

Sc-6. Shell Oil Co. N $\frac{1}{2}$ sec. 6, T. 12 S., R. 8 E., 1,000 feet south of Louisiana & Arkansas Railway tracks, in refinery. Records available: 1941-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	66.5	....	....	68.5	72.6	72.2	....	70.6	71.4	71.4	69.8	71.5
2	66.5	....	....	68.5	72.6	72.2	....	70.5	....	71.0	69.3	71.6
3	....	....	66.8	68.5	72.5	72.4	....	70.3	71.0	71.5	69.0	71.1
4	....	....	66.5	68.6	72.6	72.3	72.1	70.2	69.6	71.4	68.3	71.2
5	....	....	68.0	68.4	72.7	72.3	72.1	70.2	....	71.6	68.1	71.7
6	....	66.4	67.6	68.4	72.6	72.3	72.3	69.8	70.6	69.7	70.2	70.9
7	....	66.9	67.7	68.3	72.8	72.3	72.2	70.5	71.7	68.5	70.0	65.1
8	66.2	66.8	67.3	....	72.2	72.5	72.1	70.3	72.1	71.2	71.5	65.3
9	66.3	....	68.4	68.0	72.1	72.3	....	70.3	71.8	72.0	71.9	....
10	66.3	....	68.8	68.0	72.5	72.1	....	70.4	72.2	71.6	71.3	....
11	66.3	....	69.1	68.1	72.7	72.2	....	70.4	71.6	71.5	71.1	69.3
12	66.2	....	69.0	67.8	72.6	71.9	....	72.4	71.5	71.7	71.7	69.5
13	66.4	67.9	69.1	67.8	....	72.4	....	72.2	71.4	71.5	72.1	68.8
14	66.5	68.1	69.0	68.0	....	72.5	....	72.1	71.3	71.3	72.2	68.7
15	....	68.2	68.5	68.1	....	72.5	72.4	72.2	70.7	70.0	72.1	69.9
16	66.5	68.8	68.2	68.5	....	71.5	72.6	71.9	70.8	72.5	72.3	70.6
17	66.1	68.3	68.2	68.2	....	70.1	72.3	70.1	71.4	70.2	72.1	....
18	68.8	68.3	69.5	68.0	....	69.6	72.4	71.0	71.4	70.2	71.7	68.8
19	69.0	68.3	68.5	68.0	72.4	72.3	72.6	71.6	71.6	69.9	69.0	68.7
20	69.2	68.1	68.5	70.4	72.4	72.5	72.8	70.6	71.5	71.3	69.2	70.4
21	67.4	67.9	68.8	71.0	72.5	72.8	72.8	71.1	71.3	....	68.8	71.0
22	67.3	68.3	68.6	71.4	71.9	72.7	72.8	71.7	70.7	....	71.1	69.8
23	67.3	68.4	68.7	72.1	72.2	72.6	72.8	72.0	71.3	....	71.0	69.5
24	66.8	68.5	68.2	72.4	69.4	72.5	73.1	71.8	70.9	....	....	71.3
25	67.5	68.5	68.3	72.3	72.1	72.5	73.3	....	70.9	....	72.0	69.1
26	67.2	....	68.6	72.2	72.1	72.7	73.2	71.7	70.9	71.6	70.1	67.6
27	....	....	68.7	72.2	72.0	72.8	73.0	71.4	70.7	69.9	71.4	67.1
28	68.3	....	68.4	72.0	72.2	72.6	73.0	71.4	71.4	69.4	71.5	64.8
29	....	....	68.6	72.4	72.6	72.0	72.9	....	71.8	69.1	71.5	67.3
30	....	....	68.9	72.4	72.1	71.8	70.8	....	71.9	69.5	71.5	68.3
31	....	....	69.5	....	72.1	....	70.6	71.4	....	71.1	....	69.7

St. Landry Parish

SL-7. W. J. Durio. In Arnaudville, 50 feet northwest of Shell Oil Co. garage, 100 feet west of State Highway 25. Records available: 1944, 1946-48. Jan. 5, 17.36; Apr. 5, 13.70; July 6, 16.68. Measurements discontinued after July 6, 1948, well plugged.

SL-10. Cankton Gin Co. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 8 S., R. 3 E. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	36.24	July 8	40.99	Dec. 9	43.38
Apr. 7	39.95	Sept. 8	42.00		

SL-14. Z. T. Cary. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, T. 7 S., R. 3 E., in Lewisburg at rear of cotton gin. Automatic water-stage recorder removed and measurements discontinued Apr. 30, 1948. Records available: 1944-48.

Daily noon water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	56.0	Feb. 1	55.8	Mar. 2	54.9	Apr. 1	54.6
2	56.1	2	55.8	3	55.0	2	54.7
3	56.1	3	55.7	4	55.0	3	54.7
4	56.2	4	55.5	5	55.0	4	54.6
5	56.2	5	55.5	6	55.0	5	54.7
6	56.2	6	55.5	7	55.0	6	54.7
7	56.2	7	55.5	8	55.0	8	54.5
8	56.1	8	55.4	9	54.9	8	54.5
9	56.1	9	55.6	10	54.8	9	54.5
10	56.1	10	55.5	11	54.9	10	54.4
11	56.1	11	55.4	12	55.0	11	54.4
12	56.0	12	55.3	13	55.1	12	54.3
13	56.0	13	55.4	14	55.1	13	54.4
14	56.1	14	55.5	15	55.0	14	54.4
15	56.0	15	55.5	16	54.8	15	54.4
16	56.0	16	55.5	17	54.7	16	54.4
17	56.0	17	55.4	18	54.7	17	54.4
18	56.0	18	55.3	19	54.8	18	54.4
19	55.9	19	55.3	20	54.8	19	54.4
20	55.8	20	55.2	21	54.7	20	54.4
21	55.8	21	55.2	22	54.8	21	54.4
22	55.7	22	55.3	23	54.8	22	54.4
23	55.7	23	55.3	24	54.7	23	54.5
24	55.8	24	55.3	25	54.7	24	54.6
25	55.9	25	55.2	26	54.7	25	54.6
26	55.8	26	55.1	27	54.7	26	54.4
27	55.7	27	55.0	28	54.7	27	54.5
28	55.8	28	55.0	29	54.7	28	54.7
29	55.8	29	55.0	30	54.6	29	54.7
30	55.7	Mar. 1	54.8	31	54.6	30	54.8
31	55.7						

SL-19. Mrs. A. R. Childs. Irregular sec. 64, T. 7 S., R. 2 E., 2.5 miles north of Church Point on State Highway 375. Records available: 1944-47. Measurements discontinued.

SL-26. George Parker. Irregular sec. 71, T. 4 S., R. 5 E. Records available: 1944-48. Jan. 5, 42.00; Apr. 5, 41.09; Dec. 10, 47.26.

SL-31. Dr. Otig. Irregular sec. 42, T. 3 S., R. 3 E. Records available: 1946-48. Jan. 5, 9.61; Apr. 5, 11.48; July 5, 13.67. Measurements discontinued after July 6, 1948, pump installed.

SL-40. 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. Records available: 1944, 1946-48. Jan. 5, 16.03; Apr. 5, 13.67; July 6, 16.68; Dec. 9, 18.15.

SL-43. E. C. Simmons. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 6 S., R. 2 E. Records available: 1944-48. Jan. 7, 63.30; Apr. 7, 60.56; Sept. 7, 73.32; Dec. 6, 68.41.

SL-48. L. P. Erickson. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, T. 8 S., R. 1 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 7	59.55	July 8	105.05	Dec. 6	68.96
Apr. 7	53.96	Sept. 7	84.93		

SL-50. J. Morrison. SW $\frac{1}{4}$ sec. 49, T. 6 S., R. 1 E. Records available: 1947-48. Jan. 7, 62.93; Apr. 7, 58.27; Dec. 6, 71.08.

SL-57. Sun Oil Co. Irregular sec. 37, T. 7 S., R. 4 E., 2.0 miles west-northwest of Sunset, on State Highway 5. Records available: 1944, 1947-48. Nov. 18, 45.86; Dec. 9, 46.13.

SL-78. H. E. Lowrey. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 2 S., R. 4 E. Records available: 1946-48. Apr. 5, 7.65; July 6, 11.12; Sept. 6, 12.68; Dec. 10, 11.65.

SL-79. W. E. Dupre. SE $\frac{1}{4}$ sec. 12, T. 4 S., R. 5 E. Records available: 1947-48. Jan. 5, 15.43; Apr. 5, 14.10. Measurements discontinued after Apr. 5, 1948, well plugged.

SL-86. Immaculate Conception School. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, T. 4 S., R. 5 E. Used drilled domestic well, diameter 4 inches, depth 148 feet. Measuring point, top of 4-inch casing, at land-surface datum. Records available: 1948. Nov. 11, 18.79; Dec. 10, 17.67.

St. Martin Parish

SMn-20. 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. Records available: 1944-48.

Jan. 6	21.97	July 7	24.32	Dec. 9	26.60
Apr. 6	18.91	Sept. 8	25.10		

SMn-51. People's Cotton Oil Co. Irregular sec. 71, T. 6 S., R. 5 E., 1.2 miles northeast of Champagne. Records available: 1944-48. Jan. 5, 7.44; Apr. 5, 2.97; July 6, 7.13; Dec. 9, 9.06.

SMn-58. St. Joseph Catholic Church. Irregular sec. 55, T. 8 S., R. 6 E., in Cecelia. Records available: 1944-48. Jan. 5, 16.20. Measurements discontinued after Jan. 5, 1948, well plugged.

SMn-61. Regis Lagrange. T. 8 S., R. 6 E., 3.0 miles southeast of Arnaudville, on State Highway 401. Records available: 1944-47. No measurements made in 1948.

SMn-62. Ernest Fuselier. T. 8 S., R. 6 E., 2.4 miles southeast of Arnaudville, on State Highway 401. Records available: 1944-48. Jan. 5, 15.28; Apr. 5, 12.08; July 6, 16.36; Dec. 9, 16.99.

SMn-63. L. Charles Willis. Irregular sec. 47, T. 8 S., R. 6 E., 3.5 miles east of Arnaudville. Records available: 1944-48.

Jan. 5	6.13	July 6	6.47	Dec. 9	7.25
Apr. 5	1.90	Sept. 6	8.33		

SMn-68. A. R. Fuselier. Irregular sec. 7, T. 11 S., R. 7 E., 3.0 miles southeast of St. Martinville. Records available: 1944-48.

Jan. 6	5.85	July 7	7.35	Dec. 9	7.53
Apr. 6	3.61	Sept. 7	8.20		

SMn-86. Continental Oil Co. Irregular sec. 82, T. 10 S., R. 6 E.
Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	3.64	July 7	6.31	Dec. 9	5.98
Apr. 6	1.26	Sept. 8	6.73		

St. Tammany Parish

St-2. Mayer Israel. At Covington, in NE $\frac{1}{4}$ sec. 7, T. 6 S., R. 11 E.
Records available: 1939-48., May 5, +80.3; Sept. 23, +80.8.

St-6. Poitevent & Favre Lumber Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, T. 7 S., R. 13 E.,
on south side of Highway 114. Records available: 1939-48. May 5, +3.7;
Sept. 24, +2.8.

St-10. State Fish Hatchery. At Lacombe, in sec. 38, T. 8 S.,
R. 12 E., south well. Records available: 1939-48. May 5, +30.4;
Sept. 24, +30.1.

St-12. Techefunte State Park. In park, sec. 43, T. 8 S., R. 12 E.,
on golf course. Records available: 1939-48. May 5, +50.8; Sept. 24,
+47.0.

St-16. Great Southern Lumber Co. In sec. 20, T. 5 S., R. 13 E., 0.5
mile south and 1.5 miles west of Bush. Records available: 1939-48.
May 5, +28.5; Sept. 23, +29.4.

St-38. Jesse Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, T. 7 S., R. 13 E. Records
available: 1946-48. Sept. 24, +5.8.

St-95. McLane City Club. Sec. 44, T. 9 S., R. 14 E. Records avail-
able: 1947-48. May 5, +6.4; Sept. 24, +6.6.

St-117. Owner unknown. SE $\frac{1}{4}$ sec. 37, T. 8 S., R. 14 E. Records
available: 1947-48. May 5, +23.2; Sept. 24, +22.0.

St-763. Marshal Wagner. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 37, T. 8 S., R. 10 E. Records
available: 1947. No measurements made in 1948.

St-1020. H. D. Howser Estate. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 7 S., R. 14 E.,
half a mile east of Highway 58. Records available: 1942-49. May 5,
+16.2; Sept. 23, +15.7.

St-1150. H. Maitrejean. Sec. 37, T. 8 S., R. 13 E. Records avail-
able: 1947-48. May 5, +2.1; Sept. 24, +2.3.

Tangipahoa Parish

Ta-7. Town of Ponchatoula. In Ponchatoula, about 50 feet west of
pumping station. Records available: 1939-48. May 4, +7.3; Sept. 23,
+8.4.

Ta-8. Louisiana Cypress Lumber Co. In Ponchatoula, about 200 yards
west of Highway 122, at railroad spur on road to lumber mill. Records
available: 1939-48. May 4, +6.1; Sept. 23, +5.9.

Ta-17. Carl Blumquist. Center of NE $\frac{1}{4}$ sec. 6, T. 6 S., R. 8 E., in
corner of field. Records available: 1939-48. Sept. 23, +1.68.

Ta-19. V. Stevens. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 7 S., R. 8 E., in field.
Records available: 1939-48. Sept. 23, +18.4.

Ta-21. Burns Davis. N $\frac{1}{4}$ irregular sec. 54, T. 7 S., R. 7 E. Meas-
urements resumed. Records available: 1939-46. May 4, +5.9; Sept. 23,
+7.7.

Ta-23. Otto Bignor. South line of sec. 50, T. 7 S., R. 7 E., in field. Records available: 1939-48. May 4, +2.7; Sept. 24, +3.3.

Ta-24. Clyde Starkey. Center of sec. 53, T. 7 S., R. 7 E., in field. Records available: 1939-48. May 4, +3.6; Sept. 22, +4.5.

Ta-242. Byron Stevens. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 7 S., R. 8 E. Records available: 1945-48. Sept. 23, +12.5.

Vermilion Parish

Ve-22. Maurice Ginning Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 11 S., R. 3 E., in Maurice. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 6	19.62	July 7	21.57	Dec. 8	21.49
Apr. 6	18.17	Sept. 9	22.09		

Ve-28. Corps of Engineers, U. S. Army, New Orleans District. At Vermilion Locks on Intracoastal Canal. Records available: 1944-48.

Jan. 6	4.02	July 7	4.54	Dec. 8	5.11
Apr. 6	3.47	Sept. 9	6.14		

Ve-30. S. Hebert. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 14 S., R. 3 E. Records available: 1946-48.

Jan. 6	2.92	July 7	4.90	Dec. 8	3.99
Apr. 6	2.28	Sept. 9	5.36		

Ve-41. C. Foreman. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 1, T. 11 S., R. 2 E. Records available: 1944-48.

Jan. 6	27.13	July 7	36.10	Dec. 8	30.07
Apr. 6	25.03	Sept. 9	30.38		

Ve-57. Onezie Vincent. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 32, T. 11 S., R. 3 E. Records available: 1947-48.

Jan. 6	20.92	July 7	23.77	Dec. 8	23.15
Apr. 6	10.32	Sept. 9	25.22		

Ve-78. J. F. Noel. Irregular sec. 14, T. 13 S., R. 3 E., 1.5 miles south of Perry. Records available: 1944-48.

Jan. 6	6.58	July 7	11.42	Dec. 8	9.92
Apr. 6	7.38	Sept. 9	10.92		

Ve-106. H. Dubois. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 12 S., R. 2 E. Records available: 1944-48. Jan. 6, 12.72; Apr. 6, 11.41; July 7, 16.13; Dec. 8, 15.27.

Ve-118. Henry High School. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 13 S., R. 4 E., in Henry. Records available: 1944-48. Jan. 6, 7.33; Apr. 6, 10.37; July 7, 9.70.

Ve-120. Erath Sugar Co. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 12 S., R. 4 E., in Erath. Records available: 1944-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	7.8	7.7	7.0	6.5	7.4	9.8	11.6	11.7	10.7	10.5	....	10.4
2	7.8	7.6	7.0	6.5	7.4	9.9	11.6	11.8	10.7	10.5	....	10.3
3	7.8	7.6	6.9	6.6	7.4	10.0	11.6	11.8	10.4	10.5	....	10.3
4	7.8	7.5	6.9	6.6	7.5	10.3	11.5	11.7	10.5	10.5	....	10.3
5	7.8	7.5	6.7	6.6	7.6	10.4	11.6	11.6	10.5	10.5	....	10.3
6	7.8	7.5	6.8	6.6	7.6	10.5	11.5	11.6	10.5	10.5	....	10.3
7	7.8	7.5	6.8	6.7	7.8	10.5	11.5	11.6	10.5	10.5	....	10.1
8	7.8	7.5	6.8	6.7	7.8	10.6	11.7	11.7	10.5	10.5	....	10.2

Ve-120--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
9	7.8	7.5	6.7	6.8	7.9	11.0	11.6	11.7	10.5	10.5	....	10.2
10	7.8	7.5	6.7	6.8	7.9	11.0	11.7	11.7	10.5	10.5	....	10.3
11	7.8	7.4	6.7	6.8	8.0	11.1	11.6	11.7	10.5	10.5	....	10.2
12	7.8	7.4	6.8	6.8	8.0	11.0	11.5	11.7	10.5	10.5	....	10.2
13	7.8	7.4	6.8	6.7	8.0	11.1	11.3	11.7	10.5	10.3	....	10.2
14	7.8	7.4	6.7	6.7	8.1	11.0	11.3	11.8	10.5	10.2	....	10.2
15	7.8	7.4	6.6	6.7	8.2	11.0	11.2	11.8	10.5	10.2	....	10.1
16	7.8	7.4	6.6	6.7	8.2	11.0	11.2	11.9	10.5	10.2	10.6	10.1
17	7.8	7.4	6.6	6.8	8.3	11.4	11.3	11.9	10.5	10.2	10.5	10.1
18	7.8	7.4	6.6	6.8	8.4	11.0	11.3	11.8	10.5	10.2	10.5	10.0
19	7.8	7.3	6.5	6.9	8.6	11.1	11.3	11.7	10.5	10.2	10.5	9.9
20	7.7	7.3	6.5	6.9	8.7	11.1	11.4	11.7	10.5	10.2	10.5	9.9
21	7.7	7.3	6.5	7.0	8.9	11.1	11.4	11.7	10.5	....	10.5	9.9
22	7.7	7.3	6.4	7.1	9.1	11.1	11.5	11.7	10.5	....	10.4	9.9
24	7.7	7.2	6.4	7.2	9.2	11.1	11.5	11.6	10.5	....	10.4	9.9
24	7.7	7.2	6.4	7.2	9.3	11.2	11.7	11.5	10.5	....	10.5	9.8
25	7.7	7.2	6.4	7.3	9.4	11.2	11.7	11.3	10.5	....	10.5	9.8
26	7.7	7.2	6.4	7.2	9.5	11.3	11.7	11.2	10.5	....	10.3	9.8
27	7.7	7.1	6.4	7.2	9.5	11.5	11.9	11.2	10.5	....	10.3	9.9
28	7.7	7.1	6.5	7.2	9.5	11.9	11.9	11.1	10.5	....	10.3	9.8
29	7.7	7.1	6.5	7.3	9.6	11.6	11.9	10.9	10.5	....	10.3	9.8
30	7.7		6.4	7.3	9.7	11.6	11.8	10.8	10.5	....	10.3	9.8
31	7.7		6.4		9.7		11.7	10.8		....		9.8

Ve-124. Dr. G. L. Gardiner. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 12 S., R. 2 W.
Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	10.26	July 8	21.45	Dec. 8	14.30
Apr. 8	8.31	Sept. 9	18.91		

Ve-125. Loffland Bros. Sec. 33, T. 11 S., R. 1 W. Records available: 1945-48. Sept. 9, 22.62.

Ve-126. Magnolia Petroleum Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, T. 12 S., R. 2 W.
Records available: 1945-48. Apr. 8, 8.60; July 9, 22.57; Sept. 8, 21.19;
Dec. 8, 15.69.

Ve-127. Loffland Bros. Southwest of Ve-125, sec. 33, T. 11 S.,
R. 1 W. Records available: 1945-48.

Daily noon water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	12.9	Feb. 29	8.3	Mar. 22	7.6	Apr. 13	8.2
2	12.9	Mar. 1	8.3	23	7.6	14	7.9
3	12.9	2	8.2	24	7.6	15	7.9
4	12.9	3	7.9	25	7.6	16	8.3
5	12.8	4	7.9	26	7.6	17	8.5
6	12.8	5	7.8	27	7.6	18	8.6
7	12.8	6	7.8	28	7.6	19	8.6
Feb. 14	8.8	7	7.8	29	7.6	20	8.7
15	8.8	8	7.8	30	7.5	21	8.8
16	8.8	9	7.8	31	7.4	22	8.9
17	8.8	10	7.8	Apr. 1	7.4	23	8.9
18	8.7	11	7.8	2	7.5	24	8.9
19	8.7	12	7.9	3	7.5	25	8.7
20	8.7	13	7.9	4	7.5	26	8.3
21	8.6	14	7.9	5	7.5	27	8.1
22	8.5	15	7.8	6	7.5	28	8.2
23	8.4	16	7.8	7	7.5	29	8.7
24	8.3	17	7.8	8	7.9	30	8.9
25	8.3	18	7.8	9	8.0	May 1	9.3
26	8.3	19	7.7	10	8.1	2	9.4
27	8.2	20	7.7	11	8.2	3	9.2
28	8.3	21	7.7	12	8.3	4	9.1

Ve-127--Continued.

Daily noon water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 5	7.3	Aug. 23	22.4	Sept. 6	20.3	Dec. 19	13.8
6	9.5	24	22.2	7	20.2	20	13.8
7	9.6	25	22.0	8	20.1	21	13.8
8	9.6	26	21.9	Dec. 8	14.4	22	13.8
July 9	a25.08	27	21.7	9	14.4	23	13.7
10	24.8	28	21.5	10	14.4	24	13.7
11	24.3	29	21.3	11	14.3	25	13.7
12	23.8	30	21.2	12	14.3	26	13.7
13	23.5	31	21.0	13	14.3	27	13.6
Aug. 18	a23.12	Sept. 1	21.0	14	14.2	28	13.5
19	23.1	2	20.8	15	14.2	29	13.4
20	23.0	3	20.7	16	14.1	30	13.4
21	22.8	4	20.5	17	14.0	31	13.4
22	22.6	5	20.5	18	13.9		

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Ve-128. Charles Stancil. NE $\frac{1}{4}$ sec. 33, T. 11 S., R. 1 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 8	14.84	July 8	28.48	Dec. 8	19.35
Apr. 8	6.80	Sept. 7	25.07		

Ve-129. J. D. Vondenstein. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 13 S., R. 2 W. Used drilled irrigation well, diameter 12 inches, depth 320 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 3.71 feet. Records available: 1948. Oct. 9, 14.04; Nov. 4, 10.19; Dec. 7, 11.19.

Ve-333. J. Herpin. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 35, T. 11 S., R. 1 E. Used drilled irrigation well, diameter 10 inches, depth 280 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 4.27 feet. Measuring point is 16.07 feet above mean Gulf level. Records available: 1948. Dec. 8, 20.56.

Ve-460. Acadia-Vermilion Rice Irrigation Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 13 S., R. 2 E. Used drilled irrigation well, diameter 9 $\frac{1}{2}$ inches. Measuring point, bottom edge of inclined discharge pipe, the distance from measuring point to land-surface datum along pipe being 2.46 feet. Measuring point is 11.09 feet above mean Gulf level. Records available: 1948. Dec. 8, 11.57.

Washington Parish

Wa-8. Vertrees Young. N $\frac{1}{2}$ irregular sec. 45, T. 3 S., R. 13 E. Records available: 1944-46. Measurements discontinued.

Webster Parish

Wb-2. City of Springhill. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 23 N., R. 11 W. Records available: 1947-48.

Feb. 6	156.11	June 3	158.12	Sept. 30	158.87
Mar. 31	155.99	30	167.02	Oct. 28	163.75

Wb-15. International Paper Co., Southern Kraft Division. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, T. 23 N., R. 11 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	113.16	June 30	113.97	Sept. 1	114.35	Oct. 28	114.76
Mar. 31	112.55	Aug. 2	113.94	29	114.40	Dec. 21	114.92
June 3	113.76						

Wb-27. International Paper Co. Southern Kraft Division. NE $\frac{1}{4}$ NW $\frac{1}{4}$
sec. 25, T. 23 N., R. 11 W. Records available: 1947-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	150.5	149.3	148.9	140.0	148.6	150.5	155.3	156.3	151.7	150.8	152.5
2	151.1	149.5	148.8	134.9	148.5	152.2	156.2	156.3	151.6	150.2	152.5
3	151.2	147.6	148.2	133.2	148.6	153.1	156.7	156.2	151.7	150.0	152.3
4	151.3	147.7	148.4	144.5	148.5	141.1	157.0	156.1	151.4	150.0	152.2
5	151.2	149.7	.....	145.9	148.6	139.3	157.2	156.1	151.3	146.0	152.3
6	151.1	151.0	.....	146.6	148.6	151.1	157.4	147.1	151.2	144.3	152.1
7	151.0	151.9	.....	147.3	148.5	153.7	157.4	143.8	151.4	143.5	152.0
8	151.1	152.6	.....	147.4	148.3	153.7	157.2	142.2	151.3	142.7	151.9
9	151.3	152.8	.....	147.4	148.3	155.8	157.0	141.7	151.3	141.8	152.3
10	151.6	153.3	.....	147.4	149.2	156.6	157.0	141.2	151.2	141.3	152.4
11	151.4	153.6	.....	147.5	149.9	157.1	156.9	140.8	151.1	141.6	152.0
12	151.2	153.6	.....	147.4	150.1	157.5	156.7	140.4	151.1	141.7	151.4
13	150.1	153.8	.....	147.7	146.7	157.7	156.4	140.1	151.0	139.7	141.2
14	149.8	153.6	.....	147.8	146.8	158.0	156.1	139.8	150.8	148.1	150.8
15	149.4	153.6	.....	147.8	146.8	157.2	156.0	139.6	150.8	148.8	150.7
16	149.1	167.8	.....	147.8	147.2	156.3	155.8	141.5	150.8	142.5	150.5
17	149.0	167.3	.....	147.8	147.0	156.0	155.8	149.9	150.8	141.8	150.6
18	149.6	.....	.....	147.8	147.3	156.0	155.4	151.0	150.6	139.5	150.4
19	149.4	.....	.....	147.7	147.3	155.9	155.9	151.5	150.7	143.2	150.5
20	149.4	.....	.....	147.8	146.7	155.8	156.5	151.7	150.7	149.0	150.4
21	149.4	.....	.....	147.1	147.2	155.7	156.8	151.9	151.0	149.9	150.1
22	149.7	.....	.....	147.5	147.4	155.6	156.9	151.9	151.1	150.6	150.1
23	150.1	.....	.....	147.6	147.5	155.5	157.0	151.9	151.2	151.1	149.7
24	149.5	.....	.....	147.7	147.5	155.7	157.0	152.0	151.2	151.3	149.5
25	149.3	.....	.....	148.0	147.3	155.5	156.8	152.1	151.2	151.3	149.5
26	149.4	.....	.....	148.5	147.3	155.5	156.6	152.2	151.1	151.5	157.2
27	149.2	.....	.....	148.6	147.3	155.3	156.5	151.9	151.0	151.8	150.8
28	149.0	.....	.....	148.6	147.3	155.2	156.5	151.9	151.0	152.0	150.0
29	149.1	.....	.....	148.7	147.3	155.4	156.5	151.7	150.9	152.1	149.7
30	149.2	.....	147.7	148.6	146.8	155.4	156.4	151.8	152.4	152.4	149.5
31	149.4	.....	.....	148.7	.....	155.3	156.3	.....	153.0	.....	149.5

Wb-91. International Paper Co., Southern Kraft Division. NE $\frac{1}{4}$ NW $\frac{1}{4}$
sec. 25, T. 23 N., R. 11 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	158.83	June 3	162.46	Aug. 2	157.63	Sept. 29	159.70
Mar. 31	152.93	30	164.36	Sept. 1	160.70	Oct. 28	162.54

Wb-95. International Paper Co. Southern Kraft Division. Records available: 1947-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	50.6	51.5	50.2	49.4	50.1	50.3	53.0	55.0	55.6	55.6	56.0	56.5
2	50.9	51.4	50.4	49.8	50.2	51.1	53.1	55.0	55.6	55.7	56.0	56.1
3	51.1	51.2	50.4	49.8	50.4	51.7	53.0	55.1	55.6	55.9	55.9	56.2
4	51.5	51.2	50.6	49.7	50.5	51.5	53.0	55.1	55.7	55.8	55.8	56.0
5	51.5	51.4	50.4	49.6	50.5	51.5	51.8	55.1	55.6	55.6	55.9	55.8
6	51.7	51.7	50.1	49.5	50.6	51.6	49.9	55.1	55.6	55.6	56.5	56.0
7	51.8	51.7	49.9	49.4	50.8	51.6	48.8	55.0	56.0	55.9	56.7	55.8
8	51.7	51.9	49.8	49.5	50.7	51.6	47.8	55.0	56.3	55.9	56.5	55.9
9	51.7	52.0	49.6	49.7	50.7	51.6	50.1	55.0	56.1	56.0	56.3	56.1
10	51.9	52.0	49.6	49.5	50.8	51.7	51.4	55.0	55.9	55.8	56.5	56.4
11	51.8	51.9	50.0	49.3	50.9	51.8	52.3	55.0	55.7	55.9	56.6	55.9
12	51.8	51.8	50.2	49.4	50.9	51.8	52.9	55.0	55.7	56.1	56.4	55.9
13	52.1	51.5	50.1	49.6	50.9	51.9	53.4	55.0	55.6	56.1	56.5	56.1
14	52.1	51.8	49.9	49.9	50.9	51.9	53.8	55.1	55.4	56.0	56.4	56.0
15	51.9	51.8	49.7	49.9	50.7	52.0	54.0	55.2	55.4	55.9	56.3	55.9
16	52.0	49.8	49.8	49.9	50.7	52.1	54.2	55.2	55.3	56.0	55.6	56.0
17	52.2	47.3	50.0	49.9	50.7	52.1	54.4	55.3	55.2	56.2	55.7	56.2
18	52.1	44.6	49.7	49.9	50.7	52.2	54.5	55.3	55.3	56.3	55.5	55.9
19	52.1	44.1	49.8	49.9	50.6	52.3	54.6	55.3	55.4	56.1	55.6	55.9
20	52.0	46.3	49.9	50.0	50.6	52.2	54.6	55.2	55.4	56.0	55.8	55.8

Wb-95--Continued.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	51.9	47.4	49.8	50.0	50.5	52.3	54.8	55.2	55.5	56.0	55.8	55.7
22	51.7	48.3	49.8	49.8	50.4	52.4	54.7	55.3	55.6	56.0	56.1	55.9
23	52.1	48.7	50.0	49.7	50.4	52.6	54.8	55.4	55.6	56.0	56.1	55.9
24	52.1	49.3	50.1	49.6	50.5	52.8	54.8	55.4	55.4	56.1	56.0	55.7
25	52.4	49.6	49.9	49.7	50.6	52.8	54.8	55.4	55.2	56.1	55.9	56.2
26	52.3	49.8	49.7	49.8	50.6	52.8	54.8	55.4	55.3	56.0	55.9	56.0
27	52.4	49.7	49.8	50.1	50.6	52.9	54.9	55.4	55.4	56.0	56.1	54.5
28	52.1	50.2	49.7	50.2	50.7	52.9	54.8	55.5	55.6	56.1	56.5	54.0
29	51.8	50.4	49.4	50.2	50.8	52.9	54.9	55.5	55.6	56.1	57.1	54.3
30	51.5		49.1	50.1	50.9	53.0	55.0	55.5	55.7	56.1	56.7	54.5
31	51.5		49.2		50.0		55.0	55.5		....		54.6

Wb-96. Town of Cotton Valley. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, T. 21 N., R. 10 W. Unused drilled oil-field supply well, diameter 6 inches, depth 183 feet. Measuring point, top of 6-inch casing, 3.00 feet above land-surface datum. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level
June 3	22.47	Aug. 2	23.35	Oct. 28	25.06
30	22.83	Sept. 1	24.40	Dec. 21	20.82

West Baton Rouge Parish

WBR-4. Town of Port Allen. Sec. 66, T. 7 S., R. 12 E., at Port Allen, about 40 feet north of municipal swimming pool. Records available: 1943-47. No measurements made in 1948.

WBR-5. Town of Port Allen. Sec. 66, T. 7 S., R. 12 E., at Port Allen, about 20 feet south of reservoir behind pumping plant. Records available: 1943-47. No measurements made in 1948.

WBR-23. Cinclare Sugar Refinery. Sec. 10, T. 8 S., R. 12 E., about 50 feet northeast of well 2 (WBR-6A). Records available: 1946. Measurements discontinued.

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 in 1948 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 made, 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 the Department of Agronomy, who has served as voluntary well observer since 1940, made 100 measurements of water level in 1948.

Measurements in an irrigation well at the Southwestern Cotton Substation near Tipton, Tillman County, started in 1944, were continued in 1948. 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, and 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; Comanche, Jackson, Kiowa, Roger Mills, and Washita Counties, begun in 1947; and Kay and Seminole Counties, begun in 1948. 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

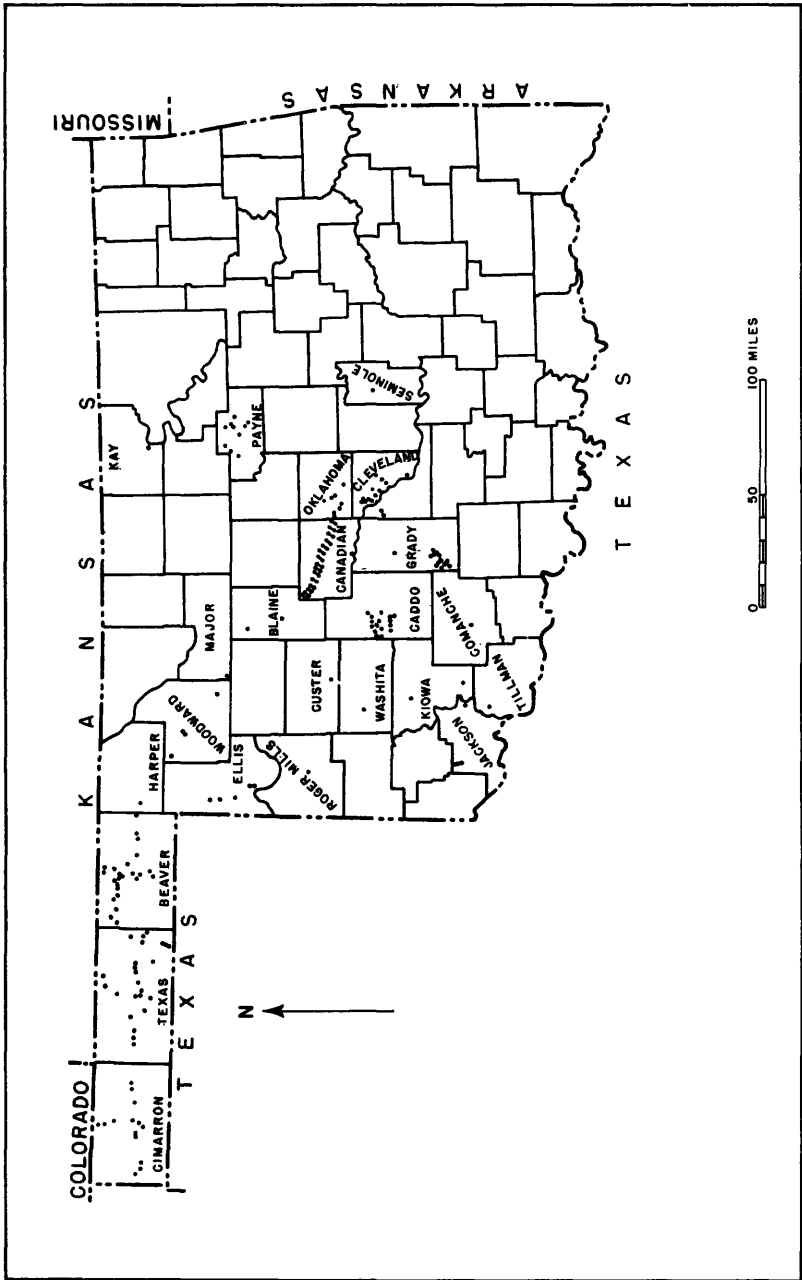


Figure 11.--Map of Oklahoma showing location of observation wells in 1948.

County, 886 and 939; North Canadian River Valley, 909; Canadian County, 947; 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, 1099. Kay and Seminole Counties are described in this report.

During 1948, a total of 1,316 tape measurements of water level was made in 184 wells, and automatic water-stage recorders were operated in 7 wells. Altogether, 207 wells are listed on pages that follow, including 21 that were added to the program during the year. Observations were discontinued in 2 wells after several measurements had been made, and in 10 others without measurements having been made. Six wells not measured in 1948 were retained. The number of wells on the active list at the end of 1948 was 194.

The frequency of measurement in the individual wells ranged in 1948 from once a year, as in most of the observation wells of the panhandle counties, to once a week, as in Cleveland County. Measurements were made monthly in the wells in Grady, Oklahoma, and Payne Counties. They were made monthly, also, in Caddo County until November, when several new wells were added and the frequency was changed to weekly. Most of the other wells were measured at irregular intervals.

An 8-page report entitled "Ground-water irrigation in the Duke area, Jackson and Greer Counties, Oklahoma," by Stuart L. Schoff, was published late in 1948 as Oklahoma Geological Survey Mineral Report 18.

PRECIPITATION

The average precipitation in the State of Oklahoma in 1948 was 31.88 inches, which was 1.01 inches below the 57-year average. Statewide, it was 97 percent of the 57-year average; in the eastern division, it was 100 percent; in the central division, 92 percent; in the western division, 91 percent. Despite this near approach to normal, the precipitation "was very unevenly distributed through the State and throughout the year. The panhandle counties and the extreme northwest, and local areas around Erick, Fairview, Geary, Okmulgee, and Vinita recorded annual amounts well above normal. In the southwestern part of the State, annual precipitation was only about 60 percent of normal. Much of south-central and southeastern Oklahoma also was deficient in rainfall for the year....The first 8 months

of the year as a whole were wet, especially February, March, June, and July, while the last 4 months of the year were extremely dry."^{1/}

At six stations in the panhandle counties for which records in 1948 are complete, the precipitation ranged from 12.94 inches (Regnier) to 25.37 inches (Lee Ranch, Guymon), and averaged 20.78 inches. Only two of these stations have records long enough to permit establishment of a "normal" annual precipitation. The departures from these normals were +7.08 inches at Goodwell and -0.23 inch at Kenton.

At 12 stations along the North Canadian River Valley from El Reno upstream to Supply the precipitation in 1948 ranged from 21.38 inches (Oakwood) to 34.40 inches (Geary), and averaged 25.90 inches. Departures from normal precipitation at eight of these stations ranged from -6.00 inches at Fort Reno to +10.87 inches at Supply.

In the vicinity of Oklahoma City and Norman, seven stations reported precipitation ranging from 27.24 inches to 34.45 inches. At the three stations for which normal annual precipitation has been established, the departures from normal ranged from -5.98 inches at Norman to +3.08 inches at Oklahoma City.

In Payne County, two stations reported total precipitation in 1948 as 31.64 and 32.78 inches. The departure from normal at Stillwater was -1.71 inches.

In the area underlain by the Rush Springs sandstone in Caddo and Grady Counties, the precipitation at three stations ranged from 19.49 inches (Carnegie) to 26.64 inches (Chickasha), and averaged 23.98 inches. Departures from normal ranged from -1.60 to -9.79 inches and averaged -4.98 inches.

Precipitation and departures from normal at other scattered stations in the vicinity of observation wells are given in the following table.

Annual precipitation and departures from normal at miscellaneous stations in Oklahoma, 1948

Station	Total precipitation (inches)	Departure from normal
Altus	a 16.35	.....
Altus dam	15.59	(b)
Arnett	a 20.86	.....
<u>Cheyenne</u>	24.68	-1.14

a Incomplete. One or more months missing.

b Normal not established.

^{1/} U. S. Dept. of Commerce, Weather Bureau, Climatological data, Oklahoma, Annual, vol. LVII, No. 13, 1948.

Annual precipitation and departures from normal at miscellaneous stations
in Oklahoma, 1948--Continued

Station	Total precipitation (inches)	Departure from normal
Clinton	22.00	-7.24
Frederick	23.30	-4.07
Lawton	24.16	-6.78
Lawton 2 N	23.53	(b)
Ponca City	32.15	+2.20
Ponca City (CAA)	30.29	(b)
Seminole	a 29.99	.....
Tipton	19.33	(b)
Union City	32.12	+4.47

a Incomplete. One or more months missing.

b Normal not established.

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 13 percent greater in 1948 than in 1947. The largest increase was about 50 percent at Felt. Pumpage increased about 32.5 percent at Terhoma and 18.5 percent at Guymon. The quantity of water pumped for irrigation and other uses by the Panhandle Agricultural and Mechanical College decreased about 43 percent, and this, coupled with small declines elsewhere, resulted in a decrease of about 4 percent for the area as a whole. Including the estimated pumpage of industries not supplied with water from municipal systems and pumpage for irrigation, the total for 1948 is 829,777,000 gallons, or about 2,546 acre-feet.

FLUCTUATIONS OF WATER LEVEL

Panhandle

Despite relatively dry weather during several preceding months, the amount of ground water stored in the principal water-bearing formations of the panhandle counties (Beaver, Texas, and Cimarron) was greater in May 1948 than at any time during the 10 years of record.

Measurements of water level in 51 observation wells were made about the middle of May, and an average, taking into account the relative importance of several different water-bearing formations, shows that the water stood about 0.5 foot higher than in October 1947, when the last previous measurements were made, and more than 3 feet higher than in November 1938, when the lowest level was recorded.

2 Total pumpage in 1947, as given in Water-Supply Paper 1099, is in error. Figures shown are for Texas County alone. Pumpage for entire area in 1947 was 868,073,000 gallons, or 2,664 acre-feet.

Over the period of record, the rise in water levels has been greatest in Cimarron County, where, however, the average for May 1948 was 0.05 foot lower than in October 1947. This decline is small and does not indicate the beginning of a persistent decline. On the contrary, it is traceable to the relatively low stage of water levels in observation wells tapping the alluvium. This aquifer occurs in only a small part of the area, and accordingly is given small weight in the average, but the water levels in it declined an average of nearly 3 feet between October and May, offsetting an average rise of 0.73 foot in the observation wells on the upland plains. Water levels in wells in alluvium in Oklahoma, 1944-48, are shown in figure 12.

The average for Texas County, which has shown the smallest rise during the period of record, was 0.24 foot above the previous high level and a total of 2.55 feet above the record low of November 1939. In the observation wells on the upland plains, the average of the water levels was the highest yet recorded, but for wells along the major streams the average was intermediate between the highest and lowest on record.

The average for Beaver County was nearly half a foot above the previous high level, recorded in April 1947. The average for wells in the northwestern part of the county exceeded the previous record by 0.31 foot, and the average for the southeastern part was 0.96 foot above the previous high level, but, as in the other two counties, the water levels in wells along the valleys were at intermediate stages.

The following tables summarize the average water levels for several groups of wells in the Oklahoma Panhandle. They are a continuation of the averages 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.

Average of water levels in groups of wells in the Oklahoma Panhandle,
in feet above assumed datum planes, 1947-48

Date	Beaver County			Texas County			Cimarron County		
	1	2	3	4	5	6	7	8	
Oct. 1947	103.29	101.12	101.83	102.41	99.03	100.85	103.21	100.21	
May 1948	*103.60	*102.49	102.42	*102.65	100.00	100.18	*103.62	100.79	

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 red beds.
3. Wells tapping water in alluvium.
4. Wells on uplands, tapping water in the Ogallala formation.
5. Well 294, tapping water in Triassic or Permian red beds.
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 alluvium.

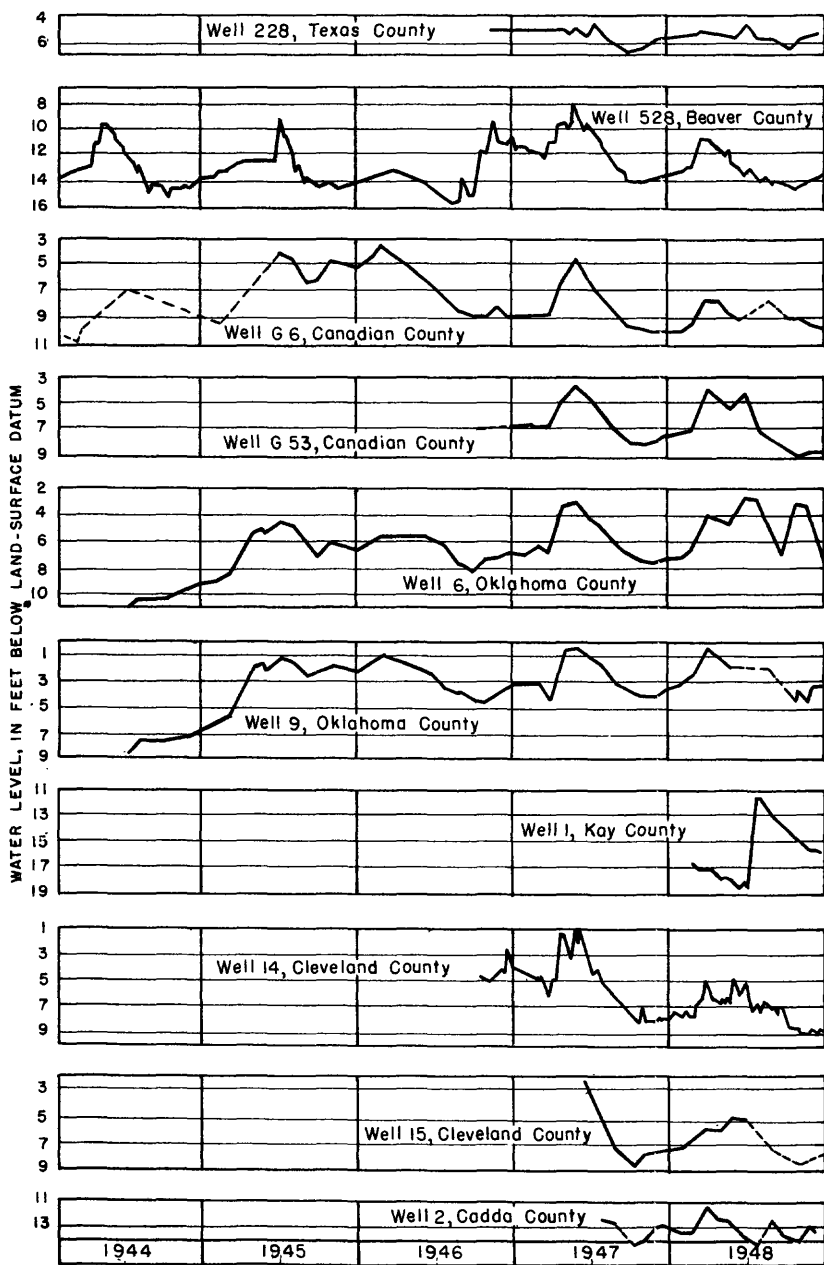


Figure 12.--Water levels in wells in alluvium, Oklahoma, 1944-48.

Weighted average of water levels in wells in the Oklahoma Panhandle, by counties, in feet above assumed datum planes, 1947-48

Date	Beaver ^{a/}	Texas ^{b/}	Cimarron ^{c/}	Average ^{d/}
Oct. 1947	102.60	102.26	102.91	102.59
May 1948	*103.20	*102.48	*103.33	*103.00

a Weighted average, in which wells in northwestern part of county represent 65 percent of the total area; wells in 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 the red beds (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 observation wells representing ground water along the North Canadian River Valley extend from the vicinity of Yukon, near the line between Oklahoma and Canadian Counties, upstream to Beaver. Some of them are close enough to the channel so that the water levels in them respond more or less promptly to stages of the river. In others, farther from the channel, the fluctuations are caused principally by variations in recharge to and discharge from the ground-water reservoir. In 1948 the number of measurements of water level ranged from 1 to 53 a well. Because of the diverse ground-water conditions represented and the wide range in the frequency of measurements in individual wells, the observed water-level fluctuations seem to follow no common pattern.

In three wells close to the channel, in Blaine and Major Counties, the highest recorded water level for the year occurred on May 17. In two of these wells the lowest recorded level occurred on February 23, but in the other it came on October 7.

In the two wells in Woodward County that are near the channel, the highest recorded level for the year occurred on February 23, but the lowest levels came 5 months apart--May 17 and October 7.

The other two wells near the channel are in Canadian County. One is affected by nearby heavy pumping, and in it the highest recorded water level occurred in March and the lowest in January. In the other well, the highest water level came in October and the lowest in February.

In wells farther from the channel, the highest recorded water levels occurred as follows: In April, four wells; in May, one well; in July, one well; in October, three wells. For the same group of wells, the lowest

recorded water levels occurred as follows: In February, six wells; in January, two wells; and in October, two wells.

Compared with the preceding year, the water levels in most of the wells were higher in October 1948 by amounts ranging from 0.07 foot to 2.45 feet. In two wells, however, they were 0.31 foot and 1.43 feet lower than in 1947.

The most complete record of ground-water fluctuations in the alluvium of the North Canadian River is that of Beaver County well 528, which was measured 53 times. Canadian County wells 1 and G6 were measured 14 times each, and Canadian G52a was measured 10 times. Hydrographs for Beaver County well 528 and Canadian County G6 appear in figure 12.

Canadian River Valley

In three wells tapping water in the alluvium of the Canadian River Valley, the lowest recorded stages occurred about November 1, but the highest levels appear to have come first in upstream areas. Near Union, in Canadian County, the highest recorded water level in a well measured monthly occurred in March. Near Norman and Lexington, which are 25 and 40 miles, respectively, farther downstream, the highest was in May (Canadian G53, Cleveland 14 and 15--see fig. 12). The water levels ranged through 3.61, 4.51 and 5.08 feet, and at the end of the year they were 0.80 foot, 0.92 foot, and 1.13 feet lower than in late December 1947, the average annual decline being 0.95 foot.

Washita River Valley

The five observation wells in the alluvium of the Washita River Valley were not all measured with the same frequency, and therefore no simple average of water levels is possible. In a well near Cheyenne, which is the well farthest upstream, the recorded highest level occurred in February and the lowest in October. The range of fluctuations for the year was 1.44 feet, and the annual net change was a rise of 0.63 foot.

In a well near Clinton (Custer 1) the highest recorded stage was in January, but higher stages during the spring may have passed unnoticed due to lack of measurements between February and October. The range in water-level fluctuation during the year was 1.56 feet, and the net annual change--from October 1947 to October 1948--was a decline of 2.05 feet.

In a well near Carnegie, the highest recorded water level occurred on May 4, the lowest occurred twice--on September 25 and October 27--and the range for the year was 2.95 feet. In a well near Fort Cobb, the highest recorded water level came on March 30 and the lowest on July 26, the range for the year being 2.94 feet (fig. 12, Caddo 2). The net annual changes in these two wells were declines of 0.25 foot (Fort Cobb) and 1.34 feet (Carnegie).

In a well north of Chickasha, the water level declined 2.84 feet from the initial measurement of July 1 to December 28, with only one small short-lived rise that was recorded on November 23.

Caddo County

Only one well tapping water in the Rush Springs sandstone of Caddo County was measured throughout the year. The water level in it fluctuated through a range of 2.79 feet, the highest recorded stage occurring on March 30 and the lowest on June 30. Measurements begun late in March in four other wells tapping the same aquifer showed water-level fluctuations ranging from 2.25 to 3.59 feet. Measurements were begun, also, in nine wells later in the year, and most of them were measured weekly during November and December, but the records are too short to permit drawing conclusions.

Although the Rush Springs sandstone is considered a water-table aquifer, the fluctuations of ground-water level in it seem to be due in large measure to changes in barometric pressure, as is true of artesian aquifers. During a 5-day period in May, a microbarograph was operated near Caddo County well 11, in which an automatic water-stage recorder provided a continuous record of the ground-water level. When converted to the amplitude of a barometer using water instead of mercury and inverted, the barometric fluctuations closely resemble the fluctuations of the hydrograph, except that the vertical range is somewhat greater.

Likewise, the hydrographs for wells 11 and 14 for the period December 24-30 are strikingly similar even in small details, although the two wells are 8 miles apart. As no heavy pumping was in progress anywhere in the area and no precipitation had occurred for several weeks, changes in barometric pressure seem to offer the only plausible explanation for the close similarity of the hydrographs. The Rush Springs sandstone is very fine-

grained, and pressure changes doubtless move much more speedily down wells than through the interstices of the rock. The result is a pressure differential between the water in the well and that in the rock, which is equalized by the movement of a small quantity of water from the well into the rock or vice versa. This movement appears as a rise or fall of the water level in the well. It is probably significant that in well 14, where the depth to water is 38 feet, the fluctuations of water level were only about half as great as in well 11, where the depth to water is 54 feet. In other words, the greater the thickness of unsaturated rock over the water table the more the changes in barometric pressure are retarded and the greater the resulting affect on the observed water level.

Wells in Caddo County that tap water in alluvium are discussed under the heading "Washita River Valley."

Canadian County

Most of the observation wells in Canadian County tap water in the alluvium of the North Canadian River. They are considered separately from the group discussed elsewhere under the heading "North Canadian River Valley" because they would obscure the fluctuations in the less numerous, more widely spaced wells farther upriver.

Between late December 1947 and late April 1948 the water levels in 29 wells³ rose by amounts ranging from 0.10 foot to 3.98 feet, and in 5 wells they declined from 0.04 to 0.58 foot. The average for 34 wells was a rise of 0.79 foot.

From April to October 1948, the water levels in 17 wells rose by amounts ranging from 0.02 foot to 1.25 feet, while in 18 wells they declined from 0.04 foot to 3.52 feet, the average change in 35 wells being a decline of 0.49 foot.

The final measurements for 1948 in most of the Canadian County wells were made in October. As comparable measurements were not made in the preceding October, the nearest approach to a net annual change is obtained by comparing them with the water levels in December 1947. During the approximately 10 months of this comparison, the net change of water level in 19 wells was a rise ranging from 0.19 foot to 1.92 feet, while in others it was a decline ranging from 0.03 foot to 1.12 feet. The average change in 30 wells in the alluvium of the North Canadian River was a rise of 0.30 foot.

³ Canadian County well 2 is not considered because the water level in it was affected by pumping in nearby wells of El Reno.

The record for Canadian County well G53 is considered under the heading "Canadian River Valley."

Cleveland County

Cleveland County well 1 penetrates a thin terrace deposit of low permeability that occasionally is entirely dry, and it enters the underlying Hennessey shale, which is the sole contributing aquifer when the water declines below the 14-foot level. The water level fluctuates in response to natural causes, and promptly reflects precipitation after the soil has been saturated. The 48 measurements made in the well during 1948 show a range of 6.80 feet in water level, but the final water level of the year, which also was the lowest for the year, was only 0.01 foot lower than at the end of December 1947. The highest recorded level occurred on June 30, when the water was only 3.24 feet below the land surface, but it promptly declined 2.12 feet in 9 days.

In the eight observation wells tapping water in sandstones of the Garber and Wellington formations, the fluctuations of water level during the year ranged from 3.29 to 49.73 feet and averaged 17.26 feet. Although minimum stages in all but one well occurred in autumn (October-December), the maximum stages were distributed irregularly through the first 6 months of the year. At the end of December the water levels in all of these wells showed net declines for the year ranging from 0.04 foot to 43.29 feet and averaging 11.57 feet. The largest decline occurred in an unused well near one of the public-supply wells of Noble, and the second and third largest were in wells near the center of heavy pumping in Norman. The least decline occurred in a well northwest of Norman near the edge of the area affected by heavy municipal pumping.

Fluctuations of water level in wells 14 and 15 are discussed under the heading "Canadian River Valley."

Comanche County

Only two measurements of water level were made in Comanche County well 2, and these differed by only 0.09 foot. Measurements have been discontinued in well 1 because the well is being pumped.

Ellis County

In two wells on the uplands of Ellis County, which tap water in Tertiary rocks, the water levels in October 1948 were 0.02 and 0.55 foot

higher than in the same month of the preceding year. In one well tapping water in the alluvium of Wolf Creek, the water level in October 1948 was 0.42 foot higher than on a comparable date in 1947.

Grady County

Water levels in from nine to 11 wells tapping water in the Rush Springs sandstone of Grady County were measured monthly in 1948. The average of the water levels reached the highest recorded stage for the year on March 31, but was only 0.09 foot lower on August 30. Declining thereafter to the end of the year, it reached a stage on December 21 that was 2.34 feet lower than in December of the preceding year.

Fluctuations of water level in well 76, which taps water in alluvium, are discussed under the heading "Washita River Valley."

Jackson County

In Jackson County well 1, which is in the alluvium of the North Fork of Red River, the water level in June 1948 was 0.74 foot lower than in June 1947.

Kay County

Kay County is near the middle of the northern row of Oklahoma counties, bounded on the north by the State of Kansas, on the east by Osage County, on the south by Noble County, and on the west by Grant County. The Arkansas River flows southward through the eastern part of the county. Approximately the southern half of its course in Kay County constitutes the boundary with Osage County. Salt Fork enters the county near the southwestern corner and joins the Arkansas at the southeastern corner. The Chikaskia River, a tributary of Salt Fork, drains approximately the western half of the county.

The bedrocks of Kay County are shale, limestone, sandstone and gypsum, of Pennsylvanian and Permian age.⁴ These beds are mostly fine-grained and relatively impermeable, and although they may yield enough water for stock and domestic purposes, they are not likely to yield supplies of water large enough for municipal or industrial use. Gypsum is soluble, and where it is present the ground water may contain high concentrations of calcium sulfate.

⁴ Clark, G. C., and Cooper, C. L., Oil and gas in Oklahoma, Kay, Grant, Garfield, and Noble Counties: Oklahoma Geol. Survey Bull. 40-H, pp. 8-9, 1927; also, Bull. 40, vol. II, pp. 68-69, 1930.

Alluvium underlies the bottom lands along the major streams and in favorable locations will yield water freely to wells. A well in the municipal well field at Ponca City, in the alluvium of the Arkansas River, is reported to yield 1,700 gallons a minute. Use of the water from alluvium is limited by high mineral content rather than by low yields. Areas of terrace deposits at Ponca City, at Blackwell, and north of Blackwell, may be moderately good aquifers but specific information about them is lacking.

Measurements of water level were made weekly in Kay County well 1, which taps water in the alluvium of the Arkansas River, beginning early in February. The highest recorded stage for the year occurred on July 29, and the lowest on June 17, the difference being 6.79 feet (fig. 12). As the well is in the municipal well field of Ponca City, subject to effects of pumping in nearby wells, and itself is pumped at times, the fluctuations of water level are, in part, a response to fluctuations in pumping. The long-term trends, however, indicate variations in recharge and discharge.

Kiowa County

Water levels in two observation wells in Kiowa County were measured in June. Compared with the stages recorded in June and July of the preceding year, the water levels in 1948 were 0.81 and 0.20 foot higher.

McClain County

In McClain County well 2, which taps water in the Hennessey shale, five measurements in 1948 show the highest stage occurring on July 1 and the lowest on February 27. The range in fluctuation was 8.46 feet.

Well 3 taps water in fine-grained sandstone tentatively correlated with the Duncan sandstone. The two water-level measurements made in the well show a decline of 0.26 foot between April 9 and December 28.

Oklahoma County

Oklahoma County wells 1-4 tap water in the Garber and Wellington formations, and in all of them the water-level fluctuations caused by seasonal variations in pumping in nearby wells obscure those due to natural causes.

In well 4 the highest stage for the year was recorded on January 17; in wells 1 and 3 it was on May 24; and in well 2 it was on December 27. The lowest recorded stages show no unanimity. In well 4, the lowest stage came on June 19; in well 2, July 2; in well 3, August 30; and in well 1, December 27. The recorded fluctuations of water level ranged in

amplitude from 8.42 to 29.84 feet, and averaged 22.48 feet. The net change during 1948 was a decline of 3.42 feet in well 1 and 7.57 feet in well 4, but in wells 2 and 3 it was a rise of 7.91 feet and 0.84 foot, respectively. The average net change for the four wells was a decline of only 0.56 foot.

Wells 6-9 tap water in the alluvium of the North Canadian River. Peak levels were recorded in wells 7, 8, and 9 on March 30, but in well 6 the peak came on July 2 (see fig. 12). As well 6 was the only well measured in July, it is probable that the January levels were not the true maximum stages in the other three wells. The lowest recorded levels for the year came on January 28 in wells 6, 7, and 8, but on November 26 in well 9 (see fig. 12). The amplitude of the fluctuations ranged from 3.22 to 4.62 feet and averaged 3.82 feet, and at the end of the year all four wells showed a net rise ranging from 0.11 to 0.34 foot and averaging 0.21 foot.

Wells 10-12 are in a terrace deposit near Bethany that is tapped for both municipal and industrial water supplies, but the water levels in the observation wells respond principally to the shifting balance of natural recharge and discharge. In 1948 the water-level fluctuations ranged from 0.89 foot to 3.44 feet and averaged 2.01 feet. In two of the wells the net annual changes were declines of 0.13 and 0.17 foot, but in the other a negligible net rise of 0.01 foot was recorded. The average annual net change in the three wells was a decline of about 0.10 foot.

Payne County

(Stillwater Creek Basin)

The observation wells in Payne County were measured near the end of each month, except in February. The average of the water levels in seven wells fluctuated through a range of 1.38 feet. The highest stage for the year was recorded in July and the lowest stage was recorded twice, in January and December. At the end of the year the average was 0.53 foot lower than at the end of the preceding year.

Seminole County

Seminole County is somewhat southeast of the middle of Oklahoma. It is bounded by Okfuskee, Hughes, Pontotoc, and Pottawatomie Counties. Its northern and southern boundaries are the North Canadian River and the Canadian River, respectively, and it is crossed from east to west by Little River and Wewoka and Salt Creeks.

5

As described by Levorsen,⁵ the bedrocks underlying the surface in Seminole County are shale, sandstone, conglomerate, and limestone, of upper Pennsylvanian age. Beds of sandstone in the Vamoosa formation crop out in the eastern part of the county and there receive recharge from precipitation. They dip westward and in the vicinity of the city of Seminole the water in them is under artesian pressure. It is of good quality and is tapped by wells for municipal and industrial purposes.

Terrace deposits of Quaternary age overlie the Pennsylvanian rocks in two small areas totaling several square miles each near Sasakwa and Konawa in the southern part of the county, and alluvium underlies the bottom lands along the main streams. The ground-water resources in these deposits have not been evaluated, although it is known that much of the ground water in the alluvium has been rendered unfit for most uses by the disposal of oil-field brines in drainage courses.

A water-stage recorder was operated in Seminole County well 1 from February 19 to the end of the year. The well taps water in the sandstones of the Vamoosa formation, and the water level appears to be affected by pumping in the area, perhaps principally from the Seminole municipal wells. The daily range in water level generally has been 1 foot or more. The lowest daily water level, which is the level tabulated elsewhere in this report, reached the highest stage for the year on June 22 and the lowest on September 28, the range being 5.04 feet. The water level at the end of December was 0.53 foot higher than at the beginning of the record.

Tillman County

The water level in the irrigation well at the Southwestern Cotton Substation, near Tipton, fluctuated through a range of 3.19 feet during 1948, and at the end of the year was 2.54 feet lower than at the end of 1947. The water level was highest on July 5, but a level only 0.01 foot lower had been recorded on March 29. These high levels seem clearly to have been a response to relatively heavy precipitation in March (2.40 inches) and June (6.08 inches). The precipitation in July and August totaled only 3.46 inches, and by August 16 the water level had declined 1.23 feet due to natural causes. Between August 17 and September 9, about 8.7 acre-feet of water was pumped for irrigation, and by September 13 the water level had

⁵ Levorsen, A. I., Oil and gas in Oklahoma, geology of Seminole County: Oklahoma Geol. Survey Bull. 40-BB, p. 9, 1928; also, Bull. 40, vol. III, p. 291, 1930.

declined an additional 1.31 feet. September was without precipitation, October and November brought 1.42 inches and 0.33 inch, respectively, and December only a trace, the total for the 4 months being 1.75 inches. By November 22 the water level had declined 0.64 foot from the level recorded at the end of the pumping. Thereafter until the end of the year, the water level fluctuated through a range of only 0.02 foot, the lowest level being recorded on December 20.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Several errors of typographical origin, principally in the legal descriptions of the wells, have crept into recent water-supply papers. These are corrected on pages that follow, and affect Canadian County wells 13 and G7; Cimarron County wells 129, 262, and 610; and Grady County well 7.

Beaver County

253. 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. Records available: 1946-48. May 18, 9.11.

275. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 2 N., R. 24 E. Records available: 1946-48. May 18, 76.44.

401. T. T. Yarnold. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 7, T. 3 N., R. 24 E. Records available: 1938-48. May 18, 88.35.

417. Ralph Ridgeway. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 3 N., R. 25 E. Records available: 1938-48. May 18, 10.63.

432. George H. Button. NW $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, T. 3 N., R. 26 E. Records available: 1938-47. No measurements made in 1948.

433. Federal Land Bank. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 3 N., R. 26 E. Records available: 1938-48. May 18, 38.61.

518. Pete Sanders Estate. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, T. 4 N., R. 23 E. Records available: 1938-48. May 18, 36.72.

523. Frances M. Hancock. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 24, T. 4 N., R. 24 E. Records available: 1938-48. May 18, 21.83.

527. Mrs. Ellen F. Williams. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, T. 4 N., R. 24 E. Records available: 1938-48. May 18, 42.64.

528. Southwestern Public Service Co. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 7, T. 4 N., R. 24 E. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	13.53	Apr. 9	10.80	July 9	12.98	Oct. 8	14.32
9	13.48	16	10.90	16	13.34	15	14.40
16	13.44	23	11.28	23	13.57	22	14.44
23	13.40	30	11.51	30	13.80	29	14.40
30	13.38	May 7	11.74	Aug. 6	13.88	Nov. 5	14.28
Feb. 6	13.28	14	12.11	13	13.86	12	14.11
13	13.07	21	11.53	20	13.65	19	14.07
20	12.82	29	12.55	27	13.82	26	13.92
26	12.90	June 4	12.65	Sept. 3	13.90	Dec. 3	13.82
Mar. 5	12.03	11	12.86	10	13.98	10	13.76
12	11.28	18	13.19	17	14.11	17	13.69
19	10.82	25	13.36	24	14.24	24	13.65
26	10.73	July 2	13.28	Oct. 1	14.28	31	13.57
Apr. 2	10.69						

576. J. C. Peters. $SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ sec. 2, T. 5 N., R. 20 E. Records available: 1938-48. May 19, 157.21.

577. George Loepp. $NE\frac{1}{4}NE\frac{1}{4}SE\frac{1}{4}$ sec. 19, T. 5 N., R. 20 E. Records available: 1938-48. May 19, 135.36.

591. A. J. Isaac. $SE\frac{1}{4}SE\frac{1}{4}SE\frac{1}{4}$ sec. 12, T. 5 N., R. 21 E. Records available: 1938-48. May 18, 189.94.

593. Ada Allred. $SE\frac{1}{4}SE\frac{1}{4}SE\frac{1}{4}$ sec. 17, T. 5 N., R. 21 E. Records available: 1938-48. May 18, 170.74.

612. Clarence Lamaster. $SW\frac{1}{4}SE\frac{1}{4}$ sec. 26, T. 4 N., R. 22 E. Records available: 1941-48. Feb. 3, 12.95; May 18, 11.07; Oct. 8, 10.90.

613. T. J. Trew. $SE\frac{1}{4}SE\frac{1}{4}SE\frac{1}{4}$ sec. 13, T. 5 N., R. 22 E. Records available: 1938-48. May 18, 62.19.

614. Mrs. B. W. Lewis. $SW\frac{1}{4}SE\frac{1}{4}SE\frac{1}{4}$ sec. 14, T. 5 N., R. 22 E. Records available: 1938-47. No measurements made in 1948.

617. 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. Records available: 1938-48. May 19, 167.18.

631. George W. Dubois. $SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ sec. 4, T. 5 N., R. 23 E. Records available: 1938-48. May 18, 106.55.

635. A. E. Shillingburg. $NW\frac{1}{4}NE\frac{1}{4}NW\frac{1}{4}$ sec. 25, T. 5 N., R. 23 E. Records available: 1938-48. May 18, 57.69.

647. Gilbert Hodges. $SW\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$ sec. 8, T. 5 N., R. 24 E. Records available: 1938-48. May 18, 48.33.

649. Arthur Williams. $NW\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$ sec. 30, T. 5 N., R. 24 E. Records available: 1938-48. May 18, 6.04.

767. Robert F. LeCrone. $SE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$ sec. 24, T. 6 N., R. 23 E. Records available: 1938-48. May 18, 63.64.

777. J. H. Neese. $NW\frac{1}{4}SW\frac{1}{4}SE\frac{1}{4}$ sec. 20, T. 6 N., R. 24 E. Records available: 1938-48. May 18, 17.09.

Blaine County

1. Oklahoma City Water Department. $NE\frac{1}{4}$ sec. 27, T. 16 N., R. 12 W. Records available: 1940-48. Feb. 28, 6.41; May 17, 6.14; Oct. 7, 6.64.

2. Oklahoma City Water Department. Near NE corner sec. 9, T. 18 N., R. 13 W. Records available: 1940-48. Feb. 23, 7.80; May 17, 6.35; Oct. 7, 6.99.

Caddo County

1. P. C. Haun. $NW\frac{1}{4}NW\frac{1}{4}$ sec. 2, T. 7 N., R. 12 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	48.40	June 30	50.72	Nov. 11	49.21	Dec. 10	48.91
Feb. 25	48.60	July 26	49.16	18	48.89	18	49.09
Mar. 30	47.93	Sept. 1	49.00	26	49.16	24	49.20
Apr. 27	48.68	25	49.29	Dec. 4	49.04	30.	49.48
May 22	48.73	Oct. 27	49.03				

2. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 11, T. 7 N., R. 12 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	13.29	May 22	12.33	Sept. 1	12.28	Nov. 18	12.96
Feb. 25	13.25	June 9	12.98	25	13.42	26	12.65
Mar. 30	11.19	30	13.68	Oct. 27	13.93	Dec. 4	13.09
Apr. 27	12.22	July 26	14.13				

3. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 3, T. 7 N., R. 13 W. Records available: 1947-48.

Jan. 2	14.80	June 9	15.31	Sept. 1	15.92	Nov. 18	15.95
Feb. 25	14.36	30	14.10	25	16.65	26	16.10
May 4	13.70	July 26	14.39	Oct. 27	16.65	Dec. 4	16.14
22	14.89						

4. James Avery. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 8 N., R. 12 W. Drilled domestic well, diameter 6 inches, depth 348 feet, used occasionally. Aquifer, Rush Springs sandstone. Drilled to a depth of 506 feet and flowed at the surface; plugged back to stop the flow. Records available: 1948.

Mar. 24	15.12	July 26	17.58	Nov. 11	18.71	Dec. 10	18.44
Apr. 27	16.59	Sept. 1	18.14	18	18.56	17	17.92
May 22	17.29	25	15.48	26	18.68	24	18.58
June 30	17.24	Oct. 27	16.00	Dec. 4	18.53	30	18.57

5. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 9 N., R. 12 W. Unused drilled well, diameter 8 inches, depth 29 feet, in area of rolling topography. Aquifer, Rush Springs sandstone. Records available: 1948.

Mar. 30	14.95	July 26	16.46	Nov. 11	16.60	Dec. 10	15.70
Apr. 27	15.12	Sept. 1	16.71	18	16.38	17	16.16
May 22	15.33	25	17.20	26	16.35	24	16.15
June 30	15.74	Oct. 27	16.78	Dec. 4	16.19	30	16.14

6. MacNalley. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 19, T. 9 N., R. 12 W. Drilled domestic well, diameter 8 inches, depth 62.5 feet, in area of gently rolling topography. Aquifer, Rush Springs sandstone. Records available: 1948.

Mar. 30	48.50	July 26	49.84	Nov. 11	49.58	Dec. 10	49.30
Apr. 27	49.35	Sept. 1	50.10	18	49.39	17	49.56
May 22	49.38	25	50.38	26	47.73	24	49.64
June 30	49.27	Oct. 27	50.50	Dec. 4	49.44	30	49.68

7. Clark Mooter. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 21, T. 9 N., R. 12 W. Drilled domestic well, diameter 8 inches, depth 40 feet, at base of bluff near edge of alluvium. Aquifer, Rush Springs sandstone. Records available: 1948.

Mar. 30	14.05	July 26	14.84	Nov. 11	15.09	Dec. 10	14.79
Apr. 27	14.08	Sept. 1	15.01	18	14.99	17	14.72
May 22	14.16	25	16.39	26	14.91	24	14.69
June 30	14.63	Oct. 27	16.60	Dec. 4	14.94	30	14.63

9. MacNalley. SE $\frac{1}{4}$ sec. 19, T. 9 N., R. 12 W. Unused drilled well, diameter 6 inches, depth 45.6 feet, in area of rolling topography. Aquifer, Rush Springs sandstone. Automatic water-stage recorder in operation from Apr. 30 through June 3. Records available: 1948.

Apr. 27	a 27.47	May 10	27.53	May 22	27.45	Sept. 25	a 28.36
30	27.47	11	27.54	25	27.49	Oct. 27	a 28.15
May 1	27.52	12	27.54	26	27.49	Nov. 11	a 28.25
2	27.54	13	27.53	29	27.44	18	a 28.02
3	27.53	16	27.46	30	27.46	26	a 28.15
4	27.52	17	27.47	31	27.45	Dec. 4	a 28.98
5	27.52	18	27.47	June 1	27.44	10	a 27.80
6	27.64	19	27.48	2	27.43	17	a 27.07
7	27.51	20	27.47	3	27.40	24	a 28.14
8	27.46	21	27.44	Sept. 1	a 29.05	30	a 28.22
9	27.50						

a Tape measurement.

10. Joe Dees. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 9 N., R. 12 W. Unused drilled well, diameter 6 inches, depth 41.8 feet, in an area of rolling topography. Aquifer, Rush Springs sandstone. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 4	23.89	Sept. 1	24.38	Nov. 18	24.72	Dec. 18	24.88
22	23.94	25	24.65	26	24.80	24	24.91
June 30	24.16	Oct. 27	24.75	Dec. 4	24.77	30	24.88
July 26	24.16	Nov. 11	24.04	11	25.71		

11. Indian land, Ed S. Prather, tenant. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 11, T. 8 N., R. 12 W. Unused drilled well, diameter 9 inches, depth 201 feet, on an upland flat. Supplied about 1,500 barrels of water a day during drilling of oil-test well. Aquifer, Rush Springs sandstone. Automatic water-stage recorder maintained from May 6 to the end of the year. Records available: 1948.

Lowest daily water level, from recorder charts

Day	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	54.07	.....	54.08	54.19	54.21	53.94
2	.....	.....	54.03	.....	54.04	54.26	54.29	54.12
3	.....	a 54.09	53.98	.....	53.99	54.23	53.72	54.12
4	.....	54.00	53.99	.....	53.98	54.10	53.80	53.90
5	.....	54.09	54.04	.....	53.99	53.86	54.08	54.20
6	a 53.83	54.17	54.01	.....	53.93	54.30	54.26	54.11
7	53.92	54.24	53.96	.....	54.04	a 54.30	54.10	54.25
8	53.60	54.24	53.97	.....	54.22	54.25	54.00	54.20
9	53.89	54.11	54.00	.....	a 54.18	54.12	54.05	54.50
10	54.00	a 54.01	53.96	.....	54.15	54.13	54.01	54.43
11	54.00	54.02	53.90	.....	54.06	54.28	a 54.07	53.86
12	54.00	53.88	53.93	a 53.89	54.06	54.29	54.20	54.17
13	53.93	53.97	54.00	53.96	54.20	54.14	54.21	54.10
14	53.82	53.91	.....	54.03	54.24	54.25	54.09	54.04
15	53.83	53.94	a 53.98	54.05	54.16	54.11	54.04	54.22
16	53.92	54.02	54.04	54.05	a 54.16	54.51	54.13	54.29
17	53.91	53.88	54.01	54.03	54.20	54.61	54.11	54.21
18	53.90	54.03	53.98	54.03	54.10	54.34	53.91	54.00
19	53.96	54.16	53.94	54.00	54.04	54.10	54.02	54.13
20	53.91	53.93	53.90	53.95	54.05	54.18	53.99	53.94
21	.....	53.85	53.93	54.02	54.03	a 54.23	54.21	54.27
22	.....	54.00	54.02	54.03	54.00	54.26	54.21	54.27
23	.....	54.16	54.08	54.06	54.07	54.33	53.93	54.12
24	.....	54.19	54.02	53.99	54.25	54.27	53.92	54.37
25	.....	53.98	53.90	53.95	54.39	54.21	54.03	54.60
26	.....	53.96	53.95	54.02	54.37	54.18	54.10	54.40
27	.....	54.03	53.95	54.07	54.22	54.15	54.00	54.02
28	.....	54.01	53.91	54.10	54.12	54.19	54.49	54.23
29	.....	54.06	53.91	54.10	54.06	54.14	54.32	54.49
30	.....	54.05	.....	54.00	54.07	54.12	54.19	54.46
31	.....	.....	54.03	.....	54.20	.....	54.33	54.33

a Tape measurement.

12. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, T. 7 N., R. 12 W. Drilled domestic well, diameter 6 inches, depth 32 feet, in area of rough topography. Aquifer, Rush Springs sandstone. Records available: 1948.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 19	19.59	Sept. 25	22.36	Nov. 26	21.19	Dec. 18	21.11
June 30	20.75	Oct. 27	21.95	Dec. 4	21.24	24	21.24
July 26	14.17	Nov. 18	21.25	10	21.13	30	21.24
Sept. 1	17.15						

14. Geological Survey, U. S. Dept. of Interior. SE. corner sec. 28, T. 9 N., R. 13 W. Unused drilled well, diameter 8 inches, depth 335 feet, in area of gently rolling topography. Aquifer, Rush Springs sandstone.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 1	a 36.00	Nov. 26	36.35	Dec. 3	36.28	Dec. 26	36.60
Oct. 26	a 36.17	27	36.31	4	a 36.28	27	36.42
Nov. 11	a 37.31	28	36.38	11	a 36.20	28	36.54
18	a 36.21	29	36.38	18	a 36.31	29	36.62
23	36.31	30	36.32	24	36.62	30	36.60
24	36.31	Dec. 1	36.32	25	36.66	31	36.61
25	36.32	2	36.28				

a Tape measurement.

15. Owner unknown. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 7 N., R. 12 W. Unused drilled well, diameter 6 inches, depth 30 feet, in area of rolling topography. Aquifer, Rush Springs sandstone. Records available: 1948.

Nov. 18	19.75	Dec. 4	19.79	Dec. 18	19.80	Dec. 30	19.83
26	19.78	10	19.83	24	19.81		

16. Joe Dees. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 30, T. 9 N., R. 12 W. Unused drilled well, diameter 6 inches, depth 37 feet. Aquifer, Rush Springs sandstone. Records available: 1948.

Nov. 18	28.14	Dec. 4	28.05	Dec. 18	27.99	Dec. 30	27.94
26	26.77	10	26.93	24	27.51		

17. Virgil A. Goodwin. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, T. 9 N., R. 13 W. Drilled irrigation well, depth 199.5 feet. Aquifer, Rush Springs sandstone. Records available: 1948. Dec. 4, 30.35; Dec. 18, 30.42; Dec. 24, 30.50; Dec. 30, 30.52.

18. Neil Horn. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 9 N., R. 13 W. Drilled irrigation well, diameter 6 inches, depth 295 feet, on flat to gently rolling upland. Aquifer, Rush Springs sandstone. Records available: 1948. Dec. 10, 36.51; Dec. 18, 36.47; Dec. 24, 36.45; Dec. 30, 36.38.

Canadian County

RFC 1. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 12 N., R. 5 W. Records available: 1945-48.

Jan. 28	9.56	May 17	6.90	Aug. 30	6.33	Oct. 29	9.00
Feb. 27	7.13	24	7.00	Oct. 7	8.24	Nov. 30	7.10
Mar. 26	4.49	June 16	8.38	9	8.41	Dec. 27	7.16
Apr. 27	5.48	July 2	4.75				

2. Oklahoma City Water Department. NW $\frac{1}{4}$ sec. 33, T. 13 N., R. 7 W. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 23	21.96	May 17	16.99	Oct. 7	11.89
Apr. 28	15.89	Sept. 1	20.47		

RFC 3. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 1, T. 13 N., R. 9 W. Records available: 1946-48. Feb. 23, 6.07; Apr. 28, 5.14; May 17, 5.61; Oct. 7, 5.80.

RFC 4. Geological Survey, U. S. Dept. of Interior. NE. corner sec. 17, T. 14 N., R. 10 W. Records available: 1942-48.

Feb. 23	7.22	May 17	5.06	Oct. 28	4.59
Apr. 28	4.61	Oct. 7	5.12		

10. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, T. 13 N., R. 9 W. Records available: 1941-48. Apr. 28, 23.23.

13. Owner unknown. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 14, T. 13 N., R. 9 W. Records available: 1941-48. Apr. 28, 7.19.

82. Ryba Jacob. SE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, T. 12 N., R. 6 W. Records available: 1941-48. Apr. 30, 22.64; June 16, 23.12; Oct. 9, 23.08.

85. W. L. Towe. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 6, T. 12 N., R. 5 W. Records available: 1941-48. Apr. 30, 10.22; June 16, 11.67; Oct. 9, 10.40.

151. Canadian County. NW corner SW $\frac{1}{4}$ sec. 20, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 13.59; Oct. 28, 13.31.

152. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 13 N., R. 10 W. Records available: 1942-43, 1945-47. Measurements discontinued.

G1. Geological Survey, U. S. Dept. of Interior. SW corner sec. 29, T. 13 N., R. 7 W. Records available: 1942-48. Apr. 28, 13.60; June 17, 18.77; Oct. 16, 19.08.

G3. 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. 7 W. Records available: 1942-48. Apr. 30, 7.53; June 16, 8.47; Oct. 9, 9.43.

G4. Geological Survey, U. S. Dept. of Interior. NE corner sec. 8, T. 13 N., R. 9 W. Records available: 1942-48. Apr. 28, 13.59; Oct. 28, 12.34.

G5. Geological Survey, U. S. Dept. of Interior. NW corner sec. 5, T. 12 N., R. 6 W. Records available: 1942-48. Apr. 30, 2.54; June 16, 3.32; Oct. 9, 4.73.

G6. Geological Survey, U. S. Dept. of Interior. SE corner sec. 8, T. 12 N., R. 5 W. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	10.26	May 17	8.97	Aug. 30	8.08	Oct. 29	9.28
Feb. 27	9.78	24	8.92	Oct. 7	9.26	Nov. 30	9.87
Mar. 26	8.00	June 16	9.50	9	9.32	Dec. 27	10.06
Apr. 27	8.04	July 2	4.55				

G7. Geological Survey, U. S. Dept. of Interior. NW corner SW $\frac{1}{4}$ sec. 21, T. 13 N., R. 7 W. Records available: 1942-48. Apr. 2³, 16.04; June 17, 15.73; Oct. 9, 16.02.

G8. 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. Records available: 1942-48. Apr. 28, 14.39; June 16, 14.70; Oct. 9, 14.89.

G10. Geological Survey, U. S. Dept. of Interior. NW corner sec. 15, T. 14 N., R. 10 W. Records available: 1942-47. Measurements discontinued.

G11. Geological Survey, U. S. Dept. of Interior. SW corner sec. 8, T. 14 N., R. 10 W. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 23	4.95	May 17	4.85	Oct. 28	4.44
Apr. 28	4.48	Oct. 7	4.80		

G12. Geological Survey, U. S. Dept. of Interior. SW corner sec. 17, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 6.87; Oct. 28, 6.81.

G13. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 14, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 7.20; Oct. 28, 6.74.

G14. Geological Survey, U. S. Dept. of Interior. 500 feet east of NW. corner sec. 25, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 17.48; Oct. 28, 17.23.

G16. 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. Records available: 1942-48. Apr. 28, 16.68; Oct. 28, 16.59.

G17. 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. Records available: 1942-48. Apr. 28, 11.98; Oct. 28, 11.89.

G18. Geological Survey, U. S. Dept. of Interior. NW. corner sec. 11, T. 13 N., R. 9 W. Records available: 1942-48. Apr. 28, 20.37; Oct. 28, 20.12.

G20. Geological Survey, U. S. Dept. of Interior. NW. corner SW $\frac{1}{4}$ sec. 12, T. 12 N., R. 6 W. Records available: 1942-48. Apr. 30, 8.83; June 16, 10.14; Oct. 9, 10.83.

G22. 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. Records available: 1942-48. Apr. 30, 4.87.

G23. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, T. 12 N., R. 6 W. Records available: 1942-47. Measurements discontinued.

G24. 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. Records available: 1942-48. Apr. 30, 5.84; June 16, 6.99; Oct. 9, 7.50.

G25. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 15, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 11.48; Oct. 28, 11.65.

G27. Geological Survey, U. S. Dept. of Interior. SW. corner NW $\frac{1}{4}$ sec. 36, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 7.12; Oct. 28, 6.98.

G28. Geological Survey, U. S. Dept. of Interior. SE. corner sec. 23, T. 13 N., R. 8 W. Records available: 1942-48. Apr. 28, 17.41; June 17, 19.23; Oct. 16, 17.66.

G29. Geological Survey, U. S. Dept. of Interior. SW. corner SE $\frac{1}{4}$ sec. 10, T. 13 N., R. 8 W. Records available: 1942-48. Apr. 28, 6.99.

G30. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 36, T. 14 N., R. 9 W. Records available: 1942-47. No measurements made in 1948.

G32. 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. Records available: 1942-48. Apr. 28, 6.47; Oct. 16, 6.36.

G34. Geological Survey, U. S. Dept. of Interior. SW. corner sec. 32, T. 13 N., R. 7 W. Records available: 1942-48. Apr. 30, 15.36; June 17, 14.73; Oct. 16, 14.20.

G35. 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. 5 W. Records available: 1942-47. Measurements discontinued.

G36. 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. Records available: 1942-48. Apr. 30, 7.97; June 17, 9.09.

G38. 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. Records available: 1942-48. Apr. 30, 6.58; June 17, 7.37; Oct. 9, 7.90.

G41. Geological Survey, U. S. Dept. of Interior. 150 feet north of SW. corner sec. 4, T. 13 N., R. 8 W. Records available: 1942-48. Apr. 28, 7.63; Oct. 16, 7.47.

G42. Geological Survey, U. S. Dept. of Interior. SE. corner SW $\frac{1}{4}$ sec. 22, T. 13 N., R. 8 W. Records available: 1942-48. Apr. 28, 13.10; Oct. 16, 13.14.

G44. Geological Survey, U. S. Dept. of Interior. NW. corner sec. 28, T. 14 N., R. 10 W. Records available: 1942-48. Apr. 28, 15.12; Oct. 28, 14.91.

G45. Geological Survey, U. S. Dept. of Interior. NW. corner sec. 21, T. 14 N., R. 8 W. Records available: 1942-48. Apr. 28, 9.14; Oct. 16, 8.89.

G46. Geological Survey, U. S. Dept. of Interior. NE. corner sec. 29, T. 13 N., R. 8 W. Records available: 1942-48. Apr. 28, 14.87; Oct. 16, 16.18.

G48. Geological Survey, U. S. Dept. of Interior. SE. corner sec. 3, T. 12 N., R. 7 W. Records available: 1942-48. Apr. 30, 14.53; June 16, 15.38.

G49. 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. Records available: 1942-48. Apr. 30, 17.33; June 16, 17.42; Oct. 9, 17.00.

G50. Geological Survey, U. S. Dept. of Interior. SE. corner sec. 1, T. 12 N., R. 7 W. Records available: 1942-48. Apr. 30, 17.33; June 16, 17.98.

G52a. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, T. 12 N., R. 5 W. Records available: G52, 1942-46; G52a, 1947-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	9.31	Apr. 27	5.77	Oct. 7	7.57	Nov. 30	7.86
Feb. 27	8.76	May 24	7.27	29	8.24	Dec. 27	7.57
Mar. 26	5.99	Aug. 30	5.92				

G53. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ sec. 3, T. 10 N., R. 7 W. Records available: 1946-48.

Jan. 30	7.30	Apr. 28	4.67	July 26	6.98	Oct. 29	8.85
Feb. 23	7.15	May 22	5.38	Sept. 1	7.85	Nov. 30	8.60
Mar. 30	3.77	July 1	4.07	Oct. 9	8.56	Dec. 28	8.60
Apr. 27	4.61						

Cimarron County

129. George Camilli. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, T. 2 N., R. 2 E. Records available: 1939-48. May 22, 163.30.

156. 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. Records available: 1946-48. May 22, 5.98.

224. Walter R. Wood. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 3 N., R. 1 E. Records available: 1938-48. May 22, 131.28.

237. Central Life Assurance Society. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 3 N., R. 1 E. Records available: 1939-48. May 22, 55.80.

262. H. W. and Z. B. Stone. $SE\frac{1}{4}SE\frac{1}{4}SW\frac{1}{4}$ sec. 12, T. 3 N., R. 4 E. Records available: 1938-43, 1946-48. May 22, 180.14.

263. John Ohnick, Jr. $SE\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$ sec. 15, T. 3 N., R. 4 E. Records available: 1938-48. May 22, 120.48.

275. O. A. Showalter. $SW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$ sec. 11, T. 3 N., R. 5 E. Records available: 1939-48. May 22, 146.37.

276. Atchison, Topeka & Santa Fe Railroad. $NW\frac{1}{4}SW\frac{1}{4}$ sec. 14, T. 3 N., R. 5 E. Records available: 1938-48. May 22, 133.81.

313. E. J. Behrendt. $NW\frac{1}{4}NW\frac{1}{4}NW\frac{1}{4}$ sec. 9, T. 3 N., R. 7 E. Records available: 1938-48. May 21, 41.95.

435. B. J. Wiggins. $SW\frac{1}{4}SW\frac{1}{4}SW\frac{1}{4}$ sec. 26, T. 4 N., R. 8 E. Records available: 1938-48. May 21, 136.35.

436. Mrs. S. C. Cantrell. $NE\frac{1}{4}NE\frac{1}{4}NE\frac{1}{4}$ sec. 32, T. 4 N., R. 8 E. Records available: 1938-48. May 21, 150.47.

516. State of Oklahoma. $SE\frac{1}{4}$ sec. 34, T. 5 N., R. 5 E. Records available: 1938-48. May 21, 6.29.

610. A. S. Parker. $NE\frac{1}{4}NE\frac{1}{4}$ sec. 21, T. 6 N., R. 5 E. Records available: 1938-48. May 21, 29.13.

660. Geological Survey, U. S. Dept. of Interior. $N\frac{3}{4}NE\frac{1}{4}$ sec. 9, T. 5 N., R. 5 E. Records available: 1946-48. May 21, 4.90.

Cleveland County

1. Mrs. Elizabeth E. Taylor. $NW\frac{1}{4}SW\frac{1}{4}$ sec. 28, T. 10 N., R. 3 W. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	9.18	Apr. 17	7.15	July 16	5.66	Oct. 14	8.91
16	9.27	24	7.37	23	8.98	28	9.07
21	9.39	30	7.00	30	8.99	Nov. 4	8.59
28	9.93	May 8	7.52	Aug. 6	7.06	11	8.43
Feb. 5	10.02	15	7.05	27	7.65	18	8.46
12	9.60	22	7.24	30	7.68	26	9.41
19	9.12	29	6.88	Sept. 3	7.79	30	9.60
26	9.73	June 11	7.58	10	8.03	Dec. 2	9.43
Mar. 4	8.47	18	7.75	17	7.88	9	9.39
23	4.10	25	6.05	23	7.87	16	9.41
30	4.63	30	3.24	30	8.53	23	9.26
Apr. 6	6.04	July 9	5.36	Oct. 7	8.89	30	10.04

4. City of Norman. 93 feet north of center of Daws Street, 150 feet west of Santa Fe Avenue, in city park, Norman. Records available: 1942-48.

Jan. 9	279.75	Apr. 8	310.06	July 9	306.51	Oct. 14	311.54
16	278.36	17	309.27	16	306.87	29	308.75
23	277.09	24	311.56	23	307.17	Nov. 4	312.31
30	273.45	May 1	311.51	30	306.26	11	312.57
Feb. 5	281.31	8	309.31	Aug. 27	320.51	18	312.51
12	279.77	15	307.46	Sept. 3	305.06	26	312.04
19	270.78	22	307.32	10	307.28	Dec. 2	311.79
27	295.99	29	307.78	17	305.20	9	311.73
Mar. 18	300.91	June 11	307.97	22	305.33	16	311.76
25	303.18	18	307.17	30	305.26	23	311.78
30	293.85	July 2	306.54	Oct. 7	312.17	30	311.84

5. F. W. Goldsby. NW, corner $SE\frac{1}{4}$ sec. 30, T. 9 N., R. 1 W. Records available: 1942-48.

5--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	144.18	143.37	142.81	b 142.49	143.02
2	a 144.47	144.16	143.36	142.88	.....	143.04
3	144.59	144.12	143.42	142.87	.....	143.00
4	144.69	.....	143.44	142.79	.....	142.92
5	144.66	.....	143.44	142.70	.....	142.96
6	144.69	.....	143.36	142.65	.....	.....
7	144.64	.....	143.28	142.73	.....	.....
8	144.54	.....	143.28	142.87	.....	143.15
9	144.66	.....	143.20	142.87	.....	143.19
10	144.66	a 143.77	143.28	142.75	.....	143.25
11	144.60	143.90	143.33	142.57	.....	143.29
12	144.64	143.91	143.34	142.74	.....	143.27
13	144.67	143.75	143.26	142.84	.....	143.31
14	144.58	143.88	143.07	142.85	.....	143.33
15	144.48	143.85	142.90	142.77	b 142.75	143.40
16	144.59	143.77	143.06	142.75	.....	143.45
17	144.60	143.78	143.08	142.74	.....	143.43
18	144.45	143.71	142.98	142.70	.....	143.49
19	144.46	143.74	142.89	142.71	.....	143.62
20	144.41	143.73	142.88	142.77	.....	143.54
21	144.31	143.71	142.89	142.78	.....	143.39
22	144.31	143.67	142.89	142.71	b 142.86	143.41
23	144.36	143.57	142.89	142.63	.....	143.41
24	144.32	143.65	142.89	142.63	.....	143.41
25	144.37	143.66	142.81	142.55	.....	143.34
26	144.37	143.56	142.80	142.60	.....	143.31
27	144.42	143.33	142.91	142.68	.....	143.31
28	144.43	143.47	142.91	142.73	.....	143.28
29	144.24	143.49	142.73	142.70	a 142.86	143.28
30	144.13	.....	142.49	.....	142.92	143.31
31	144.17	.....	142.67	.....	142.96	.....

a Estimated.

b Tape measurement.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	143.33	143.35	143.97	144.81	145.43	145.68
2	143.33	143.34	143.97	144.88	145.44	145.63
3	143.32	143.34	143.95	144.90	145.43	145.64
4	143.31	143.43	143.94	144.89	145.35	145.55
5	143.34	143.42	143.94	144.77	145.53	145.56
6	143.31	143.35	143.94	144.87	145.64	145.56
7	143.28	143.33	143.98	144.91	145.64	145.61
8	143.28	143.36	144.13	144.93	145.57	145.57
9	143.29	143.32	144.17	144.93	145.61	145.78
10	143.23	143.33	144.21	144.93	145.62	145.78
11	143.19	143.35	144.20	145.03	145.65	145.57
12	143.18	143.43	144.20	.....	145.69	145.57
13	143.26	143.42	144.29	.....	145.70	145.57
14	143.22	143.48	144.36	a 145.17	145.67	145.57
28	143.28	143.52	144.37	145.12	145.67	145.57
16	143.29	143.56	144.40	145.33	145.65	145.63
17	143.28	143.57	144.42	145.43	145.65	145.64
18	143.27	143.59	144.40	145.39	145.44	145.54
19	143.24	143.60	144.36	145.30	145.53	145.53
20	143.21	143.58	144.36	145.33	145.56	145.45
21	143.22	143.62	144.37	145.36	145.68	145.52
22	143.25	143.66	144.37	145.40	145.70	145.56
23	143.31	143.70	144.38	145.45	145.63	145.55
24	143.27	143.70	144.52	145.47	145.56	145.62
25	143.22	143.69	144.66	145.46	145.51	145.76
26	143.21	143.75	144.75	145.45	145.56	145.76
27	143.22	143.80	144.73	145.43	145.56	145.61
28	143.23	143.84	144.72	145.44	145.74	145.50
29	143.23	143.89	144.70	145.42	145.74	145.70
30	143.35	143.87	144.73	145.42	145.70	145.70
31	143.35	143.93	.....	145.44	.....	145.66

a Estimated.

6. C. H. Taylor. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, T. 8 N., R. 2 W. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	115.40	May 8	114.89	July 23	114.17	Oct. 29	116.60
23	115.32	15	114.98	30	114.73	Nov. 4	121.84
30	115.29	22	115.79	Aug. 27	115.75	11	121.69
Mar. 18	114.68	29	115.21	Sept. 3	116.20	18	121.59
25	114.65	June 11	115.16	10	116.15	25	122.38
30	114.49	18	115.17	17	116.39	Dec. 2	119.84
Apr. 8	114.91	25	113.57	23	116.54	9	119.79
17	114.64	30	113.70	30	116.93	16	119.78
24	114.83	July 9	113.73	Oct. 7	122.67	23	119.82
May 1	113.09	16	115.22	14	122.28	30	119.88

8. Town of Noble. SE $\frac{1}{4}$ SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 8 N., R. 2 W. In southeastern corner of town garage at water tower, 57 feet south of Noble public-supply well. Records available: 1943-48.

Jan. 9	a198.38	May 8	a204.87	July 23	198.78	Nov. 4	203.98
23	201.68	15	a200.12	30	197.59	11	202.89
30	a190.66	22	200.28	Aug. 27	a209.61	18	202.75
Mar. 18	a201.10	29	203.80	Sept. 3	207.49	25	201.24
25	a201.10	June 11	197.03	10	203.65	Dec. 2	221.57
30	a197.10	18	200.04	17	205.14	9	221.50
Apr. 8	a202.03	25	197.73	23	205.62	16	221.67
17	a198.95	30	200.60	30	205.33	23	221.74
24	a206.92	July 9	197.58	Oct. 7	207.39	30	221.46
May 1	a204.69	16	200.22	14	207.74		

a Public-supply well at Noble pumping.

9. E. G. Johnson. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 9 N., R. 3 W. Records available: 1943-48.

Jan. 9	215.76	Mar. 30	217.14	July 2	217.91	Oct. 14	222.79
16	216.02	Apr. 8	219.07	9	218.28	Nov. 4	223.28
23	215.86	17	221.28	23	217.49	11	224.04
30	217.63	24	223.78	30	218.38	18	223.99
Feb. 5	215.58	May 1	223.60	Sept. 3	218.02	26	222.31
12	215.58	8	221.44	10	218.04	Dec. 2	222.48
19	215.54	29	221.30	17	217.88	9	222.37
26	215.54	June 11	220.92	23	217.92	16	221.54
Mar. 4	216.38	18	223.49	30	217.91	23	221.46
18	216.08	25	220.53	Oct. 7	222.04	30	221.64
25	217.21						

10. 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 field house. Records available: 1944-48.

Jan. 23	265.73	Apr. 24	276.96	July 16	273.08	Oct. 29	283.40
30	261.72	May 1	274.29	23	273.18	Nov. 4	282.38
Feb. 5	267.63	8	271.24	30	273.57	11	282.81
19	271.62	15	269.77	Aug. 31	278.72	18	282.76
27	271.88	22	271.03	Sept. 3	272.89	26	282.51
Mar. 4	271.49	29	272.00	10	281.20	Dec. 3	282.66
18	271.93	June 11	269.13	17	272.78	10	282.61
25	274.75	18	273.03	23	272.83	16	282.73
30	269.07	25	272.56	30	272.82	23	282.69
Apr. 8	277.13	July 2	273.56	Oct. 7	282.19	30	282.73
17	277.16	9	272.67	14	281.84		

11. Mid-Continent Petroleum Co. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 29, T. 10 N., R. 3 W. Records available: 1944-48.

11--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	176.90	Apr. 17	176.88	July 9	177.29	Oct. 7	178.53
16	177.08	24	176.89	16	177.79	14	178.49
21	176.77	May 1	176.78	23	178.18	28	178.44
28	176.95	8	176.99	30	178.49	Nov. 4	178.66
Feb. 5	176.69	15	177.26	Aug. 6	177.72	11	178.68
19	177.20	22	177.78	27	177.94	18	178.73
26	176.86	29	177.35	Sept. 3	177.99	Dec. 11	178.69
Mar. 4	176.87	June 11	177.25	10	178.00	16	179.47
23	176.50	18	177.33	17	178.02	23	179.29
30	176.23	25	175.94	23	178.11	30	179.35
Apr. 6	176.48	30	177.23	30	178.39		

12. Dave Price. SW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 9 N., R. 3 W. Records available: 1945-48.

Jan. 9	150.77	Apr. 17	151.65	July 9	150.94	Oct. 14	160.66
16	150.92	24	150.66	16	150.76	28	152.32
21	150.61	May 1	150.47	23	150.14	Nov. 4	153.08
30	150.69	8	150.29	Aug. 6	151.53	11	152.73
Feb. 5	150.65	15	150.72	27	151.74	18	152.71
12	150.67	22	150.99	Sept. 3	150.19	26	152.61
19	150.65	29	150.82	10	150.38	Dec. 2	152.75
27	150.42	June 11	150.94	17	150.28	9	152.66
Mar. 4	150.75	18	150.30	23	150.19	16	152.81
18	150.27	25	149.96	30	152.03	23	152.76
30	150.09	30	151.00	Oct. 7	160.50	30	150.65
Apr. 8	150.62						

14. Geological Survey, U. S. Dept. of Interior. NE corner sec. 29, T. 9 N., R. 3 W. Records available: 1946-48.

Jan. 9	7.26	Apr. 17	6.38	July 16	7.17	Oct. 14	8.58
16	7.54	24	6.67	23	6.59	29	8.70
23	7.66	30	6.43	30	7.28	Nov. 4	9.14
30	7.66	May 8	6.54	Aug. 6	6.40	11	9.04
Feb. 5	7.23	15	6.13	27	6.94	18	9.01
12	7.54	22	6.76	30	7.01	26	8.77
19	7.53	29	4.63	Sept. 3	6.77	Dec. 2	8.81
26	7.50	June 11	6.12	10	7.41	9	8.79
Mar. 4	6.70	18	5.89	17	6.69	16	8.79
18	6.09	25	4.92	23	6.82	23	8.74
26	4.72	30	5.23	30	8.14	28	8.57
30	5.68	July 9	7.22	Oct. 7	8.49	30	8.69
Apr. 8	6.10						

15. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 6 N., R. 1 W. Records available: 1947-48.

Jan. 28	7.30	Apr. 28	6.15	June 30	5.31	Oct. 29	8.74
Feb. 26	6.83	May 28	5.13	Aug. 31	7.52	Dec. 31	8.44
Mar. 25	5.86						

Comanche County

1. Landall. SW corner sec. 28, T. 2 N., R. 11 W. Records available: 1947. In use in 1948; measurements discontinued.

2. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 2 N., R. 12 W. Records available: 1947-48. Jan. 1, 5.49; June 9, 5.40.

Custer County

1. 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. Records available: 1946-48. Jan. 1, 9.79; Feb. 25, 9.86; Oct. 29, 11.35.

Ellis County

1. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 18 N., R. 24 W. Records available: 1946-48. Feb. 24, 37.31; Oct. 19, 38.19.

2. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 34, T. 18 N., R. 24 W. Records available: 1946-47. No measurements made in 1948.

4. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 10, T. 19 N., R. 25 W. Records available: 1946-48. Oct. 19, 27.41.

6. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 21 N., R. 25 W. Records available: 1947-48. Feb. 24, 4.04; Oct. 19, 4.38.

Grady County

3. Simmons. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 4 N., R. 7 W. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	14.20	Apr. 28	13.69	July 27	12.97	Oct. 26	15.99
Feb. 22	13.76	May 28	13.63	Aug. 30	13.01	Nov. 23	15.85
Mar. 31	13.26	July 1	14.06	Sept. 25	15.77	Dec. 21	15.95

4. C. W. West. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, T. 5 N., R. 7 W. Records available: 1945-47. Measurements discontinued.

7. Owner unknown. NE $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 9, T. 4 N., R. 7 W. Records available: 1946-48.

Jan. 30	54.11	Apr. 28	54.85	July 27	54.99	Oct. 26	56.40
Feb. 27	53.96	May 28	54.76	Aug. 30	54.80	Nov. 23	56.30
Mar. 31	54.48	July 1	55.03	Sept. 25	56.47	Dec. 21	55.35

8. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, T. 4 N., R. 7 W. Records available: 1946-48.

Jan. 30	30.58	Apr. 28	30.00	July 27	30.47	Oct. 26	30.11
Feb. 27	30.09	May 28	30.11	Aug. 30	29.90	Nov. 23	31.00
Mar. 31	29.87	July 1	29.59	Sept. 25	29.99	Dec. 21	31.33

11. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 9, T. 4 N., R. 7 W. Records available: 1946-48.

Jan. 30	8.95	Apr. 28	6.15	July 27	6.08	Oct. 26	9.87
Feb. 27	8.60	May 28	5.85	Aug. 30	8.11	Nov. 23	10.37
Mar. 31	5.98	July 1	5.31	Sept. 25	9.29	Dec. 21	10.77

12. James Howell. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 36, T. 4 N., R. 8 W. Records available: 1946-48.

Jan. 30	47.55	Apr. 28	47.31	July 27	47.32	Oct. 26	47.88
Feb. 27	46.87	May 28	47.42	Aug. 30	47.56	Nov. 23	47.86
Mar. 31	47.26	July 1	47.84	Sept. 28	47.80		

19. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 4 N., R. 8 W. Records available: 1946-48.

Jan. 30	27.37	Apr. 28	26.74	July 27	26.43	Oct. 26	28.45
Feb. 27	27.27	May 28	26.87	Aug. 30	27.10	Nov. 23	28.20
Mar. 31	26.71	July 1	26.28	Sept. 28	28.40	Dec. 21	27.58

24. W. W. Mobley. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 4 N., R. 7 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	16.16	Apr. 28	13.59	July 27	15.47	Oct. 28	17.82
Feb. 27	16.01	May 28	13.31	Aug. 30	17.17	Nov. 27	16.72
Mar. 31	12.97	July 1	14.73	Sept. 28	16.92	Dec. 21	16.81

26. G. W. Wade. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 9, T. 3 N., R. 8 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	12.16	Apr. 28	9.99	July 28	9.48	Oct. 28	13.50
Feb. 27	11.80	May 29	10.15	Aug. 30	9.60	Nov. 23	13.57
Mar. 31	9.87	July 1	9.33	Sept. 28	12.49	Dec. 21	13.57

34. E. M. Nixey. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 3 N., R. 7 W. Records available: 1946-47. Measurements discontinued.

35. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 3 N., R. 8 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	54.12	Apr. 28	53.97	July 27	52.27	Oct. 28	56.00
Feb. 27	53.64	May 28	54.13	Aug. 30	52.35	Nov. 23	55.28
Mar. 31	53.89	July 1	52.32	Sept. 28	55.30	Dec. 21	54.98

36. Henry J. Sweany (previously reported as owner unknown). SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, T. 4 N., R. 8 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 27	74.24	May 28	74.21	Aug. 30	74.80	Oct. 26	74.90
Mar. 31	74.13	July 1	74.74	Sept. 28	74.93	Nov. 23	74.85
Apr. 28	74.19	27	74.69				

43. Q. L. Merideth. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 25, T. 4 N., R. 8 W. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	4.63	Apr. 28	4.53	July 27	4.59	Oct. 26	5.67
Feb. 27	4.60	May 28	4.36	Aug. 30	4.43	Nov. 23	4.90
Mar. 31	4.58	July 1	4.44	Sept. 28	5.35	Dec. 21	4.32

45. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 26, T. 7 N., R. 7 W. Measurements discontinued after May 28, 1948. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
Jan. 30	9.19	Mar. 31	6.28	May 28	5.90
Feb. 27	8.50	Apr. 28	6.75		

66. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 33, T. 4 N., R. 8 W. Drilled well, diameter 7 inches, depth 254 feet, cased from surface to 40 feet, open hole from 40 feet to bottom. In area of rolling topography. Aquifer, Rush Springs sandstone. Equipped with automatic water-stage recorder from Sept. 8 to the end of year. Records available: 1948.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 27	a 80.20	Sept. 26	80.13	Oct. 14	80.13	Nov. 7	80.42
July 1	a 79.79	27	80.12	15	80.14	8	80.39
Aug. 30	a 80.25	28	a 80.20	16	80.14	9	80.32
Sept. 8	80.40	29	80.20	17	79.99	10	80.35
9	80.41	Oct. 1	80.18	18	80.09	11	80.42
10	80.53	2	80.13	19	a 80.09	12	80.45
11	80.63	4	80.15	26	a 80.42	13	80.41
15	a 80.27	5	80.28	Nov. 2	a 80.44	14	80.45
16	80.25	6	80.28	4	80.60	15	80.63
21	a 80.26	12	a 80.05	5	80.41	16	80.68
25	80.27	13	80.13	6	80.27	17	80.83

a Tape measurement.

66--Continued.

Lowest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 18	80.85	Nov. 29	80.66	Dec. 10	80.55	Dec. 21	80.67
19	80.68	30	80.68	11	80.56	22	80.67
20	80.70	Dec. 1	80.71	12	80.49	23	80.62
21	80.64	2	80.68	13	80.51	24	80.69
22	80.57	3	80.63	14	80.51	25	80.77
23	80.66	4	80.71	15	80.60	26	80.68
24	80.77	5	80.74	16	80.71	27	80.60
25	80.80	6	80.59	17	80.70	28	80.67
26	80.69	7	80.55	18	80.62	29	80.78
27	80.76	8	80.55	19	80.67	30	80.78
28	80.70	9	80.37	20	80.59	31	80.77

76. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, T. 7 N., R. 7 W. Driven test well, diameter 1 $\frac{1}{2}$ inches, depth 23 feet, with 1 $\frac{1}{2}$ -inch by 24-inch well point. On alluvial plain of Washita River. Aquifer, alluvium. Records available: 1948.

July 1	5.65	Sept. 25	8.29	Nov. 23	8.29	Dec. 4	8.37
27	5.73	Nov. 18	8.38	26	8.34	28	8.49
Aug. 30	7.80						

Harper County

1. E. W. Johnson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, T. 26 N., R. 25 W. Records available: 1940-48. Feb. 23, 7.52; May 18, 7.36; Oct. 8, 6.57.

2. Owner unknown. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 22, T. 27 N., R. 25 W. Records available: 1947-48. Well filled in above water level after May 18, 1948; measurements discontinued. May 18, 14.03.

●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. Records available: 1947-48. Jan. 1, 7.81; June 9, 7.50.

3. Ivan Owen. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, T. 2 N., R. 23 W. Drilled irrigation well, diameter 15 $\frac{1}{2}$ inches, uncased, depth 90 feet. Equipped with turbine pump and gasoline engine. Irrigates 50 acres. Records available: 1948. June 10, 29.12.

4. Buddy Bryant. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, T. 3 N., R. 23 W. Drilled irrigation well, diameter 16 inches, depth 127 feet, iron casing. Equipped with turbine pump and powered with 56-horsepower butane engine. Records available: 1948. June 10, 29.97.

5. Otto Yates. S $\frac{1}{2}$ NW $\frac{1}{4}$ sec. 35, T. 3 N., R. 23 W. Drilled irrigation well, depth 120 feet. Records available: 1948. June 10, 26.27.

Kay County

1. City of Ponca City well 5. SE $\frac{1}{4}$ SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 26, T. 26 N., R. 2 E. Dug well, diameter 30 inches, depth 38 feet. Tapping water in alluvium of Arkansas River. Equipped with turbine pump powered with a $\frac{7}{8}$ horsepower electric motor. Records available: 1948.

1--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20	16.69	May 13	c 17.56	July 29	g 11.62	Oct. 21	j 14.40
26	16.79	20	c 17.75	Aug. 5	h 11.74	27	j 14.55
Mar. 5	a 16.87	27	c 17.72	12	i 11.63	Nov. 4	j 14.75
11	a 16.90	June 3	c 17.87	19	i 11.85	11	j 15.03
18	a 16.91	10	c 18.15	26	i 12.32	18	j 15.14
25	a 16.87	17	c 18.41	Sept. 2	i 12.67	25	j 15.34
Apr. 1	a 16.94	24	b 18.29	9	j 13.03	Dec. 2	j 15.42
8	a 16.97	30	b 18.14	16	i 13.35	9	k 15.55
15	a 17.03	July 1	d 18.14	23	j 13.62	16	j 15.60
22	b 17.37	8	e 18.30	30	i 13.71	23	j 15.74
29	c 17.52	15	c 17.56	Oct. 7	j 14.03	30	j 15.81
May 6	c 17.78	22	f 12.74	14	i 14.26		
a	City wells 1 and 3 pumping.			g	City wells 2, 4, 5 pumping.		
b	City wells 1-6 pumping.			h	City wells 1, 2, 4 pumping.		
c	City wells 1, 3-6 pumping.			i	City wells 1, 3, 4 pumping.		
d	City wells 1-4, 6 pumping.			j	City wells 1 and 4 pumping.		
e	City wells 2, 4-6 pumping.			k	City well 4 pumping.		
f	City wells 1, 2, 4, 5 pumping.						

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. Records available: 1947-48. June 9, 9.88.

2. Edith L. Wright. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 13, T. 2 N., R. 17 W. Records available: 1947-48. Jan. 1, 39.15; June 9, 38.77.

McCain County

2. Roy McDonald. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, T. 8 N., R. 4 W. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 27	32.18	May 28	27.49	Dec. 28	29.80
Apr. 9	25.45	July 1	23.72		

3. Owner unknown. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 20, T. 8 N., R. 4 W. Unused drilled well, diameter 6 inches, depth 22.6 feet. Tapping water in Duncan sandstone. Records available: 1948. Apr. 9, 14.57; Dec. 28, 14.83.

Major County

RFM 1. Geological Survey, U. S. Dept. of Interior. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 29, T. 20 N., R. 16 W. Records available as Major County well 1, 1939-40; as RFM 1 (replacement well) 1942-47, 1948. Feb. 23, 7.90; May 17, 7.35; Oct. 7, 7.77.

Oklahoma County

1. Joslyn Production Co. SE $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 29, T. 13 N., P. 3 W. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	172.16	Apr. 27	169.08	July 31	172.42	Oct. 26	172.45
Feb. 27	171.57	May 24	168.67	Aug. 30	176.27	Nov. 26	172.46
Mar. 30	169.66	July 2	172.44	Sept. 28	171.37	Dec. 27	177.09

2. Sunray Oil Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 23, T. 12 N., R. 3 W. Avey lease, 28th and Lindsay Avenue, Oklahoma City. Records available: 1943-48.

2--Continued.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	184.05	Apr. 27	179.92	July 31	203.37	Oct. 26	199.69
Feb. 27	183.18	May 24	179.60	Aug. 30	197.82	Nov. 26	199.71
Mar. 30	180.23	July 2	203.39	Sept. 28	186.94	Dec. 27	178.59

3. 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 North Lottie Avenue, Oklahoma City. Records available: 1943-48.

Jan. 28	202.30	Apr. 27	198.18	July 31	218.52	Oct. 26	218.68
Feb. 27	200.83	May 24	197.97	Aug. 30	227.84	Nov. 26	218.72
Mar. 30	198.08	July 2	218.56	Sept. 28	222.73	Dec. 27	203.71

4. U. S. Air Force, Oklahoma City Air Depot. NW $\frac{1}{4}$ SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, T. 11 N., R. 2 W. Records available: 1944-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	.....	.....	153.41	.....	167.21	171.50
2	.....	.....	153.10	.....	168.20	171.42
3	.....	a 153.90	157.98	.....	169.31	172.22
4	.....	.....	154.11	.....	169.39	173.41
5	.....	.....	153.66	.....	169.40	.....
6	.....	.....	153.63	.....	171.62	.....
7	a 153.80	.....	153.60	157.12	172.43	.....
8	154.17	.....	158.55	157.31	171.87	172.60
9	154.47	.....	158.98	157.33	171.12	172.92
10	154.53	154.41	153.91	157.28	171.18	174.20
11	154.40	154.50	153.69	157.05	168.47	175.32
12	154.28	154.51	153.53	162.65	169.34	176.20
13	154.27	154.35	153.51	163.71	169.24	176.80
14	a 154.00	154.56	153.31	164.85	166.55	176.73
15	.....	154.56	158.83	166.63	164.52	177.88
16	.....	159.11	155.60	166.82	164.05	178.20
17	.....	155.17	154.50	166.86	167.67	177.80
18	.....	154.12	154.20	167.21	168.00	178.95
19	.....	154.16	153.82	167.52	168.03	179.70
20	.....	154.22	158.64	167.71	169.03	179.05
21	154.77	154.22	154.49	165.10	169.05	178.92
22	154.91	154.23	154.14	166.70	169.40	176.70
23	.....	153.88	159.27	163.18	169.80	174.66
24	.....	158.39	155.50	a 163.03	170.10	173.80
25	.....	154.40	155.30	162.78	170.50	173.29
26	.....	153.53	156.40	162.06	170.95	172.78
27	.....	153.41	156.40	161.66	171.50	172.40
28	159.34	153.67	160.92	161.78	171.68	172.02
29	156.90	153.70	160.54	165.93	172.15	171.85
30	.....	.....	157.17	166.91	172.15	172.30
31	.....	.....	.....	.....	171.80	.....

a Tape measurement.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	171.47	172.88	177.09	176.80	169.21	161.98
2	171.23	175.66	177.32	175.19	166.20	162.20
3	171.14	175.89	177.30	176.58	165.56	162.20
4	171.09	175.95	177.45	174.90	165.10	162.18
5	170.90	173.40	177.68	174.10	165.15	162.15
6	170.42	172.92	177.69	175.66	165.19	166.42
7	169.90	174.34	177.68	175.52	165.15	163.55
8	170.02	172.70	177.72	175.53	164.70	162.59
9	173.67	172.25	178.01	175.30	164.22	162.58
10	171.27	171.88	178.18	172.95	164.12	162.58
11	170.45	171.60	178.23	172.49	163.95	162.53
12	170.18	175.02	178.28	171.94	163.74	162.70
13	169.77	173.22	178.10	171.48	163.52	162.98

4--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	172.97	172.15	177.80	171.08	163.08	167.05
15	173.27	172.11	177.99	170.79	162.69	164.45
16	170.90	174.93	178.09	170.52	162.30	166.29
17	173.85	172.40	178.31	170.51	162.71	166.79
18	171.68	175.05	178.40	170.21	162.15	167.69
19	174.40	175.50	178.42	169.68	162.45	168.02
20	172.30	175.81	178.22	172.27	162.69	167.79
21	171.08	175.85	177.46	169.97	162.87	165.63
22	174.40	175.90	177.68	169.12	166.20	164.48
23	174.63	175.96	177.90	168.60	163.40	164.35
24	171.82	176.19	178.15	168.28	162.29	164.49
25	171.50	176.18	178.30	167.83	161.70	164.49
26	171.24	176.54	177.70	170.49	161.70	166.24
27	174.69	176.60	177.86	167.90	161.67	163.21
28	174.95	176.88	177.40	166.30	161.62	162.21
29	175.26	177.00	177.48	166.05	165.65	161.70
30	175.80	177.09	176.28	165.91	162.45	161.60
31	174.00	176.92		165.95		161.44

6. 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. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.27	Apr. 27	4.41	July 31	2.74	Oct. 26	3.17
Feb. 27	6.60	May 24	4.82	Aug. 30	5.40	Nov. 26	3.21
Mar. 30	3.95	July 2	2.65	Sept. 28	7.05	Dec. 27	7.15

7. 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. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.46	Mar. 30	4.16	May 24	4.89	Dec. 27	7.41
Feb. 27	6.93	Apr. 27	4.58	Aug. 30	5.56		

8. 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. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	7.17	Mar. 30	3.95	May 24	4.81	Dec. 27	7.05
Feb. 27	6.51	Apr. 27	4.38	Aug. 30	5.44		

9. Oklahoma City Water Department. SE. corner sec. 36, T. 12 N., R. 4 W., on northwest corner of intersection of Reno Street and May Avenue, Oklahoma City. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	3.28	Apr. 27	1.08	Oct. 26	4.46	Nov. 30	3.41
Feb. 27	2.51	May 24	1.85	29	3.60	Dec. 27	3.23
Mar. 30	.32	Aug. 30	2.20	Nov. 26	4.53		

10. 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. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	36.31	Apr. 27	36.69	July 31	36.68	Oct. 26	36.72
Feb. 27	36.34	May 24	36.75	Aug. 30	37.15	Nov. 26	36.81
Mar. 30	36.40	July 2	36.72	Sept. 28	37.20	Dec. 27	36.36

11. 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. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	13.04	Apr. 27	10.68	July 31	10.01	Oct. 26	10.18
Feb. 27	12.34	May 24	10.98	Aug. 30	12.58	Nov. 26	10.22
Mar. 30	10.36	July 2	10.01	Sept. 28	13.45	Dec. 27	13.06

12. 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. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 28	16.79	Apr. 27	15.89	July 31	15.09	Oct. 26	15.84
Feb. 27	16.77	May 24	15.73	Aug. 30	15.87	Nov. 26	15.89
Mar. 30	16.10	July 2	15.13	Sept. 28	16.40	Dec. 27	16.78

Payne County

1. Unknown oil company. SW $\frac{1}{4}$ sec. 15, T. 19 N., R. 4 E. Records available: 1934-48.

Jan. 26	6.12	May 28	4.79	Aug. 27	4.45	Nov. 26	5.55
Mar. 27	4.30	June 29	1.93	Sept. 27	5.73	Dec. 22	5.55
Apr. 28	4.21	July 28	4.32	Oct. 30	6.18		

2. J. F. Gilchrist. NW $\frac{1}{4}$ sec. 36, T. 20 N., R. 3 E. Records available: 1934-48.

Jan. 26	8.05	May 28	7.52	Aug. 27	7.30	Nov. 26	8.03
Mar. 27	7.48	June 29	7.80	Sept. 27	7.47	Dec. 22	8.08
Apr. 28	7.35	July 28	7.42	Oct. 30	7.69		

3. V. D. Hesser. NW $\frac{1}{4}$ sec. 23, T. 20 N., R. 3 E. Records available: 1934-48.

Jan. 26	11.34	May 28	10.50	Aug. 27	8.07	Nov. 26	9.80
Mar. 27	10.88	June 29	9.45	Sept. 27	8.52	Dec. 22	9.84
Apr. 28	10.74	July 28	8.15	Oct. 30	8.72		

4. W. O. Snyder. NW $\frac{1}{4}$ sec. 2, T. 19 N., R. 3 E. Records available: 1934-48.

Jan. 26	22.14	May 28	21.67	Aug. 27	20.65	Nov. 26	22.13
Mar. 27	21.65	June 29	21.55	Sept. 27	20.81	Dec. 22	22.13
Apr. 28	21.57	July 28	20.34	Oct. 30	21.10		

7. Charles Focht. NW $\frac{1}{4}$ sec. 20, T. 19 N., R. 3 E. Records available: 1934-48.

Jan. 26	20.65	Apr. 28	21.09	July 28	19.77	Oct. 30	21.82
Feb. 27	21.41	May 28	20.78	Aug. 28	19.32	Nov. 26	22.78
Mar. 27	21.57	June 29	21.15	Sept. 27	20.44	Dec. 22	22.93

9. Owner unknown. SW $\frac{1}{4}$ sec. 21, T. 20 N., R. 2 E. Records available: 1934-48.

Jan. 26	21.38	May 28	21.67	Aug. 27	19.50	Nov. 26	20.05
Mar. 27	21.96	June 29	21.37	Sept. 27	20.27	Dec. 22	20.70
Apr. 28	21.95	July 28	19.73	Oct. 30	20.44		

13. Erma T. Pool. SW $\frac{1}{4}$ sec. 23, T. 19 N., R. 1 E. Records available: 1934-48.

Jan. 26	23.49	May 28	23.48	Aug. 27	23.38	Nov. 26	23.15
Mar. 27	23.16	June 29	23.55	Sept. 27	23.59	Dec. 22	23.54
Apr. 28	23.74	July 28	23.27	Oct. 30	23.15		

15. Lovell Bros. NE $\frac{1}{4}$ sec. 35, T. 19 N., R. 3 E. Records available: 1934-48.

Jan. 26	34.94	May 28	34.28	Aug. 28	34.11	Nov. 26	34.41
Mar. 27	34.30	June 29	34.46	Sept. 27	34.57	Dec. 22	34.65
Apr. 28	34.59	July 28	33.77	Oct. 30	34.71		

16. W. K. Hartman. SW $\frac{1}{4}$ sec. 12, T. 18 N., R. 3 E. Records available: 1934-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 26	20.41	May 28	20.60	Aug. 28	20.30	Nov. 26	20.70
Mar. 27	20.52	June 29	15.92	Sept. 27	20.56	Dec. 22	20.72
Apr. 28	20.55	July 28	19.93	Oct. 30	20.77		

Roger Mills County

1. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 8, T. 13 N., R. 23 W. Records available: 1947-48. Feb. 24, 6.63; Oct. 19, 8.07.

Seminole County

1. Skelly Gas Corporation. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, T. 9 N., R. 6 E. Drilled well, diameter 8 inches, depth 495.5 feet, cased with iron casing. Taps water in sandstones of the Vamoosa formation. Records available: 1948.

Lowest daily water level, from recorder charts

Day	Feb.	Mar.	Apr.	May	June
1	.....	113.13	113.16	111.85	111.80
2	.....	112.88	112.95	113.05	112.98
3	.....	113.02	113.15	113.31	113.26
4	.....	113.19	112.61	112.68	112.36
5	.....	113.19	112.72	112.26	111.92
6	.....	113.15	112.05	113.05	113.00
7	.....	113.09	112.20	113.63	113.35
8	.....	113.08	112.83	113.70	112.66
9	.....	113.07	112.83	112.82	112.33
10	.....	113.24	112.92	112.49	113.37
11	.....	113.41	111.89	112.46	113.73
12	.....	113.42	112.44	112.41	113.35
13	.....	113.32	113.23	113.36	112.72
14	.....	112.94	113.34	113.74	113.11
15	.....	112.73	112.31	113.82	113.16
16	.....	113.08	112.74	112.95	112.41
17	.....	113.10	112.95	113.64	112.23
18	.....	113.04	112.09	114.00	113.19
19	113.20	112.85	112.79	113.25	113.75
20	113.22	112.85	113.03	112.71	113.09
21	113.25	112.82	112.24	113.26	111.52
22	113.25	112.74	112.95	113.60	110.84
23	113.17	112.87	113.12	112.82	.....
24	113.34	112.87	112.22	112.27	.....
25	113.34	112.85	112.89	112.13	.....
26	113.33	112.88	113.03	112.03	.....
27	112.97	113.12	112.32	111.89	.....
28	113.21	113.18	112.95	112.37	112.14
29	113.26	113.04	113.27	112.74	.....
30		112.76	112.35	112.21	112.08
31		112.93		112.06	

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	111.98	113.65	114.70	115.73	113.72	112.66
2	111.97	114.16	114.90	115.87	114.19	112.99
3	111.91	114.29	115.06	115.06	114.24	112.42
4	111.80	113.69	114.29	114.53	113.19	112.14
5	.....	113.19	114.85	114.13	113.46	112.73
6	.....	113.65	115.26	114.26	114.15	112.50
7	.....	113.95	115.36	115.13	114.06	112.85
8	.....	113.34	114.37	115.44	113.09	112.25
9	112.62	112.80	114.92	115.53	.....	112.92
10	112.11	112.62	115.39	115.54	114.14	112.32
11	111.62	112.51	115.49	115.70	113.96	112.10

1--Continued.

Lowest daily water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	.....	113.20	115.22	115.78	114.19	112.57
13	.....	113.94	115.67	114.94	113.81	111.95
14	.....	114.06	115.76	115.37	113.86	111.43
15	112.67	114.31	115.03	115.38	113.97	111.95
16	113.25	114.20	115.48	115.37	113.00	112.68
17	113.59	113.94	115.77	115.58	113.27	112.69
18	113.78	114.30	115.86	114.97	113.40	111.74
19	113.86	113.80	115.87	115.05	112.68	112.00
20	113.93	114.13	115.13	114.29	113.25	112.15
21	114.05	114.62	115.40	114.53	113.60	111.24
22	114.06	114.80	115.47	114.92	112.92	111.82
23	113.39	114.49	115.18	114.82	112.43	112.34
24	112.90	114.97	115.62	115.06	112.37	112.40
25	.....	115.20	115.02	114.23	113.16	112.59
26	113.60	115.28	115.51	113.62	113.38	112.76
27	113.79	115.05	115.83	114.09	112.70	111.84
28	113.25	115.37	115.88	114.56	112.11	111.14
29	112.74	114.96	114.89	114.65	112.98	112.05
30	112.65	114.98	114.98	113.80	113.27	112.60
31	112.55	115.28		113.16		112.67

Texas County

40. August Lorenz. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, T. 3 N., R. 17 E. Records available: 1937-48. May 19, 89.39.

125. J. Donald Hughes. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 13, T. 1 N., R. 18 E. Records available: 1939-48. May 23, 9.13.

130. Robert Johnson. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 1 N., R. 19 E. Records available: 1939-48. May 23, 8.75.

138. Joe Sutton. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 6, T. 1 N., R. 19 E. Records available: 1939-48. May 23, 9.39.

176. W. N. Ballinger. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 18, T. 3 N., R. 15 E. Records available: 1937-48. May 18, 7.14.

182. 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. Records available: 1938-47. Measurements discontinued.

188. Kuhn Bros. NW $\frac{1}{4}$ sec. 1, T. 2 N., R. 14 E. Records available: 1938-48.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
1	122.42	.....	122.59	122.61	122.63	122.51	122.40	.....
2	122.36	122.62	122.66	122.62	122.68	122.42	122.32	.....
3	122.68	122.51	.....	122.48	122.70	.....	122.25	.....
4	122.73	122.62	.....	122.39	122.62	122.48	.....	.....
5	122.63	122.67	122.57	122.57	122.73	122.59	.....	.....
6	122.63	122.61	122.56	122.39	122.74	122.62	a122.35	.....
7	122.33	122.79	122.61	122.55	122.48	122.54	.....	.....
8	122.53	122.82	122.60	122.80	122.32	122.48	.....	.....
9	122.59	122.57	122.71	122.57	122.71	122.50	.....	.....
10	122.53	122.91	122.78	122.25	122.74	122.52	.....	.....
11	122.43	123.07	122.78	122.48	122.73	122.53	.....	.....
12	122.65	123.00	122.67	122.62	122.67	122.60	.....	.....
13	122.65	122.80	122.44	.....	122.60	122.40	.....	.....
14	122.47	123.01	122.42	122.55	122.43	122.55	a122.20	.....
15	122.56	122.81	122.67	122.48	122.67	122.58	.....	.....
16	122.62	122.94	122.86	122.55	122.67	122.40	.....	.....
17	122.49	122.52	122.75	122.47	122.63	122.64	.....	.....

a Tape measurement.

188--Continued.

Lowest daily water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Sept.
18	122.56	122.46	122.44	122.36	122.58	122.66	.....	.....
19	122.58	122.81	122.62	122.57	122.62	122.63	.....	.....
20	122.41	122.79	122.47	122.72	122.60	122.40	.....	.....
21	122.40	122.68	.....	122.55	122.51	122.36	a122.40	a122.45
22	122.63	122.47	122.43	122.40	122.51	122.61	.....	.....
23	122.63	122.67	122.50	122.35	122.64	122.70	.....	.....
24	122.68	122.92	122.47	122.43	122.67	122.66	.....	.....
25	122.71	122.82	122.27	122.56	122.66	122.55	.....	.....
26	122.71	122.59	122.68	122.63	122.51	122.55	.....	.....
27	122.79	122.67	122.71	122.68	122.62	122.55	.....	.....
28	122.66	122.82	122.60	.....	122.46	122.57	a122.30	.....
29	122.34	122.75	122.24	.....	122.61	122.53	.....	.....
30	122.48	.....	122.33	122.37	122.71	122.49	.....	.....
31	122.59	.....	122.61	.....	122.61	.....	.....	.....

a Tape measurement.

228. Geological Survey, U. S. Dept. of Interior. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 15, T. 2 N., R. 17 E. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 8	5.72	Mar. 16	5.06	May 11	5.63	June 29	4.70
15	5.72	25	5.20	19	5.69	July 21	5.67
21	5.70	30	5.22	23	5.65	Aug. 31	5.89
30	5.63	Apr. 8	5.35	25	5.66	Oct. 7	6.56
Feb. 5	5.53	14	5.37	27	5.64	Nov. 4	5.84
16	5.46	27	5.49	June 8	5.80	Dec. 14	5.49
25	5.51	May 6	5.57				

281. C. F. Webb. Formerly owned by Lester Sparks. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 3 N., R. 11 E. Records available: 1938-48. May 21, 88.03.

284. Paul Spradlin. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 5, T. 3 N., R. 12 E. Records available: 1939-48. May 21, 100.41.

294. Stonebraker-Zea Ranch. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, T. 3 N., R. 13 E. Records available: 1937-48. May 20, 42.11.

309. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, T. 3 N., R. 14 E. Records available: 1936-48. May 21, 11.02.

332. Owner unknown. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 17, T. 3 N., R. 15 E. Records available: 1937-47. No measurements made in 1948.

354. A. M. Fankhauser. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, T. 6 N., R. 15 E. Records available: 1937-48. May 18, 145.77.

406. Owner unknown. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 35, T. 4 N., R. 11 E. Records available: 1946-48. May 21, 78.50.

436. Leo Holtgraver. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, T. 4 N., R. 14 E. Records available: 1938-48. May 20, 170.24.

462. Geological Survey, U. S. Dept. of Interior. SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 36, T. 4 N., R. 16 E. Records available: 1946-48. May 19, well dry.

497. R. M. Van Hying. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 21, T. 4 N., R. 19 E. Records available: 1937-48. May 19, 100.88.

551. Owner unknown. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 4 N., R. 13 E. Records available: 1937-48. May 21, 143.28.

589. George Hoferber. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 34, T. 4 N., R. 17 E. Records available: 1937-48. May 19, 116.15.

725. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, T. 3 N., R. 15 E. Records available: 1946-48. May 19, 8.71.

761. Federal Life Insurance Co. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, T. 3 N., R. 19 E. Records available: 1937-48. May 19, 98.93.

765. O. Jolliff. SW $\frac{1}{4}$ sec. 26, T. 3 N., R. 19 E. Records available: 1937-48. May 19, 105.07.

770. A. C. DeHart. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, T. 3 N., R. 19 E. Records available: 1937-48. May 19, 121.71.

842. C. A. Rahm. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 22, T. 6 N., R. 16 E. Records available: 1937-48. May 20, 112.57.

Tillman County

1. Southwestern Cotton Substation. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, T. 1 S., R. 19 W. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	20.11	Apr. 5	19.62	July 5	19.45	Oct. 4	22.29
12	20.19	12	19.62	12	19.84	11	22.37
19	20.21	19	19.67	19	19.98	18	22.41
26	20.29	26	19.76	26	20.17	26	22.43
Feb. 2	20.23	May 3	19.99	31	20.32	30	22.43
9	20.29	10	20.03	Aug. 2	20.43	Nov. 1	22.43
16	20.25	17	20.40	9	20.56	8	22.53
23	20.27	24	20.13	16	20.68	15	22.55
27	20.31	29	20.10	23	a 21.34	22	22.63
Mar. 1	20.21	31	20.00	30	a 21.78	29	22.62
8	20.28	June 7	20.20	Sept. 6	a 21.98	Dec. 6	22.63
15	20.00	14	20.35	12	a 21.99	13	22.63
22	19.74	21	20.48	20	21.94	20	22.64
29	19.46	28	20.21	27	22.16	27	22.63

a Pumped 8.7 acre-feet of water for irrigation, Aug. 17-Sept. 9.

Washita County

1. S. A. LeMasters. NE. corner sec. 6, T. 9 N., R. 19 W. Records available: 1947-48. Oct. 19, 20.16.

Woodward County

1. Oklahoma City Water Department. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, T. 20 N., R. 17 W. Records available: 1939-48. Feb. 23, 3.11; May 17, 3.31; Oct. 7, dry.

2. Oklahoma City Water Department. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, T. 23 N., R. 21 W. Records available: 1939-48. Feb. 23, dry at 3.6; May 17, 3.37; Oct. 7, dry.

4. Owner unknown. NW $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, T. 23 N., R. 20 W. Records available: 1945-48. Feb. 23, 4.67; May 17, 3.82; Oct. 7, 4.80.

5. Geological Survey, U. S. Dept. of Interior. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, T. 24 N., R. 22 W. Records available: 1947-48. Feb. 23, 3.65; May 17, 4.24; Oct. 7, 4.28.

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 started in new areas, the observation-well program was likewise extended, especially if there were considerable quantities of ground water pumped in the areas or an indication that the water level was declining. During 1948, a total of 3,198 measurements was made in 893 wells in 44 counties.

The water-level measurements made in connection with the program prior to 1948 have been published in Water-Supply Papers 777, 817, 840, 845, 886, 909, 939, 947, 989, 1019, 1026, 1074, and 1099. Several mimeographed progress reports have been issued which contain water-level measurements and discussions of the fluctuations of water levels in the Houston district, the irrigated area of the Southern High Plains, and the Winter Garden District.

PRECIPITATION

For the purpose of summarizing climatological data, the United States 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 middle division is from semihumid to semi-arid, and the western division is arid. For example, 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; but at El Paso, in the extreme western part of the State, the average yearly precipitation from 1850 through 1947 was 9.16 inches, the annual precipitation ranged from 2.22 inches in 1891 to 21.81 inches in 1856. A similar wide range in annual precipitation occurs at most stations throughout the State.

SUMMARY OF CHANGES IN WATER LEVELS IN 1948

SOUTHERN HIGH PLAINS REGION

In the Southern High Plains of Texas most of the heavily pumped wells are in the following 17 counties: Armstrong, Bailey, Briscoe, Castro, Cochran, Crosby, Deaf Smith, Floyd, Hale, Hockley, Lamb, Lubbock, Lynn, Farmer, Randall, Swisher, and Terry.

Irrigation from wells in this region was started near Plainview, Hale County, in 1911. By 1914 about 140 wells had been drilled in the three principal districts--Plainview, Hereford, and Muleshoe. From 1919 to 1926, the rainfall in most of the region was above the average and comparatively little irrigation was practiced. Interest in irrigation 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 the acres irrigated from the start of irrigation to December 31, 1948.

Estimated number of irrigation wells and acres irrigated from wells in the Southern High Plains in 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	5,500	650,000
1947	7,500	900,000
1948	10,500	1,250,000

Since 1937 water-level measurements have been made periodically in observation wells in the High Plains. Some of these wells are used for irrigation, some for domestic and stock purposes, 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 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 largest declines of water level are in four districts: Plainview-Lockney, Lubbock, Muleshoe, and Hereford. The wells are more closely spaced in these areas than elsewhere.

In a few lightly pumped localities the water levels in 1948 were higher than they were in 1938 or 1947. The following table shows a summary by counties of the average net decline in water level from the spring of 1938 to the spring of 1948 in 110 observation wells for which comparable measurements are available.

Average net decline in water level from March 1938 to March 1948

County	Number of wells	Average net decline, in feet	No. of wells in which the water level was higher in 1948 than in 1938
Bailey	13	3.7	0
Castro	7	4.9	0
Crosby	3	1.9	0
Deaf Smith	20	7.3	1
Floyd	11	14.9	0
Hale	21	10.7	0
Hockley	4	.6	1
Lamb	7	1.7	1
Lubbock	14	1.8	5
Swisher	5	8.2	1
Randall	5	.6	1

The following table shows a summary, by counties, of the average net decline in water level from 1947 to 1948.

Average net decline in water level from March 1947 to March 1948

County	Number of wells	Average net decline, in feet	No. of wells in which the water level was higher in 1947 than in 1948
Bailey	13	2.9	0
Castro	11	.7	3
Crosby	3	1.4	0
Deaf Smith	18	2.1	0
Floyd	15	5.0	0
Hale	23	2.8	0

Average net decline in water level from March 1947 to March 1948--Continued

County	Number of wells	Average net decline, in feet	No. of wells in which the water level was higher in 1948 than in 1947
Hockley	5	1.1	1
Lamb	6	2.0	1
Lubbock	16	2.4	0
Swisher	8	1.6	1
Randall	5	.3	1

WINTER GARDEN DISTRICT

Dimmit, Maverick, and Zavala Counties.--The irrigation of vegetables has been in progress in the district for about 30 years and, in more recent years, citrus trees, feed crops, and cotton have been irrigated. Most of the irrigation wells draw water from the Carrizo sand which crops out in western Dimmit County, eastern Maverick County, and western and northern Zavala County. In some localities the water from irrigation wells is supplemented by surface water from the Nueces River and impounding reservoirs on Pendencia, Turkey, and Comanche Creeks. Surface water is more economical to pump than ground water, therefore the wells along the river and reservoirs are pumped very little or none during the wet years. Pumpage inventories that were made in the field indicate that the amount of water withdrawn from wells was as follows: 30,000 acre-feet in 1929-30; 28,000 acre-feet in 1937-38; and 58,500 acre-feet in 1947-48.

Water-level measurements have been made during July, August, and September, at the close of the season of least pumping when the effect of local pumping is at a minimum. The measurements made during May and August 1948 show the effect of local and seasonal pumping; however, the September 1948 measurements were made after a heavy general rain.

The following table shows the yearly measurements in 47 wells. Some wells are in the heavily pumped areas, whereas others are in the more lightly pumped areas, in the outcrop areas, or in areas remote from pumping. The table also shows the rise or decline in the wells between 1947-48, 1941-48, and 1930-48.

July-September water-level measurements, in feet below measuring point, in the Winter Garden district in Dimmit, Zavala, and Eastern Maverick Counties, Texas

	Well	1930	1936	1937	1938	1939	1940	1941	1942
Carrizo Springs- Outcrop area	N7-78	93.7	...	102.4	102.7	104.6	104.3	106.5	108.9
	N7-125	59.5	64.9	65.0	65.8	66.5	67.0	67.8	68.5
	S1-16	56.0	58.6	58.4	60.2	59.4	59.6	60.1	60.9
	S1-18	103.6	106.2	106.0	106.5	106.7	106.9	107.3	107.8
La Pryor	H7-20	73.8	...	...	...	...	76.7	77.0	77.9
	N1-24	116.3	122.7	123.0	121.6	123.6	123.3	124.1	126.3
	N1-40	110.0	...	106.9	102.9	114.5	105.0	105.5	109.4
	M3-29	96.7	97.2	97.1	97.2	...	...	...	...
West of La Pryor	N1-39	76.4	...	...	...	...	...	...	...
	N1-90	...	...	...	...	...	...	...	...
	N1-92	...	...	...	...	...	...	...	...
	M6-10	72.1	75.3	74.9	74.0	...	74.7	74.9	77.7
Cometa	M6-16	40.9	41.0	39.7	40.7	42.0	42.7	...	47.1
	M6-16a	...	...	...	...	...	...	...	...
	M6-18	37.5	40.0	39.8	38.0	42.1	38.8	38.8	42.2
	M6-19	50.1	57.7	55.9	56.5	55.7	56.5	58.8	60.0
Crystal City	M9-1	54.7	64.7	61.0	67.8	71.6	63.8	65.4	72.6
	M9-9	78.5	81.3	81.4	87.4	85.3	...	86.3	88.8
	N5-30	...	...	...	...	...	...	...	...
	N5-39	59.2	62.2	57.4	50.7	60.6	41.9	42.0	60.7
Winter Haven	N5-40	57.6	58.3	54.9	50.0	55.9	39.7	38.8	57.9
	N5-55	62.0	59.5	56.8	49.9	59.0	43.5	43.2	62.4
	N5-60	...	61.5	54.3	51.1	58.3	49.7	41.4	...
	N7-34	45.2	47.1	44.9	41.1	45.2	34.5	35.1	47.6
Carrizo Springs Asherton	N8-26	59.9	51.6	47.4	47.1	53.5	38.0	39.4	...
	N8-28	61.3	51.6	47.1	47.2	53.9	38.2	39.4	58.1
	N8-40	41.0	...	41.5	57.3	34.9	43.3	40.1	40.9
	S2-24	107.1	...	93.4	106.8	98.1	97.6	92.3	104.8
Catarina	S2-27	66.1	57.7	48.4	53.1	57.5	...	51.4	53.4
	S2-78	173.4	160.1	152.0	157.7	157.2	145.7	143.7	160.3
	S2-102	120.6	115.3	111.1	...	111.1	104.8	101.8	106.1
	S3-10	79.6	75.6	70.1	83.6	74.5	65.8	65.1	73.3
Brundage Big Wells	S3-16	...	138.8	129.2	133.6	133.4	126.3	125.6	...
	S5-3	118.7	...	98.2	101.2	103.9	97.6	95.2	105.6
	S5-5	73.7	69.3	63.7	64.7	67.6	67.4	65.9	69.5
	S5-10	94.6	75.6	76.4	80.0	82.4	...	...	...
Valley Wells	S6-4	23.8	17.9	7.8	11.0	10.8	8.1	8.0	11.7
	N8-103	41.1	28.7	28.0	29.2	32.4	32.9	11.9	26.8
	N9-12	18.8	23.7	14.7	19.8	19.4	11.4	10.1	19.2
	N9-16	66.4	...	65.8	...	68.7	...	...	66.0
Big Wells, 9 miles east of Rambie Ranch, 15 miles west of La Pryor	N9-25	18.1	...	11.4	...	...	6.1	...	...
	N9-32	28.2	...	23.2	...	27.1	18.7	...	...
	N9-33	...	36.0	22.1	36.3	26.9	17.6	18.0	31.2
	T1-5	4.0	8.1	4.0	8.5	6.9	1.8	2.6	12.0
	O7-3	95.7	98.6	95.7	...	99.7	94.6	94.6	97.4
	M3-7	30.6	...	...	...	...	...	...	...
	M3-7a	...	...	...	...	...	...	...	...

		Decline							
	Well	1943	1944	1945	1946	1947	1948	1947- 48	1941-1930- 48 48 48
Carrizo Springs Outcrop area	N7-78	110.2	107.9	108.9	111.0	113.3	114.4	1.1	8.1 20.7
	N7-125	69.0	70.0	70.5	70.4	73.2	72.8	+4	5.0 13.3
	S1-16	60.9	62.8	61.9	62.5	...	66.1	2.4	8.8 12.5
	S1-18	109.4	110.2	111.5	111.9	113.7	116.1	.3	+5 2.7
La Pryor	H7-20	...	76.7	76.4	75.9	76.2	76.5	8.9	44.9 52.7
	N1-24	133.7	131.2	133.9	141.5	160.1	169.0	19.8	62.5 58.0
	N1-40	117.1	115.6	...	125.3	148.2	168.0	.2	... 1.6
	M3-29	...	...	...	98.1	98.1	98.3	2.2	... 7.0
West of La Pryor	N1-39	...	...	...	80.0	81.2	83.4	17.7	...
	N1-90	...	...	...	160.0	170.4	188.1	12.0	...
	N1-92	...	...	...	...	84.1	96.1	...	...

July-September water-level measurements, in feet below measuring point, in the Winter Garden district in Dimmit, Zavala, and Eastern Maverick Counties, Texas--Continued

	Well	1943	1944	1945	1946	1947	1948	Decline		
								1947-48	1941-48	1930-48
Cometa	M6-10	81.1	80.9	80.8	85.3	....	98.6	....	23.7	26.5
	M6-16	46.4	47.1	46.8	47.4	49.4	49.6	.2	....	8.7
	M6-16a	....	....	....	....	62.1	72.4	10.3	....	....
	M6-18	46.2	45.5	45.1	52.4	57.0	67.6	10.6	28.8	30.1
	M6-19	62.1	62.1	62.9	65.5	67.5	69.5	2.0	10.7	19.4
	M9-1	73.1	69.4	76.5	84.0	80.6	88.0	7.4	22.6	33.3
	M9-9	88.8	....	88.5	90.3	90.6	90.5	+1	....	12.0
	N5-30	....	....	....	....	105.1	146.3	41.2	....	....
	N5-39	74.2	68.6	78.9	94.2	106.2	147.3	41.1	105.3	88.1
Crystal City	N5-40	69.7	65.4	75.1	85.8	102.5	144.1	41.6	105.3	86.5
	N5-55	76.4	72.2	81.3	89.8	108.5	150.9	42.4	107.7	88.9
	N5-60	....	66.7	....	90.3	116.2	148.5	32.3	107.1	....
	N7-34	60.8	56.0	63.2	64.9	56.3	59.3	3.0	24.2	14.1
	N8-26	73.5	66.8	65.8	74.1	....	136.3	....	96.9	76.4
Winter Haven	N8-28	74.7	67.5	65.7	74.2	89.9	133.1	43.2	93.7	71.8
	N8-40	79.1	47.6	67.7	....	96.7	108.5	11.8	68.4	67.5
Carrizo Springs	S2-24	142.3	....	....	122.0	127.2	165.7	39.5	73.4	58.6
Asherton	S2-27	61.4	66.5	65.4	69.7	69.0	75.2	6.2	23.8	9.1
	S2-78	184.6	186.6	183.0	177.0	178.7	212.5	33.8	68.8	39.2
Catarina	S2-102	114.4	114.1	113.5	113.4	111.9	114.9	3.0	13.1	+5.7
	S3-10	85.4	88.8	85.6	....	90.7	102.5	11.8	37.4	22.9
	S3-16	141.4	....	146.9	144.6	142.4	153.5	11.1	27.9	....
	S5-3	117.2	120.4	138.5	140.6	139.0	147.9	8.9	52.7	29.2
	S5-5	76.5	78.5	77.3	81.4	78.5	82.2	3.7	16.3	8.5
	S5-10	....	97.1	95.8	97.8	96.6	104.9	8.3	....	10.3
	S6-4	22.2	22.6	21.4	21.6	20.9	23.3	2.4	15.3	+5
Brundage	N8-103	....	....	....	39.8	49.7	80.0	30.3	68.1	38.9
	N9-12	26.2	....	....	....	....	55.4	....	45.3	36.6
	N9-16	78.9	76.5	76.7	73.3	78.2	99.9	21.7	....	33.5
	N9-25	....	31.6	30.9	26.0	....	58.5	....	....	40.4
	N9-32	....	....	....	....	40.9	62.4	21.5	43.7	34.2
	N9-33	44.0	39.5	40.7	35.6	39.1	46.7	7.6	28.7	....
Valley Wells	T1-5	13.7	14.4	15.2	17.5	16.5	30.3	13.8	27.7	26.3
Big Wells, 9 miles east of Ramble Ranch, 15 miles west of La Pryor	O7-3	103.5	104.7	103.8	106.7	109.4	119.3	9.9	24.7	23.6
	M3-7	....	....	....	....	32.3	33.6	1.3	....	3.1
	M3-7a	....	....	....	43.4	44.5	45.1	.6	....	....

FALFURRIAS-KINGSVILLE REGION

For a number of years there has been some irrigation of citrus fruits and some winter garden vegetables in Jim Wells and Brooks Counties. Also, since 1940 there has been considerable development of oil in Brooks, Jim Wells, Duval, and Kleberg Counties. The rate of drilling oil wells has increased since 1942. A gasoline plant southwest of Premont, a naval air base southeast of Kingsville, and a celanese plant north of Kingsville were put in operation in 1943. These plants originally used large quantities of ground water. In 1946 the naval air base was closed, and in 1948 the celanese plant started using surface water for a part of its supply.

Water levels are usually measured in February each year when the least irrigation water is used and when the water levels are generally highest.

Duval County.--Most of the observation wells are on the outcrop area of the sands which are heavily pumped in Jim Wells, Brooks, and Kleberg Counties. The deeper wells in the southeastern part of the county show greater declines than the wells in the central and northern part owing to the fact that they are nearer the centers of heavy pumpage in the Premont-Falfurrias area and the water is under artesian pressure. In 35 observation wells the average net decline in water level was 1.02 feet between 1947 and 1948; the water level in 5 of these wells rose from 0.04 foot to 2.42 feet while in 30 wells the water level declined from 0.03 foot to 4.09 feet. In 31 wells the average net decline in water level was 2.44 feet between 1943 and 1948; in 8 of these wells the water levels rose from 0.03 foot to 5.66 feet, while in 22 wells the water level declined from 0.20 foot to 15.97 feet.

Brooks County.--In 19 observation wells drawing from one or more sands and ranging in depth from 25 to 1,000 feet, the average net decline in water level between 1947 and 1948 was 6.06 feet; rises of 0.2 and 0.38 foot were observed in 2 wells and declines ranging from 0.55 foot to 16.40 feet were recorded in 17 wells. Between 1943 and 1948 the decline in water levels in 13 wells ranged from 1.26 to 45.01 feet and averaged 20.63 feet. Between 1932 and 1948 the decline in 12 wells ranged from 1.16 to 56.64 feet and averaged 27.61 feet. Some of the wells were in an area remote from heavy pumping.

Jim Wells County.--In seven shallow observation wells in the outcrop area in the western part of the county there was no net change in water level from 1947 to 1948. The water level in the same wells showed an average net decline of 2.05 feet from 1943 to 1948.

In 17 deep observation wells, mostly in the Premont-Falfurrias area, there was an average decline of 7.18 feet between 1947 and 1948; the decline ranged from 0.68 foot to 15.39 feet. In 12 of these wells there was average decline of 23.92 feet between 1943 and 1948; the decline ranged from 12.43 to 40.98 feet. There was very little decline prior to 1943.

Kleberg County.--In 14 observation wells there was an average net decline in water level of 1.74 feet between 1947 and 1948. In 13 wells there was an average decline of 29.93 feet between 1932 and 1948, the decline ranging from 7.48 to 53.01 feet. In two Kingsville city wells, in the

central part of the city, the water levels rose 6 and 7 feet, probably caused by a shift of pumping to new wells in more remote parts of the city.

BALCONES FAULT ZONE

Observation wells that draw water from the Glen Rose limestone, Edwards limestone, Austin chalk, and younger formations, are along the fault zone from Del Rio eastward through San Antonio and northward to Georgetown. The wells are in Val Verde, Kinney, Uvalde, Medina, Bexar, Guadalupe, Comal, Hays, Travis, and Williamson Counties. The following table summarizes the changes in water level from November 1947 to August 1948.

Average net change in water level from November 1947 to August 1948				
County	Number of wells	Average rise (+) or decline (-) (feet)	No. of wells in which the water level rose	No. of wells in which the water level declined
Wells drawing from the Edwards limestone				
Val Verde	1	+4.0	1	0
Kinney	7	+.2	3	4
Uvalde	7	-7.9	0	7
Medina	6	-12.6	0	6
Bexar	6	-11.8	0	6
Comal	11	-4.3	0	11
Hays	7	-11.8	0	7
Travis	4	-6.6	0	4
Wells drawing from the Austin chalk or younger formations				
Kinney	2	-2.0	0	2
Uvalde	5	-1.5	2	3
Medina	1	-2.4	0	1
Hays	1	-.8	0	1
Travis	3	-.3	1	2

The rise of water level in the Edwards limestone wells in Val Verde and Kinney Counties was caused by a heavy rain west of Brackettville in July 1948.

HOUSTON-GALVESTON REGION

The Houston district includes Harris County west of the San Jacinto River, and parts of Fort Bend, Waller, and Montgomery Counties. Large quantities of ground water are pumped in the district from industrial and municipal wells in the Houston-Pasadena area and from rice-irrigation wells in the Katy area west of Houston. All of these wells draw their water supply from sands that crop out from 20 to 50 miles west, northwest, and north of Houston. About 230 observation wells in the district are measured

periodically at intervals ranging from 1 month to 1 year. To simplify discussion the district is divided into three general areas--the Houston-Pasadena area, the Katy rice-growing area, the outcrop area of the water-bearing sands which supply the water, and the Galveston area.

The following table gives the estimated average daily withdrawal of ground water in the district in 1930, 1937, and 1940-48 inclusive.

Estimated average daily withdrawal of ground water in the Houston, Pasadena, and Katy areas, Texas
(millions of gallons a day)a/

	1930	1937	1940	1941	1942	1943	1944	1945	1946	1947	1948
Houston Water Dept. (from city records)	25.8	25.2	28.8	27.2	30.5	35.2	39.5	43.2	51.3	55.8	61.1
Houston independent public water supplies and industrial wells	14	16	17	16	18	20	21	21	22	24	24
Pasadena industrial wells	10	29	33	34	36	39	47	48	50	55	61
Total for the Houston and Pasadena areas	50	70	79	77	85	94	108	112	123	135	146
Katy irrigation wells	18	30	45	23	38	52	55	50	60	75	120
Total for the district	68	100	124	100	123	146	163	162	183	210	266

a The rice wells are pumped only during the season that begins about May 1 and lasts approximately 130 days, 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. Therefore, for convenience in compilation and in order that comparisons may be made, the total withdrawals in all three areas are given as daily averages for the entire year.

Houston-Pasadena area.--The preceding table shows that the average daily pumpage of ground water in this area increased by 20 millions gallons from 1930 to 1937, remained about the same from 1937 to 1941, and then increased substantially year to year through 1948. The war impact was responsible for most of the increase from 1941 to 1945. At the end of the war, several plants that had been producing war goods were shut down or production was curtailed and there was a corresponding decrease in pumpage of ground water. This decrease was only temporary, however, and in 1946, 1947, and 1948 industry became launched upon an even greater program of expansion which resulted in the record-breaking withdrawals of ground-water year by year. It was necessary to expand municipal well fields in order to meet the demands of the steadily increasing population of the area, and the pumpage for public supplies rose each year to all-time high figures. Most of the ground water used in the area in 1948 was drawn from about 310 wells.

In the observation wells that are screened opposite the heavily pumped sands in the Houston-Pasadena area, the average loss in water level from the spring of 1942 to the spring of 1948 was 48.5 feet. The largest average loss, amounting to 58.8 feet in 20 observation wells, occurred in the eastern Houston and ship-channel areas, where there was the greatest increase in pumpage. In the northern, central, and western parts of Houston and west of the city, the loss in water level amounted to 41.6 feet between the spring measurements of 1942 and 1948. For the period 1947-48 the average decline in these localities was 8.0 feet as compared to declines of 9.7 feet during 1946-47, 7.5 feet during 1945-46, and 5.5 feet during 1944-45. The increase in the rate of decline in the northern, central, and western parts of Houston is mostly the result of the year-by-year increase in pumpage by the municipal well fields. To the north of Houston, there was an average drop in water level of 5.9 feet between 1947 and 1948, as compared with 4.5 feet between 1946 and 1947; 5.2 feet between 1945 and 1946; and 4.2 feet between 1944 and 1945. The all-time record-breaking average pumpage of 145 million gallons a day in 1948 has caused the decline to continue at an accelerated rate, and spring measurements of 1949 are expected to be the lowest on record for the Houston-Pasadena area.

Observation wells screened in the lightly pumped sands to a depth of 400 feet showed a decline in water level during the period 1942-48, but the rate of decline was considerably less than that in wells drawing from the deeper, more heavily pumped sands. The drop between spring measurements for the period 1947-48 was an average of 2.7 feet. The average drop between 1942 and 1948 was 19.8 feet. In 2 wells for which comparative measurements are available the declines from 1931 to 1948 were 25.4 and 30.1 feet.

Katy rice-growing area. Additional land has been put under irrigation in this area each year since 1935 as a result of high prices for farm products. The estimated acreage irrigated by years is as follows: 47,600 acres in 1948; 44,900 acres in 1947; 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. During the 10-year period from 1931 to 1941 there was a slow but persistent decline in water level in this area, the maximum being 20.3 feet, the minimum, 5.4 feet, and the average, 11.3 feet in the 12 wells for which comparable records are available. Spring measurements in 1941 and

1942 for 44 observation wells showed an average rise during the year of 2.1 feet, due to the small demands for irrigation in 1941 and the unusually large amount of recharge from heavy rains from November 1940 to November 1941. Little net change occurred in 1942-43. From the spring of 1943 to the spring of 1948, an average net decline of 5.9 feet was recorded in 33 observation wells. For the 17-year period, 1931-48, the 11 wells for which comparable measurements are available showed an average net decline of 15.1 feet.

The pumpage for rice irrigation in 1948 amounted to an all-time record-breaking average of 120 million gallons a day as a result of an abnormally dry season together with the increased acreage farmed. The water levels consequently declined at a faster rate than in previous years, and it is expected that spring measurements in 1949 will show the lowest stage on record for the area.

Outcrop area of the water-bearing sands.--The water table in the outcrop area of the aquifers that supply the municipal, industrial, and irrigation wells of the Houston district was from 5 to 10 feet higher during the period 1941-46 than during the period 1938-40, and was as high or higher than it was in 1931-34. An additional rise was recorded during 1946-47 as a result of the above-normal rainfall during the year. The 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. The abnormally wet year from November 1940 to November 1941 and the above-normal rainfall of 1945-46 accounted for most of the recharge. During 1947 and 1948 the water levels dropped persistently. In 10 representative observation wells the drop from January 1947 to January 1948 ranged from about 2 feet to 19.2 feet and averaged 6 feet.

Galveston area.--Prior to 1944 there was a persistent drop in water levels in Galveston County as a result of heavy pumping in the Texas City industrial area and in the Alta Loma well field of the city of Galveston. The rate of decline decreased from 1944 to 1947, and at Texas City the artesian pressure became almost stationary as the cone of depression caused by the pumping became flatter and larger each year. With the appreciable curtailment of pumpage in 1948, as a result of a surface-water supply being made available to the Texas City area, there has been some recovery in

the water level in and near that industrial area. Water levels still continued to decline slowly, however, throughout a large part of Galveston County during 1948.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Angelina County

168. City of Lufkin. About 300 yards west of Redland School. Records available: 1939-45; 1948. July 22, 263.16.

169. Gulf Pipe Line Co. 2.75 miles northwest of Redland. Records available: 1939-46; 1948. July 21, 95.13.

Aransas County

No measurements made in 1948.

Bailey County

5a. E. W. Gray. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, blk. Z, 10 miles northwest of Muleshoe. Records available: 1937-48. Mar. 13, 64.34.

9. Fred McKillip. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, blk. Z, 10.5 miles west of Muleshoe. Records available: 1936-48. Mar. 12, 43.53.

21a. Mrs. J. W. Gregory, Sr. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, blk. X, 8 miles west of Muleshoe. Records available: 1936; 1938-48. Mar. 13, 30.32.

25. C. A. Wagner. NW. corner SE $\frac{1}{4}$ sec. 6, blk. Z, 8 miles west of Muleshoe. Records available: 1936-48. Mar. 12, 26.86.

31. J. H. Farley. NW. corner NW $\frac{1}{4}$ sec. 10, blk. X. Records available: 1936-40; 1942-43; 1946; 1948. Mar. 13, 21.12.

33. Mrs. J. W. Gregory. NW. corner SW $\frac{1}{4}$ sec. 12, blk. X, 7 miles northwest of Muleshoe. Records available: 1936-43; 1945-48. Mar. 13, 37.19.

36. J. E. Jeter. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, blk. X, 4.75 miles northwest of Muleshoe. Records available: 1937-48. Mar. 12, 22.81.

45. H. M. Schofner. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, blk. Y, 2.25 miles northwest of Muleshoe. Records available: 1937-48. Mar. 12, 24.33.

49. Jess Mitchell. NW. corner NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, blk. X, 3.75 miles northwest of Muleshoe. Records available: 1934; 1936-48. Mar. 12, 26.76.

53. W. B. Gwyn, Sr. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 22, blk. Y, 3.25 miles northwest of Muleshoe. Records available: 1936-48. Mar. 12, 26.45.

62. Levi Churchill. NW. corner SE $\frac{1}{4}$ sec. 42, blk. Y, 2.75 miles north of Muleshoe. Records available: 1936-48. Mar. 13, 28.36.

63. Sam Gorrell. NW. corner SW $\frac{1}{4}$ sec. 42, blk. Y, 2.75 miles north of Muleshoe. Records available: 1936-45; 1947-48. Mar. 12, 27.69.

66. C. W. Patterson. NW. corner NE $\frac{1}{4}$ sec. 41, blk. Y, 2.25 miles north of Muleshoe. Records available: 1936; 1938-48. Mar. 12, 27.11.

67. I. W. Hardin. NW. corner NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 41, blk. Y, 2.25 miles north of Muleshoe. Records available: 1936-48. Mar. 12, 26.33.

69. E. R. Hart. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 52, blk. Y, 1.75 miles north of Muleshoe. Records available: 1936-45; 1947-48. Mar. 12, 21.85.

92. L. H. McConnell. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 51, blk. Y, 3.25 miles north of Muleshoe. Records available: 1936-44; 1947-48. Mar. 12, 24.45.

95. E. R. Hart. NW. corner NW $\frac{1}{4}$ sec. 71, blk. Y, 4 miles northeast of Muleshoe. Records available: 1936-44; 1946-48. Mar. 12, 25.54.

116. E. R. Hart. NW $\frac{1}{4}$ NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 32, blk. W, 7 miles northeast of Muleshoe. Records available: 1934; 1936-37; 1939-44; 1947-48. Mar. 12, 28.72.

117. Allison Cassady. NW. corner NW $\frac{1}{4}$ sec. 32, blk. W, 6 miles northeast of Muleshoe. Records available: 1934; 1936-44; 1946-48. Mar. 12, 37.46.

130. E. R. Hart. NW. corner of NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, blk. W, 6 miles northeast of Muleshoe. Records available: 1914; 1936-44. Measurements discontinued.

131. R. D. Precure. NW. corner SW $\frac{1}{4}$ sec. 34, blk. W, 6 miles northeast of Muleshoe. Records available: 1914; 1936-44; 1946-48. Mar. 12, 23.35.

132. J. A. Ryan. NW. corner SE $\frac{1}{4}$ sec. 34, blk. W, 6.5 miles northeast of Muleshoe. Records available: 1937-45; 1947-48. Mar. 12, 22.90.

136. C. A. Barnett. NW. corner SE $\frac{1}{4}$ sec. 48, blk. W, 5.5 miles east of Muleshoe. Records available: 1914; 1934; 1936-48. Mar. 12, 17.50.

137. J. C. Hunt. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 48, blk. W, 4.75 miles east of Muleshoe. Records available: 1914; 1936-48. Mar. 12, 15.02.

205. W. A. Mathis. NW $\frac{1}{4}$ lab. 19, lge. 189, Ector County School land, 5 miles west of Muleshoe. Records available: 1936-39; 1941; 1943-44; 1946-48. Mar. 13, 48.70.

207. Mr. Whittington. SE $\frac{1}{4}$ lab. 22, lge. 188, 8 miles south of Muleshoe. Records available: 1936-43; 1946-48. Mar. 13, 107.79.

324a. Foard County School land. NW $\frac{1}{4}$ lab. 15, lge. 192, 9 miles south of Muleshoe. Records available: 1937-44; 1946-48. Mar. 13, 91.70.

435. I. C. Enochs. SE $\frac{1}{4}$ lab. 69, lge. 182, 9 miles northeast of Baileyboro. Records available: 1936-44; 1947-48. Mar. 13, 13.98.

Bexar County

15. H-17. Robert Mechler. 6 miles east of Castroville. Records available: 1933-48. Apr. 24, 132.47; June 30, 134.33; Aug. 2, 137.35.

26. H-13. Fuller's earth plant. 13.5 miles east of San Antonio. Records available: 1933-48. Apr. 23, 116.97; June 30, 119.55; Aug. 2, 123.22.

28. I-47. A. J. McCulley. 8 miles west of San Antonio. Records available: 1933-48. Apr. 23, 76.52; July 1, 77.94; Aug. 2, 81.57.

XB-1. I-122. Robert Boenig. 11 miles west of San Antonio. Records available: 1937-48. Apr. 23, 132.13; June 30, 133.71; Aug. 2, 136.91.

XB-2. H-16. Oscar Bippert. 18 miles west of San Antonio. Records available: 1934; 1937-45; 1947-48. Apr. 24, 83.87; June 30, 86.22; Aug. 9, 90.10.

XB-3. F-86. Beitel Church. 8 miles northeast of San Antonio. Records available: 1933-35; 1938-48. Apr. 23, 64.60; July 1, 65.98; Aug. 6, 70.18.

224. City of San Antonio. On east side of Acme Road, 0.4 mile north of U. S. Highway, 5.5 miles west of Post Office in San Antonio. Unused drilled irrigation well, diameter 24 and 12 inches, depth 965 feet. Measuring point, top of 8-inch protective liner, 2 feet above land-surface datum. Equipped with water-stage recorder since Oct. 24, 1949. Records available: 1944; 1948.

Highest daily water level from recorder charts

Date	Water level	Date	Water level	Date	Water level
June 4, 1944	a45	Oct. 29, 1948	63.82	Nov. 6, 1948	65.30
21, 1948	a62.5	30	63.88	7	65.38
Aug. 23	a68.92	31	63.88	8	65.12
Oct. 24	63.75	Nov. 1	63.81	9	65.50
25	63.57	2	63.93	10	65.48
26	63.63	3	64.37	11	65.33
27	63.58	4	64.63	12	64.88
28	63.74	5	65.02	13	64.98

a Tape measurement.

224--Continued.

Highest daily water level from recorder charts

Date	Water level	Date	Water level	Date	Water level
Nov. 14, 1948	64.60	Nov. 30, 1948	64.09	Dec. 16, 1948	64.77
15	64.34	Dec. 1	64.10	17	64.86
16	64.28	2	64.14	18	64.65
17	64.33	3	64.31	19	64.55
18	64.12	4	64.31	20	64.35
19	64.38	5	64.32	21	64.53
20	64.29	6	64.31	22	64.76
21	64.15	7	64.32	23	65.03
22	64.23	8	64.59	24	64.79
23	64.14	9	64.74	25	64.91
24	64.07	10	65.09	26	64.73
25	63.92	11	64.84	27	64.47
26	63.62	12	64.86	28	64.35
27	63.79	13	64.73	29	64.63
28	64.03	14	64.85	30	64.95
29	63.98	15	64.68	31	64.95

436. 26. Ed Steves & Sons. At Beverly Lodges Tourist Court, in northeast part of San Antonio. Records available: 1932-48.

Highest daily water level from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	54.94	.....	54.63	58.75	61.37	63.90	63.44	67.70	.....	67.25	64.98	65.22
2	54.83	.....	55.31	58.90	61.59	64.24	63.43	66.81	.....	67.55	65.13	65.24
3	54.92	.....	55.60	59.05	61.64	64.57	63.11	67.42	.....	67.52	65.75	65.44
4	55.05	.....	55.92	59.03	62.43	64.93	61.95	68.35	.....	66.24	66.09	65.46
5	54.96	.....	56.10	58.83	62.66	65.16	61.40	68.02	.....	67.52	66.41	65.43
6	55.10	.....	56.17	59.29	63.17	65.35	61.26	68.09	.....	67.60	66.67	65.38
7	55.50	.....	56.18	59.70	62.83	65.09	61.39	68.20	.....	68.07	66.74	65.54
8	55.60	.....	56.15	60.36	62.81	65.81	61.65	67.91	.....	67.85	66.49	65.68
9	55.55	.....	56.16	60.85	62.85	66.22	61.97	67.66	.....	67.92	66.86	65.85
10	55.78	.....	56.21	61.00	62.70	66.26	62.42	68.18	.....	67.77	66.83	66.07
11	55.77	.....	56.63	61.10	63.30	66.02	62.47	68.60	66.10	67.64	66.43	65.91
12	55.55	.....	57.05	61.06	62.51	65.88	62.51	68.05	65.68	67.91	65.98	65.94
13	55.92	.....	56.74	61.64	62.00	65.96	62.50	68.87	65.47	68.21	66.02	65.79
14	56.15	.....	56.40	61.58	61.89	65.96	62.88	68.88	65.80	68.32	65.73	65.95
15	56.27	.....	56.22	61.79	62.00	66.45	63.18	68.66	65.87	68.27	65.48	65.75
16	.....	.....	56.56	62.03	61.98	66.92	63.73	68.32	66.12	68.30	65.42	65.84
17	56.58	.....	56.92	62.19	61.99	67.11	64.13	68.42	66.21	67.60	65.49	65.91
18	56.63	.....	57.07	62.15	62.70	67.22	64.16	68.79	66.14	66.14	65.34	65.71
19	56.44	.....	56.98	61.90	63.10	67.46	64.18	.....	65.98	65.63	65.58	65.55
20	56.27	.....	57.21	62.39	63.50	67.25	64.74	.....	65.70	65.38	65.49	65.38
21	56.25	.....	57.18	62.63	63.80	66.82	65.22	.....	65.94	65.30	65.37	65.51
22	56.21	55.18	57.05	62.90	64.02	66.97	65.60	.....	66.20	65.13	65.39	65.79
23	56.12	54.82	57.09	62.31	64.00	67.44	65.87	.....	66.25	65.12	65.26	65.98
24	.....	54.80	57.59	61.70	63.73	67.07	66.17	.....	66.36	64.93	56.20	65.83
25	.....	54.88	57.70	61.15	63.61	66.52	66.20	.....	66.54	64.73	65.02	65.92
26	.....	54.85	57.88	60.64	63.15	65.71	66.02	.....	66.75	64.86	64.69	65.65
27	.....	54.80	58.00	60.72	62.83	64.91	66.61	.....	66.44	.....	64.92	65.44
28	.....	54.85	58.05	60.77	62.88	64.40	67.08	.....	66.66	64.97	65.13	65.36
29	.....	54.84	57.72	61.05	63.07	64.60	67.40	.....	66.92	65.04	65.04	65.63
30	.....	.....	58.04	61.20	63.23	63.77	67.67	.....	67.12	65.17	65.17	66.00
31	.....	.....	58.40	.....	63.20	.....	67.87	.....	.....	65.10	.....	65.92

Brazoria County

10. Gulf, Colorado and Santa Fe Railway Co. About 200 feet north of depot at Pearland. Records available: 1931; 1936; 1943-48. Feb. 5, 106.00; Sept. 21, 113.87; Dec. 14, 112.5.

612. C. H. Alexander. 0.5 mile north of traffic light on highway in Pearland. Used drilled well, diameter 20 to 14 inches, depth 1,773 feet. Measuring point, lower edge of port hole on side of pump, 4.0 feet above land-surface datum. Equipped with turbine pump for rice irrigation. Records available: 1947-48.

Date	Water level	Date	Water level	Date	Water level
Mar. 11, 1947	83.62	Feb. 5, 1948	89.94	Dec. 14, 1948	97.76
Dec. 15	89.93	Sept. 21	98.87		

Brooks County

202. E. C. Lasater Estate. 4 miles northwest of Falfurrias. Records available: 1932-33; 1935-38; 1941; 1943; 1945; 1947-48. Feb. 6, 43.22.

254. R. G. Maun. 2.5 miles northwest of Falfurrias. Records available: 1932-33; 1935-41; 1943-47. Measurements discontinued.

270. J. W. Story. 1 mile northwest of Falfurrias. Records available: 1932-33; 1935; 1938-41; 1943-46; 1948. Feb. 9, 69.20.

273. George Franks. 1.5 miles west of Falfurrias. Records available: 1932-33; 1935-41; 1943-47. No measurements made in 1948.

324. L. O. Atkinson. 1 mile south of Falfurrias. Records available: 1932-33; 1935-41; 1943-45; 1947-48. Feb. 9, 19.90.

340. Dr. H. M. Bennett. 2 miles south of Falfurrias. Records available: 1932-33; 1935; 1937-41; 1943-48. Feb. 9, 35.67.

405. A. Rupp. 5 miles east of Falfurrias. Records available: 1932-33; 1935-41; 1943-48. Feb. 12, 48.00.

474. A. Rupp. 5.5 miles southeast of Falfurrias. Records available: 1932-33; 1935-38; 1940-41; 1943-48. Feb. 12, 41.02.

504. Neal Rupp. 5.5 miles southeast of Falfurrias. Records available: 1932-33; 1935-41; 1943-46; 1948. Feb. 12, 41.13. Measurements discontinued.

505. Neal Rupp. 5.5 miles southeast of Falfurrias. Records available: 1932-33; 1935-41; 1943-48. Feb. 12, 42.95. Measurements discontinued.

865. Florencio Rodriguez. 4.5 miles west of Rachal. Records available: 1933; 1935-41; 1943-45; 1947-48. Feb. 9, 79.26.

Castro County

4. H. J. Kuper. At railroad crossing in west edge of Summerfield. Records available: 1937-40; 1944; 1947. No measurements made in 1948.

8. Earl Cole. NW. corner SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 125, blk. M7, 4.5 miles southeast of Summerfield. Records available: 1937-48. Jan. 15, 76.69; Mar. 9, 75.71.

18. Frio Public School. NE. corner NE $\frac{1}{4}$ sec. 118, blk. M7, 11.5 miles northwest of Dimmitt. Records available: 1937-39; 1941-48. Mar. 9, 70.98.

20. H. E. Lindley. 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. Records available: 1936-48. Jan. 15, 73.87; Mar. 9, 73.36.

32. W. A. Springer. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 81, blk. M7, 8 miles east of Summerfield and 2 miles east of Frio Public School. Records available: 1936-48. Mar. 9, 66.82.

36. E. O. Baker. SW $\frac{1}{4}$ NR $\frac{1}{4}$ sec. 72, blk. M7, 12 miles north of Dimmitt. Records available: 1937-48. Jan. 15, 89.86; Mar. 9, 89.40.

40. J. N. Burgin. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 51, blk. M7. Records available: 1937-42; 1944-46; 1948. Mar. 9, 69.30; Mar. 12, 69.35.

48. J. M. Richardson. NW. corner NW $\frac{1}{4}$ sec. 30, blk. M7, 13.2 miles east of Summerfield. Records available: 1937-48. Mar. 9, 64.00.

52. C. G. Maples. NW $\frac{1}{4}$ NR $\frac{1}{4}$ sec. 1, blk. M10A, 6.5 miles north of Dimmitt. Records available: 1937-48. Mar. 9, 76.10.

53. W. A. Hunter. SW. corner SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 52, blk. M7, 11 miles east of Summerfield. Records available: 1936; 1938-48. Jan. 15, 67.05; Mar. 9, 65.98.

57. E. S. Ireland. SE $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 33, blk. M7, 6 miles north of Dimmitt. Records available: 1938-44; 1947-48. Mar. 9, 79.88.

58. J. R. Tucker. SW. corner SW $\frac{1}{4}$ sec. 2, 2 miles northeast of Dimmitt. Records available: 1938-48. Mar. 9, 151.32.

201. J. C. Heiman. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 339, blk. M6, 6.5 miles east of Dimmitt. Records available: 1938-44; 1947-48. Mar. 3, 151.49.

202. Frank Huseman. SW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 222, blk. M6, 11 miles east of Dimmitt. Records available: 1938-42; 1944-48. Mar. 3, 102.80.

330. George Schacher. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 144, blk. M6. Used drilled irrigation well, diameter 12 inches, depth 225 feet. Measuring point, top of 12-inch iron casing, 3.0 feet above land-surface datum. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 3, 1943	122.40	Feb. 28, 1945	122.28	Mar. 20, 1947	123.20
3, 1944	122.12	27, 1946	122.63	3, 1948	124.44

339a. Harry Kleman. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 180, blk. M6. Used drilled irrigation well, diameter 18 inches, depth 230 feet. Measuring point, bottom edge porthole, west side of pump, 1.6 feet above land-surface datum. Records available: 1943-48.

Feb. 3, 1943	120.25	Nov. 20, 1945	122.32	Mar. 20, 1947	122.19
3, 1944	120.32	Feb. 27, 1946	121.05	8, 1948	122.55
28, 1945	120.56				

410b. L. W. Guthrie. NW $\frac{1}{4}$ sec. 7, blk. K-3. Used drilled irrigation well, diameter 16 inches, depth 228 feet. Measuring point, top of concrete pump foundation, 1.0 foot above land-surface datum. Records available: 1942-48.

Apr. 2, 1942	63.82	Feb. 7, 1944	64.48	Mar. 22, 1947	67.93
Nov. 16	64.15	28, 1945	65.88	11, 1948	69.58
Jan. 27, 1943	63.83	27, 1946	66.60		

529. Irving Redecker. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 52, blk. T4. Used drilled irrigation well, diameter 14 inches, depth 200 feet. Measuring point, top of airline hole in pump base, 1.8 feet above land-surface datum. Records available: 1939; 1944-48.

Sept. 21, 1939	94.16	Feb. 28, 1945	88.65	Mar. 22, 1947	91.58
Feb. 4, 1944	88.20	27, 1946	89.88	3, 1948	91.83

Cochran County

1. Beck Gin Co. Northeastern edge of Whiteface. Records available: 1937-42; 1944-48. Mar. 15, 149.60.

5. Dave Linder. At dugout, 8.0 miles northwest of county line at Whiteface, and 0.15 mile south of Highway 24. Records available: 1937-41; 1944-48. Mar. 15, 125.60.

10. John W. Lynch. 5 miles north of Morton. Records available: 1937-41; 1944-45; 1947-48. Mar. 15, 93.92.

Comal County

117. Alfred Reierle. 3.5 miles southeast of Spring Branch. Records available: 1936; 1939-43; 1945-46; 1948. Aug. 11, 124.39.

118. Henry Jonas Estate. 3 miles northwest of Smithson Valley. Records available: 1937; 1939-46; 1948. Aug. 11, 92.66.

119. John Stricker. 4 miles southeast of Spring Branch. Records available: 1936; 1939-46; 1948. Aug. 11, 169.18.

120. Albert Marek. 2 miles south of Spring Branch. Records available: 1936; 1939-46; 1948. Aug. 11, 83.84.

131. J. B. Graham. 5.5 miles south of Spring Branch. Records available: 1936; 1939-46; 1948. Aug. 11, 116.61.

155. George Fromme. 6 miles north of Bulverde. Records available: 1936; 1939-41; 1943-46; 1948. Aug. 11, 115.41.

162. O. A. Doeppenschmidt. 9 miles northeast of New Braunfels. Records available: 1939-46. No measurements made in 1948.

171. Mrs. Mattie Shelburne. 3 miles northeast of Bulverde. Records available: 1936; 1939-46; 1948. Aug. 11, 231.31.

183. August Wehe. In Bulverde. Records available: 1936; 1939-41; 1943; 1945-46; 1948. Aug. 11, 278.5.

184. Chas. Willig. 1.5 miles east of Bulverde. Records available: 1936; 1939-46. No measurements made in 1948.

221. Albert Simon. 4 miles north of New Braunfels. Records available: 1939-48. Apr. 24, 172.77; June 25, 166.06.

222. William Kraft. 4 miles northwest of New Braunfels. Records available: 1936; 1939-46; 1948. June 25, 179.59.

223. L. S. Davis. Formerly owned by Albert Kraft. 4.5 miles northwest of New Braunfels. Records available: 1936; 1939-48. Apr. 23, 208.62; June 25, 210.06; Aug. 11, 210.75.

225. W. H. Harborth Estate. 4 miles northwest of New Braunfels. Records available: 1936; 1939-48. Apr. 23, 175.32; June 25, 176.70; Aug. 11, 177.72.

232. Krueger Bros. Formerly owned by A. J. Caldwell. 8 miles northwest of New Braunfels. Records available: 1937; 1939-48. May 2, 197.12; Aug. 11, 196.14.

263a. Walter Kappelmacher. 3.75 miles northwest of New Braunfels. Records available: 1939-48. May 2, 229.69.

271. Albert Wallhoeffler. 1.5 miles northeast of Gruene station. Records available: 1936-48. Apr. 24, 90.58; June 25, 91.03; Aug. 6, 91.25.

274. Charles Soechting. 3 miles northeast of Gruene station. Records available: 1937-48. Apr. 24, 151.95; June 25, 152.73; Aug. 6, 152.80.

278. Nancy Gruene. 2.5 miles southwest of Hunter. Records available: 1936-48. Apr. 23, 148.40; Aug. 6, 151.90.

291. Oscar Preiss. 1.1 miles southeast of Thornhill school. Records available: 1936; 1938-48. Apr. 24, 54.18; June 25, 54.74; Aug. 6, 54.96.

326. William Schaeffer. 3.5 miles west of Solms. Records available: 1934; 1936-48. Apr. 24, 40.61; June 25, 42.18; Aug. 6, 43.91.

336. A. W. Feich. 1.5 miles southwest of Solms. Records available: 1934; 1936-48. Apr. 24, 89.00; June 25, 91.32; Aug. 6, 92.30.

373. L. Jentsch. 1 mile east of Solms. Records available: 1936-48. Apr. 24, 26.67; June 25, 28.97; Aug. 6, 29.03.

399. John Karback. 1.3 miles north of Gruene. Records available: 1937-48. May 2, 173.94; Aug. 6, 174.59.

Crosby County

1. J. T. Vaughn. In Cone, at store and filling station on east side of street, 1 block south of school. Records available: 1937-40; 1942-44; 1946-48. Feb. 17, 114.71.
2. C. B. Travis. 1.85 miles south of Cone. Records available: 1937-40; 1942-44; 1947-48. Feb. 17, 107.85.
3. New Home School. NW. corner NW $\frac{1}{4}$ NW $\frac{1}{4}$, S. M. Walker Survey. Records available: 1937-41; 1943-48. Feb. 17, 139.24.
4. J. A. McGlocklen. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 114, GTRR Survey. Records available: 1937-45. Measurements discontinued.
7. B. F. Lackey. In Ralls, on north side of U. S. Highway 62, 3 miles west of its junction with State Highway 207. Records available: 1937-48. Feb. 18, 99.32.
9. Dallas Stock Land Bank. On east edge of Lorenzo, 1 block north of U. S. Highway 62, on east side of road. Records available: 1937-38; 1942; 1947-48. Feb. 18, 82.68.

Deaf Smith County

113. A. S. Higgins. NW. corner NW $\frac{1}{4}$ sec. 28, blk. K4, 12.5 miles north of Hereford. Records available: 1937-47. Measurements discontinued.
150. I. J. Loving. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 79, blk. K4, 10.5 miles north of Hereford. Records available: 1938-44; 1946-48. Mar. 15, 100.77.
205. J. L. McGee. NW. corner NW $\frac{1}{4}$ sec. 50, blk. K3. Records available: 1937-38; 1942-46; 1948. Mar. 15, 90.15.
207. Charles B. Miles. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, blk. K3. Records available: 1936-41; 1943-48. Mar. 15, 59.98.
212. Alfred May. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 16, blk. 3. Records available: 1936-48. Records available: 1936-48. Mar. 12, 76.48.
216. C. C. Stewart. SW. corner SE $\frac{1}{4}$ sec. 14, blk. 3, 13 miles northeast of Hereford. Records available: 1937-47. No measurements made in 1948.
217. W. E. Neal. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 21, blk. 3, 13 miles northeast of Hereford. Records available: 1936-48. Mar. 12, 91.46.
219. J. E. Manz. NE. corner NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 11, blk. 3. Records available: 1937-44; 1946-48. Mar. 12, 79.32.
220. C. T. Wimberly. SW. corner of SW $\frac{1}{4}$ sec. 22, blk. 3, 11.5 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 90.78.
224. A. T. Fry. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, blk. 3. Records available: 1937-44; 1946; 1948. Mar. 12, 62.40.
226. Jack Renfro. NW. corner NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 7, blk. K3, 9 miles northeast of Hereford. Records available: 1936; 1938-48. Mar. 12, 57.28.
230. F. C. Reineaur. NW. corner SW $\frac{1}{4}$ sec. 6, blk. K3, 7.5 miles northeast of Hereford. Records available: 1936-48. Mar. 12, 48.64.
234. H. M. Horton. Sec. 534, excess acreage strip, 7.75 miles northeast of Hereford. Records available: 1937-47. No measurements made in 1948.
235. Lewis A. Smith. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, blk. K3, 7 miles northeast of Hereford. Records available: 1936-48. Mar. 12, 53.85.
236. Ray Kershen. SW. corner SW $\frac{1}{4}$ sec. 5, blk. K3, 6.4 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 52.65.
237. Ray Kershen. NW. corner NW $\frac{1}{4}$ sec. 5, blk. K3, 7 miles northeast of Hereford. Records available: 1934; 1936-48. Mar. 12, 47.79.
241. Frank Wilde. NW. corner NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, blk. K3, 5.5 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 52.82.

242. Travis Dameron. NW. corner SW $\frac{1}{4}$ sec. 24, blk. K3, 4.5 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 53.34.
245. E. F. Plank. SW. corner NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, blk. K3, 5.5 miles northeast of Hereford. Records available: 1934; 1936-48. Mar. 12, 52.01.
247. R. R. Lindsey. NE $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 34, blk. K3, 7.5 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 27.35.
251. R. R. Lindsey. NW. corner SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 47, blk. K3, 6.5 miles north of Hereford. Records available: 1936-48. Mar. 15, 63.36.
258. J. R. Davis. SW. corner NE $\frac{1}{4}$ sec. 77, blk. K3, 3 miles north of Hereford. Records available: 1936-48. Mar. 15, 65.45.
261. D. L. McDonald. NW. corner NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 65, blk. K3, 4 miles north of Hereford. Records available: 1914; 1936-48. Mar. 15, 63.29.
265. Reinauer Bros. NW. corner SE $\frac{1}{4}$ sec. 74, blk. K3, 6 miles north of Hereford. Records available: 1937-48. Mar. 15, 73.85.
272. J. L. Hoffman. SW. corner SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 86, blk. K3, 5 miles northwest of Hereford. Records available: 1936-48. Mar. 15, 76.25.
281. R. A. Freeman. NW. corner NW $\frac{1}{4}$ sec. 96, blk. K3, 5.5 miles northwest of Hereford. Records available: 1937-41; 1944-48. Mar. 15, 75.14.
283. J. T. Gilbreath. North line of NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 133, blk. M7, 3 miles west of Hereford. Records available: 1936-48. Mar. 9, 67.48.
288. Lee Hopson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 63, blk. K3, 2.5 miles north of Hereford. Records available: 1936-48. Mar. 15, 74.52.
291. Roy T. Slagle. NW. corner NW $\frac{1}{4}$ sec. 59, blk. K3, 1 mile northeast of Hereford. Records available: 1936-48. Mar. 15, 67.36.
300. Ayres Estate. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 43, blk. K3, 2 miles northeast of Hereford. Records available: 1937-48. Mar. 12, 54.78.
301. V. C. Hodges. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 43, blk. K3, 2.6 miles northeast of Hereford. Records available: 1937-41; 1943; 1945-48. Mar. 12, 49.71.
302. Noel Ewton. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 38, blk. K3, 4 miles northeast of Hereford. Records available: 1936-48. Mar. 12, 53.43.
311. H. H. Boardman. SW $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 41, blk. K3, 2 miles east of Hereford. Records available: 1934, 1936-48. Mar. 12, 52.18.
315. William Woulff. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 67, blk. M7, 3.5 miles west of Hereford. Records available: 1936-48. Mar. 12, 58.38.
322. Dr. G. W. Heard. SW. corner SE $\frac{1}{4}$ sec. 112, blk. M7, 2.5 miles south of Hereford. Records available: 1936-48. Mar. 12, 81.65.
326. Frank J. Knabe. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 114, blk. M7. Records available: 1937-41; 1945-48. Mar. 9, 99.95.
331. Owen Andrews. SW. corner NW $\frac{1}{4}$ sec. 107, blk. M7, 4 miles south of Hereford. Records available: 1937-48. Mar. 12, 83.92.
336. George M. Clingan. SW. corner NF $\frac{1}{4}$ sec. 86, blk. M7, 3.5 miles southeast of Hereford. Records available: 1936-48. Mar. 15, 95.28.
340. Felix Urbanczyk. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 108, blk. M7, 3.75 miles south of Hereford. Records available: 1936-48. Mar. 12, 84.40.
342. Felix Urbanczyk. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 108, blk. M7, 3.5 miles south of Hereford. Records available: 1937-45; 1947-48. Mar. 12, 83.85.
431. S. J. Barclay. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 152, blk. M7, 4.5 miles southwest of Hereford. Records available: 1937-48. Mar. 9, 73.58.
502. Carl H. Schroeder. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 50, blk. K8, 8.5 miles west of Hereford. Records available: 1937-48. Mar. 9, 105.40.
506. Alton Fraser. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, Gregg County school land, 9.2 miles west of Hereford. Records available: 1937-47. Measurements discontinued.
513. A. E. Acton. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 174, blk. M7, 7.5 miles southwest of Hereford. Records available: 1937-40; 1942-47. No measurements made in 1948.

514. Howard Gault. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 173, blk. M7, 0.5 mile north of Summerfield. Records available: 1937-39; 1942-48. Mar. 9, 109.04.

Dimmit County

M9-9. Mr. Myers. 2.5 miles southwest of Cometa. Records available: 1929-39; 1941-43; 1945-48. Sept. 16, 87.48.

N7-34. Byrd Cattle Co. 2 miles northwest of Winter Haven. Records available: 1929-48. Sept. 14, 58.92.

N7-78. C. Schmitt. 3 miles west of Carrizo Springs. Records available: 1930-33; 1935-48. Sept. 14, 112.85.

N7-125. J. Gardner. In Carrizo Springs. Records available: 1930-32; 1936-48. Sept. 14, 71.79.

N8-19. C. W. Wilkeson. 2 miles southeast of Winter Haven. Records available: 1929-33; 1937-43; 1947-48. Aug. 12, 1943; 85.03; July 23, 1947, 90.45; Aug. 10, 1948, 93.15; Sept. 14, 1948, 93.61.

N8-26. G. C. Riha. 4 miles southeast of Winter Haven. Records available: 1929-41; 1943-46; 1948. May 14, 138.89; Aug. 10, 130.15; Sept. 14, 136.30.

N8-28. G. W. Weston. 4 miles southeast of Winter Haven. Records available: 1929-48. May 14, 134.95; Aug. 10, 126.06; Sept. 13, 131.61.

N8-40. John Stahl. 3 miles northeast of Carrizo Springs. Records available: 1929-33; 1935-48. May 15, 92.80; Aug. 10, 125.0; Sept. 14, 108.46.

N8-103. Marrs McLean. Formerly owned by Nueces Land & Irrigation Co. 4 miles southwest of Brundage. Records available: 1929-32; 1935-42; 1946-48. Aug. 11, 71.92; Sept. 14, 80.00.

N9-12. Federal Land Bank. 1 mile west of Big Wells. Records available: 1929-43; 1948. May 14, 51.56; Sept. 14, 53.87.

N9-16. Boyd Bros. 1.5 miles east of Big Wells. Records available: 1929-33; 1935; 1937; 1939; 1942-48. May 15, 97.64; Aug. 11, 97.72; Sept. 14, 98.89.

N9-25. Order of Calenthia. 4 miles southeast of Brundage. Records available: 1929-33; 1935-40; 1942; 1944-46; 1948. May 14, 55.37; Sept. 14, 57.50.

N9-32. P. J. Lewis. 2.5 miles south of Big Wells. Records available: 1929-33; 1937-41; 1947-48. Sept. 14, 61.39.

N9-33. P. J. Lewis. 2.5 miles south of Big Wells. Records available: 1932; 1936-44; 1946-48. May 14, 39.55; Aug. 11, 42.85; Sept. 14, 46.19.

O7-3. G. W. Hatch. 9 miles northwest of Big Wells. Records available: 1929-44; 1946-48. Sept. 14, 117.81.

S1-15. Central Securities Co. 6 miles southwest of Carrizo Springs. Records available: 1930-34; 1938-41; 1943-47. Measurements discontinued.

S1-16. G. W. Gilfillan & Son. 4.5 miles southwest of Carrizo Springs. Records available: 1930-33; 1935-46; 1948. May 15, 63.54; Aug. 10, 63.89; Sept. 14, 65.08.

S1-18. Central Securities Co. 3.5 miles southwest of Carrizo Springs. Records available: 1930-48.

Date	Water level	Date	Water level	Date	Water level
May 16	113.04	Sept. 14	114.07	Nov. 9	114.20
Aug. 10	113.86	Oct. 11	114.47	Dec. 23	114.25

S2-24. L. V. Richardson. 5.5 miles southeast of Carrizo Springs. Records available: 1928; 1930-33; 1935-43; 1946-48. May 15, 146.35; Sept. 14, 163.7.

S2-27. J. A. McDonald. 3.5 miles northeast of Asherton. Records available: 1929-33; 1935-39; 1942-48. May 15, 71.70; Aug. 11, 73.30; Sept. 14, 74.21.

S2-78. J. W. Robinson. 2.5 miles southwest of Asherton. Records available: 1929-33; 1935-48. May 16, 201.69; Aug. 10, 202.34; Sept. 15, 211.97.

S2-102. William H. McKinney. 4 miles northwest of Catarina. Records available: 1929-33; 1935-48.

Date	Water level	Date	Water level	Date	Water level
Aug. 10	113.60	Oct. 11	114.31	Dec. 23	115.52
Sept. 14	113.87	Nov. 9	114.87		

S3-10. Catarina Farms Co. 4.5 miles northeast of Catarina. Records available: 1929-33; 1936-48. May 14, 107.94; Sept. 16, 102.03.

S3-16. Catarina Farms Co. 2.5 miles west of Catarina. Records available: 1936-41; 1943; 1945-48. Sept. 16, 152.53.

S5-3. Catarina Farms Co. 6 miles west of Catarina. Records available: 1929-33; 1935-48. May 15, 143.55; Aug. 10, 144.67; Sept. 15, 146.87.

S5-5. Dolph Briscoe. 13 miles southwest of Catarina. Records available: 1929-33; 1936-37; 1939-48. Aug. 10, 81.95; Sept. 16, 80.82.

S5-10. Catarina Farms Co. 5 miles southwest of Catarina. Records available: 1929-33; 1935-39; 1944-48. Sept. 16, 103.87.

S6-4. O. V. Ray. 1.5 miles southeast of Catarina. Records available: 1928; 1930-33; 1935-48. May 15, 20.52; Aug. 10, 22.80; Sept. 15, 23.32.

T1-5. Bob Graves. 2.25 miles east of Valley Wells. Records available: 1930-32; 1934; 1936-41; 1943-48. May 14, 25.77; Sept. 21, 30.34.

Duval County.

55. L. N. Garcia. 3.7 miles west of San Diego. Records available: 1931; 1933-41; 1945; 1947-48. Feb. 5, 50.02.

61. Jose M. Sepulvida. 7 miles northwest of San Diego. Records available: 1933-41; 1943; 1945-48. Feb. 5, 39.85.

69. Juan Peralez. 9 miles west of San Diego. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 69.23.

70. M. Cantu. 10.4 miles west of San Diego. Records available: 1931; 1933-34; 1936-41; 1948. Feb. 5, 48.44.

71. Helena de Pena. 11.2 miles west of San Diego. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 5, 39.48.

73. Severo Ranjel. 11 miles west of San Diego. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 34.80.

143. Salidonia Ruiz. In Benavides. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 35.25.

144. Pete Coronado. In Benavides. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 36.16.

158. Marcos Gomez. 1.75 miles southwest of Benavides. Records available: 1933-41; 1943; 1945; 1948. Feb. 5, 92.20.

173. Ismael Garcia Estate. 2.3 miles east of Benavides. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 48.43.

175. Mrs. Tom Cavanaugh. 1 mile east of Benavides. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 44.85.

183. Lazaro Vela. 8 miles south of San Diego. Records available: 1931; 1933-34; 1936-41; 1943; 1945; 1947-48. Feb. 5, 50.80.

184. Eusebio Alanis. 7.5 miles southwest of San Diego. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 42.11.

185. Cervando Saenz. 10 miles south of San Diego. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 5, 33.31.

188. Encarnacion Pena. 1 mile north of San Jose. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 74.59.

189. Pedro Lopez. At San Jose. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 5, 60.13.

190. Margarita Lopez. About 0.5 mile south of San Jose. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 42.52.

201. Maria Villareal de Saenz. 1.25 miles north of Santa Cruz. Records available: 1931; 1933-41; 1943; 1945-48. Feb. 6, 74.92.

203. N. E. Martinez. In Santa Cruz. Records available: 1933-41; 1943; 1945-48. Feb. 6, 61.98.

204. Hilario Saenz. 1 mile south of Santa Cruz. Records available: 1931-41; 1943; 1945-48. Feb. 6, 76.28.

211. J. Perez. 1.3 miles north of Concepcion. Records available: 1931; 1933-41; 1943; 1947-48. Feb. 6, 40.18.

230. San Antonio Loan & Trust Co. 3.5 miles north of Realitos. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 57.78.

240. Gus Minges. 1.5 miles northeast of Realitos. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 92.80.

271. J. Mann. 5.5 miles southeast of Realitos. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 75.38.

276. Hermann Dammier. 10.25 miles south of Realitos. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 5, 41.06.

289. Adolfo Garcia. 3.75 miles northeast of Sejita. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 5, 44.21.

290. Andaliasia Garcia. 3 miles northeast of Sejita. Records available: 1931; 1933-38; 1940-41; 1943; 1945; 1947-48. Feb. 5, 49.39.

292. Raphael Flores. 1 mile east of Sejita. Records available: 1931; 1933-41; 1947-48. Feb. 5, 33.13.

297. San Antonio Loan & Trust Co. 6.5 miles southeast of Sejita. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 6, 53.63.

301. Virginia Garcia. 5 miles south of Concepcion. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 6, 63.67.

302. Rafael Garcia. 4.5 miles south of Concepcion. Records available: 1933-41; 1943; 1945; 1947-48. Feb. 6, 33.40.

304. Rafael Garcia. 3 miles south of Concepcion. Records available: 1931; 1933-41; 1943; 1945; 1947-48. Feb. 6, 58.10.

315. Ruben Schultz. 6.75 miles southwest of Santa Cruz. Records available: 1932-39; 1941; 1943; 1945-48. Feb. 6, 47.45.

319. San Antonio Loan & Trust Co. 5.25 miles southeast of Santa Cruz. Records available: 1931; 1933-39; 1941; 1943; 1945-48. Feb. 6, 47.79.

322. Santona Jinojosa. About 0.75 mile east of La Copita. Records available: 1932-41; 1943; 1945-48. Feb. 6, 38.99.

• 325. Val Stockton. 3 miles east of La Copita. Records available: 1932; 1943-46. Measurements discontinued.

El Paso County

8. El Paso Electric Co. well 4. At Santa Fe and Fourth Streets. Records available: 1936-48. Dec. 17, 1946; 34.09; Jan 23, 1948, 23.80.

9. El Paso Electric Co. well 3. At Santa Fe and Fourth Streets. Records available: 1935-45; 1947. No measurements made in 1948.

10. City of El Paso drainage well. At Fourth and Oregon Streets. Records available: 1938-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 25, 1947	17.77	Jan. 30, 1948	20.18	Aug. 31, 1948	20.96
June 24	20.40	June 29	20.65		

18. City of Juarez well 3. In Ciudad, Chihuahua, Mexico, near Hipodromo. Records available: 1935; 1937-38; 1940-45; 1947. No measure-made in 1948.

19. El Paso Milling Co. At Kansas and Eleventh Streets. Records available: 1935-47. No measurements made in 1948.

21. City of El Paso well 10. At Campbell and Sixth Streets. Records available: 1934-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 25, 1947	23.25	Aug. 28, 1947	23.63	June 29, 1948	22.40
June 24	23.49	Jan. 30, 1948	23.08	Aug. 31	22.07

29a. Consumers Ice & Fuel Co. well 2. At Cotton and Dallas Streets. Records available: 1939-48.

Dec. 17, 1946	34.09	June 24, 1947	40.52	Oct. 28, 1948	32.35
Apr. 25, 1947	39.10	Aug. 31, 1948	37.27	Dec. 29	30.17

30a. City of El Paso well 14. At San Antonio and Walnut Streets. Records available: 1937-48.

Dec. 17, 1946	29.15	Jan. 30, 1948	29.14	Oct. 26, 1948	27.68
June 24, 1947	37.91	June 16	34.53	Dec. 29	30.17
Aug. 26	32.29				

32a. City of El Paso well 17. At San Antonio and Tornillo Streets. Records available: 1939-48.

Dec. 17, 1946	32.32	Jan. 30, 1948	32.60	Oct. 26, 1948	30.41
Apr. 25, 1947	62.66	June 16	34.74	Dec. 29	28.38
Aug. 28	34.50	Aug. 31	35.66		

42. City of El Paso well 9. At Luna and Pera Streets. Records available: 1934-48.

Dec. 17, 1946	27.90	Aug. 26, 1947	31.70	Oct. 26, 1948	26.05
Apr. 25, 1947	30.40	Jan. 19, 1948	34.04	Dec. 29	23.20

48a. City of El Paso well 18. In Hadlock addition. Records available: 1940-48.

Dec. 17, 1946	26.85	Aug. 26, 1947	33.11	Oct. 26, 1948	25.76
June 24, 1947	34.54	Jan. 9, 1948	27.04	Dec. 20	24.77
July 28	37.48	Mar. 18	24.06		

48b. City of El Paso test well 33. Near Franklin Canal. Records available: 1940-48.

Dec. 17, 1946	21.02	Jan. 9, 1948	20.67	Sept. 27, 1948	22.46
Apr. 25, 1947	21.19	Mar. 18	18.88	Oct. 26	19.95
June 24	25.00	June 28	27.60	Nov. 29	19.36
July 28	25.80	July 27	26.13	Dec. 28	18.00
Aug. 26	23.17	Aug. 26	24.84		

49. City of El Paso well 4. In Montana well field. Records available: 1935; 1937-48. Jan. 9, 71.76; Mar. 18, 69.32; Nov. 3, 70.73; Dec. 20, 69.81.

50. City of El Paso well 1. In Montana well field. Records available: 1935; 1937-48.

Date	Water level	Date	Water level	Date	Water level
Dec. 17, 1946	90.22	Mar. 13, 1948	85.41	Sept. 27, 1948	94.56
June 23, 1947	96.62	June 28	101.08	Oct. 26	89.85
July 28	99.91	July 20	101.74	Nov. 29	89.91
Aug. 30	100.72	Aug. 27	99.77	Dec. 28	88.60
Jan. 9, 1948	89.32				

51. City of El Paso well 2. In Montana well field. Records available: 1936-47. Dec. 17, 1946, 99.52. No measurements made in 1948.

52. City of El Paso well 3. In Montana well field. Records available: 1935-48.

Dec. 17, 1946	109.15	Apr. 5, 1948	172.50	Dec. 28, 1948	107.09
Mar. 18, 1948	104.08	Oct. 26	108.48		

53. Loretta College. At Clifton and Reynolds Streets. Records available: 1935-48.

Dec. 17, 1946	136.38	Mar. 18, 1948	133.30	Sept. 27, 1948	142.85
June 23, 1947	143.61	June 28	148.66	Oct. 26	136.11
Aug. 29	146.28	Aug. 27	147.63	Dec. 29	131.46
Jan. 9, 1948	135.34				

55. The Texas Co. 0.6 mile northeast of Ascarate. Records available: 1935-48. June 23, 1947, 55.05; Jan. 19, 1948, 46.95; Mar. 18, 1948, 47.02; June 29, 1948, 55.67.

59. Phelps-Dodge Refining Corporation well 1. Near Southern Pacific Railway at North Loop road. Records available: 1935-36; 1940-45; 1947. No measurements made in 1948.

64. City of El Paso and Geological Survey test well 1. On Carlsbad Highway. Records available: 1937-48.

Dec. 27, 1946	266.82	Jan. 13, 1948	267.27	Sept. 27, 1948	267.59
Apr. 29, 1947	266.02	June 14	267.10	Oct. 26	267.42
June 23	267.00	July 27	267.30	Nov. 29	266.37
July 28	267.16	Aug. 26	267.22	Dec. 28	267.33
Aug. 26	267.20				

67b. Texas & New Orleans Railway Co. well 3. Near south entrance to Fort Bliss. Records available: 1938-39; 1941-45; 1947. No measurements made in 1948.

72. U. S. Dept. of the Army, Fort Bliss well 2. Records available: 1935-45; 1947-48. Jan. 13, 224.87; Dec. 29, 226.86.

75b. City of El Paso test well 10. 0.6 mile south of Wilson Road and 0.6 mile west of Airport road. Records available: 1938-48.

Dec. 17, 1946	216.00	Jan. 13, 1948	216.08	Aug. 26, 1948	220.94
Apr. 10, 1947	216.20	Mar. 17	215.83	27	222.97
June 23	216.60	May 12	218.98	Oct. 26	218.55
July 28	219.00	June 14	219.79	Nov. 29	216.79
Aug. 26	218.53	July 26	220.18		

76. City of El Paso and Geological Survey test well 2. Near southeast corner of Biggs Field. Records available: 1936-48.

Dec. 17, 1946	245.53	Jan. 13, 1948	245.56	Sept. 27, 1948	248.48
Apr. 29, 1947	245.47	June 14	247.60	Oct. 26	247.04
June 23	247.14	July 26	248.23	Nov. 29	246.35
July 28	247.52	Aug. 26	248.27	Dec. 28	245.30
Aug. 26	247.62				

77. City of El Paso well 12. In Mesa well field. Records available: 1935-48.

Date	Water level	Date	Water level	Date	Water level
Dec. 17, 1946	217.75	July 28, 1947	224.53	June 14, 1948	226.10
Apr. 29, 1947	221.06	Aug. 26	224.61	Aug. 31	226.67
June 23	221.48	Jan. 13, 1948	219.06	Dec. 29	214.90

78c. City of El Paso test well 4. 1 mile north of city well 11. Records available: 1937-48.

Dec. 17, 1946	197.67	Aug. 26, 1947	197.90	Aug. 31, 1948	198.75
June 23, 1947	197.86	June 14	198.35	Oct. 26	198.80
July 28	198.01	Jan. 13, 1948	198.60	Dec. 29	199.14

112. City of El Paso old Mesa well 32. In Mesa well field. Records available: 1935-48. Dec. 17, 1946, 207.35; June 23, 1947, 212.85; Jan. 13, 1948, 213.17; Dec. 29, 1948, 209.11.

128b. City of El Paso well 21. 2 miles north of Mesa well field. Records available: 1941-48.

Dec. 17, 1946	245.15	Jan. 16, 1948	247.01	Dec. 29, 1948	203.47
June 23, 1947	248.06	Mar. 25	203.76		

128c. City of El Paso well 23. 2.5 miles north of Mesa well field. Records available: 1939-48.

Dec. 17, 1946	203.25	Aug. 26, 1947	202.95	Aug. 31, 1948	203.58
Apr. 29, 1947	202.51	Jan. 13, 1948	202.86	Sept. 27	203.58
June 23	202.73	Mar. 24	202.37	Oct. 26	203.68
July 28	202.91	June 14	202.86	Dec. 28	203.13

136. City of El Paso and Geological Survey test well 3. 6.9 miles north of Wilson Road. Records available: 1936-48.

Dec. 17, 1946	274.43	Jan. 12, 1948	247.87	Sept. 27, 1948	248.36
Apr. 29, 1947	247.59	June 14	248.08	Oct. 26	248.44
June 23	247.66	July 26	248.18	Nov. 29	248.53
July 28	247.87	Aug. 26	248.13	Dec. 28	248.25
Aug. 26	247.86				

139a. City of El Paso test well 29. 9 miles north of Mesa well field. Records available: 1940-45; 1947-48. June 23, 1947, 337.83; Jan. 12, 1948, 337.20; June 30, 1948, 337.88.

143a. City of El Paso test well 30. 12 miles north of Mesa well field. Records available: 1940-45; 1947-48. June 23, 1947, 317.93; Jan. 12, 1948, 317.50; June 30, 1948, 319.18.

Floyd County

5. M. C. Scheele. SW corner of SW $\frac{1}{4}$ sec. 127, blk. D2, 11 miles northwest of Lockney. Records available: 1936-48. Jan 16, 58.10; Mar. 1, 57.85.

14. Herman R. King. SW $\frac{1}{4}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, blk. C9, 10 miles north of Lockney. Records available: 1936-38; 1940-48. Mar. 1, 63.59.

32. Frank Whitfill. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 12, blk. C9, 9 miles north of Lockney. Records available: 1937-43; 1945-48. Mar. 1, 96.00.

57. T. L. Wilhite. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 87, blk. D2, 7.5 miles northwest of Lockney. Records available: 1936-48. Mar. 1, 72.70.

106. M. W. Alford. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 65, blk. D2. Records available: 1934; 1937-46; 1948. Mar. 1, 70.16.

108. Ivan Thompson. NW. corner SE $\frac{1}{4}$ sec. 65, blk. D2, 6.5 miles northwest of Lockney. Records available: 1938-48. Mar. 1, 70.59.

111. 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. Records available: 1914; 1936-48. Feb. 26, 65.37.

112. C. R. Roach. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 12, blk. D5, 7 miles northwest of Lockney. Records available: 1914; 1936-45; 1947-48. Feb. 26, 64.82.

120. Francis Carthel. NW. corner NW $\frac{1}{4}$ sec. 1, blk. D5, 4.5 miles northwest of Lockney. Records available: 1937-48. Mar. 1, 77.75.

139. L. R. Collis. SE. corner SE $\frac{1}{4}$ sec. 2, blk. D5, 3 miles northwest of Lockney. Records available: 1914; 1934; 1937-38; 1942-48. Mar. 1, 94.14.

140. C. Williams. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 2, blk. D5, 3.5 miles northwest of Lockney. Records available: 1914; 1938-48. Mar. 1, 79.87.

143. Plainview-Lockney Farms. SE $\frac{1}{4}$ NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, blk. D5, 5 miles northwest of Lockney. Records available: 1914; 1936-47. No measurements made in 1948.

150. Mollie S. Gholson. NW. corner NW $\frac{1}{4}$ sec. 14, blk. D5, 7 miles northwest of Lockney. Records available: 1936-48. Feb. 26, 58.80.

153. J. C. Thomas & Sons. SW. corner NW $\frac{1}{4}$ sec. 15, blk. D5. Records available: 1914; 1936-46; 1948. Feb. 26, 68.78.

157. Texas Land & Development Co. NW. corner NE $\frac{1}{4}$ sec. 10, blk. D5, 6 miles west of Lockney. Records available: 1934; 1937-48. Mar. 1, 71.00.

161. 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. Records available: 1914; 1936-48. Mar. 1, 79.77.

326. W. C. Simms. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 68, blk. 1, 2 miles east of Floydada. Records available: 1937; 1939-43; 1945-48. Mar. 9, 147.20.

409. A. V. and J. H. Campbell. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 24, blk. N, 5 miles west of Lockney. Records available: 1914; 1936-43; 1945-48. Mar. 2, 75.18.

410. W. C. McGrede. SW. corner W $\frac{1}{2}$ sec. 44, blk. D6, 5.5 miles west of Lockney. Records available: 1936-47. Measurements discontinued.

416. J. R. Belt, Jr. NW. corner NE $\frac{1}{4}$ sec. 46, blk. D6, 4.5 miles west of Lockney. Records available: 1938-48. Mar. 2, 85.80.

421. J. R. Belt, Jr. NW. corner NW $\frac{1}{4}$ sec. 48, blk. D6, 3.5 miles west of Lockney. Records available: 1914; 1934; 1936-48. Jan. 16, 94.50; Mar. 2, 91.10; Dec. 1, 103.00.

428. W. L. Thomas. NW. corner F. Griggs survey, 3.5 miles southwest of Lockney. Records available: 1938-48. Mar. 2, 74.50.

435. W. M. Summerlin. Center of L. C. Reed survey, at crossing of Burlington & Santa Fe Railways, in southwest part of Lockney. Records available: 1937-48. Mar. 2, 93.10.

437. Lockney Oil Mill Co. On north side of Panhandle & Santa Fe Railway. Records available: 1937-48. Mar. 2, 67.15.

441. Federal Land Bank. NW. corner NW $\frac{1}{4}$ sec. 50, blk. D3, 2 miles northeast of Lockney. Records available: 1937-48. Mar. 2, 70.30.

442. Solon Clements. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 51, blk. D3. Records available: 1937-46; 1948. Mar. 2, 37.08.

446. W. J. King. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 68, blk. G, 2.5 miles southeast of Lockney. Records available: 1937-47. Measurements discontinued.

459. Texas Land & Development Co. SW. corner M. Y. Price survey, 5.5 miles southwest of Lockney. Records available: 1934; 1937-48. Mar. 2, 62.55.

463. Sam Moore. Formerly owned by Texas Land & Development Co. NW. corner NW $\frac{1}{4}$ sec. 14, blk. N, 6 miles west of Lockney. Records available: 1934; 1937-48. Mar. 2, 67.20.

467. C. J. Barnard. NW $\frac{1}{4}$ SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, blk. N, 8 miles southwest of Lockney. Records available: 1937-48. Mar. 9, 53.69.
472. Texas Land & Development Co. NW. corner J. K. Andrews Survey, 5.5 miles southwest of Lockney. Records available: 1938-48. Mar. 2, 64.32.
486. Mrs. M. E. Morris. SE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 53, blk. O, 5.5 miles southeast of Lockney. Records available: 1937-48. Mar. 2, 35.25.
510. W. R. Crow. North end of J. R. Powell survey, 8 miles southwest of Lockney. Records available: 1937-48. Mar. 9, 55.98.
519. J. L. Faulkner. NE. corner SW $\frac{1}{4}$ sec. 44, blk. G, 7.5 miles west of Floydada. Records available: 1936-48. Jan. 16, 56.78; Mar. 9, 56.82.
523. C. F. Harris. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 41, blk. G, 7.5 miles northwest of Floydada. Records available: 1939-48. Mar. 9, 73.20.
525. W. Fry. NW $\frac{1}{4}$ NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 52, blk. G, 5.5 miles south of Lockney. Records available: 1937-48. Mar. 2, 44.35.
529. Panhandle & Santa Fe Railway. SW. corner SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 63, blk. 1, 2 miles northwest of Floydada. Records available: 1937-40; 1942-48. Mar. 9, 109.82.
562. H. W. Carver. NW $\frac{1}{4}$ J. A. H. survey. Records available: 1937; 1939-43; 1945-46; 1948. Mar. 9, 135.13.

Fort Bend County

7. C. C. Cardiff. Owner's well 1. 4 miles southwest of Katy. Records available: 1931; 1933; 1939-48. Mar. 19, 63.62; Nov. 16, 71.47.
11. P. V. Cook. Owner's well 3. 1.75 miles southwest of Katy. Records available: 1932-33; 1939-40; 1942-48. Mar. 19, 60.45; Nov. 16, 65.57.
15. P. V. Cook. Owner's well 1. 3.25 miles southwest of Katy. Records available: 1931-33; 1939-48. Mar. 19, 64.56; Nov. 16, 70.16.
17. Mrs. H. L. Gordon. 5 miles south of Katy. Records available: 1940-48. Mar. 19, 57.27; Nov. 19, 65.81.
20. L. Pauli. 5.75 miles southeast of Katy. Records available: 1931; 1933; 1939-48. Mar. 19, 46.77.
21. L. Pauli. 6 miles south of Katy. Records available: 1931-33; 1939-40; 1942-48. Mar. 19, 48.03; Nov. 16, 57.47.
26. C. Pillot. Owner's well 1. 10 miles southeast of Katy. Records available: 1939-48. Mar. 19, 33.01.
29. C. Pillot. Owner's well 2. 9 miles southeast of Katy. Records available: 1940-46; 1948. Mar. 19, 28.96.
30. Owner's well 2. B. Ray Woods. 6.5 miles southwest of Katy. Records available: 1940-48. Mar. 19, 65.31; Nov. 19, 70.36.
33. Earl McMillian. 3.5 miles southwest of Katy. Records available: 1941-48. Mar. 19, 65.45; Nov. 19, 69.66.
75. Gulf Pipe Line Co. 10 miles southeast of Sugarland. Records available: 1938-48. Feb. 5, 81.90; Sept. 21, 91.73; Dec. 14, 91.40.
77. Ansel & Brinkman. 2 miles north of Blue Ridge State Prison. Records available: 1945-48. Mar. 23, 66.26; Dec. 14, 76.74.

Gaines County

No measurements made in 1948.

Galveston County

16. Cecil Brown. In Friendswood. Records available: 1939-41; 1943-44; 1947-48. Oct. 1, 103.9.
28. Galveston, Houston & Henderson Railroad. At League City. Records available: 1931-33; 1935; 1939-48. May 17, 86.94; Oct. 4, 92.22.
42. J. Freund. In Kemah. Records available: 1939-48. May 24, 65.79; Oct. 4, 68.31.

112. Galveston, Houston & Henderson Railroad. 6.5 miles northeast of Alta Loma. Records available: 1931-33; 1935-45; 1947-48. May 20, 88.90; Oct. 5, 94.19.

115. J. W. Palmer. 6 miles northeast of Alta Loma. Records available: 1932-33; 1935-48. May 20, 69.85; Oct. 5, 74.67.

244. Stone Oil Co. In Texas City. Records available: 1939-48. May 18, 152.44; Oct. 6, 169.58.

295. Atchison, Topeka & Santa Fe Railway Co. In Hitchcock. Records available: 1939-41; 1943-44; 1946-48. Oct. 7, 90.87.

381. Stewart Production Co. 3 miles southeast of Hitchcock. Records available: 1939-46; 1948. May 25, 85.99.

688. City of Galveston test well 1. In Alta Loma. Records available: 1941-48. May 21, 111.85; Oct. 8, 110.24.

689. City of Galveston test well 2. 2.5 miles northeast of Alta Loma. Records available: 1941-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	105.7	105.9	106.2	106.0	106.5	106.7
2	105.8	105.9	106.2	106.1	106.5	106.7
3	105.8	105.8	106.3	106.1	106.6	106.7
4	105.8	105.8	106.3	106.1	106.6	106.7
5	105.8	105.8	106.4	106.1	106.6	106.7
6	105.8	105.8	106.4	106.1	106.6	106.8
7	105.9	105.8	106.4	106.1	106.6	106.8
8	105.9	105.8	106.3	106.1	106.6	106.8
9	105.9	105.9	106.3	106.2	106.6	106.8
10	105.9	105.9	106.3	106.2	106.6	106.8
11	105.9	105.9	106.4	106.1	106.6	106.8
12	105.9	105.9	106.5	106.2	106.6	106.9
13	105.9	105.9	106.5	106.2	106.7	106.9
14	106.0	106.0	106.4	106.3	106.7	106.9
15	106.0	106.0	106.4	106.3	106.7	106.9
16	106.0	106.0	106.4	106.4	106.7	107.0
17	106.0	106.1	106.4	106.4	106.8	107.0
18	106.0	106.1	106.4	106.5	106.8	107.0
19	105.9	106.1	106.4	106.5	106.8	107.1
20	105.9	106.1	106.4	106.5	106.8	107.1
21	105.9	106.1	106.5	106.6	106.8	107.1
22	105.8	106.1	106.4	106.6	106.8	107.2
23	105.8	106.1	106.3	106.6	106.8	107.2
24	105.9	106.1	106.2	106.6	106.8	107.3
25	105.9	106.2	106.1	106.6	106.8	107.3
26	105.9	106.2	106.0	106.5	106.8	107.3
27	105.9	106.2	106.0	106.5	106.7	107.4
28	105.9	106.2	106.1	106.6	106.7	107.4
29	105.9	106.2	106.0	106.6	106.7	107.4
30	105.9		106.0	106.6	106.7	107.4
31	105.9		105.9		106.7	

Daily noon water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	107.5	108.3	108.9	108.9	108.5	107.6
2	107.5	108.4	108.9	108.9	108.5	107.6
3	107.5	108.5	108.9	108.9	108.5	107.6
4	107.5	108.6	108.9	108.9	108.5	107.4
5	107.6	108.7	108.9	108.9	108.4	107.4
6	107.6	108.7	108.9	108.8	108.5	107.4
7	107.7	108.7	108.9	108.8	108.5	107.3
8	107.7	108.8	108.9	108.8	108.5	107.2
9	107.7	108.8	108.9	108.8	108.5	107.2
10	107.7	108.8	108.9	108.8	108.5	107.2
11	107.7	108.9	108.9	108.8	108.5	107.1
12	107.8	108.9	108.8	108.8	108.5	107.1
13	107.8	108.9	108.8	108.8	108.5	107.0
14	107.8	108.9	108.8	108.8	108.5	107.0

689--Continued.

Daily noon water level, from recorder charts

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
15	107.8	108.9	108.8	108.8	108.5	106.9
16	107.9	108.9	108.8	108.8	108.3	106.9
17	107.9	108.9	108.8	108.8	108.2	106.9
18	107.9	108.9	108.8	108.8	108.2	106.9
19	107.9	108.9	108.8	108.8	108.1	106.9
20	107.9	108.9	108.8	108.8	108.1	106.9
21	108.0	108.9	108.8	108.7	108.1	106.5
22	108.0	108.9	108.8	108.7	108.0	106.5
23	108.0	108.8	108.8	108.7	108.0	106.5
24	108.1	108.8	108.8	108.7	107.9	106.4
25	108.1	108.8	108.8	108.7	107.9	106.4
26	108.1	108.8	108.9	108.7	107.8	106.4
27	108.2	108.8	108.9	108.7	107.8	106.2
28	108.2	108.8	108.9	108.6	107.7	106.0
29	108.3	108.9	108.9	108.6	107.8	106.0
30	108.3	108.9	108.9	108.6	107.7	106.0
31	108.3	108.9		108.5		105.9

692. Carbide & Carbon Chemical Co. test well 1. 3 miles southwest of Texas City. Records available: 1941-48. May 18, 111.44; Oct. 5, 102.16.

787. City of Galveston test well 8-11. 5.75 miles northwest of Alta Loma. Unused drilled well, diameter 4 inches, depth 700 feet (?). Measuring point, top of casing, 1.0 foot above land-surface datum. Records available: 1942-48.

Date	Water level	Date	Water level	Date	Water level
May 27, 1942	54.76	Nov. 28, 1947	100.46	June 28, 1948	101.87
Aug. 6, 1943	74.11	Dec. 29	100.50	July 26	102.88
Apr. 18, 1944	80.25	Jan. 30, 1948	100.33	Aug. 24	103.94
May 11, 1945	90.63	Feb. 28	100.71	Sept. 24	105.03
29, 1946	93.05	Mar. 31	100.11	Oct. 22	104.16
Oct. 25	94.36	Apr. 29	100.91	Nov. 23	103.50
July 7, 1947	97.23	May 28	100.83	Dec. 21	101.52
Nov. 3	100.14				

Guadalupe County

316. Alvin Fresinhahn. 400 feet north of U. S. Highway 81. 0.1 mile east of Guadalupe-Bexar County line. Records available: 1933; 1937-48. June 25, 122.46.

Hale County

15. S. C. Hutchinson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, blk. 51, 15 miles northwest of Hale Center. Records available: 1941-48. Feb. 20, 62.52.

17a. L. W. Guthrie. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 8, blk. 51. Records available: 1942-44; 1946; 1948. Feb. 20, 61.60.

36. G. D. Lewellen. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, blk. 06, 12.5 miles northwest of Hale Center. Records available: 1936-38; 1941-48. Feb. 19, 83.59.

81. S. E. Curry. 650 feet east of the NW. corner sec. 51, blk. K. Used drilled irrigation well, diameter 16 inches, depth 201 feet. Measuring point, top of 2-inch pipe in concrete foundation, 1.0 foot above land-surface datum. Records available: 1945-48.

Feb. 19, 1945	59.37	Jan. 17, 1947	61.35	Feb. 20, 1948	62.91
25, 1946	60.12	Mar. 10	60.74		

103. Carl Meyer. NE $\frac{1}{4}$ SF $\frac{1}{4}$ sec. 8, blk. C4, 16 miles north of Hale Center. Records available: 1936-48. Feb. 20, 53.25.

105. Texas Land & Development Co. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 27, blk. S1. Records available: 1937-46; 1948. Feb. 20, 56.19.

123. J. Smith. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 24, blk. JK, 11 miles north of Hale Center. Records available: 1914; 1936-48. Jan. 17, 69.56; Feb. 20, 69.64.

124b. Lester James. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 4, blk. JK4, 9.5 miles north of Hale Center. Records available: 1942-48. Feb. 19, 79.53.

125. E. E. Clark. SF $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 1, blk. JK4, 10 miles northwest of Hale Center. Records available: 1937-43; 1945-48. Feb. 19, 89.35.

202. Texas Land & Development Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 20, blk. C3, 17 miles north of Hale Center. Records available: 1934; 1936-48. Feb. 20, 73.68.

206. Texas Land & Development Co. Just east of Richard William Survey, 18 miles north of Hale Center. Records available: 1936-48. Feb. 21, 79.16.

208. Texas Land & Development Co. SW $\frac{1}{4}$ J. P. Lattimore Survey, 17.5 miles northeast of Hale Center. Records available: 1936-43; 1945-48. Feb. 21, 72.63.

210. Dr. M. Howell. NE $\frac{1}{4}$ D. R. McVicker survey, 18.5 miles northeast of Hale Center. Records available: 1936-48. Feb. 21, 74.84.

212. Ray Smith. West center of C. R. McVicker strip, west of sec. 55, blk. M14, 18 miles northeast of Hale Center. Records available: 1938-48. Feb. 21, 69.90.

220. Texas Land & Development Co. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 3, blk. JK3, 15.5 miles north of Hale Center. Records available: 1934; 1936-45; 1947-48. Feb. 20, 65.30.

223. Texas Land & Development Co. NW $\frac{1}{4}$ SF $\frac{1}{4}$ sec. 18, blk. C3, 14.5 miles north of Hale Center. Records available: 1936-47. Measurements discontinued.

232. R. Carter. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 1, blk. JK3, 13.5 miles northeast of Hale Center. Records available: 1914; 1936-41; 1943-48. Feb. 20, 68.13; Mar. 12, 63.42.

238. Dr. McKinley Howell. SF $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, blk. JK3, 13.5 miles northeast of Hale Center. Records available: 1914; 1936-48. Feb. 20, 58.12.

246. J. C. Sherman. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, blk. JK2, 12 miles northeast of Hale Center. Records available: 1936-48. Jan. 17, 66.36; Feb. 20, 66.12.

255. G. H. Slaton. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 15, blk. JK2, 10 miles north of Hale Center. Records available: 1914; 1937-48. Feb. 19, 27.80.

259. C. J. Ebeling. NW $\frac{1}{4}$ SF $\frac{1}{4}$ sec. 3, blk. JK2, 9 miles north of Hale Center. Records available: 1914; 1936-48. Feb. 19, 24.27.

305. T. H. Ringwald. On strip land, 0.55 mile east of southwest corner of sec. 54, blk. M14, 18.5 miles northeast of Hale Center. Records available: 1937-48. Feb. 21, 77.12.

307. Texas Land & Development Co. On strip land, 0.3 mile east of southwest corner of sec. 53, blk. M14, 19 miles northeast of Hale Center. Records available: 1934; 1936-48. Feb. 21, 72.67.

316. Homer Rook. NE $\frac{1}{4}$ S. D. Lemaster survey, 17.5 miles northeast of Hale Center. Records available: 1936-48. Feb. 21, 60.58.

317. Henry Duncan. NE $\frac{1}{4}$ J. F. Owens survey, 18.5 miles northeast of Hale Center. Records available: 1934; 1937-47. Measurements discontinued.

330. E. H. Cox. NE $\frac{1}{4}$ J. M. Martin survey, 16.5 miles northeast of Hale Center. Records available: 1914; 1936-48. Feb. 21, 55.78.

338. Dr. J. H. Stewart. NW $\frac{1}{4}$ SF $\frac{1}{4}$ sec. 110, blk. D2, 20 miles northeast of Hale Center. Records available: 1914; 1936-48. Feb. 21, 54.81.

357. G. D. Lewellen. SF $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 8, blk. D6, 14.5 miles northeast of Hale Center. Records available: 1937-48. Jan. 17, 49.07; Feb. 21, 49.03.

370. D. A. Reading. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 5, blk. D4, 14.5 miles northeast of Hale Center. Records available: 1936-48. Feb. 21, 53.80.
402. N. R. Johnson. SW $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 40, blk. JK2, 11 miles northeast of Hale Center. Records available: 1937-48. Feb. 20, 33.72.
422. Mrs. J. B. Long. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, blk. D5, 16 miles northeast of Hale Center. Records available: 1937-45; 1947-48. Feb. 21, 49.76.
427. C. M. Smith. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 17, blk. D5, 17.5 miles northeast of Hale Center. Records available: 1914; 1936-48. Feb. 21, 58.85.
428. C. M. Smith. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, blk. D5, 17 miles east of Hale Center. Records available: 1936-48. Feb. 21, 58.85; April 10, 67.28.
- 433a. Lizzie B. Morris. SW. corner of west 186 acres in sec. 37, blk. D6, 15 miles east of Hale Center. Records available: 1938-48. Feb. 24, 29.79.
435. H. O. Thompson. SW. corner of NF $\frac{1}{4}$ sec. 35, blk. D6, 14 miles east of Hale Center. Records available: 1937-45; 1947-48. Feb. 24, 61.73.
436. I. B. Rankin. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 33, blk. D6, 13.5 miles east of Hale Center. Records available: 1936-48. Feb. 24, 65.45.
449. C. A. Benefield. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 10, blk. D7, 8 miles east of Hale Center. Records available: 1936-48. Feb. 26, 65.73.
454. B. F. Smith. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 21, blk. N., 16.5 miles east of Hale Center. Records available: 1914; 1936-41; 1943-48. Feb. 24, 66.42.
462. R. E. Keniston. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, blk. N, 16 miles east of Hale Center. Records available: 1914; 1936-48. Feb. 26, 51.85.
463. R. E. Keniston. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 16, blk. N, 16 miles east of Hale Center. Records available: 1914; 1937-48. Feb. 26, 50.45; July 19, 59.55.
467. M. E. Courtney. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, blk. N, 13.5 miles east of Hale Center. Records available: 1937-1948. Feb. 26, 41.80.
470. N. H. Neer. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 25, blk. D7, 11 miles east of Hale Center. Records available: 1936-48. Feb. 26, 32.98.
508. J. D. Webb. SW. corner sec. 8, blk. JK2, 7.5 miles north of Hale Center. Records available: 1914; 1936-48. Feb. 28, 54.45.
539. Fred Rastetter. SE. corner SE $\frac{1}{4}$ sec. 29, blk. A, 3.25 miles northeast of Hale Center. Records available: 1937-41; 1943-48. Feb. 28, 64.18.
547. O. C. McClain. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 40, blk. A-1, 7 miles northeast of Hale Center. Records available: 1936-48. Feb. 26, 52.31.
552. H. S. Dunaway. NF $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, blk. A1, 4 miles east of Hale Center. Records available: 1914; 1934; 1936-48. Feb. 28, 63.44.
553. B. Jacobs. NW $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 6, blk. A1, 4.5 miles east of Hale Center. Records available: 1914; 1934; 1936-48. Feb. 28, 59.90.
564. T. F. Mounts. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, blk. A1, 2 miles northeast of Hale Center. Records available: 1937-48. Feb. 28, 62.32.
567. J. B. Maxey. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 19, blk. A1, 1.25 miles northeast of Hale Center. Records available: 1936-48. Feb. 28, 56.97.
569. O. C. Sanders. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 3, blk. A1, 1 mile southeast of Hale Center. Records available: 1914; 1936-48. Feb. 28, 59.86.
- 720b. P. R. Caraway. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27. Records available: 1938-39; 1941; 1943; 1946; 1948. Feb. 23, 14.09.
816. A. M. Eason. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 18, blk. R, 9.5 miles southeast of Hale Center. Records available: 1936-48. Feb. 28, 56.80.
825. Mathilda Akeson. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 18, blk. A4, 3.25 miles north of Hale Center. Records available: 1937-44; 1946-47. No measurements made in 1948.
828. John Bowling. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 33, blk. A4, 5 miles south of Hale Center. Records available: 1937-48. Feb. 23, 76.70.
837. F. L. Hunzicker. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 54, blk. A4, 8 miles southeast of Hale Center. Records available: 1936-48. Feb. 28, 63.14.

840. Debb McLaughlin. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 12, blk. R, 12 miles southeast of Hale Center. Records available: 1937-43; 1945-48. Feb. 28, 62.62.

852. Abernathy Cemetery. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 2, blk. X, 15 miles south of Hale Center. Records available: 1937-48. Feb. 23, 118.20; Nov. 30, 119.41.

859. 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. Records available: 1937-48. Feb. 28, 80.07.

906. Floyd Reagan. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 59, blk. R, 14 miles east of Hale Center. Records available: 1936-48. Feb. 28, 42.53.

923. D. C. Bayley. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 28, blk. R, 9.5 miles east of Hale Center. Records available: 1937-48. Feb. 28, 52.48.

936. 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. Records available: 1936-48. Feb. 28, 51.24.

946. 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. Records available: 1937; 1939-47. No measurements made in 1948.

956. J. W. Heard. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 7, blk. R, 11.5 miles southeast of Hale Center. Records available: 1937-48. Feb. 28, 68.31.

958. Luther Bain. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, blk. R, 12 miles southeast of Hale Center. Records available: 1936-48. Feb. 28, 60.14.

971. L. S. Claitor. NW corner NW $\frac{1}{4}$ sec. 15, blk. CL, 17.5 miles southeast of Hale Center. Records available: 1938-48. Feb. 28, 63.95.

Harris County

6a. C. H. Burton. At east edge of Waller. Records available: 1931-35; 1939-48. Feb. 16, 7.78; June 11, 9.39; Sept. 13, 12.64; Dec. 13, 14.50.

11. J. A. Hafner. 2.25 miles southeast of Waller. Records available: 1931-33; 1936-48. Feb. 16, 43.13; June 11, 43.17; Dec. 13, 46.55.

14. J. A. Hafner. 1.75 miles east of Waller. Records available: 1931-34; 1936-48. Feb. 16, 55.54; June 11, 68.56; Sept. 13, 78.65; Dec. 13, 66.00.

31. R. L. Burton. 4 miles southeast of Waller. Records available: 1931-33; 1935-36; 1938-48. Feb. 16, 45.77; June 11, 81.86; Sept. 13, 38.54 (?); Dec. 13, 59.18.

33. W. C. Neeley. In Hockley. Records available: 1931-48. Feb. 16, 10.80; June 11, 36.03; Dec. 13, 48.86.

35. Dr. A. N. Boyd. 6.25 miles southeast of Waller. Records available: 1931-48. Feb. 16, 27.21; June 11, 26.52; Sept. 13, 32.48; Dec. 13, 31.41.

40. Ira Southard. Near Hockley. Records available: 1940-48. Mar. 17, 46.00; Nov. 12, 67.1(?).

69. W. F. Klenk. 2.5 miles west of Spring. Records available: 1944-48. Feb. 18, 20.27; June 16, 21.33; Sept. 28, 24.78; Dec. 16, 25.85.

70. R. W. Klenk. 2.5 miles west of Spring. Records available: 1938, 1944-48. Feb. 18, 21.35; Sept. 28, 25.08; Dec. 16, 27.33.

95. H. C. Middlestead. 1.75 miles southeast of Spring. Records available: 1931-36; 1939-48. Feb. 18, 15.11; June 16, 16.44; Sept. 28, 20.88; Dec. 16, 22.11.

97. H. C. Middlestead. 1.2 miles northwest of Westfield. Records available: 1931-36; 1938-44; 1946-48. Feb. 18, 2.25; June 16, 7.65.

98. John Jones. 4.5 miles west of Westfield. Records available: 1943-48. Feb. 18, 26.32; June 16, 27.07; Sept. 27, 29.67; Dec. 16, 30.62.

100. D. D. Mintz. 4.3 miles west of Westfield. Records available: 1944-48. Feb. 17, 32.65; June 14, 32.27; Sept. 28, 34.68; Dec. 15, 35.93.

104. 103. George Glameyer. 4.5 miles south of Spring. Records available: 1931; 1938-48. Feb. 17, 12.66; June 14, 13.79; Sept. 28, 17.93; Dec. 15, 18.88.

108. R. L. Glazner. 1.75 miles west of Westfield. Records available: 1943-48. Feb. 17, 36.30; June 14, 36.63; Sept. 28, 39.86; Dec. 15, 40.70.
134. Ira Southard. Owner's well 1. 9 miles northwest of Cypress. Records available: 1931; 1939-48. Mar. 17, 53.83; Nov. 10, 59.10.
136. Jess Freeman. Owner's well 1. 9 miles southwest of Cypress. Records available: 1931; 1933; 1939-48. Mar. 17, 55.71; Nov. 8, 61.15.
139. Oscar Kemp. Owner's well 1. 7.5 miles northeast of Katy. Records available: 1931-33; 1939-48. Mar. 17, 51.07; Nov. 10, 61.04.
140. Oscar Kemp. Owner's well 2. 7.5 miles northeast of Katy. Records available: 1939-48. Mar. 17, 50.82; Nov. 10, 61.30.
157. H. J. Longenbaugh. Owner's well 2. 10 miles northeast of Katy. Records available: 1940-44; 1946; 1948. Mar. 17, 36.27; Nov. 19, 43.64.
167. E. C. Smith. 1.75 miles northwest of Cypress. Records available: 1931-36; 1938-48. Feb. 16, 14.89; June 11, 21.99; Sept. 13, 27.02; Dec. 13, 21.58.
171. E. H. Juergen. In Cypress. Records available: 1931-48. Feb. 16, 8.87; June 11, 8.92; Sept. 13, 10.62; Dec. 13, 12.00.
178. K. P. Black. 5 miles southeast of Cypress. Records available: 1931-33; 1935-36; 1939-48. Feb. 16, 1.72; June 11, 5.06; Sept. 13, 13.36; Dec. 13, 16.48.
182. Joel Schmidt. 4.5 miles south of Cypress. Records available: 1939; 1941-48. Mar. 18, 30.54; Nov. 8, 39.05.
186. T. B. Tucker. Owner's well 3. 6 miles southwest of Cypress. Records available: 1931; 1939-48. Mar. 18, 32.80.
205. Humble Pipe Line Co. Owner's well 2. At Satsuma. Records available: 1931-44; 1946-48. Feb. 16, 46.92; June 11, 46.57; Sept. 13, 53.45. Measurements discontinued Dec. 13, 1948.
206. R. B. Tucker. At Satsuma. Records available: 1931-48. Feb. 16, 38.38.
211. Amerada-Stanolind. 4 miles northwest of Fairbanks. Records available: 1946-48. Feb. 16, 43.22; Dec. 13, 54.53.
221. S. Terpstra. 10.75 miles east of Cypress. Records available: 1938-48. Feb. 18, 47.26; June 16, 50.38; Sept. 28, 58.18; Dec. 16, 55.33.
225. Trinity & Brazos Valley Railway Co. 11.5 miles southeast of Cypress. Records available: 1938-48. Feb. 18, 63.42; June 16, 66.94; Sept. 28, 77.60 (?); Dec. 17, 71.95.
226. W. A. Fraser. 3 miles east of Satsuma. Records available: 1941-43; 1945-48. Feb. 16, 48.75; Dec. 13, 58.63.
229. F. S. Clancy. 4 miles northeast of Satsuma. Records available: 1946-48. Feb. 23, 45.77; Sept. 28, 62.85; Dec. 16, 57.16.
230. Amerada-Stanolind. 2.3 miles north of Fairbanks. Records available: 1946-48. Sept. 13, 71.17.
231. Jack Frazier Drilling Co. About 100 yards south of Fairbanks-West Montgomery road and between North Houston-Rosslyn road and railroad. Records available: 1946-48. Feb. 18, 60.07; June 16, 60.73; Sept. 28, 66.58; Dec. 17, 68.03.
249. United Gas Corporation. 4.5 miles west of Aldine. Records available: 1946-48. Feb. 18, 41.20; June 14, 41.40 (?); Sept. 28, 39.93; Dec. 16, 41.47.
253. Homer J. Moore. 3.5 miles west of Aldine. Records available: 1944-48. Mar. 24, 60.93; Sept. 27, 73.77; Dec. 16, 69.15.
255. J. M. Blake. 2.5 miles northwest of Aldine. Records available: 1937-48. Feb. 17, 9.77; June 14, 14.37; Sept. 27, 20.32; Dec. 15, 21.64.
258. F. M. Corzeliuss. 2.7 miles northwest of Aldine. Records available: 1946-48. Mar. 24, 48.34; June 14, 54.40; Sept. 27, 60.26; Dec. 17, 59.25.
264. H. Weary. 3 miles north of Aldine. Records available: 1931-33; 1937-48. Feb. 17, 52.89; June 14, 54.49; Sept. 27, 59.15; Dec. 15, 58.77.

268. City of Houston test well 10-A. In Westfield. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	47.49	Mar. 31	47.38	May 28	47.88	July 26	49.85
Feb. 27	47.39	Apr. 29	47.50	June 26	49.07	Aug. 24	50.92

269. City of Houston test well 7. In Westfield. Records available: 1939-48.

Jan. 30	+1.56	Apr. 29	+0.84	July 26	1.40	Oct. 25	2.22
Feb. 27	+1.49	May 28	+.82	Aug. 24	.85	Nov. 24	2.57
Mar. 31	+.72	June 26	+.13	Sept. 24	1.54	Dec. 21	2.92

280. Pan-American Pipe Line Co. 9 miles southeast of Humble. Records available: 1940; 1943-48. Feb. 4, 63.30; Sept. 17, 67.14; Dec. 17, 68.70.

286. Jack Frazier Drilling Co. 10 miles northwest of Houston courthouse. Records available: 1940; 1943-48. Feb. 17, 66.74; June 14, 68.64; Sept. 27, 71.10; Dec. 15, 71.42.

287. Jack Frazier Drilling Co. 10 miles northeast of Houston courthouse. Records available: 1941; 1943-48. Feb. 17, 89.68; June 14, 91.59; Sept. 27, 94.59; Dec. 15, 95.72.

290. J. C. Townes. 5 miles southwest of Humble. Records available: 1943-48. Feb. 17, 50.50; June 14, 51.08; Sept. 27, 53.13; Dec. 15, 54.51.

291. A. T. McDannald. 4.5 miles south of Humble. Records available: 1931; 1943-48. Mar. 24, 47.12; June 14, 47.48; Sept. 27, 49.52; Dec. 15, 50.43.

302. McDannald Oil Co. 3 miles southeast of Humble. Records available: 1939-41; 1943-48. Feb. 17, 61.60; June 14, 62.83; Sept. 27, 65.95; Dec. 15, 67.72.

305. A. T. McDannald. 4.5 miles south of Humble. Records available: 1943-48. Mar. 24, 5.01; June 14, 6.47; Sept. 27, 10.42; Dec. 15, 11.30.

306. Bender Estate. 4 miles southeast of Humble. Records available: 1945-48. Feb. 17, 58.85; June 14, 60.04; Sept. 27, 61.86; Dec. 15, 63.58.

331. Known as "Black Cat" oil test. 8.25 miles east of Humble. Records available: 1939-41; 1943-47. Measurements discontinued.

352. A. E. Thompson. 5.75 miles north of Katy. Records available: 1939-41; 1943-48. Mar. 17, 59.22.

357. P. V. Cook. Owner's well 2. 4.5 miles northeast of Katy. Records available: 1931-33; 1939-48. Mar. 17, 57.26.

362. F. G. Stockdick. Owner's well 2. 4 miles northeast of Katy. Records available: 1931-33; 1938-48. Mar. 17, 49.46; Oct. 9, 62.18.

367. W. C. Hickman. 3.25 miles east of Katy. Records available: 1930; 1938-48. Mar. 18, 48.89; Nov. 18, 60.43.

370. J. M. Johnson. 3 miles east of Katy. Records available: 1929-31; 1938-44; 1948. Mar. 19, 52.49; Nov. 9, 66.45.

371. L. E. Morrison. 3.5 miles southeast of Katy. Records available: 1939-48. Mar. 19, 48.17; Nov. 9, 64.86.

380. W. H. Hegar. 8 miles northeast of Katy. Records available: 1939-48. Mar. 18, 28.32.

381. W. H. Hegar. 7.5 miles northeast of Katy. Records available: 1931-33; 1939-48. Mar. 18, 30.33; Nov. 8, 38.27.

382. W. C. Stockdick. 6 miles northeast of Katy. Records available: 1939-48. Mar. 18, 48.02; Nov. 10, 63.33.

384. A. J. Jordens. 6 miles northeast of Katy. Records available: 1932-33; 1939-48. Mar. 17, 51.04; Nov. 9, 59.61.

385. A. J. Jordens. 6 miles northeast of Katy. Records available: 1933; 1939-48. Mar. 17, 44.72; Nov. 9, 57.03.

399. Gertie Rice Farm. 9.5 miles northeast of Katy. Records available: 1939-48. Mar. 18, 33.05; Nov. 8, 41.36.

420. E. A. Showers. 4 miles northeast of Alief. Records available: 1946-48. Feb. 6, 53.58; June 17, 60.74; Sept. 22, 70.10; Dec. 14, 66.18.

422. Cities Service Oil Co. 3 miles northeast of Alief. Records available: 1946-48. Feb. 6, 49.30; June 17, 56.35; Dec. 14, 61.72.

424. Buffalo Oaks. 2 miles north of Alief. Records available: 1946-48. June 17, 68.45; Sept. 22, 79.70; Dec. 14, 73.48.

456. Frank Willberg. In southeast part of Fairbanks. Records available: 1931; 1939-48. Feb. 16, 62.63; June 11, 63.12; Sept. 13, 71.00; Dec. 13, 72.46.

473. H. W. Rasmussen. 8.5 miles west of Houston courthouse. Records available: 1938-48. Feb. 6, 71.08; June 17, 76.91; Dec. 14, 83.40.

480. John Pillot. 2 miles northeast of Clodine. Records available: 1941-48. Mar. 19, 41.00.

489. City of Houston test well 4a. 2 miles west of Alief. Records available: 1939-48. Feb. 6, 49.00; June 17, 57.16; Sept. 21, 68.69; Dec. 14, 59.58.

490. City of Houston test well 5. In Alief. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	87.10	Apr. 29	87.93	July 26	93.17	Oct. 25	99.79
Feb. 27	86.93	May 28	88.60	Aug. 24	95.88	Nov. 23	99.84
Mar. 31	86.84	June 28	91.08	Sept. 24	98.33	Dec. 21	98.61

496. Diamond "L" Ranch. 13 miles southwest of Houston courthouse. Records available: 1938-47. Measurements discontinued.

498. Brae Burn Country Club. 11 miles southwest of Houston courthouse. Records available: 1937-48. Feb. 6, 71.77; June 17, 62.58; Sept. 21, 72.53; Dec. 14, 70.60.

504. Dr. E. W. K. Andrau. 1.1 miles northeast of Alief. Records available: 1946-48. Feb. 6, 54.76; Sept. 22, 74.05; Dec. 14, 66.78.

512. Joe Kowis. 8.5 miles northwest of Houston courthouse. Records available: 1931-48. Records available: 1931-48. Feb. 16, 7.29; June 11, 8.72; Sept. 13, 11.91; Dec. 13, 16.11.

519. Felix Meyers. 6.75 miles northwest of Houston courthouse. Records available: 1937-48. Feb. 16, 3.38; June 11, 8.46; Sept. 13, 15.19; Dec. 12, 16.15.

538. The Bayou Club. 6 miles northwest of Houston courthouse. Records available: 1940; 1943-48. Feb. 5, 94.09; June 10, 98.40; Sept. 20, 106.42; Dec. 10, 105.34.

591. City of Houston. Heights 3. 4 miles northwest of Houston courthouse. Records available: 1938-48. Feb. 4, 163.35; June 10, 171.80; Sept. 17, 179.80; Dec. 10, 174.53.

602. River Oaks Country Club well 1. 4 miles west of Houston courthouse. Records available: 1931-48. Feb. 5, 122.76; June 10, 133.50; Sept. 20, 140.54; Dec. 14, 136.30.

604. Horlock Ice Co. 2.2 miles northwest of Houston courthouse. Records available: 1937-48. Feb. 4, 95.04; June 10, 101.64; Dec. 10, 101.17.

607. Henke & Pillot. 2 miles northwest of Houston courthouse. Records available: 1931, 1943-48. Feb. 4, 104.89; June 10, 110.30.

619. City of Houston. 1 mile west of Houston courthouse. Records available: 1931-48.

Jan. 30	141.66	Apr. 29	144.77	July 26	149.88	Oct. 25	153.45
Feb. 27	141.08	May 28	144.72	Aug. 24	154.76	Nov. 23	151.65
Mar. 31	142.02	June 26	149.31	Sept. 24	152.00	Dec. 21	148.83

651a. 649. L. P. Mallett. 9 miles north of Houston courthouse. Records available: 1938-48. Feb. 17, 92.01; June 14, 94.42; Sept. 27, 101.04; Dec. 15, 100.87.

651b. 232. L. P. Mallett. 9 miles north of Houston courthouse. Records available: 1938-48. Feb. 17, 9.87; June 14, 13.18; Sept. 27, 20.08; Dec. 15, 21.92.

651d. 650. Joe Morales. 8 miles north of Houston courthouse. Records available: 1938-48. Feb. 17, 101.36; June 14, 104.03; Sept. 27, 106.67; Dec. 15, 110.04.

656. Texas Creosoting Co. 4.5 miles north of Houston courthouse. Records available: 1931-48. Feb. 4, 143.38; June 9, 146.81; Sept. 17, 152.80; Dec. 9, 154.26.

663. South Texas Cotton Oil Co. well 1. About 2.5 miles northeast of Houston courthouse. Records available: 1931; 1938-48. Feb. 4, 90.37; June 9, 93.64; Sept. 17, 96.65; Dec. 9, 94.16.

666a. 623. Houston Foundry & Machine Co. At White and Weber Streets, Houston. Records available: 1938-48. Feb. 4, 119.52; June 10, 122.86; Sept. 20, 128.77; Dec. 10, 127.05.

711. San Jacinto Hotel. At 820 Main Street, Houston. Records available: 1940-48. Jan. 22, 175.55; June 7, 185.37; Sept. 13, 192.23; Dec. 6, 187.38.

748. Gulf Pipe Line Co. 5 miles northeast of Houston courthouse. Records available: 1931; 1939-48. Feb. 4, 141.50; June 8, 146.01; Sept. 17, 152.14; Dec. 9, 153.04.

751. The Texas Pipeline Co. 5 miles northeast of Houston courthouse. Records available: 1931; 1937-48. Feb. 2, 147.62; June 8, 151.72; Sept. 15, 158.02; Dec. 8, 159.14.

757. Layne-Bowler Co. 4 miles east of Houston courthouse. Records available: 1931-48. Feb. 3, 160.06; June 8, 164.76; Sept. 17, 171.77; Dec. 8, 172.40.

759. Port City Compress & Warehouse Co. 4.75 miles east of Houston courthouse. Records available: 1931-48. Feb. 3, 168.83; June 8, 172.73; Sept. 15, 180.95; Dec. 8, 181.80.

787a. 779. American Service Co. well 2. At 1623 Westheimer Street, Houston. Records available: 1938-45; 1947-48. Feb. 5, 117.60.

798a. 778. H. C. Weiss. At South Main and Sunset Streets, Houston. Records available: 1938-48. Feb. 5, 100.05; Dec. 10, 122.70.

807a. 840. City of Bellaire well 1. Records available: 1938-42; 1946-48. Feb. 5, 101.90; June 10, 108.00; Sept. 20, 120.51; Dec. 10, 116.60.

812. Harris County School for Girls. 7.75 miles southwest of Houston courthouse. Records available: 1943-48. Feb. 5, 85.42; June 10, 89.51; Sept. 20, 102.60; Dec. 10, 97.79.

853. Houston Ice & Cold Storage Co. At 2715 McKinney Street, Houston. Records available: 1937-48. Jan. 22, 144.93; June 7, 149.62; Sept. 14, 152.84; Dec. 6, 151.64.

854. Houston Ice & Cold Storage Co. At 2715 McKinney Street, Houston. Records available: 1937-48. Jan. 22, 151.60.

876. Houston Country Club. 3.75 miles southeast of Houston courthouse. Records available: 1937-48. Jan. 22, 144.84; June 7, 148.07; Sept. 14, 157.26; Dec. 6, 157.98.

878. Gulf Atlantic Warehouse Co. Anderson-Clayton Turring Basin, Houston. Records available: 1937-48. Mar. 4, 155.50; Apr. 23, 161.00.

879. City of Houston. Magnolia Park 2. At 7300 Canal Street, Houston. Records available: 1938-42; 1945-48. Jan. 22, 160.86; June 7, 165.00; Sept. 14, 173.75; Dec. 6, 174.22.

881. Terminal Compress & Warehouse Co. At 82d and Harrisburg Streets, Houston. Records available: 1931; 1937-48. Jan. 22, 161.73; June 7, 163.04; Sept. 14, 175.68; Dec. 6, 177.96.

883. Tennessee Coal & Iron Railroad Co. well 1. U. S. Steel Co. 6.5 miles southeast of Houston courthouse. Records available: 1938-48. Feb. 3, 150.30; June 8, 138.55; Sept. 15, 139.05.

898a. 913. Allen Estate. At Park Place and Popular Streets, Houston. Records available: 1937-48. Jan. 22, 148.77; June 7, 152.30; Sept. 14, 162.45; Dec. 6, 163.66.

909. J. W. Madden. 9 miles southeast of Houston courthouse. Records available: 1931; 1934; 1940-48. Feb. 5, 54.4 (?); June 17, 56.92; Sept. 21, 56.36; Dec. 14, 57.48.

933. Champion Paper & Fibre Co. test well. 9 miles northeast of Houston courthouse. Records available: 1939-48. Feb. 4, 118.59; June 9, 121.90; Dec. 9, 127.75.

934. Champion Paper & Fibre Co. 9 miles northeast of Houston courthouse. Records available: 1939-48. Feb. 4, 75.80; June 9, 77.32; Sept. 17, 79.82; Dec. 9, 81.45.

936. The Texas Co. well 2. At Camp Beaty. 9 miles northeast of Houston courthouse. Records available: 1940; 1942-48. Feb. 3, 136.93; June 8, 140.13; Dec. 8, 148.38.

939. San Jacinto Ordnance Depot construction well 2. 14 miles east of Houston courthouse. Records available: 1941; 1943-48. Feb. 3, 135.89; June 9, 147.56; Sept. 15, 155.13; Dec. 8, 158.16.

940. San Jacinto Ordnance Depot construction well 1. 14.5 miles east of Houston courthouse. Records available: 1941; 1943-48. Feb. 3, 130.95; June 9, 142.65; Sept. 15, 149.60; Dec. 8, 151.84.

943. Gulf Pipe Line Co. At Lynchburg pump station. Records available: 1943-48. Feb. 3, 99.70; June 9, 107.99; Sept. 15, 113.12; Dec. 9, 114.20.

947. Leon J. Vetrano. 11 miles northwest of Goose Creek. Records available: 1940; 1943-48. Feb. 4, 84.10; Dec. 9, 92.18.

1019. Captain Chas. Crotty. At Morgans Point. Records available: 1939-48. Jan. 22, 102.45; Dec. 6, 115.69.

1101a. 1100. M. M. Graves Estate. 8.5 miles west of Goose Creek. Records available: 1931-32; 1934; 1939-48. Feb. 2, 143.91; June 7, 153.45; Sept. 16, 162.15; Dec. 6, 162.82.

1104. City of La Porte well 1. At La Porte water plant. Records available: 1930-31; 1937; 1940-48. June 7, 132.10; Sept. 14, 136.65; Dec. 6, 134.80.

1106. West & Siabara. 4.5 miles west of La Porte. Records available: 1946-48. Jan. 22, 116.12; Sept. 14, 130.25; Dec. 6, 128.15.

1117. Humble Oil & Refining Co. 17 miles southeast of Houston courthouse. Records available: 1940; 1944-48. Jan. 22, 105.91; Sept. 29, 119.37; Dec. 6, 117.87.

1152a. 1150. City of Galena Park well 1. In Galena Park, at water works. Records available: 1937; 1939-48. Feb. 3, 200.70; June 8, 207.12; Sept. 15, 213.67; Dec. 8, 217.97.

1161. Sinclair Refining Co. well 6. 3 miles north of South Houston. Records available: 1924; 1937-48.

Highest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	199.3	Jan. 8	201.1	Jan. 15	202.0	Feb. 21	203.8
2	199.0	9	201.0	16	202.0	22	203.7
3	199.0	10	200.4	17	202.1	23	203.1
4	199.3	11	200.6	18	202.2	24	203.0
5	199.6	12	201.9	19	202.2	25	203.0
6	199.9	13	202.1	Feb. 19	203.9	26	203.1
7	200.2	14	202.0	20	204.0	27	203.1

1161--Continued.

Highest daily water level, from recorder charts

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 28	203.1	Apr. 14	203.1	May 29	206.3	Oct. 23	220.2
29	202.9	15	203.1	June 1	206.8	24	220.4
Mar. 1	202.9	16	203.4	2	207.0	25	220.5
2	203.1	17	203.9	3	207.1	26	220.7
3	203.1	18	204.1	4	207.3	27	220.7
4	203.2	19	203.8	5	207.6	Nov. 7	220.6
5	202.9	20	203.5	6	207.7	8	220.5
6	202.9	21	203.3	7	207.7	9	220.7
7	202.9	22	203.2	8	207.8	10	221.0
8	202.9	23	203.2	Sept. 17	216.3	11	221.0
9	202.9	24	203.3	18	216.4	12	221.0
10	203.1	25	203.5	19	216.5	13	221.3
11	203.3	26	203.5	20	216.5	14	221.4
12	203.5	27	203.6	21	216.8	15	221.1
13	204.1	28	203.3	22	216.9	16	220.5
14	204.2	29	203.1	23	217.1	17	220.5
15	203.8	30	203.0	24	217.3	18	220.3
16	203.8	May 1	203.0	25	217.4	19	220.3
17	203.8	2	203.1	26	217.7	20	220.4
18	203.7	3	203.2	27	218.2	21	220.4
19	203.5	4	203.3	28	218.3	22	220.4
20	203.5	5	203.6	29	218.5	23	220.4
21	203.5	6	203.7	30	218.7	24	220.2
22	203.5	7	204.2	Oct. 1	218.8	25	220.2
23	203.6	8	204.3	2	218.9	26	220.3
24	203.6	9	204.3	3	218.9	27	220.3
25	203.6	10	204.5	4	218.9	Dec. 5	220.9
26	203.4	11	204.7	5	219.1	7	220.9
27	203.6	12	204.8	6	219.2	8	220.9
28	203.6	13	205.1	7	219.6	9	220.8
29	203.3	14	205.3	8	219.7	10	220.9
30	203.3	15	205.5	9	219.6	11	220.8
31	203.3	16	205.6	10	219.5	12	220.7
Apr. 1	203.3	17	205.8	11	219.4	14	216.3
2	203.6	18	206.1	12	219.8	17	215.8
3	203.3	19	206.3	13	219.9	18	216.6
4	203.3	20	206.1	14	219.5	19	216.9
5	203.2	21	205.9	15	219.5	20	217.2
6	203.3	22	205.9	16	219.6	21	217.4
7	203.4	23	205.9	17	219.8	22	217.4
8	203.6	24	206.2	18	219.8	23	217.6
9	203.9	25	206.3	19	220.2	26	214.6
10	204.0	26	206.2	20	220.3	28	213.4
11	204.0	27	206.2	21	220.3	29	212.9
12	203.6	28	206.2	22	220.2	30	212.6
13	203.2						

1170. Houston Lighting & Power Co. At Deepwater plant, 4.25 miles north of South Houston. Measurements by owner. Records available: 1936-48.

Jan. 8	202	May 11	206	July 20	213	Oct. 22	221
Feb. 11	205	June 16	211	Aug. 31	218	Nov. 17	222
Mar. 10	205						

1181. Phillips Petroleum Co. well 1. At tank farm, 1.3 miles north-east of Pasadena. Records available: 1929; 1945-48. Feb. 2, 219.54; June 7, 223.04; Sept. 16, 226.92; Dec. 6, 233.49.

1182. Port Terminal Railroad. At Pasadena, near southeast corner of Crown refinery. Records available: 1939-48. Feb. 2, 228.75; June 7, 233.63; Sept. 16, 235.34; Dec. 6, 241.80.

1187. City of Pasadena well 1. South well of 4 at city hall in Pasadena. Records available: 1937-41; 1944-48. June 7, 215.48; Sept. 16, 219.50.

1204. Harris County. At former reform school in South Houston. Records available: 1946-47. Measurements discontinued.

1205. City of South Houston well 1. South well of 5 at city water works in South Houston. Records available: 1940-48. Jan. 22, 119.36; June 7, 123.87; Sept. 14, 138.53; Dec. 6, 142.14.

1209. Texas Fireworks Distributing Co. At South Houston. Records available: 1932-33; 1935-48. Jan. 22, 33.39; June 7, 31.65; Sept. 14, 31.73; Dec. 6, 31.87.

1229. City of Houston test well 8. On Spencer Highway, 3 miles east of South Houston. Records available: 1939-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 30	147.57	Apr. 29	158.47	July 26	164.02	Oct. 22	169.01
Feb. 28	154.06	May 28	161.05	Aug. 24	165.94	Nov. 23	170.59
Mar. 31	157.77	June 28	163.55	Sept. 24	166.42	Dec. 21	172.10

1230. City of Houston test well 9. On Spencer Highway, 3 miles east of South Houston. Records available: 1939-48.

Jan. 30	173.64	Apr. 29	175.75	July 26	185.78	Oct. 20	191.14
Feb. 28	173.78	May 28	180.05	Aug. 24	188.38	Nov. 23	190.44
Mar. 31	174.24	June 28	183.87	Sept. 24	190.22	Dec. 21	190.18

1234. City of South Houston well 3. At city water works in South Houston. Records available: 1942-47. No measurements made in 1948.

1267. City of South Side Place well 3. At city water works in South Side Place. Records available: 1941; 1943-48. Feb. 5, 99.06; June 10, 109.74; Sept. 20, 123.19; Dec. 10, 120.91.

1360. S. Siabara. About 0.25 mile east of Webster. Records available: 1931-33; 1936-48; Jan 22, 91.29; June 7, 97.60.

1369. City of South Houston well 2. At city water works in South Houston. Records available: 1941; 1944-48. Jan. 22, 165.40; June 7, 171.04; Sept. 14, 182.48; Dec. 6, 181.14.

1370. City of Jacinto City. Formerly owned by Harris County Fresh Water District No. 5. Market Street Road. Records available: 1944-46; 1948. June 9, 178.70; Sept. 17, 180.45; Dec. 8, 184.15.

1374. Harris County Water Control & Improvement District No. 11 well 1. Formerly Harris County Fresh Water District No. 5. Market Street Road. Records available: 1940; 1942-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 3	170.92	June 9	185.18	Dec. 8	195.48
May 17	184.0	Sept. 17	187.80		

1398. Mission Manufacturing Co. well 2. On U. S. Highway 59, 3.25 miles northeast of Houston courthouse. Records available: 1939; 1943-47. No measurements made in 1948.

1414. Harris County Water Control & Improvement District No. 3 well 2. At 816 Rosslyn Street, in Garden Oaks subdivision. Records available: 1940, 1943-48. Feb. 4, 128.02; June 10, 135.95; Sept. 17, 140.80; Dec. 10, 139.60.

1417. Houston Lighting & Power Co. well 1. 9 miles southwest of Houston courthouse. Records available: 1943-48. Feb. 5, 106.39; June 17, 106.24; Sept. 21, 115.51; Dec. 14, 116.55.

1418. W. B. Nelson. On Hall road, 13 miles southeast of Houston courthouse. Records available: 1943-48. Mar. 23, 132.46; June 17, 148.73; Sept. 21, 155.39; Dec. 14, 146.31.

1420. City of Galena Park well 2. At city water works in Galena Park. Records available: 1942-48. Feb. 3, 201.51; June 8, 206.85; Sept. 15, 213.67; Dec. 8, 217.55.

1421. Tennessee Coal & Iron Railroad Co. well 2. U. S. Steel. At Clinton docks, 6.5 miles southeast of Houston courthouse. Records available: 1943-44; 1946-48. Feb. 3, 185.90; June 8, 189.35.

1422. Mission Manufacturing Co. well 1. About 50 feet west of well 1398. Records available: 1943-48. Feb. 4, 132.19; June 9, 137.88; Sept. 17, 144.39; Dec. 9, 144.25.

1423. Clarence Nelson. 13 miles southeast of Houston courthouse. Records available: 1946-48. Mar. 23, 133.95; June 17, 147.60; Sept. 21, 154.13; Dec. 14, 145.15.

1424. Harris County Water Control & Improvement District No. 3 well 3. At Alba and Sue Barnett Streets, in Garden Oaks subdivision. Records available: 1946-48. Sept. 17, 136.08; Dec. 10, 136.60.

1500. Texas-Gulf Production Co. 8 miles west of Humble. Records available: 1943-48. Feb. 17, 52.48; June 14, 54.04; Sept. 27, 59.84; Dec. 17, 59.38.

1501. A. T. McDannald. 4.75 miles south of Humble. Records available: 1943-48. Mar. 24, 35.34; June 14, 36.14; Sept. 27, 38.87; Dec. 15, 39.89.

1502. Jack Frazier Drilling Co. 7.75 miles south of Humble. Records available: 1943-44; 1946-48. Feb. 17, 92.47; June 14, 93.76; Sept. 27, 95.55; Dec. 15, 96.97.

1503. R. R. Michel test hole Q-1. 1.5 miles southwest of Tom Ball. Records available: 1940-44; 1946-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	30.81	July 26	31.37	Sept. 24	31.92	Nov. 24	32.42
June 16	31.17	Aug. 24	31.63	Oct. 25	32.19	Dec. 21	32.62
26	31.23						

1504. Bogs Estate test hole N-1. 1 mile north of Huffsith. Records available: 1940-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 18	23.45	July 26	23.73	Sept. 24	24.23	Nov. 24	24.69
June 16	23.46	Aug. 24	23.99	Oct. 25	24.46	Dec. 21	24.87
26	23.48						

1505. Wm. Tautenhahn test hole U-1. 0.25 mile north of Westfield. Records available: 1940-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 17	12.38	July 26	16.13	Sept. 27	18.01	Nov. 24	18.82
June 14	13.80	Aug. 24	17.32	Oct. 25	18.48	Dec. 21	18.99
26	13.80	Sept. 24	17.98				

1506. Sinclair-Prairie Oil Co. 3.5 miles northeast of Fairbanks. Records available: 1943-48. Feb. 18, 66.08; June 16, 68.28.

1507. Stanolind Oil & Gas Co. 3.75 miles northeast of Fairbanks. Records available: 1944-48. Feb. 18, 68.14; June 16, 70.52; Sept. 28, 79.05; Dec. 17, 78.08.

Hays County

106. Henry Armsbruster. 1.25 miles northwest of Buda. Records available: 1937; 1940-48. Apr. 2, 153.65.

110. M. O. Rogers. 7 miles west of Buda. Records available: 1937; 1940-46; 1948. Aug. 6, 58.40.

113. Otto Schwartz. 3.25 miles west of Buda. Records available: 1937; 1943-45; 1948. Aug. 6, 268.47.

126. F. W. Zimmerman. 9.75 miles west of Buda. Records available: 1937; 1940-46; 1948. Aug. 6, 94.29.
- 234a. N. E. Hughes. 0.25 mile northwest of Wimberly. Records available: 1940-46; 1948. Aug. 5, 16.98.
349. E. Brooks. 1.75 miles northwest of San Marcos. Records available: 1937; 1940-48. May 2, 163.95; Aug. 5, 164.13.
504. Glynn C. Key. On U. S. Highway 290, 2.3 miles west of Hays-Travis County line. Records available: 1937-46; 1948. Aug. 5, 37.73.
505. Glynn C. Key. On U. S. Highway 290, 2.3 miles west of Hays-Travis County line. Records available: 1937-46; 1948. Aug. 5, 71.97.
506. Dr. A. Garcia. 0.7 mile east of Dripping Springs. Records available: 1937-46; 1948. Aug. 5, 37.40.
507. Dr. A. Garcia. 0.7 mile east of Dripping Springs. Records available: 1937-46; 1948. Aug. 5, 64.83.
524. H. W. Hageman. 1.8 miles north of San Marcos. Records available: 1937-48. May 1, 33.38; Aug. 5, 33.85.
528. F. N. Whaley. 4.75 miles north of San Marcos. Records available: 1937-48. May 1, 97.08; Aug. 6, 97.30.
529. Nicholas Thiele. At south edge of Kyle. Records available: 1937-48. May 1, 158.58; Aug. 5, 157.50.
532. John Butler. 3.2 miles north of Kyle. Records available: 1937-44; 1946-48. May 1, 157.55. Measurements discontinued.
534. J. J. Horton. In Buda. Records available: 1937-48. May 1, 129.65; Aug. 6, 135.46.
535. Thomas Yoe. On U. S. Highway 81, 0.2 mile south of Hays-Travis County line. Records available: 1937-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29	25.99	May 30	26.08	Aug. 29	26.24	Nov. 25	26.37
Mar. 28	26.06	June 27	26.23	Sept. 26	26.30	Dec. 24	26.46
Apr. 25	26.14	July 29	26.18	Oct. 26	26.39		

543. W. P. Donaldson. 2.6 miles southwest of San Marcos. Records available: 1937-48. May 2, 74.24; Aug. 5, 74.15.
553. G. M. Jackson. 3 miles southwest of San Marcos. Records available: 1937-48. May 2, 120.47; Aug. 5, 120.72.
585. R. F. Clayton. 4.1 miles south of Wimberly. Records available: 1937-46. Measurements discontinued.
586. W. A. Leath. 1 mile southeast of Wimberly. Records available: 1937-44; 1946; 1948. Aug. 5, 53.46.
590. Fred Boyett. 4.1 miles southwest of Wimberly. Records available: 1937-46; 1948. Aug. 5, 74.71.
591. Fred Boyett. 4.1 miles southwest of Wimberly. Records available: 1937-46; 1948. Aug. 5, 50.22.
614. J. D. McCall. 6.8 miles south of Dripping Springs. Records available: 1937-46; 1948. Aug. 5, 149.60.
615. Wiley Roberts. 4.6 miles south of Dripping Springs. Records available: 1937-46; 1948. Aug. 5, 85.05.
629. J. N. Byler. 6.5 miles north of Wimberly. Records available: 1937-46; 1948. Aug. 5, 232.8.
- 677a. N. E. Hughes. 0.25 mile north of Wimberly. Records available: 1938-46; 1948. Aug. 5, 29.63.
677. J. E. Bryant. 6.5 miles north of Wimberly. Records available: 1937-46; 1948. Aug. 5, 99.79.
678. J. E. Bryant. 6.5 miles north of Wimberly. Records available: 1937-46; 1948. Aug. 5, 276.08.

706. Jim Roberts. 0.9 mile north of Wimberly. Records available: 1937-46; 1948. Aug. 5, 74.04.

Hockley County

5. Santa Fe Railway Co. In Smyer. Records available: 1937-41; 1943-47. No measurements made in 1948.

7. Mr. Pickard. South line of lab. 23, William Tubbs survey, 5.2 miles east of Levelland. Records available: 1937-40; 1944-48. Mar. 1, 84.02.

24. R. Y. Huguen. SW $\frac{1}{4}$ sec. 99, blk. A, R. M. Thomson survey, 2 miles southeast of railroad depot in Anton. Records available: 1937-48. Mar. 3, 24.39.

28. Dan Jacison 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 of railway station in Anton. Records available: 1937-48. Mar. 3, 34.01.

126. W. M. Alexander. SE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 89, blk. A, 3 miles south of Anton. Records available: 1938-48. Mar. 3, 22.57.

247a. A. N. Riley. NW $\frac{1}{4}$ lab. 3, lge. 78, Reeves C.S.L. Used drilled irrigation well, diameter 18 inches, depth 230 feet. Measuring point, bottom edge porthole on west side of pump, 1.6 feet above land-surface datum. Records available: 1944-48.

Date	Water level	Date	Water level	Date	Water level
Feb. 5, 1944	105.22	Feb. 28, 1946	104.62	Mar. 1, 1948	104.93
Mar. 6, 1945	105.00	Mar. 17, 1947	105.13		

434. C. E. Pendergrass. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 74, blk. A, 4 miles south of Anton. Used drilled irrigation well, diameter 16 inches, depth 221 feet. Measuring point, lower edge of porthole, 1.5 feet above land-surface datum. Records available: 1938; 1944-48.

May 6, 1938	133.20	Mar. 6, 1945	130.58	Mar. 15, 1947	138.17
Jan. 28, 1944	130.65	1, 1946	130.24	3, 1948	131.42
Feb. 22	130.62	Jan. 16, 1947	130.54		

576. M. L. Goolsby. SW $\frac{1}{4}$ NW $\frac{1}{4}$ lab. 2, lge. 29, Hood C.S.L., 1 mile south of Levelland. Used drilled irrigation well, diameter 15 $\frac{1}{2}$ inches, depth 172 feet. Measuring point, top of $\frac{3}{4}$ -inch hole in pump base, 1.0 foot above land-surface datum. Records available: 1944; 1946-48. Jan. 29, 1944, 87.65; Feb. 28, 1946, 87.71; Mar. 5, 1947, 88.04; Mar. 1, 1948, 88.46.

827a. Roy Dopson. Lab. 14, lge. 10, Donley C.S.L. Used drilled irrigation well, diameter 12 $\frac{1}{2}$ inches, depth 170 feet. Measuring point, $\frac{3}{4}$ -inch hole in west side of pump base, 1.5 feet above land-surface datum. Records available: 1944-46; 1948. Jan. 29, 1944, 89.42; Mar. 5, 1945, 88.62; Mar. 1, 1946, 98.15; Mar. 1, 1948, 93.55.

Jackson County

5. Jackson County. At Upper Cordele school. Records available: 1934-36; 1938-48. Mar. 10, 36.00.

6. N. J. Marthiljohni. 1 mile south of Morales. Records available: 1934-35; 1938-41; 1946-48. Mar. 10, 36.16.

7. D. W. Schropshire. 1.25 miles north of Navidad. Records available: 1934-36; 1938-48. Mar. 10, 42.31.

11a. Nellie Miller Estate. About 5 miles south of Morales. Records available: 1936; 1938-42; 1944-48. Mar. 10, 37.85.

14. Mrs. C. V. Watson. 2.3 miles north of Cordele. Records available: 1934-36; 1938-48. Mar. 10, 34.69.

56. A. H. Nagel. At Cordele. Records available: 1934-36; 1938-48. Mar. 10, 31.96.

57. S. G. Drushel. 2.5 miles south of Cordale. Records available: 1934-36; 1938-46; 1948. Mar. 10, 37.50.
64. Wm. Clifford. 3.5 miles west of Edna. Records available: 1934-36; 1938-45; 1947-48. Mar. 10, 38.02.
66. S. J. and E. F. Swenson. 5 miles northeast of Edna. Records available: 1934-36; 1938; 1938-48. Mar. 8, 36.16.
69. A. E. Westhoff. 2.5 miles northeast of Edna. Records available: 1934-36; 1938-48. Mar. 8, 33.05.
71. W. Rogers. 3.7 miles west of Edna. Records available: 1934-36; 1938-44; 1946-48. Mar. 10, 28.25.
78. Rose, Sample, Taylor, & Bagby. 2 miles east of Edna. Records available: 1934-35; 1938-48. Mar. 8, 28.37.
88. A. E. Westhoff. 6 miles southeast of Edna. Records available: 1909; 1934-36; 1938; 1942-48. Mar. 8, 23.61.
103. A. C. Wilbeck. 6 miles northwest of Ganado. Records available: 1934-36; 1938-47. No measurements made in 1948.
105. A. M. Robinson. 4 miles north of Ganado. Records available: 1934; 1942-47. No measurements made in 1948.
- 108a. Sugarland Fig Growers Association. In Ganado. Records available: 1934; 1936; 1938-48. Mar. 10, 27.34.
229. W. A. Utzman. 3 miles north of Vanderbilt. Records available: 1934-36; 1938-48. Mar. 8, 35.58.
230. Royal Dedman. 5.5 miles northeast of Vanderbilt. Records available: 1934-36; 1938-48. Mar. 8, 36.21.
304. O. B. Fenner. 6 miles northeast of Morales. Records available: 1942-43; 1947. No measurements made in 1948.
305. O. B. Fenner. 5.5 miles northeast of Morales. Records available: 1942; 1947. No measurements made in 1948.
313. G. A. Harrison. 4 miles northeast of Edna. Records available: 1942-48. Mar. 8, 31.11.
318. George Carstien. 5 miles north of Ganado. Records available: 1942-47. No measurements made in 1948.
322. Mrs. B. W. Martin. 2 miles northwest of Ganado. Records available: 1940-47. No measurements made in 1948.
337. Rose & Sample. 9 miles southeast of Ganado. Records available: 1942-47. No measurements made in 1948.
357. A. V. Raplee. 10 miles south of Francitas. Records available: 1942-48. Mar. 11, 14.33.

Jim Wells County

193. M. Morales. 8.5 miles northwest of Ben Bolt. Records available: 1933; 1935-41; 1943; 1945; 1946-48. Feb. 8, 24.44.
206. Emilio Barrera. 6.5 miles west of El Par. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 8, 55.42.
207. Roman Saenz. 6 miles west of El Par. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 8, 75.08.
221. Feliz Perez Cadena. 6 miles northwest of Wadoto. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 8, 48.64.
222. Manuel Cadena. 6 miles northwest of Wadoto. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 8, 49.03.
242. Hormigas. King Estate. 6.5 miles south of Ben Bolt. Records available: 1933; 1943-48. Feb. 7, 91.32; Sept. 28, 95.91; Dec. 11, 95.50.
252. Cerapio Hinojosa. 6.5 miles northwest of Ella. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 10, 55.28.
253. San Juan Hinojosa. 6.5 miles southwest of Ella. Records available: 1933; 1935-41; 1943; 1945; 1947-48. Feb. 10, 56.87.

31. Liberty. King Estate. 2 miles southeast of Santa Gertrudis ranch headquarters. Records available: 1932-34; 1938-41; 1943-47. No measurements made in 1948.

35. Silo. King Estate. 1.5 miles southeast of Santa Gertrudis ranch headquarters. Records available: 1932-35; 1938-41; 1943-47. No measurements made in 1948.

64. Rincon Caesar. King Estate. 18 miles southeast of Santa Gertrudis ranch headquarters. Records available: 1932-35; 1938-41; 1943-45; 1947-48. Feb. 12, 11.99.

91. City of Kingsville well 2. At city hall in Kingsville. Records available: 1932-34; 1939; 1941; 1943; 1945; 1947. Measurements discontinued.

188. J. R. Trussell. 3.5 miles south of Kingsville. Records available: 1932-35; 1938-41; 1943-48. Feb. 12, 64.83.

190. L. E. Flato and others. 4.5 miles south of Kingsville. Records available: 1932-35; 1938-41; 1943-45; 1947-48. Feb. 12, 55.7.

282. Pete Christensen. 3 miles north of Rivera. Records available: 1933-34; 1938-40; 1943-45; 1947-48. Feb. 12, 32.97.

283. W. H. Bensman. 3 miles north of Rivera. Records available: 1933-34; 1938; 1940-41; 1943-45; 1947. Measurements discontinued.

372. Caesar Pens (owner's name for well). King Estate. Used drilled well, diameter 5 inches, depth 750 feet. Measuring point, top of 4 by 6 wood pipe clamp, 1.5 feet above land-surface datum and 53.90 feet above sea level. Equipped with windmill. Records available: 1932; 1943; 1945-48.

Date	Water level	Date	Water level	Date	Water level
Dec. 15, 1932	20.87	Mar. 15, 1945	57.88	Feb. 21, 1947	(a)
Nov. 16, 1943	49.96	16, 1946	100.40	11, 1948	102.97

a Below 123.5 feet.

374. Palo Marcado (owner's name for well). King Estate. 15 miles west of Laureles ranch headquarters. Used drilled well, diameter 10 inches, depth 852 feet. Measuring point, top of 4 by 6 wood pipe clamp, 0.8 foot above land-surface datum and 53.46 feet above sea level. Equipped with windmill. Records available: 1933; 1943-48.

Jan. 12, 1933	30.09	Mar. 16, 1945	54.38	Feb. 20, 1947	73.71
Nov. 14, 1943	46.43	15, 1946	65.32	11, 1948	77.82
Mar. 6, 1944	46.09				

375. Noria Honda. King Estate. 12 miles west of Laureles Ranch headquarters. Records available: 1933-35; 1938; 1940-41; 1943-48. Feb. 11, 37.16.

380. King Estate Telephone 1. 13 miles southwest of Laureles Ranch headquarters. Records available: 1933-34; 1938; 1940-41; 1943-47. No measurements made in 1948.

383. Quantitos. King Estate. 8.5 miles southwest of Laureles ranch headquarters. Records available: 1933-35; 1938; 1940-41; 1943-47. Measurements discontinued.

384. Aljibes. King Estate. 7 miles west of Laureles ranch headquarters. Records available: 1933-34; 1938; 1940-41; 1943; 1945-48. Feb. 11, 18.91.

385. Palacios. King Estate. 8 miles west of Laureles ranch headquarters. Records available: 1933-35; 1938; 1940-41; 1943-45; 1947. No measurements made in 1948.

386. Chiltipin (owner's name for well). King Estate. 5 miles west of Laureles ranch headquarters. Used drilled well, diameter 7 inches, depth 945 feet. Measuring point, top of 3 by 5 wood pipe clamp, 0.5 foot above land-surface datum and 34.99 feet above sea level. Equipped with windmill. Records available: 1943-45; 1947-48.

Date	Water level	Date	Water level	Date	Water level
Nov. 14, 1943	8.51	Mar. 16, 1945	11.26	Feb. 11, 1948	24.43
Mar. 6, 1944	10.30	Feb. 20, 1947	20.34		

Lamb County

1. H. H. Engleking. NW. corner SE $\frac{1}{4}$ sec. 14, blk. W, 11 miles west and 4.5 miles north of Earh. Records available: 1936-47. Mar. 13, 1947, 67.08. No measurements made in 1948.

3a. J. P. Crawford. NW. corner SW $\frac{1}{4}$ sec. 30, blk. W, 11 miles west and 3 miles north of Earh. Records available: 1934; 1936-48. Jan. 1, 1947, 29.22; Mar. 13, 1947, 28.58; Feb. 19, 1948, 30.54.

6. Albert Lavigne. NW. corner SW $\frac{1}{4}$ sec. 35, blk. W. Records available: 1937-45; 1947-48. Mar. 13, 1947, 22.41; Feb. 19, 1948, 23.55.

7. Lillie Bickle. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 46, blk. W, 11 miles west and 1 mile north of Earh. Records available: 1934; 1936-44; 1946-47. Mar. 13, 1947, 14.97. No measurements made in 1948.

8. J. L. Withrow. NW. corner NE $\frac{1}{4}$ sec. 51, blk. W, 0.5 mile north of U. S. Highway 70 and 0.5 mile east of Bailey-Lamb County line. Records available: 1936-48. Mar. 13, 1947, 14.68; Feb. 19, 1948, 17.08.

13. John Fryie. NW. corner of NW $\frac{1}{4}$ sec. 45, blk. W, 10 miles west and 1.5 miles north of Earh. Records available: 1934; 1936-48. Jan. 14, 1947, 15.43; Mar. 13, 1947, 19.09; Feb. 19, 1948, 21.70.

16. R. L. Brown. NW. corner of NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 30, blk. W, 10 miles west and 3 miles north of Earh. Records available: 1936-48. Jan. 14, 1947, 35.31; Feb. 19, 1948, 36.60.

19. John Allen. NW. corner of SE $\frac{1}{4}$ sec. 36, blk. W. Records available: 1913; 1936-45; 1947-48. Mar. 13, 1947, 19.64; Feb. 19, 1948, 20.68.

30. J. M. Young. NE $\frac{1}{4}$ NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 38, blk. W, 7 miles west and 2 miles north of Earh. Records available: 1936-48. Jan. 14, 1947, 21.76; Mar. 13, 1947, 24.03; Feb. 19, 1948, 24.87.

38. Zeb Smith. SE $\frac{1}{4}$ NE $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 57, blk. 2, 5 miles west and 2 miles north of Earh. Records available: 1936-38; 1943-48. Mar. 13, 1947, 37.03; Feb. 19, 1948, 38.59.

46b. Gus Parish. NE $\frac{1}{4}$ NF $\frac{1}{4}$ sec. 78, blk. 2, W.E.H. subdivision, 0.2 mile southwest of center of Earh. Used drilled irrigation well, diameter 16 inches, depth 130 feet. Measuring point, top of $\frac{1}{2}$ -inch hole in north side of pump base, 1.5 feet above land-surface datum. Records available: 1946-48. Feb. 28, 1946, 37.12; Mar. 18, 1947, 36.42; Feb. 19, 1948, 37.48.

56. N. F. Cleavinger. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 53, blk. 1. Used drilled irrigation well, diameter 15 $\frac{1}{2}$ inches, depth 215 feet. Measuring point, top of pump base through airline hole, 1.0 foot above land-surface datum. Records available: 1940; 1942-45; 1947-48.

Sept. 3, 1940	101.33	Feb. 14, 1944	97.29	Mar. 13, 1947	99.48
Nov. 12, 1942	97.30	22, 1945	97.10	Feb. 19, 1948	101.04
Feb. 23, 1943	96.78				

57. E. M. Gettys. Sec. 59, blk. 1, W.E.H. Survey. Used drilled irrigation well, diameter 15 inches, depth 210 feet. Measuring point, bottom edge 5/8-inch hole on east side of pump base, 1.0 foot above land-surface datum. Records available: 1942-48.

Aug. 13, 1942	113.50	Feb. 7, 1944	87.40	Mar. 13, 1947	89.44
Nov. 10	87.56	22, 1945	87.27	Feb. 19, 1948	91.10
Feb. 23, 1943	86.88	Mar. 2, 1946	88.67		

60. S. A. Davis. NW. corner SE $\frac{1}{4}$ sec. 69, blk. 1, 0.5 mile northwest of Springlake. Records available: 1937-48. Jan. 1, 1947, 70.38; Feb. 19, 1948, 71.79.

76. F. E. Gladden. NW. corner NE $\frac{1}{4}$ sec. 12, blk. T1, TAT Survey, 10 miles east of Farth. Records available: 1937-39; 1941-44; 1946-48. Mar. 18, 1947, 69.13; Feb. 18, 1948, 72.24.

76a. George Brown. SE. corner of northeast 68 acres in sec. 1, blk. T1, 10 miles east of Farth. Records available: 1938-44. Measurements discontinued.

88. Halsell Cattle Co. SW $\frac{1}{4}$ lab. 20, lge. 238, on east side of Amherst-Farth road, 8.5 miles south of Farth. Records available: 1937-48. Mar. 18, 1947, 34.08; Feb. 20, 1948, 34.28.

108. Texas Highway Department. 4.7 miles northwest of Sudan. Records available: 1937-45. Measurements discontinued.

231. Vincent Peterman. Center of NE $\frac{1}{4}$ lab. 16, lge. 218, on south side of U. S. Highway 84, 2 miles southeast of Bailey-Lamb County line. Records available: 1937-42; 1946-48. Mar. 18, 1947, 93.55; Feb. 20, 1948, 93.62.

236. L. D. Criswell. NW $\frac{1}{4}$ SE $\frac{1}{4}$ lab. 24, lge. 649, 1 mile north of U. S. Highway 84, 2 miles east of Amherst. Records available: 1937-38; 1940-48. Mar. 18, 1947, 69.85; Feb. 20, 1948, 67.90.

243. Les Barker. Center of lab. 5, lge. 664, on south side of U. S. Highway 84, 1.5 miles northwest of Littlefield. Records available: 1937-48. Jan. 16, 1947, 74.60; Mar. 18, 1947, 74.50; Feb. 10, 1948, 74.00.

251a. G. Y. Oxford. NW $\frac{1}{4}$ lab. 17, lge. 644, 8.5 miles north of Littlefield. Records available: 1939-45. Measurements discontinued.

322. Yellow House Land Co. NW. corner lab. 16, lge. 671, on north side of U. S. Highway 84 and Panhandle & Santa Fe Railway, 4.5 miles southeast of Littlefield. Records available: 1937-48. Mar. 18, 1947, 39.53; Feb. 20, 1948, 43.05.

341a. Yellow House Land Co. SE. corner NW $\frac{1}{4}$ NE $\frac{1}{4}$ lab. 23, lge. 671, 0.5 mile north of Yellow House railroad switch. Records available: 1938-48. Jan. 16, 1947, 42.99; Mar. 18, 1947, 42.21; Feb. 20, 1948, 46.29.

342a. R. M. Love. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 6, blk. 1, 4.3 miles northwest of Anton. Records available: 1938-45. Measurements discontinued.

Lubbock County

3a. E. E. Winters. NE $\frac{1}{4}$ NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 43, blk. P. Records available: 1938-40; 1943-46; 1948. Mar. 3, 23.78.

37. L. K. Fowler. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 149, blk. C, 17 miles northeast of Lubbock. Records available: 1937; 1939-48. Jan. 15, 75.77; Feb. 18, 75.66.

64a. W. O. Fortenberry. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 30, blk. D, 0.4 mile east of U. S. Highway 87, 10.5 miles north of Lubbock. Records available: 1937-48. Jan. 16, 89.62; Feb. 23, 88.24.

74a. J. S. George. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 37, blk. A, 1.5 miles west of U. S. Highway 85, 6.5 miles north of Lubbock. Records available: 1938-47. No measurements made in 1948.

77a. J. H. Felton. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 35, blk. A, 6 miles north of Lubbock. Records available: 1938; 1940; 1943-48. Feb. 21, 74.26.

81. J. E. Vickers. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 27, blk. A, 0.2 mile west of U. S. Highway 87, 5 miles north of Lubbock. Records available: 1936-48. Feb. 21, 43.50.

99. R. B. Gray. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, blk. P, 4 miles northwest of Shallowater. Records available: 1937-38; 1940; 1942-48. Mar. 3, 32.44.

101. J. E. Armes. SW. corner sec. 38, blk. P, 4 miles west of Shallowater. Records available: 1937-43; 1945; 1947. No measurements made in 1948.

107. B. G. Lockey. SW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 27, blk. D6, on north side of U. S. Highway 84, in Shallowater. Records available: 1937-48. Mar. 3, 48.65.
118. T. C. James. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 17, blk. JS, 9 miles west of Lubbock. Records available: 1936-48. Jan. 15, 88.02; Mar. 1, 87.54.
121. Mr. Brown. SE $\frac{1}{4}$ sec. 1, blk. D6, north of Carlisle Public School and north of State Highway 24. Records available: 1937-45; 1947-48. Mar. 1, 82.17.
123. Travis Tubbs. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, blk. JS, 6 miles west of Lubbock. Records available: 1936-48. Feb. 20, 68.80.
128. 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. Records available: 1936-48. Feb. 20, 51.12.
138. Edith Collie. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 25, blk. JS, 7 miles northwest of Lubbock. Records available: 1937-43; 1945-48. Mar. 3, 39.64.
139. J. W. Ellis. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 23, blk. JS, 7 miles northwest of Lubbock. Records available: 1937-48. Feb. 20, 26.85.
- 150a. 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. Records available: 1938-48. Feb. 20, 28.00.
151. Broadview School. SE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 14, blk. A, on south side of U. S. Highway 84 and 3 miles northwest of Lubbock. Records available: 1937-48. Feb. 24, 28.33.
154. John King. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 22, blk. A, 4 miles west of Lubbock. Records available: 1937-47. No measurements made in 1948.
156. 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. Records available: 1936-48. Feb. 20, 54.03.
188. State Experiment Farm. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 5, blk. O, 3 miles east of Lubbock. Records available: 1937-48. Mar. 10, 76.06.
219. Ed Harrison. NW. corner sec. 5, blk. RG, 9.5 miles east of Lubbock. Records available: 1937-48. Jan. 15, 43.89.
222. 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. Records available: 1937-48. Feb. 18, 52.16.
223. W. C. Grimes. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 11, blk. PG, 12 miles east of Lubbock. Records available: 1937-48. Feb. 18, 42.51.
301. S. D. Stewart. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 68, blk. S, 8 miles south of Lubbock. Records available: 1937; 1939-41; 1943-48. Mar. 2, 54.00.
314. T. B. Zelner. SW. corner SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 17, blk. B, 4 miles southwest of Lubbock. Records available: 1937-48. Feb. 26, 48.04.
316. E. A. Hankins. NW $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 6, blk. E2, 4.75 miles southwest of Lubbock. Records available: 1937-39; 1942-43; 1945-47. No measurements made in 1948.
339. J. E. Hinson. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 34, blk. AK, 8.5 miles west of Lubbock. Records available: 1937; 1939-48. Mar. 1, 66.08.
355. 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. Records available: 1937-48. Jan. 15, 85.00; Mar. 1, 84.76.
369. 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. Records available: 1936; 1938; 1940; 1942-48. Mar. 2, 82.26.
383. 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. Records available: 1937-40; 1942; 1944-48. Mar. 1, 75.44.
387. W. J. Garrett. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 15, blk. B. Records available: 1937-46; 1948. Feb. 26, 37.13.

392. 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. Records available: 1937-39; 1942-48. Mar. 1, 90.59.

395. H. W. Stanton. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 16, blk. A. Records available: 1937-45; 1948. Feb. 20, 51.78.

398. E. E. Ireland. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 36, blk. D5, 8.5 miles northwest of Lubbock. Records available: 1937-47. No measurements made in 1948.

401. 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. Records available: 1937-48. Feb. 21, 79.19.

402. Fort Worth & Denver Railway Co. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 65, blk. A. Records available: 1937-48. Feb. 18, 40.86.

403. J. E. Smiley. SW. corner SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 56, blk. A, 8 miles north-east of Lubbock. Records available: 1937-48. Feb. 18, 40.53.

Lynn County

No measurements made in 1948.

Matagorda County

3. Southern Pacific Railroad Co. About 0.6 mile west of highway intersection at Midfield. Records available: 1934; 1938-41; 1943-46; 1948. Mar. 11, 5.13.

33. Turtle Bay School. 5 miles west of Palacios. Records available: 1938-42; 1944-46; 1948. Mar. 11, 12.62.

40. City of Palacios. At water works. Records available: 1934; 1938-46; 1948. Mar. 11, 10.20.

Maverick County

M3-7. M. Rambie. About 100 yards north of the Rambie ranchhouse, 15 miles west of La Pryor. Unused drilled well, diameter 5 inches, depth 50 feet. Measuring point, top of casing, at land-surface datum. Records available: 1930; 1947-48. Jan. 27, 1930, 30.50; July 25, 1947, 32.31; Sept. 16, 1948, 33.35.

M3-7a. M. Rambie. About 100 feet south of the Rambie ranchhouse, 15 miles west of La Pryor. Used drilled well, diameter 5 inches, depth 50 feet. Measuring point, top of casing, 1.0 foot above land-surface datum. Equipped with windmill. Records available: 1946-48. July 12, 1946, 42.37; July 25, 1947, 43.48; Sept. 16, 1948, 44.07.

Medina County

I-2-7. Alfred Schlentz. 8.2 miles northwest of Hondo. Records available: 1930; 1934; 1937-45; 1947-48. Nov. 7, 1947, 202.25; Apr. 23, 1948, 212.35; Aug. 2, 1948, 212.51.

I-3-3. Gus Britch. 4.7 miles northeast of Hondo. Records available: 1930; 1934; 1937-48. Nov. 7, 1947, 195.28; Apr. 23, 1948, 194.51; Aug. 2, 1948, 198.28.

I-3-4. H. W. McClain. 7.2 miles northeast of Hondo. Records available: 1930; 1934; 1937-48. Apr. 24, 182.88; Aug. 2, 195.07.

I-4-18. Ross Kennedy Estate. 3.7 miles east of Sabin. Records available: 1930; 1934; 1937-48. Apr. 23, 230.38; Aug. 2, 236.45.

I-4-29. Will Kelly. 6.3 miles southwest of D'Hanis. Records available: 1930; 1934; 1937-48. Apr. 22, 219.46; Aug. 2, 225.3F.

I-4-30. Virgil Johnson. 12 miles southeast of D'Hanis. Records available: 1930; 1934; 1937-48. Apr. 22, 55.08; Aug. 2, 61.05.

XM-1. Lenard Otto. 1 mile east of Castroville. Records available: 1937-47. Measurements discontinued.

XM-3. John Krenmueller. 7 miles east of Castroville. Records available: 1937-45; 1947-48. Apr. 24, 61.34; Aug. 2, 63.78.

Montgomery County

22. City of Conroe. In Conroe. Records available: 1931-36; 1939-48. Feb. 18, 0.72; June 16, 0.58; Sept. 28, 11.11; Dec. 16, 3.40.

29. Brown Estate. 1.8 miles south of Conroe. Records available: 1931-36; 1938-48. Feb. 18, 21.55; June 16, 22.52; Sept. 23, 24.01; Dec. 16, 24.87.

45. Blair & Sons. At Tamina. Records available: 1931-36; 1938-48. Feb. 18, 13.05; June 16, 20.71; Sept. 28, 14.10; Dec. 16, 15.36.

46. E. W. Castleschoult. 9.5 miles south of Conroe. Records available: 1931-36; 1938-48. Feb. 18, 27.66; June 16, 28.14; Sept. 28, 28.06; Dec. 16, 27.98.

57. R. E. Hicks. 2.25 miles northwest of Conroe. Records available: 1940-48. Feb. 18, 39.94; June 16, 40.68; Sept. 28, 41.27; Dec. 16, 41.80.

140. J. M. Liles. Test hole R-2. 1 mile north of Conroe. Records available: 1940-48. Feb. 18, 7.75; June 16, 9.84; Sept. 28, 11.36; Dec. 16, 12.06.

Nacogdoches County

322. Southland Paper Mills, Inc. well C-7-0. 10 miles south of Nacogdoches. Records available: 1941-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 13	80.20	Mar. 24	84.55	Apr. 30	109.25	Oct. 4	150.18
Feb. 3	81.10	26	89.26	June 21	128.72	29	152.48
18	81.11	27	92.24	July 13	128.82	Dec. 12	157.90
Mar. 10	81.39	Apr. 2	101.06	Aug. 24	137.95	30	151.93
17	81.32	8	109.48	Sept. 30	144.89		

325. Southland Paper Mills, Inc. well C9-0. 11 miles southeast of Nacogdoches. Records available: 1941-48.

Jan. 13	132.71	Mar. 26	133.88	Aug. 24	165.30	Oct. 14	170.79
Feb. 18	132.71	Apr. 8	140.12	Sept. 16	167.08	Nov. 11	174.30
Mar. 10	133.16	May 12	150.38	23	167.95	Dec. 3	174.64
23	133.42	July 20	161.66	Oct. 7	169.84	23	177.88
24	133.52						

331. Southland Paper Mills, Inc. well W4-0. 8 miles southeast of Nacogdoches. Records available: 1941-48.

Jan. 13	96.00	Mar. 10	95.93	Apr. 2	94.62	June 21	106.04
Feb. 3	95.34	17	96.16	8	97.07	Aug. 24	111.53
18	95.49	26	96.23	30	96.87	Dec. 16	120.88

Parmer County

6. Mrs. K. Hamlin. SE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 4, T. 16 S., 2.5 miles east of Farwell. Records available: 1937-38; 1942-43; 1945; 1948. Mar. 17, 153.75.

15. A. C. Hays. NE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 20, T. 1 N., R. 5 E., 1 mile southeast of Black. Records available: 1937-38; 1942; 1947-48. Mar. 17, 138.55.

Randall County

76. 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. Records available: 1937-43; 1946-47. No measurements made in 1948.

83a. Owner unknown. SW. corner NE $\frac{1}{4}$ sec. 28, blk. 85, 2 miles west of Canyon. Records available: 1938-43; 1946-48. Mar. 15, 79.59.

103. W. H. Bush Estate. SW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 64; blk. 85, 1.2 miles south of Canyon. Records available: 1937-43; 1946-48. Mar. 15, 9.97.

117. Melton Dooley. NE $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 128, blk. B5, 4.75 miles south of Canyon. Records available: 1937-43; 1946-48. Mar. 15, 40.26.

145a. Owner unknown. SE corner NE $\frac{1}{4}$ sec. 10, blk. B5, 7.5 miles west of Canyon. Records available: 1938-42; 1946-48. Mar. 15, 110.97.

189a. W. F. Miller. NE $\frac{1}{4}$ SE $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 109, blk. M8, 16 miles south of Canyon. Records available: 1938-41; 1947-48. Mar. 15, 91.77.

San Patricio County

No measurements made in 1948.

Swisher County

1. Will Vaughn. NW corner NW $\frac{1}{4}$ sec. 10, blk. M6. Used drilled irrigation well, diameter 12 inches, depth 203 feet. Measuring point, top of airline hole, opposite discharge pipe, 1.1 feet above land-surface datum. Records available: 1937; 1943; 1947-48. Oct. 28, 1937, 89.50; May 31, 1943, 88.73; Mar. 17, 1947, 89.88; Mar. 3, 1948, 89.39.

2. I. Irlbeck. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 63, blk. M8, 3 miles south of Happy. Records available: 1937-48. Mar. 3, 77.66.

16. Tulia Wheat Growers. SW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 117, blk. M8, 8 miles south of Happy. Records available: 1937-47. No measurements made in 1948.

36. W. C. Cowan. SE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 3, blk. W1, 3 miles northwest of Tulia. Records available: 1934; 1937; 1940-48. Jan. 16, 58.20; Mar. 3, 58.06.

40. Murry Vise. NE $\frac{1}{4}$ NE $\frac{1}{4}$ sec. 18, blk. W1, 4 $\frac{1}{2}$ miles north of Tulia. Used drilled irrigation well, diameter 16 inches, depth 285 feet. Measuring point, top of 1-inch hole in pump base, 0.5 foot above land-surface datum. Records available: 1937; 1943; 1947-48. Mar. 26, 1937, 59.67; May 29, 1943, 59.28; Mar. 17, 1947, 62.12; Mar. 2, 1948, 63.08.

59. C. G. Jordan. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 23, blk. M6, 10 miles west of Tulia. Used drilled irrigation well, diameter 16 inches, depth 200 feet. Measuring point, top of concrete foundation, 0.5 foot above land-surface datum. Records available: 1937; 1947-48. Sept. 14, 1937, 113.55; Mar. 20, 1947, 116.99; Mar. 1, 1948, 100.98.

115. W. W. Parker. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 164; blk. M9. Used drilled irrigation well, diameter 16 inches, depth 226 feet. Measuring point, top of 1-inch hole in pump base, 1.5 feet above land-surface datum. Records available: 1937; 1943; 1945-48.

Date	Water level	Date	Water level	Date	Water level
Nov. 15, 1937	57.38	Feb. 22, 1945	61.40	Mar. 17, 1947	59.31
May 28, 1943	56.78	25, 1946	59.14	2, 1948	60.75

124. W. C. Watson. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 125, blk. M10. Used drilled irrigation well, diameter 16 inches, depth 188 feet. Measuring point, top of concrete foundation, 4.0 feet above land-surface datum. Records available: 1937; 1943; 1947-48. Nov. 26, 1937, 46.91; May 15, 1943, 55.49; Mar. 17, 1947, 51.60; Mar. 2, 1948, 53.29.

233. L. L. Armor. SW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 88, blk. B2, 10 miles east of Kress. Used drilled irrigation well, diameter 16 inches, depth 203 feet. Measuring point, top of concrete foundation, 1.0 foot above land-surface datum. Records available: 1937; 1943; 1947-48. Nov. 8, 1937, 50.85; June 30, 1943, 72.28; Mar. 13, 1947, 62.49; Feb. 23, 1948, 67.00.

247. R. J. Pool. NE $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 80, blk. B2, 12 $\frac{1}{2}$ miles east of Kress. Used drilled irrigation well, diameter 12 inches, depth 226 feet. Measuring point, top of 1 $\frac{1}{2}$ -inch hole in pump base, 1.2 feet above land-surface datum. Records available: 1937; 1943; 1948. Nov. 9, 1937, 57.34; July 16, 1943, 60.70; Feb. 23, 1948, 66.58.

255. Dr. H. H. Hicks. NW corner NE $\frac{1}{4}$ sec. 2, blk. B6, 7.5 miles east of Kress. Records available: 1937-38; 1940-48. Jan. 16, 50.70; Feb. 23, 50.47.

258. B. A. Dubbert. NW $\frac{1}{4}$ SE $\frac{1}{4}$ sec. 25, blk. M14, 8 miles east of Kress. Records available: 1936-47. No measurements made in 1948.
302. J. D. Vaughn. SW $\frac{1}{4}$ SW $\frac{1}{4}$ ssc. 23, blk. W1, 1.5 miles southwest of Tulia. Records available: 1934; 1937; 1939-48. Feb. 26, 65.18.
305. J. L. Cantrell. NW. corner NE $\frac{1}{4}$ sec. 25, blk. W1, 1.75 miles southeast of Tulia. Records available: 1937-48. Feb. 26, 40.30.
332. W. F. Kerr. NW $\frac{1}{4}$ NW $\frac{1}{4}$ ssc. 28, blk. M13, 4 miles north of Kress. Records available: 1937-48. Jan. 16, 78.01; Feb. 23, 76.97.
354. V. A. Beck. NW $\frac{1}{4}$ SW $\frac{1}{4}$ sec. 52, blk. M13, at west edge of Kress. Records available: 1936-46; 1948. Feb. 28, 68.43.
359. E. E. Farmway. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 57, blk. M13, 2.75 miles west of Kress. Records available: 1937-48. Feb. 28, 81.32.
368. C. F. Harris. About 0.3 mile west of southeast corner of sec. 62, blk. M13, on R. F. Hudgins survey, 2.75 miles south of Kress. Records available: 1936-48. Jan. 16, 89.41; Feb. 28, 89.34.
370. Neelsy Culp. About 0.33 miles east of southeast corner sec. 62, blk. M13, on R. F. Hudgins survey, 2.7 miles south of Kress. Records available: 1936-48. Feb. 23, 86.54.
383. S. R. Golden. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 54, blk. M14, 4.5 miles southeast of Kress. Records available: 1914; 1934; 1936-48. Feb. 23, 84.75.
421. A. V. Perryman. NW $\frac{1}{4}$ NW $\frac{1}{4}$ sec. 9, blk. K3, 19.5 miles southwest of Tulia. Records available: 1942-48. Feb. 28, 66.32.
429. Clifton Reed. NW. corner strip sec. 66, J. A. Ward survey, 5.5 miles west of Kress. Records available: 1937; 1939-48. Jan. 16, 107.50; Feb. 28, 106.68.

Travis County

256. Mr. Robinson. 12 miles north of the State Capitol in Austin. Records available: 1939; 1941-46. Measurements discontinued.
261. H. C. Warren. 13 miles north of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 3, 226.00.
266. J. D. Dillingham. 12 miles north of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 240.34.
280. Travis County. 9.5 miles north of the State Capitol in Austin. Records available: 1939-46; 1948. Aug. 4, 13.00.
284. Robinson Bros. 8.5 miles north of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 173.28.
318. R. R. Sansom. 7.5 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 151.05.
322. John Teagle. 5.5 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 177.03.
323. Fred Parsons. 5.75 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 95.80.
327. Walling Estate. 4.5 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 177.36.
328. Walling Estate. 4.5 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 20.38.
331. J. C. Campbell, Jr. 3.75 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 4, 92.51.
343. Travis County Water District No. 2. 4.75 miles northeast of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 3, 175.41.
392. Tom Williams. 7.5 miles north of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 12, 15.71.
400. Mrs. S. D. Williams. 8.5 miles north of the State Capitol in Austin. Records available: 1939; 1941-46. Measurements discontinued.

414. J. R. McElroy. 11 miles north of the State Capitol in Austin. Records available: 1940-46; 1948. Aug. 12, 39.36.

460. Rose Dellanna. 2 miles southwest of State Capitol in Austin. Records available: 1937; 1941-48. Mar. 2, 83.06; Aug. 6, 84.06.

483. S. N. Allred. 5 miles southwest of State Capitol in Austin. Records available: 1939; 1941-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29	240.56	May 30	243.22	Aug. 29	244.62	Nov. 25	245.48
Mar. 28	240.85	June 27	253.28	Sept. 26	248.42	Dec. 24	245.95
Apr. 25	252.69	July 29	254.12	Oct. 26	250.09		

502. H. S. Lawson heirs. 6.5 miles south of State Capitol in Austin. Records available: 1937-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29	10.39	May 30	11.12	Aug. 29	15.58	Nov. 25	16.66
Mar. 28	10.88	June 27	13.62	Sept. 26	16.22	Dec. 24	16.93
Apr. 25	12.45	July 29	14.40	Oct. 26	15.87		

509. Erlene Patton. In Oak Hill. Records available: 1937-47. Measurements discontinued.

527. Sarah Moore. About 100 yards south of Cedar Valley post office. Records available: 1937-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29	4.88	May 30	9.19	Aug. 29	13.98	Nov. 25	15.15
Mar. 28	5.10	June 27	10.23	Sept. 26	14.44	Dec. 24	15.68
Apr. 25	6.52	July 29	11.22	Oct. 26	14.70		

616. J. R. Moore. 14.5 miles west of the State Capitol in Austin. Records available: 1938-46; 1948. Aug. 5, 161.18.

618. Homer Heep. About 50 feet east of U. S. Highway 81, 1 mile north of Travis-Hays County line. Records available: 1938-48.

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 29	22.74	May 30	21.35	Aug. 29	25.95	Nov. 25	24.86
Mar. 28	23.17	June 27	24.08	Sept. 26	26.43	Dec. 24	26.59
Apr. 25	24.29	July 29	24.39	Oct. 26	24.08		

619. United Gas Pipe Line Co. At company's Buda pump station, 3 miles northeast of Buda. Unused drilled well, diameter 6 inches, depth 703 feet, cased to 639 feet. Measuring point, top of steel plate welded on top of casing, 2.0 feet above land-surface datum and 737.98 feet above sea level. Records available: 1943-48.

Date	Water level	Date	Water level	Date	Water level
Apr. 1, 1943	159.67	May 28, 1945	149.23	Apr. 27, 1947	147.07
Sept. 1	162.27	July 29	149.39	June 1	147.62
Oct. 4	162.68	Sept. 3	151.10	June 29	148.62
30	164.55	30	153.01	July 27	150.18
Nov. 28	165.88	Nov. 4	155.67	Sept. 1	152.75
Jan. 5, 1944	167.78	Dec. 5	157.75	27	155.37
Feb. 3	168.50	Jan. 4, 1946	158.94	Oct. 31	157.78
27	164.79	Feb. 7	159.88	Nov. 30	160.34
Apr. 1	162.89	Mar. 5	158.09	Dec. 30	161.97
30	159.32	Apr. 4	156.34	Feb. 29, 1948	165.59
May 29	157.14	28	154.62	Mar. 28	167.38
July 2	154.00	July 2	152.64	Apr. 25	168.36
30	152.60	Aug. 3	152.89	May 30	170.15
Aug. 27	153.45	Sept. 2	154.14	June 27	171.00
Oct. 1	154.30	Oct. 2	155.32	July 29	171.78
30	155.09	Nov. 7	156.23	Aug. 29	172.68
Dec. 1	158.40	Dec. 2	155.78	Sept. 26	173.79
Jan. 1, 1945	156.80	Jan. 12, 1947	151.32	Oct. 26	173.93
Feb. 4	157.04	29	149.73	Nov. 25	174.31
Mar. 30	152.16	Mar. 2	148.15	Dec. 24	175.04
May 2	150.19	30	146.91		

687. Mrs. Elizabeth Gentsch. 5 miles southwest of the State Capitol in Austin. Records available: 1939; 1941-46; 1948. Aug. 6, 218.97.

884. H. A. Townsley. 7.5 miles northwest of Creedmoor. Records available: 1941-48. May 2, 208.19; Aug. 6, 205.52.

885. F. B. Polk. 7 miles northwest of Creedmoor. Records available: 1939; 1941-47. Measurements discontinued.

890. Russell C. Faulkner. 6 miles northwest of Creedmoor. Records available: 1937-38; 1941-46; 1948. Aug. 6, 15.09.

892. Russell C. Faulkner. 6 miles northwest of Creedmoor. Records available: 1941-46. No measurements made in 1948.

895. Joe C. Carrington. 5 miles northwest of Creedmoor. Records available: 1941-48. Feb. 29, 64.98; Mar. 28, 66.62; Apr. 25, 67.83; May 30, 69.75.

Uvalde County

H-2-4. H. I. Holmes. 13.7 miles north of Uvalde. Records available: 1929-48. Apr. 22, 158.48; Aug. 9, 168.86.

H-2-5. Mrs. W. E. Fitzgerald. 18 miles north of Uvalde. Records available: 1929-48. Apr. 22, 82.30; Aug. 9, 91.10.

H-4-6. Briscoe, Penley & Spangler. 4.5 miles northwest of Uvalde. Records available: 1929-42; 1944-48. Apr. 21, 73.11; Aug. 9, 73.05.

H-4-28. J. R. Ingraham. 7.2 miles west of Uvalde. Records available: 1929-33; 1935-48. Apr. 21, 23.73; Aug. 9, 19.23.

H-4-34. John Rosenow. 13.5 miles northwest of Uvalde. Records available: 1939-48. Apr. 21, 172.58; Aug. 10, 169.50.

H-4-35. John Rosenow. 12.4 miles west of Uvalde. Records available: 1939-45; 1947-48. Apr. 21, 72.00.

H-5-1. City of Uvalde. 2 blocks south of Uvalde County courthouse. Records available: 1929-32; 1934-48.

Daily noon water level, from recorder charts

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	36.48	37.33	37.98	39.19	40.21	41.04	.....	41.35	41.56	41.85	42.49	43.36
2	36.51	37.34	38.02	39.26	40.22	41.10	.....	41.34	41.57	41.89	42.53	43.41
3	36.55	37.35	38.08	39.30	40.25	41.15	.....	41.36	41.60	41.92	42.55	43.45
4	36.59	37.35	38.13	39.33	40.30	41.22	.....	41.38	41.62	41.97	42.56	43.48
5	36.60	37.37	38.15	39.36	40.33	41.26	.....	41.36	41.63	42.04	42.60	43.52
6	36.65	37.39	38.17	39.39	40.36	41.30	.....	41.40	41.66	42.08	42.61	43.55
7	36.67	37.41	38.20	39.46	40.39	.....	.....	41.36	41.69	42.13	42.64	43.60
8	36.69	37.43	38.22	39.52	40.42	.....	.....	41.35	41.73	42.17	42.66	43.64
9	36.72	37.46	38.25	39.54	40.45	.....	.....	41.39	41.68	42.20	42.70	43.69
10	36.76	37.47	38.30	39.60	40.50	.....	.....	41.37	41.62	42.24	42.73	43.74
11	36.77	37.49	38.35	39.63	40.50	.....	.....	41.43	41.60	42.26	42.79	43.76
12	36.78	37.53	38.38	39.66	40.48	.....	.....	41.46	41.58	42.31	42.81	43.80
13	36.85	37.55	38.40	39.72	40.48	41.67	.....	41.62	41.59	42.36	42.83	43.84
14	36.87	37.60	38.43	39.76	40.50	41.71	.....	41.64	41.59	42.40	42.85	43.87
15	36.89	37.62	38.46	39.81	40.52	41.79	.....	41.63	41.60	42.45	42.86	43.89
16	36.91	37.75	38.55	39.84	40.56	41.88	.....	41.41	41.60	42.50	42.88	43.92
17	36.96	37.70	38.57	39.91	40.61	41.93	.....	41.37	41.61	42.46	42.90	43.96
18	36.97	37.73	38.61	39.93	40.65	42.01	.....	41.37	41.62	42.37	42.92	43.98
19	36.98	37.73	38.66	39.96	40.70	42.07	.....	41.38	41.61	42.35	42.96	44.00
20	37.00	37.78	38.71	40.02	40.74	42.10	41.43	41.39	41.62	42.35	42.98	44.03
21	37.04	37.79	38.74	40.08	40.77	42.14	41.42	41.41	41.65	42.34	43.02	44.06
22	37.05	37.83	38.76	40.10	40.81	42.18	41.36	41.40	41.66	42.35	43.06	44.10
23	37.10	37.82	38.81	40.09	40.84	42.23	41.34	41.43	41.66	42.36	43.08	44.12
24	37.12	37.85	38.88	40.08	40.80	42.19	41.35	41.45	41.67	42.36	43.11	44.15
25	37.15	37.86	38.88	40.07	40.82	42.19	41.34	41.49	41.70	42.36	43.14	44.17
26	37.17	37.88	38.96	40.07	40.82	42.16	41.36	41.48	41.72	42.37	43.16	44.19
27	37.20	37.90	39.01	40.09	40.83	42.16	41.40	41.49	41.74	42.40	43.21	44.22
28	37.21	37.93	39.03	40.12	40.86	42.11	41.36	41.50	41.75	42.40	43.27	44.25
29	37.27	37.95	39.07	40.16	40.90	42.10	41.36	41.52	41.77	42.42	43.28	44.25
30	37.29		39.10	40.18	40.94	42.11	41.37	41.52	41.81	42.45	43.33	44.33
31	37.31		39.15		41.00		41.39	41.51		42.46		44.36

H-5-22. Jack Dean. 2 miles north of Uvalde. Records available: 1929-48. Apr. 22, 69.30; Aug. 9, 69.38.

H-5-26. George Kennedy. 7.2 miles northeast of Uvalde. Records available: 1929-38; 1940-44; 1946-48. Apr. 22, 170.70; Aug. 9, 173.26.

H-5-51. O. T. Caldwell. 2.5 miles southwest of Uvalde. Records available: 1929-48. Apr. 22, 39.25; Aug. 9, 45.10.

H-6-8. K. K. Woodley. 1.5 miles east of Knippa. Records available: 1929-33; 1935-48. Apr. 22, 76.79; Aug. 9, 70.21.

H-6-10. Herbert Stevens. 3 miles west of Sabinal. Records available: 1929-33; 1935-44; 1946-48. Apr. 22, 67.73; Aug. 2, 67.23.

H-6-16. Cecil Reagan. 3 miles southeast of Knippa. Records available: 1929-34; 1936-38; 1940-44; 1946-48. Nov. 7, 1947, 177.91; Apr. 22, 1948, 183.39; Aug. 9, 1948, 183.97.

H-8-63. Uvalde County Public School. 6.4 miles southeast of Uvalde. Unused drilled well, diameter 6 inches, depth 65 feet. Measuring point, top of iron water pipe clamp, 3.5 feet above land-surface datum and 849.14 feet above mean sea level. Records available: 1945-48.

Date	Water level	Date	Water level	Date	Water level
Sept. 12, 1945	29.29	Mar. 4, 1947	28.04	Nov. 10, 1948	32.57
Jan. 5, 1946	28.54	Oct. 12, 1948	33.00	Dec. 24	33.54
Aug. 8	29.62				

XU-9. Frank Kirchgraber. 16.5 miles west of Uvalde. Records available: 1937-48. Apr. 21, 65.95.

XU-10. Texas & New Orleans Railroad Co. At Cline. Records available: 1937-48. Apr. 22, 49.50; Aug. 10, 47.49.

Val Verde County

XV-2. Otto Koog. 2.8 miles east of Del Rio. Records available: 1937-44; 1946-48. Apr. 20, 82.50.

XV-3. Patricio Confreres. 1.5 miles east of Del Rio. Records available: 1937-48. Apr. 20, 41.95; Aug. 10, 37.10.

Waller County

152. Mr. Meyers. 1.5 miles east of Prairie View railroad station. Records available: 1937-40; 1942-48. Feb. 16, 2.26; June 11, 6.27.

154. W. D. Weaver. About 0.6 mile west of Waller. Records available: 1937-47. Measurements discontinued.

223. T. B. Tucker. 6.75 miles northwest of Katy. Records available: 1931; 1933; 1939-48. Mar. 18, 63.12; Nov. 15, 69.69.

225. L. E. Morrison. Owner's well 2. 6 miles northwest of Katy. Records available: 1940-48. Mar. 17, 68.09; Nov. 15, 89.26.

235. John Cope. 2 miles west of Katy. Records available: 1931; 1933; 1939-48. Mar. 19, 63.92; Nov. 10, 68.40.

239. Lyn Hebert. 12 miles northwest of Katy. Records available: 1941-48. Mar. 18, 58.20; Nov. 18, 84.30.

240. B. Ray Woods. Owner's well 3. 6 miles west of Katy. Records available: 1940-46; 1948. Mar. 19, 60.53; Nov. 15, 64.10.

242. Robichaux & Thompson. 8 miles northwest of Katy. Records available: 1941-48. Mar. 18, 61.78; Nov. 15, 64.03.

245. G. P. Nelson. Owner's well 2. 10 miles northwest of Katy. Records available: 1941-48. Mar. 18, 59.35; Nov. 15, 65.48.

246. A. E. Thompson. 8.5 miles northwest of Katy. Records available: 1940-46; 1948. Mar. 18, 56.98; Nov. 11, 69.13.

247. T. B. Tucker. Owner's well 5. 6.5 miles northwest of Katy. Records available: 1939-48. Mar. 18, 65.04; Nov. 15, 74.66.

252. J. A. Kimball. 2.25 miles northwest of Katy. Records available: 1940-48. Mar. 17, 65.80; Nov. 10, 69.57.

Wharton County

1. A-1. Otto Michelson. 11 miles west of Hahn. Records available: 1940-47. No measurements made in 1948.

8. A-8. Lester Glaze. Formerly owned by J. W. Wyer. About 0.7 mile west of Round Mott School. Records available: 1935; 1938-48. Mar. 8, 36.01.

31. A-31. Tom Thomas. 6.5 miles north of Louise. Records available: 1934-35; 1938-48. Mar. 8, 26.92.

32. A-32. Harfst Bros. About 0.7 mile south of Cobbler Creek School. Records available: 1934-35; 1938-48. Mar. 8, 30.78.

33. B-33. Harfst Bros. 0.7 mile south of Cobbler Creek School. Records available: 1934-35; 1938-42; 1946; 1948. Mar. 8, 38.32.

57. C-57. W. A. Harrison. 3.25 miles north of Glen Flora. Records available: 1934; 1941-48. Mar. 9, 15.99.

66. C-66. J. J. Pendegrass. 2.5 miles west of Bonus. Records available: 1940-48. Mar. 9, 22.71.

70a. C-70a. J. J. Vacek. 3.2 miles west of East Bernard. Records available: 1935; 1938-48. Mar. 8, 9.65.

70b. C-70b. J. J. Vacek. 3.2 miles west of East Bernard. Records available: 1935; 1938-47. Measurements discontinued.

81. C-81. William J. Corman. In Lissie. Records available: 1940-45; 1947-48. Mar. 9, 20.98.

84. C-84. Fred Fotjek. 5 miles west of East Bernard. Records available: 1940-48. Mar. 8, 19.32.

96. C-96. Frank Bucek. 8 miles north of Wharton. Records available: 1934-35; 1938-48. Mar. 8, 21.14.

108. D-108. City of Wharton. In Wharton. Records available: 1934-36; 1938-48. Mar. 9, 22.89.

109. D-109. City of Wharton. In Wharton. Records available: 1934-35; 1937-48. Mar. 8, 29.47.

148. E-148. Central Power & Light Co. In El Campo. Records available: 1941-47. No measurements made in 1948.

165. A-165. H. P. Stockton. 1.4 miles northwest of Louise. Records available: 1934-35; 1938-48. Mar. 8, 24.15.

173. F-173. Stoval & Appling. 8.25 miles southwest of Louise. Records available: 1934-35; 1938-47. No measurements made in 1948.

178. F-178. Adrian Johnson. 8 miles southwest of El Campo. Records available: 1934-35; 1938-47. No measurements made in 1948.

181. F-181. T. E. Appling. 7 miles southeast of El Campo. Records available: 1934-35; 1938-48. Mar. 9, 26.33.

186. F-186. Otto Mickelson. 2.5 miles north of Danevang. Records available: 1935; 1938-48. Mar. 9, 15.43.

200. F-200. J. L. Myatt. 4.25 miles west of Danevang. Records available: 1940-47. No measurements made in 1948.

209. E-209. J. C. Allen. 7 miles southeast of El Campo. Records available: 1934-35; 1938-47. No measurements made in 1948.

239. D-239. Gulf, Colorado & Santa Fe Railway Co. 2.5 miles southeast of Boling. Records available: 1934-35; 1938-47. No measurements made in 1948.

241. D-241. Texas Gulf Sulphur Co. At New Gulf, 400 feet northeast of timekeeper's office. Records available: 1934-35; 1937-48. Mar. 9, 25.70.

Williamson County

342. McCann Estate. 5 miles southwest of Georgetown. Records available: 1941-43; 1945; 1948. Aug. 12, 46.78.
344. Victor Robertson. 5 miles southwest of Georgetown. Records available: 1940-46; 1948. Aug. 12, 118.20.
346. Jack Gillam. 4 miles southwest of Georgetown. Records available: 1940-46; 1948. Aug. 12, 134.38.
348. Claude DeDear. 3.5 miles southwest of Georgetown. Records available: 1941; 1943; 1946. Measurements discontinued.
350. H. M. Weir. 3 miles southwest of Georgetown. Records available: 1940-44. Measurements discontinued.
351. Fred Montgomery. 2.5 miles southwest of Georgetown. Records available: 1940-46. Measurements discontinued.
353. Walter Thwing. 2.25 miles south of Georgetown. Records available: 1940-46; 1948. Mar. 12, 129.09.
418. Eubanks Estate. 1.5 miles south of Georgetown. Records available: 1940-43; 1945; 1948. Aug. 12, 99.65.
420. Mrs. Juanita Fleegeer. 0.75 mile southwest of Georgetown. Records available: 1940-46; 1948. Aug. 12, 92.43.
889. R. T. Love. Formerly owned by Bankers Life Insurance Co. Records available: 1940-46; 1948. Aug. 12, 98.20.
922. R. R. Stolley. 1.25 miles south of Round Rock. Records available: 1940-46; 1948. Mar. 12, 139.14.
929. Mrs. J. L. Frisk. 2.5 miles south of Round Rock. Records available: 1940-42; 1944-46. Measurements discontinued.

Zavala County

- H7-20. W. A. Butler. 5.5 miles north of La Pryor. Records available: 1929-33; 1938-42; 1944-48. Aug. 7, 72.08; Sept. 15, 76.01.
- H8-68. A. Walker. 4.5 miles northeast of La Pryor. Used drilled well, diameter 6 inches, depth 84 feet. Measuring point, top of iron water-pipe clamp, 3.0 feet above land-surface datum. Equipped with windmill. Records available: 1948. Sept. 17, 60.04; Oct. 12, 60.50; Nov. 10, 61.31; Dec. 27, 61.92.
- M3-29. Hal Mangum. 12 miles west of La Pryor. Records available: 1930; 1932-33; 1936-38; 1946-48. July 12, 1946, 97.60; July 25, 1947, 97.61; Sept. 16, 1948, 97.75.
- M6-10. W. M. Van Cleve. 7.5 miles northwest of Cometa. Records available: 1930-34; 1936-46; 1948. Sept. 16, 97.08.
- M6-16. J. S. Steward. 6 miles northwest of Cometa. Records available: 1930-40; 1942-48. Sept. 16, 49.62.
- M6-18. N. E. Ware. 4 miles northeast of Cometa. Records available: 1930-48. Sept. 16, 66.84.
- M6-19. L. D. Van Cleve. 3 miles northwest of Cometa. Records available: 1930-48. Aug. 9, 67.95; Sept. 16, 68.98.
- M9-1. T. B. Mear. In Cometa. Records available: 1928-34; 1936-48. Aug. 9, 92.14; Sept. 16, 86.95.
- N1-24. J. C. Williams. 2.5 miles northwest of La Pryor. Records available: 1929-33; 1935-48. Aug. 3, 177.30; Sept. 15, 168.70.
- N1-39. R. W. Norton. 8 miles west of La Pryor. Measurement resumed. Records available: 1930-33; 1946-48. July 12, 1946, 78.55; July 25, 1947, 79.79; Sept. 16, 1948, 81.99.
- N1-40. I. T. Pryor. 2 miles west of La Pryor. Records available: 1930-35; 1937-44; 1946-48. Sept. 16, 166.48.

N1-83. San Antonio, Uvalde & Gulf Railroad Co. 0.5 mile south of La Pryor, at stock loading pens. Used drilled well, diameter 11 inches, depth about 350 feet. Measuring point, top of casing, 1.0 foot above land-surface datum. Equipped with windmill. Records available: 1948. Sept. 17, 93.41; Oct. 12, 93.07; Nov. 10, 92.80; Dec. 27, 92.37.

N1-90. Mathews Ranch. 4.5 miles west of La Pryor. Used drilled well, diameter 8 to 6 inches, depth 467 feet. Measuring point, top of iron water-pipe clamp, 0.7 foot above land-surface datum. Equipped with windmill. Records available: 1946-48.

Date	Water level	Date	Water level	Date	Water level
July 12, 1946	159.29	Sept. 16, 1948	187.38	Nov. 10, 1948	188.74
25, 1947	169.72	Oct. 12	188.32	Dec. 27	190.40

N1-92. Mathews Ranch. About 150 feet north of State Highway 76, 7.2 miles west of La Pryor. Used drilled well, diameter 6 inches, depth 335 feet. Measuring point, top of iron water-pipe clamp 1.0 foot above land-surface datum. Equipped with windmill. Records available: 1947-48. July 25, 1947, 83.06; Sept. 16, 1948, 95.05.

N5-21. A. N. Box. 8 miles northeast of Crystal City. Used drilled well, diameter 8 inches, depth 1,000 feet. Measuring point, top of iron water-pipe clamp, 0.4 foot above land-surface datum. Equipped with windmill. Used for irrigation prior to 1933. Records available: 1948. Sept. 13, 142.96; Oct. 12, 170.14; Nov. 10, 185.60; Dec. 27, 200.82.

N5-30. Richie Bros. 2.75 miles east of Crystal City. Used drilled irrigation well, diameter 12½ inches, depth 940 feet. Measuring point, top of hole in pump base, 3.0 feet above land-surface datum. Equipped with turbine pump and 75 horsepower electric motor. Records available: 1947-48. July 24, 1947, 102.07; Sept. 13, 1948, 144.30.

N5-39. C. R. Jarrett. 2 miles northeast of Crystal City. Records available: 1929-48. Sept. 13, 146.33.

N5-40. C. R. Jarrett. 2.5 miles east of Crystal City. Records available: 1929-48. Sept. 13, 143.09.

N5-55. Cribbs & Davidson. 2.5 miles east of Crystal City. Records available: 1929-48. Sept. 13, 149.91.

N5-60. E. L. Reedy. 4 miles east of Crystal City. Records available: 1929-33; 1936-41; 1944; 1946-48. Aug. 8, 168.51; Sept. 13, 148.46.

N8-7. Dr. Walter Biedelsbach. 3 miles southeast of Crystal City. Records available: 1929-39; 1941-47. Measurements discontinued.

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