Water Levels and Artesian Pressure in Observation Wells in the United States in 1945

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Part 2. Southeastern States

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

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This report was prepared by the Geological Survey in cooperation with the States of Alabama, Florida, Georgia, Kentucky, Maryland, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia, and other agencies, by personnel of the Water Resources Branch under the direction of:

C. G. Paulsen---------- Chief Hydraulic Engineer
A. N. Sayre---------- Chief, Division of Ground Water

R. R. Bennett---------- District Geologist (Ground Water), Baltimore, Md.
D. J. Cederstrom---------- District Geologist (Ground Water), Charlottesville, Va.
H. H. Cooper, Jr.---------- District Engineer (Ground Water), Tallahassee, Fla.
E. M. Cushing---------- District Engineer (Ground Water), Memphis, Tenn.
S. M. Herrick---------- District Geologist (Ground Water), Atlanta, Ga.
P. E. LaMoreaux---------- District Geologist (Ground Water), Tuscaloosa, Ala.
M. J. Mundorff---------- District Geologist (Ground Water), Raleigh, N. C.
G. G. Parker---------- District Geologist (Ground Water), Miami, Fla.
M. I. Rorabaugh---------- District Engineer (Ground Water), Louisville, Ky.

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Part 2. SOUTHEASTERN STATES

INTRODUCTION

By A. N. Sayre and others

Significance of records of water level and artesian pressure

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

Annual publication of records by Geological Survey

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

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

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

Scope of present volume

The present volume covers the southeastern States and gives records of water level and artesian pressure in about 1,012 observation wells of the Geological Survey and cooperating agencies in Alabama, Florida, Georgia Kentucky, Maryland, Mississippi, North Carolina, Tennessee, Virginia, and West Virginia. Of these wells, 112 are equipped with automatic water-stage recorders. For some wells not previously reported complete records of water level are given in this volume, including those for the years before 1945. 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 identifying description are given in this report. The numbers in parentheses immediately following a well number are those of the water-supply papers in which earlier records of that well are given and the pages on which they appear. An asterisk indicates that a description of the well is given in the paper whose number is so marked. This report includes about 23,400 individual determinations of water level and artesian pressure.

Land-surface datum

Before 1943, in Geological Survey reports, the water levels and artesian pressures for some wells were given in feet above or below the measuring point and for other wells in feet above or below sea level or above or below various assumed datum planes. It had been considered inadvisable to adopt a standard procedure in expressing water levels and artesian heads

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

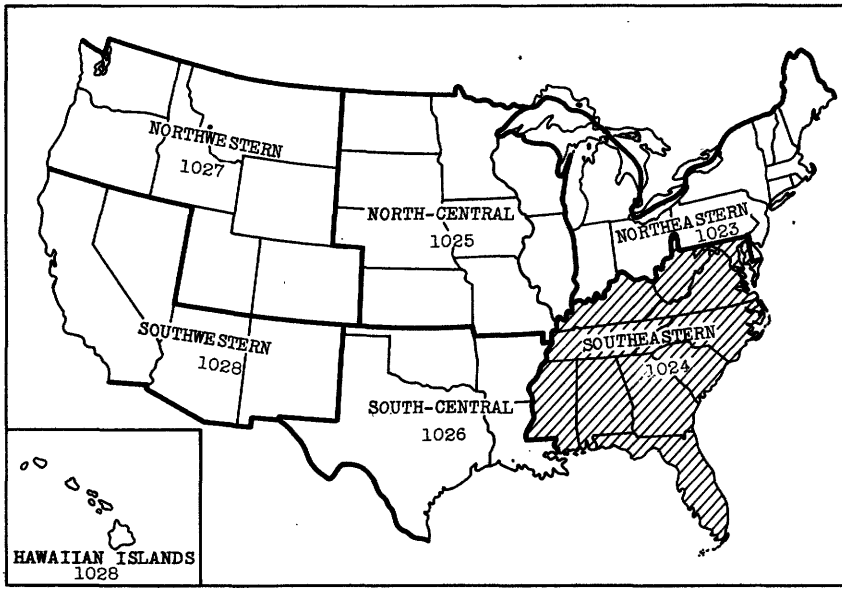

Figure 1.--Outline map of the United States, showing sections of the country covered by the six water-supply papers on water levels and artesian pressure in observation wells in 1945. The shaded section represents the part of the country covered by this volume.

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

Network of key observation wells

During 1942 the Geological Survey established a network of key observation wells in order to make available current information on general groundwater conditions over the country. These wells were selected because the

fluctuations of water level in them are believed to be typical and they represent the general fluctuations that occur in the parts of the country in which the wells are situated. At the end of 1945 the network included about 160 wells in 45 States. About 40 of the wells were established expressly for the network in 1942 and about 20 were established in 1943; the other 100 were selected from wells measured regularly in connection with cooperative ground-water investigations. The coverage of the country is still far from adequate, and it is expected that some wells not now included will be added to the network from time to time.

Changes in ground-water level in 1945 in the southeastern part of the United States

In 1945 the precipitation was above normal in all of the States in the southeastern section of the country, with the exception of Alabama where it was normal. 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 noticeably affected by pumping or artesian flow. A summary of the changes in ground-water level is given in the chapter for each State.

Acknowledgments

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

ALABAMA

By P. E. LaMoreaux

PROGRAM OF WORK

Measurements of water levels in observation wells in Alabama, which were begun in June 1940, were continued through 1945 as a part of the ground-water investigations in cooperation with the Alabama Geological Survey. These measurements were begun in connection with an investigation on the availability, quality, and quantity of ground water in the area of outcrop of the Cretaceous formations of Alabama. The Cretaceous area forms a band approximately 50 miles wide extending in a northwest direction across the central part of the State. Upon the completion of the studies[1/2/] in the Cretaceous area in 1944, the program was expanded and ground-water studies were planned to include the outcrop area of the Tertiary formations in the southern quarter of the State. This investigation of the Tertiary area of Alabama continued through 1945. Progress was made on the comprehensive study of the ground-water resources of the entire area, while a detailed investigation was being conducted on the salt-water encroachment of the shallow aquifer in the vicinity of Mobile.

A total of eight wells have been under observation since June 1940 in Chilton, Dallas, Greene, Jackson, Montgomery, Pickens, and Tuscaloosa Counties. (Water-Supply Papers 907, 937, 945, 987.) From time to time during 1940-45 observations on some of these wells were discontinued because it was decided that they were not giving adequate information. Of these eight observation wells, two wells, at Clanton and Eutaw, have been kept under observation since their installation in 1941. A third well, at Scottsboro, has a fairly complete record of observations since 1936. The earlier observations on this well were made by the Tennessee Valley Authority.

1/ Carlston, C. W., Fluoride in the ground water of the Cretaceous area of Alabama: Alabama Geol. Survey Bull. 52, 1942.
2/ Carlston, C. W., Ground-water resources of the Cretaceous area of Alabama: Alabama Geol. Survey Special Report 18, 1944.

Monthly measurements were continued through 1945 at well 6 near Eutaw, and a water-stage recorder was maintained on well 10 at Clanton. Weekly measurements were continued in well J28 at Scottsboro.

From April 27 to December 28, 1941, observations were made on a pumping well at the Selma Water Works, Dallas County. On October 1 observations were begun on an abandoned well belonging to the Selma Water Works to observe water-level fluctuations in the aquifer from which the Selma public water supply is drawn. A water-stage recorder has been installed on this well and a continuous record of the water level is being kept, along with the day-by-day pumpage for the nearby wells in the Selma well field.

A total of 133 individual measurements were made on these 4 observation wells in 1945.

FLUCTUATIONS OF WATER LEVEL

The Eutaw, Clanton, and Selma observation wells are in that part of Alabama designated by the U. S. Weather Bureau as the middle division. The greatest recharge in this area occurs during the period January, February, March, and April. The precipitation recorded in this division was 1.29 inches below normal for January, but an accumulative rainfall of 24.58 inches for the entire period, January-April, was 4.08 inches above normal. Rainfall during May, June, and July averaged 0.3 inch below normal. During July and August an accumulative rainfall of 7.78 inches was recorded, 2.12 inches below normal. The rains during July and August are generally responsible for the recharge of water levels during the hot summer months. The rainfall during September, October, and December was slightly above normal. Following is a discussion of the fluctuation of the water levels in these wells, which shows the effect of the variation in precipitation.

On April 30 the water level in Chilton County well 10, at Clanton, rose to 16.74 feet below land-surface datum, or 0.24 foot higher than its previous highest stage on April 24, 1944. A steady decline of the water table took place during the entire summer until October 13 when the water level in this well began rising slowly until it reached 19.32 feet below land-surface datum on December 29. The usual recharge caused by summer rains during the latter part of July and August was slight. On October 6

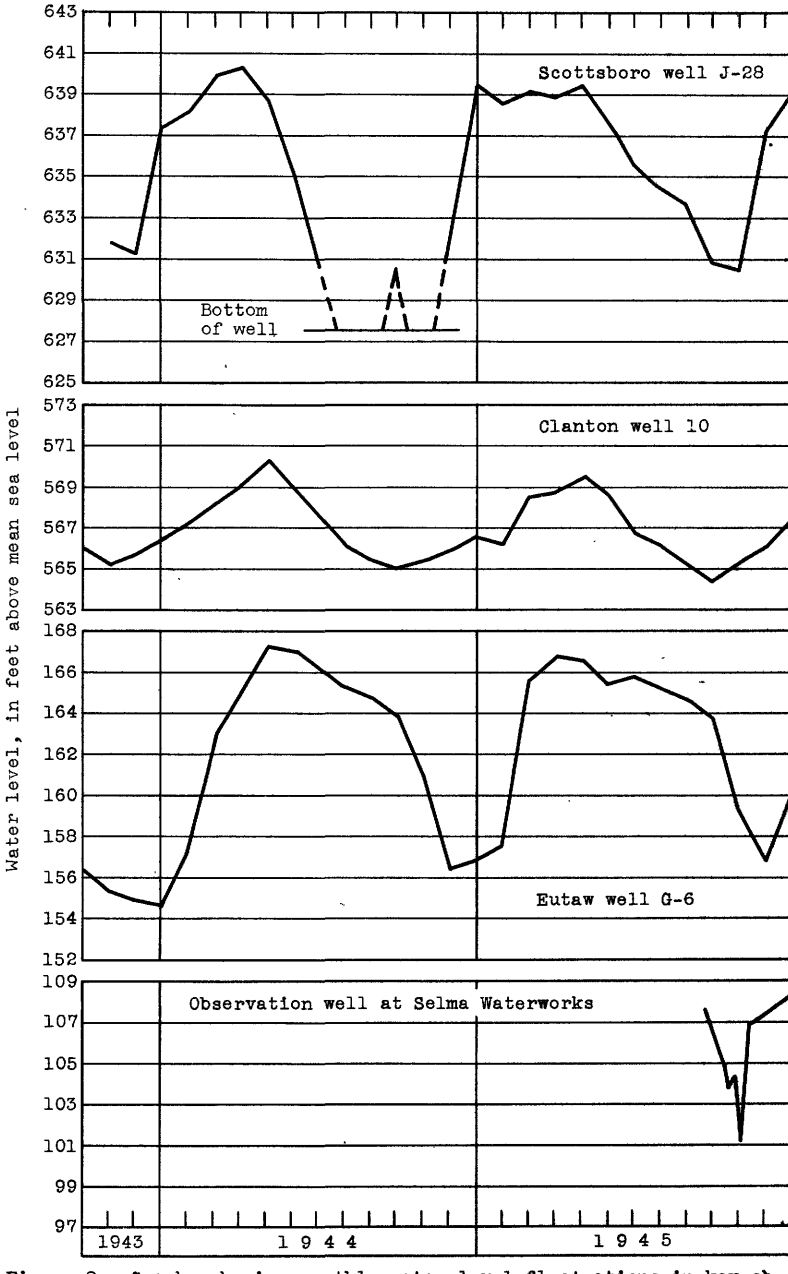

Figure 2.--Graphs showing monthly water-level fluctuations in key observation wells in Alabama.

the water level in well 10 was 22.40 feet below land-surface datum. This was the lowest water surface recorded for the year, but was 0.86 foot above the lowest stage on record of 23.26 feet on November 20, 1944.

The Dallas County well at the Selma Water Works had an incomplete record during 1945, although the well did show a recharge period during the latter part of October and throughout all of November and December. The lowest recorded water level for the period the well was under observation was 23.43 feet below land-surface datum on November 1, 1945. On December 30 the water level in this well had risen to 16.24 feet below land-surface datum.

The highest water level for Greene County well 6 was 16.10 feet below land-surface datum on April 2. This was 0.89 foot lower than the previous record high of 15.21 feet for March 1944. The low for this well was reached on November 30 when its water level stood at 25.84 feet below land-surface datum. This was 1.81 feet higher than the record low of 27.65 feet at the end of December 1943, and 0.37 foot higher than the recorded low of 26.21 feet in November 1944.

Well J28 at Scottsboro, is in the northern division, as designated by the U. S. Weather Bureau. The accumulative rainfall during January, February, March, and April was 24.28 inches, which was 3.40 inches above normal for this period, as a result of 3.29 inches above-normal rainfall in February and 1.49 inches of above-normal rainfall during April. Precipitation during January and March was slightly below normal. Well J28 recorded its highest water level of 1.84 feet below land-surface datum on March 4. Throughout January, February, March, and April water levels in this well fluctuated only slightly. On May 13 the water level began a gradual decline that lasted throughout the summer until October 21 when the water level was 11.74 feet below land surface, the lowest for the year. It will be noted from the graph showing the previous year that this well went dry during July, part of August, September, and October. On October 29 the water level in well J28 was 11.67 feet below land-surface datum. It rose gradually to 2.84 feet on December 31.

From the foregoing it will be seen that in 1945 the water level in Clanton well 10 reached a low for the year slightly less pronounced than the record low for the 5-year period established in November 1944, and a

high water level slightly higher than the highest recorded water level for the previous year. The Dallas County well at Selma was under too short an observation for comparison, but showed a recharge period during October, November, and December. During the year the Greene County well did not reach the record peak it did on March 24, 1944, but the recorded low was slightly above the low of the preceding year, and above the established record low of December 1943. The water level in the Scottsboro well had an accumulative level higher during the spring of 1945 than during the spring of 1944. The decline in water level in this well during the summer months was much less rapid than the previous year; the well did not dry up as it did in 1944.

From these data it will be noted that Alabama observation well water-surface trends were higher during 1945 and did not reach the low water levels recorded in 1943 and 1944.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Chilton County

10 (*937, p. 7; 945, p. 9; *987, p. 8; 1017, p.7-8). City of Clanton. In brick recorder house behind settling tanks in waterworks lot, on north side of Clanton.

Water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	20.47	Mar. 31	17.42	June 29	19.90	Sept.28	21.06
14	20.22	Apr. 7	18.12	July 6	20.12	Oct. 6	22.40
21	20.34	14	18.35	13	20.39	13	22.39
28	20.36	21	18.69	20	20.56	20	21.65
Feb. 2	20.18	28	17.24	26	20.54	27	21.43
4	20.37	30	16.74	Aug. 3	20.41	Nov. 3	21.23
11	19.59	May 5	17.29	10	20.80	10	22.34
18	19.17	12	18.09	17	20.99	17	21.37
21	17.97	19	17.47	24	21.28	25	20.82
25	18.28	26	17.91	30	21.52	Dec. 2	20.79
28	17.99	31	17.80	Sept. 1	21.51	8	20.91
Mar. 4	18.13	June 2	18.44	8	21.72	15	20.73
11	18.21	8	18.79	15	21.86	23	20.22
18	18.43	15	19.34	22	21.61	29	19.32
25	18.38	22	18.49				

Dallas County

City of Selma. At Selma waterworks plant, 6 blocks east of courthouse on Selma Avenue. Diameter 6 inches, depth 420 feet, elevation of top of well casing 124.19 feet above sea level. Measurements of water level to nearest hundredth of a foot made by W. C. Robinson, superintendent of waterworks. Two bench marks were established near well, as follows: (1) X chiseled in concrete base on west side of brick stack, 16 feet east of back door in main waterworks building; (2) X chiseled in wall at northeast corner of cement reservoir. Measuring point, top of 1- by 3-inch tin strip on recorder housing floor, 126.37 feet above sea level. Land-surface datum is 124.30 feet above mean sea level.

City of Selma--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 17	16.13	Oct. 11	19.49	Nov. 1	23.43	Dec. 2	16.90
24	17.33	18	20.43	10	17.51	30	16.24
Oct. 1	18.33	25	19.68				

Greene County

6 (*937, p. 8; 945, p. 9; *987, p. 9; 1017, p. 8). R. Neilon and E. Ward. In front of Cotton Patch Restaurant, on U. S. Highway 11, 3.8 miles north of Eutaw, on hillside, in upper Eutaw sands.

Water level, in feet below land-surface datum, 1945

Jan.	24.94	Apr.	15.93	July	17.39	Oct.	23.41
Feb.	16.93	May	17.23	Aug.	18.06	Nov.	25.84
Mar.	15.75	June	16.98	Sept.	19.03	Dec.	23.28

Jackson County

J28 (*987, p. 9; 1017, p. 8). Tennessee Valley Authority well TVA 28. On State Highway 35 about 0.4 mile south of its intersection with U. S. Highway 72 and 50 feet southeast of its intersection with old Scottsboro highway, 30 feet south of State Highway 35.

Water level, in feet below land-surface datum, 1945

Date		Date		Date		Date	
Jan. 7	2.28	Apr. 1	2.92	July 1	6.21	Oct. 8	10.72
14	2.02	8	3.08	9	7.97	21	11.74
20	3.01	15	3.54	22	8.84	29	11.67
28	3.38	22	3.16	29	7.74	Nov. 6	9.10
Feb. 4	3.30	30	2.23	Aug. 5	9.03	12	9.80
13	1.92	May 6	3.13	12	9.30	18	6.50
18	1.86	13	2.48	19	10.07	25	4.63
25	2.93	20	3.08	26	7.95	Dec. 1	4.44
28	2.79	26	3.44	Sept. 2	9.25	9	3.24
Mar. 4	1.84	June 3	4.43	9	10.27	16	3.69
11	3.22	10	5.32	23	10.74	23	3.31
18	2.72	17	5.38	30	11.07	31	2.84
25	2.54	24	4.11				

FLORIDA

By G. G. Parker, H. H. Cooper, Jr., and N. D. Hoy

PROGRAM OF WORK

The observations of water levels and artesian pressures in Florida were continued in 1945 in cooperation with the Florida Geological Survey and several counties and cities of the State. The program is part of a cooperative investigation of the ground-water resources of Florida, which was begun in some parts of the State as early as 1930 and which has been intensive in southeastern Florida since 1939 and over much of southern Florida since 1944. The intensive work in southern Florida is in cooperation with the Florida Geological Survey, Dade County, and the cities of Miami, Miami Beach, Coral Gables, Fort Myers, Fort Pierce, and Lake Worth. At the end of 1945, 408 wells were included in this program, of which 35 were equipped with automatic water-stage recorders. The table that follows gives the distribution of observation wells and water-stage recorders by counties and indicates the number of water-level measurements made in each county during 1945.

Distribution, by counties, of observation wells in Florida, 1945

County	Number of wells at end of year	Number of tape measurements and pressure readings	Number of wells equipped with water-stage recorders
Broward	2	28	0
Clay	5	9	0
Dade	216	2,202	17
Duval	15	17	0
Escambia	6	315	4
Hendry	2	13	0
Highlands	1	0	0
Lee	71	685	5
Manatee	1	15	1
Marion	1	51	0
Nassau	12	71	1
Orange	1	6	1
Palm beach	50	263	1
St. Johns	6	57	1
St. Lucie	15	106	0
Sarasota	2	99	2

OCCURRENCE OF GROUND WATER

Ground water in Florida occurs both as confined (artesian) water and as unconfined (nonartesian) water.

The confined water is under artesian pressure, a force which raises it to some altitude above that where the water is encountered in drilling the well. This height to which artesian water will rise in a tightly cased well is commonly spoken of as the artesian head, or simply as "head," and an imaginary surface connecting all such points of a given artesian aquifer is the piezometric surface of that aquifer. This fluctuates from time to time with additions to or withdrawals from the aquifer, and it is this surface that the Geological Survey measures and maps.

The principal artesian aquifers of the State are limestones or dolomites of Eocene, Oligocene, and Miocene age. These are generally capped by a thick section of Miocene and younger materials of low permeability consisting of clay, silt, very fine sand, and marl. These deep artesian aquifers are highly productive and yield water in copious quantities, although south of St. Johns County, on the east coast, it is too highly mineralized for most uses.

In some places relatively small, but locally very important, quantities of ground water are taken from shallow artesian aquifers ranging in depth below land surface from about 25 to 150 feet. Examples of such areas are Indiantown, in Martin County, where the municipal supply is obtained from a battery of artesian wells about 25 to 35 feet deep; Fort Pierce, in St. Lucie County, where the municipal wells are 100 to 150 feet deep; and the Fort Myers area where numerous shallow artesian wells range in depth from about 35 to 150 feet. The shallow aquifers range in age from Miocene to Pleistocene, and usually consist of sand, sandy shell marl, or consolidated sandy materials. Generally they are capped by relatively thin layers of marl, clay, silt, or very fine sand. The quality of this shallow artesian water is generally superior to that of the deep artesian water.

The nonartesian water of the State generally occurs in Pliocene, Pleistocene, and Recent materials ranging from some of the most highly permeable limestones in the world (Tamiami formation of southeastern Florida) to the Pleistocene terrace sands that mantle most of the State, and which have a wide range of permeability that depends principally upon sorting, grade, size, roundness, and presence or absence of cementing materials in the sand.

FLUCTUATIONS OF WATER LEVEL

Heavy withdrawal from the artesian limestone formations in northeastern Florida has caused a substantial lowering of the artesian pressures, especially in the Fernandina area, Nassau County (see Water-Supply Paper 907, p. 12). Since about 1943, however, artesian pressures in the Fernandina area have risen progressively in conjunction with a gradual decrease in the yield of most of the heavily pumped wells. The rise in pressures indicates that the decrease in yield is not due to a depletion of storage in the artesian formations, but rather to a clogging of the pores in the limestone around the wells. The nature and areal extent of this clogging has not been determined.

The withdrawal at Fernandina has been from wells no deeper than 1,050 feet. In 1945 a well was drilled to a depth of 2,100 feet for Rayonier, Incorporated. This well penetrated permeable limestone formations below 1,200 feet which will yield additional large quantities of water. The development of these lower formations so as to lessen the draft on the upper ones will allow artesian pressures to rise further in the Fernandina area.

In Escambia County, in western Florida, water levels declined generally in 1945 from the high levels reached in 1944 when the precipitation at Pensacola was 20.05 inches above normal. The precipitation at Pensacola in 1945 was 59.05 inches, which was 1.70 inches above normal. Around Bayou Chico heavy pumping has caused water levels to fall below sea level and salt-water encroachment has occurred. The water level in Escambia County well 62, west of the heavily pumped wells, declined about 2 feet during the year but was not at any time so low as it was in 1943 when, in September, it reached a record low of 3.63 feet below sea level. In Escambia County well 60, on Pensacola Bay, east of the heavily pumped wells, the water level fell to a record low of 7.00 feet below sea level on December 21, 1945.

Escambia County well 45 is near the well field of the Florida Pulp and Paper Company at Cantonment. The water level in this well has been declining progressively since July 1941 when the paper mill first began pumping its wells.

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Artesian pressures in Marion County well 5 were measured weekly in 1945 as in previous years. The pressure declined steadily from the beginning of the year to June 16 when it reached a low of 6.3 feet above the land-surface datum, the lowest since 1934. It then rose rapidly until, on October 6, it reached 13.0 feet, the highest since 1935. The precipitation at Ocala during the 3½-month period in which the pressure rose was 40.49 inches, 67 percent of the total in 1945. The precipitation in 1945 was 60.43 inches, 7.26 inches above normal, whereas in 1944 it was 47.01 inches.

The maintainence of water-stage recorders on Sarasota County wells 5 and 9 was continued in 1945 through the courtesy of Mr. J. G. Kimmel of Palmer Corporation, Sarasota. The water levels in these wells are not directly influenced by local rainfall, but they often rise during periods of rainfall owing to decreases in the withdrawal of water for irrigating truck farms (see Water-Supply Paper 945, pp. 11-12). Records of water levels in well 9, beginning in 1930, indicate that the water level is declining progressively, but very slowly, probably owing to a gradual increase in withdrawal as new wells are drilled. The decline since 1930 apparently has been only about 3 feet.

The water level in Orange County well 47 fluctuates rapidly in response to local rainfall, which recharges the artesian water-bearing formations through sinkholes and drainage wells (see Water-Supply Paper 987). The water level in this well declined from the beginning of the year to the last part of June, after which rainfall caused it to rise. The short record of water levels does not indicate a progressive decline.

Water levels in southern Florida in 1945 were generally lower than normal, and in some areas, notably the southeastern coastal areas and the Everglades, all-time low records were established. This was largely due to rainfall deficiency during both 1944 and 1945 in many parts of southern Florida, but is complicated by other factors. The following table shows the rainfall distribution at selected stations in southern Florida, together with departures from normal.

Precipitation and departure from normal precipitation at selected stations in southern Florida, in inches, 1944-45
(From U. S. Weather Bureau records)

Locality	Normal precipitation	Total precipitation 1944	Total precipitation 1945	Departure from normal 1944	Departure from normal 1945	Accumulated departure from normal, 1944-45
Arcadia	50.16	41.57	-8.59	53.55	+3.39	-5.20
Belle Glade	52.84	52.12	-.72	50.65	-2.19	-2.91
Coconut Grove	55.10	43.34	-11.76	55.15	+.05	-11.71
Everglades	51.40	42.24	-9.16	57.42	+6.02	-3.14
Fort Myers	52.39	34.17	-18.22	52.58	+.19	-18.03
Fort Pierce	49.79	48.34	-1.45	51.88	+2.09	+.64
Homestead	62.60	51.15	-11.45	54.28	-8.32	-19.77
Hypoluxo	57.44	34.70	-24.74	56.41	-3.03	-27.77
Kissimmee	50.06	43.34	-6.72	50.13	+.07	-6.65
LaBelle	47.01	48.60	+1.59	62.74	+14.77	+16.36
Lakeland	52.72	40.70	-12.02	52.24	-.48	-12.50
Miami	57.85	28.66	-29.19	34.54	-23.23	-52.42
Miami Airport	57.77	40.19	-17.58	42.28	-15.49	-33.07
Moore Haven	49.95	42.70	-7.25	45.48	-4.47	-11.72
Okeechobee	47.94	36.38	-11.56	43.41	-4.53	-16.09
Orlando Airport	52.35	48.85	-3.50	55.95	+3.60	+.10
Punta Gorda	50.76	38.89	-11.87	56.54	+5.78	-6.09
Sarasota	53.71	35.75	-17.96	55.38	-1.69	-19.65
West Palm Beach	61.85	44.91	-16.94	73.02	+9.45	-7.49
West Palm Beach Airport	61.85	44.22	-17.63	67.29	+3.72	-13.91

From a study of this table it is apparent that 1944 was generally an exceedingly dry year in southern Florida with only one station, LaBelle, having more than normal rainfall, and with Miami showing the greatest deficiency, 29.19 inches. In 1945 there was normal rainfall or more over most of southern Florida, but along the southeastern part of the Atlantic Coastal Ridge and the Everglades rainfall was again deficient. In the 2 years of 1944-45 the Miami station registered a total rainfall deficiency of 52.42 inches, or 90.7 percent of 1 year's normal rainfall.

Thus, the aquifers did not everywhere receive their normal recharge, and in some areas, notably the Miami area, 2 years of rainfall scarcely exceeded that of one normal year.

In Dade County, where the Coastal Ridge is severed in numerous places by drainage canals that were for the most part uncontrolled in 1944 and only partially controlled in 1945, water levels in the canals fell to sea level during the height of the drought for considerable distances back into the Everglades. These drainage canals helped to reduce water levels to unprecedented lows by continuing to drain off ground water during the drought.

Over a large part of southern Dade County, centering west and southwest of Florida City, the water table fell below sea level during the spring months, and reached a maximum of almost 3 feet below average ocean level [1/] in well F387 at Royal Palm Hammock, 10 miles southwest of Florida City and about the same distance north of the Bay of Florida.

This lowering of the water table below ocean level was largely brought about by the exceedingly high rate of evapo-transpiration acting upon a water table already reduced to sea level by lack of rainfall and by drainage. But, in addition to the natural withdrawal of ground water by evapo-transpiration, irrigation helps reduce water levels still lower. The greater the drought the greater the withdrawal of ground water for irrigation and, thus, the greater the lowering of the water table. It should be emphasized, however, that irrigation withdrawal had very little to do with the development of the large area of below-ocean-level water table in the area centering west and south of Florida City--evapo-transpiration, which may possibly account for more than 71 inches of water a year in this area, was principally responsible. The U. S. Weather Bureau reports [2/] the evaporation of 70.704 inches from the Hialeah pan in 1945.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Broward County

S329 (*907, p. 34; 937, p. 27; 945, p. 29; *987, p. 17; *1017, p. 11). City of Fort Lauderdale. SE¼NE¼ sec. 12, T. 50 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 12	6.13	Mar. 2	7.07	Apr. 14	7.85	June 27	8.01
19	6.15	9	7.20	May 31	8.33	July 2	7.85
26	6.31	16	7.35	June 1	8.39	19	8.00
Feb. 1	6.44	30	7.66	8	8.42	Aug. 2	6.35
9	6.56	Apr. 3	7.74	11	8.45	8	6.74
16	6.82	6	7.70				

1/ Average ocean level around the southern part of the peninsula of Florida is somewhat more than 0.5 foot above U. S. Coast and Geodetic Survey mean sea level datum. Thus, when the water level in well F387 fell to 2.34 feet below mean sea level on May 24, the level was actually almost 3 feet below average ocean level, for 0.5 foot must be added to the 2.34 feet as a correction.

2/ Climatological Data: Florida Section, Annual, 1945, p. 76.

S330 (*1017, p. 12). Florida Power & Light Co. SW¼NW¼ sec. 30, T. 50 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Mar. 1	3.08	May 2	2.93	Aug. 27	2.22
Apr. 14	3.36	June 26	2.92	Oct. 29	1.22

Clay County

1 (*907, p. 13; 937, p. 12; 945, p. 12; 987, p. 17; 1017, p. 12). Girl Scouts of America. At Camp Chowenaw, about 1,000 feet south of SE. corner of sec. 20, T. 5 S., R. 26 E. Water levels, in feet above land-surface datum, 1945: Aug. 10, 38.7; Nov. 27, 43.0.

2 (*907, p. 13; 937, p. 12; 987, p. 17; 1017, p. 12). Mrs. M. A. Chaulker. At Middleburg, in NW¼NW¼ sec. 13, T. 5 S., R. 24 E. Water levels, in feet above land-surface datum, 1945: Aug. 10, 42.8; Nov. 26, 40.9.

4 (*907, p. 14; 937, p. 12; 945, p. 12; 987, p. 17; 1017, p. 12). T. J. Jennings. Near north line of SW¼SW¼ sec. 32, T. 4 S., R. 25 E. 3.2 miles northeast of Middleburg. Water levels, in feet above land-surface datum, 1945: Aug. 10, 36.3; Nov. 26, 37.1.

5 (*907, p. 14; 937, p. 12; 945, p. 12; 987, p. 17; 1017, p. 12). John Huntley. NE¼NE¼ sec. 32, T. 4 S., R. 25 E., about 500 feet northwest of new highway, in rear of residence of owner, 4.2 miles northeast of Middleburg. Water level, in feet above land-surface datum, 1945: Aug. 10, 31.0.

8 (*907, p. 14; 937, p. 13; 945, p. 13; 987, p. 18; 1017, p. 12). St. Elmo Hotel. In Green Cove Springs, north of St. Elmo Hotel. Water levels, in feet above land-surface datum, 1945: Aug. 10, 17.5; Nov. 27, 19.5.

Dade County

D151 (*886, p. 66; *907, p. 28; 937, p. 23; 945, p. 29; 987, p. 18; 1017, p. 13). Peoples' Water & Gas Co. Center of sec. 16, T. 52 S., R. 42 E. Water level, in feet below land-surface datum, 1945: Apr. 8, 11.95.

F1 (*1017, p. 13). City of Miami Springs. NW¼NE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.97	Apr. 30	6.19	July 30	5.93	Oct. 30	3.40
Mar. 2	6.25	May 31	6.83	Aug. 29	5.65	Nov. 28	4.81
30	6.73	June 29	6.55	Sept.26	5.29	Dec. 29	5.29

F2 (*1017, p. 14). City of Miami Springs. NW¼NE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.43	Apr. 30	6.73	July 30	6.36	Oct. 30	3.84
Mar. 2	6.64	May 31	7.27	Aug. 29	5.89	Nov. 28	5.28
30	7.21	June 29	6.96	Sept.26	5.70	Dec. 29	5.73

F3 (*1017, p. 15). City of Miami Springs. SW¼NE¼ sec. 19, T. 53 S., R. 41 E.

F3--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.81	Apr. 30	5.12	July 30	4.74	Oct. 30	2.12
Mar. 2	5.00	May 31	5.70	Aug. 29	4.36	Nov. 28	3.67
30	5.54	June 29	5.36	Sept.26	4.01	Dec. 29	4.05

F4 (*1017, p. 16). City of Miami Springs. SW¼NE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.73	Apr. 30	7.00	July 30	6.69	Oct. 30	4.00
Mar. 2	6.91	May 31	7.65	Aug. 29	6.29	Nov. 28	5.61
30	7.53	June 29	7.31	Sept.26	5.95	Dec. 29	5.99

F5 (*1017, p. 17). City of Miami Springs. NE¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.32	Apr. 30	5.56	July 30	5.37	Oct. 30	2.69
Mar. 2	5.59	May 31	6.16	Aug. 29	4.85	Nov. 28	4.34
30	6.07	June 29	5.85	Sept.26	4.66	Dec. 29	4.67

F6 (*1017, p. 18). City of Miami Springs. SW¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.24	Apr. 30	6.37	July 30	6.24	Oct. 30	3.67
Mar. 3	6.47	May 31	7.03	Aug. 29	5.77	Nov. 28	5.32
30	6.95	June 29	6.76	Sept.26	5.57	Dec. 29	5.64

F7 (*1017, p. 19). City of Miami Springs. NE¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.61	Apr. 30	5.76	July 30	5.60	Oct. 30	3.13
Mar. 2	5.84	May 31	6.32	Aug. 29	5.18	Nov. 28	4.71
30	7.55	June 29	6.03	Sept.26	4.96	Dec. 29	5.36

F8 (*1017, p. 20). City of Miami Springs. SE¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.54	Apr. 30	5.69	July 30	5.46	Oct. 30	3.15
Mar. 3	5.81	May 31	6.23	Aug. 29	5.15	Nov. 28	4.72
30	6.16	June 29	5.99	Sept.26	4.95	Dec. 29	4.93

F9 (*886, p. 65; *907, p. 29; *937, p. 23; 945, p. 30; *987, p. 18; 1017, p. 21). City of Miami Springs. SW¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	4.40	Apr. 30	4.56	July 30	4.40	Oct. 30	1.89
Mar. 3	4.64	May 31	5.11	Aug. 29	3.99	Nov. 28	3.52
30	5.05	June 29	4.85	Sept.26	3.74	Dec. 29	3.83

F10 (*1017, p. 21). City of Miami Springs. SW¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.83	Apr. 30	6.05	July 30	5.86	Oct. 30	3.01
Mar. 3	6.09	May 31	6.64	Aug. 29	5.46	Nov. 28	4.78
30	6.64	June 29	6.40	Sept.26	4.94	Dec. 29	5.13

F11 (*1017, p. 22). City of Miami Springs. NW¼SE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	6.52	Apr. 30	6.76	July 30	6.54	Oct. 30	3.95
Mar. 2	6.70	May 31	7.35	Aug. 29	6.13	Nov. 28	5.55
30	7.25	June 29	7.06	Sept.26	5.83	Dec. 29	5.88

F12 (*886, p. 66; *907, p. 29; 937, p. 23; 945, p. 30; *987, p. 18; 1017, p. 23). City of Miami Springs. NE¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	9.19	Apr. 30	9.62	July 30	8.95	Oct. 30	6.07
Mar. 2	9.39	May 31	10.76	Aug. 29	8.63	Nov. 28	7.45
30	10.53	June 29	9.94	Sept.26	8.01	Dec. 29	7.88

F13 (*1017, p. 23). City of Miami Springs. NE¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	8.38	May 1	9.19	July 27	8.24	Oct. 30	5.23
Mar. 3	8.90	31	10.28	Aug. 29	8.13	Nov. 28	6.71
30	9.91	June 29	9.54	Sept.27	7.63	Dec. 29	7.08

F14 (*1017, p. 24). City of Miami Springs. NW¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.07	May 1	8.47	July 31	7.46	Oct. 30	4.17
Mar. 3	8.11	31	9.47	Aug. 29	6.94	Nov. 29	5.66
30	9.06	June 29	9.05	Sept.27	6.57	Dec. 29	5.91

F15 (*1017, p. 25). City of Miami Springs. SE¼SW¼ sec. 24. T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.41	May 1	7.76	July 31	7.07	Oct. 30	3.53
Mar. 3	7.41	31	8.67	Aug. 30	6.25	Nov. 29	5.30
30	8.26	June 29	8.43	Sept.27	5.84	Dec. 29	5.91

F18 (*1017, p. 26). City of Opa Locka. NW¼SW¼ sec. 22, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.07; May 20, 8.37; Aug. 3, 7.59.

F22 (*1017, p. 27). City of Opa Locka. NE¼NE¼ sec. 21, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.41; May 20, 7.65; Aug. 3, 6.77.

F25 (*886, p. 65; *907, p. 26; 937, p. 23; 945, p. 30; *987, p. 18; 1017, p. 28). City of Opa Locka. NE¼SW¼ sec. 21, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.57; May 20, 6.94.

F53 (*1017, p. 28). City of Miami. NW¼SW¼ sec. 12, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 12.83; May 19, 13.00.

F62 (*886, p. 67; *907, p. 30; 937, p. 24; 945, p. 30; *987, p. 19; 1017, p. 29). City of Miami. SE¼SE¼ sec. 14, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 10.33; May 19, 10.42.

F64 (*1017, p. 29). City of Miami. SE¼SE¼ sec. 23, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 1	10.73	May 2	10.38	June 27	10.97	Oct. 29	8.44
Apr. 10	10.66	19	10.64	Aug. 27	9.63		

F69 (*1017, p. 30). City of Miami. SE¼NW¼ sec. 26, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 9.87; May 19, 9.77.

F109 (*886, p. 67; *907, p 30; 937, p. 24; 945, p. 31; *987, p. 19; 1017, p. 31). City of Miami. NE¼SE¼ sec. 10, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 8.97; May 19, 9.13.

F112 (*1017, p. 31). City of Miami. SW¼NE¼ sec. 22, T. 53 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 10, 8.04.

F117 (*1017, p. 31). City of Miami. NE¼NW¼ sec. 34, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Mar.	6.42	May 2	5.78	June 27	6.21	Oct. 29	5.58
Apr. 10	6.00	19	6.36	Aug. 27	5.41		

F124 (*1017, p. 32). City of Miami. NW¼NW¼ sec. 3, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 9.93; May 19, 9.94.

F137 (*1017, p. 33). City of Miami. Sec. 11, T. 54 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Mar. 1	10.01	May 19	9.98	Aug. 27	9.31
May 2	9.54	July 2	9.78	Oct. 29	6.99

F155 (*1017, p. 34). City of Miami. SE¼NW¼ sec. 15, T. 54 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 29	5.97	May 19	5.88	Aug. 2	5.63	Nov. 7	3.54
Apr. 9	5.98	June 2	5.88	28	5.25	Dec. 23	4.83
May 3	5.63	28	5.80				

F174 (*945, p. 31; *987, p. 19; 1017, p. 35). City of Miami. SW¼NE¼ sec. 9, T. 54 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 1	11.43	May 3	11.49	June 27	10.29	Nov. 8	8.83
Mar. 29	11.81	19	11.68	Aug. 2	11.39	Dec. 3	10.35
Apr. 9	11.85	30	10.59				

F179 (*945, p. 32; *987, p. 19; 1017, p. 35). City of Miami. SE¼NW¼ sec. 16, T. 54 S., R. 41 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	7.56	7.61	July 2-8	7.64	7.75
8-14	7.47	7.60	9-15	7.65	7.70
15-21	7.39	7.50	16-22	7.48	7.71
22-28	7.40	7.62	23-29	7.44	7.48
Jan. 29-Feb. 4	7.59	7.75	July 30-Aug. 5	7.45	7.59
Feb. 5-11	7.75	7.90	Aug. 6-12	7.42	7.53
12-18	7.86	7.90	13-19	7.37	7.43
19-25	7.82	7.92	20-26	7.26	7.38
Feb. 26-Mar. 4	7.78	7.84	Aug. 27-Sept.2	7.08	7.26
Mar. 5-11	7.84	7.97	Sept. 2-9	6.41	7.08
12-18	7.77	7.96	10-16	6.08	7.70
19-25	7.78	7.97	17-23	5.88	6.16
Mar. 26-Apr. 1	7.86	7.95	24-30	6.16	6.38
Apr. 2-8	7.84	7.94	Oct. 1-7	6.29	6.36
9-15	7.77	7.92	8-14	6.32	6.38
16-22	7.62	7.77	15-21	5.97	6.32
23-29	7.62	7.69	22-28	5.90	5.98
Apr. 30-May 6	7.56	7.66	Oct. 29-Nov. 4	4.40	5.96
May 7-13	7.62	7.72	Nov. 5-11	4.96	5.60
14-20	7.72	7.81	12-18	5.60	6.01
21-27	7.73	7.81	19-25	6.01	6.39
May 28-June 3	7.74	7.83	Nov. 26-Dec. 2	6.39	6.63
June 4-10	7.63	7.84	Dec. 3-9	6.63	6.82
11-17	7.63	7.71	10-16	6.82	6.92
18-24	7.61	7.71	17-23	6.92	7.01
June 25-July 1	7.71	7.78	24-30	7.01	7.09

F186 (*886, p. 66; *907, p. 32; 937, p. 24; 945, p. 33; *987, p. 19; 1017, p. 35). City of Miami. SE¼SE¼ sec. 1, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 13, 11.01; May 19, 11.17.

F210 (*987, p. 20; 1017, p. 35). City of Miami. SW¼NE¼ sec. 13, T. 53 S., R. 41 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	8.07	8.15	June 4-10	8.14	8.31
8-14	7.90	8.12	11-17	8.13	8.28
15-21	7.92	8.00	18-24	8.01	8.28
22-28	8.00	8.15	June 25-July 1	8.03	8.17
Jan. 29-Feb. 4	8.11	8.26	July 2-8	8.09	8.17
Feb. 5-11	8.26	8.38	9-15	8.16	8.22
12-18	8.34	8.42	16-22	7.86	8.26
19-25	8.36	8.44	23-29	7.75	7.86
Feb. 26-Mar. 4	8.31	8.47	July 30-Aug. 5	7.82	7.90
Mar. 5-11	8.45	8.53	Aug. 6-12	7.81	7.89
12-18	8.34	8.49	13-19	7.81	7.88
19-25	8.38	8.52	20-26	7.20	7.81
Mar. 26-Apr. 1	8.41	8.47	Aug. 27-Sept.2	7.06	7.20
Apr. 2-8	8.30	8.52	Sept. 3-9	6.40	7.14
9-15	8.13	8.30	10-16	6.10	7.02
16-22	8.07	8.14	17-23	6.08	6.62
23-29	8.08	8.17	24-30	6.62	6.93
Apr. 30-May 6	8.05	8.13	Oct. 1-7	6.93	7.14
May 7-13	8.13	8.28	8-14	6.84	7.14
14-20	8.24	8.31	15-21	6.63	6.84
21-27	8.20	8.30	22-28	6.68	6.91
May 28-June 3	8.18	8.30	Oct. 29-Nov. 4	5.55	6.68

F210--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Nov. 5-11	5.90	6.41	Dec. 3-9	7.28	7.41
12-18	6.41	6.75	10-16	7.41	7.52
19-25	6.75	7.05	17-23	7.52	7.58
Nov. 26-Dec. 2	7.05	7.28	24-30	6.99	7.56

F212(*1017, p. 36). City of Miami. SW¼NE¼ sec. 32, T. 52 S., R. 41 E. No measurements made in 1945.

F213 (*1017, p. 37). City of Miami. SW¼SW¼ sec. 15, T. 54 S., R. 41 E. Measurements discontinued after Mar. 6.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1	15.84	16.18	Jan. 30	15.98	16.26
2	15.97	16.30	31	16.05	16.32
3	15.85	16.15	Feb. 1	16.12	16.40
4	15.82	16.13	2	16.15	16.43
5	15.97	16.22	3	16.15	16.41
6	15.90	16.19	4	16.13	16.38
7	15.82	16.02	5	16.15	16.35
8	15.83	16.09	6	16.18	16.40
9	15.83	16.10	7	16.23	16.47
10	15.93	16.23	8	16.27	16.50
11	16.00	16.23	12	16.08	16.39
12	15.92	16.29	13	16.05	16.38
13	15.83	16.13	14	16.03	16.39
14	15.72	16.15	15	16.09	16.45
15	15.70	16.05	16	16.15	16.49
16	15.68	16.02	17	16.17	16.48
17	15.64	16.00	18	16.22	16.50
18	15.68	16.00	19	16.31	16.56
19	15.70	16.02	25	15.98	16.25
20	15.74	16.05	26	15.95	16.24
21	15.77	16.04	27	15.94	16.25
22	15.87	16.12	28	16.03	16.39
23	15.98	16.23	Mar. 1	16.16	16.44
24	16.01	16.31	2	16.14	16.38
25	15.95	16.33	3	16.09	16.33
26	15.95	16.26	4	16.12	16.27
27	15.97	16.32	5	16.18	16.36
28	15.81	16.13	6	16.07	16.35
29	15.89	16.18			

F214 (*1017, p. 43). City of Miami. SE¼SE¼ sec. 13, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 1	10.78	May 2	10.46	June 27	10.51	Oct. 29	8.54
Apr. 10	10.59	19	10.67	Aug. 29	9.57		

F218 (*1017, p. 44). City of Miami. NW¼SW¼ sec. 18, T. 53 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Mar. 1	10.40	May 2	10.08	June 27	10.16
Apr. 10	10.21	19	10.33		

F225 (*1017, p. 45). City of Miami. NW¼SW¼ sec. 7, T. 53 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 8.08; May 19, 8.46; June 26, 8.18.

F226 (*1017, p. 46). City of Miami. NW¼SW¼ sec. 18, T. 53 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 15.94; May 19, 15.99.

F228 (*1017, p. 46). City of Miami. NW¼SW¼ sec. 31, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 12.35; May 20, 12.43; June 26, 12.19.

F233 (*886, p. 67; *907, p. 30; 937, p. 24; 945, p. 33; *987, p. 21; 1017, p. 47). City of Miami. SW¼SE¼ sec. 33, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 10.21; May 19, 10.38; July 2, 10.22.

F234 (*945, p. 33; *987, p. 21; 1017, p. 47). City of Miami. NW¼NW¼ sec. 27, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Jan. 1, 6.57; Apr. 10, 6.57; May 19, 6.72; June 27, 6.74.

F235 (*1017, p. 47). City of Hialeah. NW¼SE¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.96	May 19	6.49	July 30	6.09	Oct. 30	3.80
Mar. 3	6.56	31	6.55	Aug. 29	5.53	Nov. 28	5.24
30	6.57	June 29	6.26	Sept.26	5.54	Dec. 29	5.50
Apr. 30	6.11						

F236 (*1017, p. 48). City of Hialeah. SE¼NW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.70	Apr. 30	6.97	July 30	6.73	Oct. 30	4.36
Mar. 3	6.99	May 31	7.42	Aug. 29	6.34	Nov. 28	5.87
30	7.38	June 29	7.60	Sept.26	6.18	Dec. 29	6.21

F237 (*1017, p. 49). City of Hialeah. SE¼NW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.16	May 19	6.83	July 30	6.16	Oct. 30	3.69
Mar. 3	6.80	31	6.91	Aug. 29	5.79	Nov. 28	5.24
30	7.17	June 29	7.01	Sept.26	5.56	Dec. 29	5.62
Apr. 30	6.47						

F238 (*1017, p. 50). City of Hialeah. SW¼NW¼ sec. 17, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.30	Apr. 30	7.60	July 31	7.20	Oct. 30	4.50
Mar. 3	7.93	May 31	8.01	Aug. 30	6.84	Nov. 28	6.19
31	7.98	June 29	8.10	Sept.27	6.48	Dec. 29	6.62

F239 (*1017, p. 50). City of Hialeah. NW¼NW¼ sec. 17, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	8.73	May 1	9.01	July 31	8.62	Oct. 30	5.87
Mar. 3	9.31	June 1	9.41	Aug. 30	8.28	Nov. 28	7.57
31	9.34	29	9.21	Sept.27	8.16	Dec. 29	8.01

F240 (*886, p. 67; *907, p. 30; 937, p. 24; 945, p. 34; *987, p. 22; 1017, p. 51). City of Hialeah. NW¼NE¼ sec. 8, T. 53 S., R. 41 E. Water level, in feet below land-surface datum, 1945: May 20, 7.54.

F243 (*945, p. 34; *987, p. 22; 1017, p. 51). City of Hialeah. NE¼NE¼ sec. 31, T. 52 S., R. 41 E. Measuring point lowered to 0.6 foot above land-surface datum. Water level, in feet below land-surface datum, 1945: Apr. 8, 7.52.

F245 (*1017, p. 51). City of Hialeah. NW¼SW¼ sec. 32, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.58; May 20, 7.64.

F246 (*1017, p. 51). City of Hialeah. SW¼NE¼ sec. 5, T. 53 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 8, 7.42.

F253 (*945, p. 35; *987, p. 22; 1017, p. 52). City of Hialeah. SE¼NW¼ sec. 12, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 5.09; Apr. 12, 4.95; May 19, 5.30.

F257 (*1017, p. 52). City of Hialeah. NW¼SW¼ sec. 7, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 4.12; Apr. 12, 3.99; May 19, 4.23.

F260 (*1017, p. 53). City of Hialeah. SE¼SW¼ sec. 7, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.63	May 1	8.11	July 31	7.63	Oct. 30	4.93
Mar. 3	8.37	19	8.38	Aug. 30	8.33	Nov. 28	6.37
31	8.38	June 1	8.59	Sept.27	6.83	Dec. 29	6.78
Apr. 8	8.36	29	8.69				

F261 (*1017, p. 54). City of Hialeah. NE¼SE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.59	May 1	6.89	July 31	6.40	Oct. 30	3.91
Mar. 3	6.89	June 1	7.37	Aug. 30	6.25	Nov. 28	5.48
31	7.30	29	7.12	Sept.27	5.89	Dec. 29	5.95

F263 (*1017, p. 55). City of Hialeah. SE¼SE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.05	May 19	7.75	July 31	7.01	Oct. 30	4.42
Mar. 3	7.35	June 1	7.86	Aug. 30	6.67	Nov. 28	5.76
31	7.78	29	7.59	Sept.27	6.38	Dec. 29	6.38
May 1	7.34						

F264 (*1017, p. 56). City of Hialeah. SE¼NE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.85	May 1	7.18	July 31	6.91	Oct. 30	4.15
Mar. 3	7.29	June 1	7.65	Aug. 30	6.48	Nov. 28	5.74
31	7.59	29	7.44	Sept.27	6.13	Dec. 29	6.20

F265 (*1017, p. 57). City of Hialeah. NE¼NE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.53	May 1	6.88	July 31	6.44	Oct. 30	3.71
Mar. 3	7.19	June 1	7.30	Aug. 30	6.14	Nov. 28	5.38
31	7.25	29	7.07	Sept.27	5.74	Dec. 29	5.85

F266 (*1017, p. 58). City of Hialeah. NW¼NE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.42	May 1	7.77	July 31	7.32	Oct. 30	4.64
Mar. 3	8.10	June 1	8.17	Aug. 30	7.07	Nov. 28	6.26
31	8.12	29	7.94	Sept.27	6.61	Dec. 29	6.72

F268 (*886, p. 67; *907, p. 31; 937, p. 25; 945, p. 35; *987, p. 22; 1017, p. 59). City of Hialeah. SW¼SE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.25	May 1	6.15	July 31	5.80	Oct. 30	3.22
Mar. 3	6.56	June 1	6.67	Aug. 30	5.47	Nov. 28	4.72
31	6.58	29	6.83	Sept.27	4.21	Dec. 29	5.17

F270 (*1017, p. 59). City of Hialeah. SE¼NW¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.03	May 1	6.38	July 31	5.99	Oct. 30	3.40
Mar. 3	6.78	June 1	6.94	Aug. 30	5.74	Nov. 28	4.85
31	6.84	29	6.67	Sept.27	5.47	Dec. 29	5.39

F271 (*1017, p. 60). City of Hialeah. NW¼NE¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.39	May 19	8.10	July 31	7.30	Oct. 30	4.68
Mar. 3	8.11	June 1	8.26	Aug. 30	7.07	Nov. 28	6.17
31	8.16	29	8.00	Sept.27	6.75	Dec. 29	6.73
May 1	7.75						

F273 (*945, p. 36; *987, p. 22; 1017, p. 61). Town of North Miami. SW¼NE¼ sec. 29, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 12.42; May 20, 12.08.

F279 (*1017, p. 61). Town of North Miami. SE¼SW¼ sec. 30, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.30; June 26, 6.99; Dec. 4, 6.30.

F281 (*1017, p. 62). Town of North Miami. NE¼NW¼ sec. 30, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.40; May 20, 6.11; Dec. 4, 5.42.

F283 (*1017, p. 63). Town of North Miami. NW¼NW¼ sec. 18, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.77; May 20, 9.05.

F284 (*886, p. 66; *907, p. 28; 937, p. 25; 945, p. 36; *987, p. 23; 1017, p. 63). Town of North Miami. SW¼SE¼ sec. 26, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 10.59; June 26, 10.56.

F288 (*886, p. 66; *907, p. 28; 937, p. 25; 945, p. 36; *987, p. 23; 1017, p. 63). Town of North Miami Beach. SW¼SW¼ sec. 7, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.59; May 20, 8.86.

F296 (*1017, p. 64). Town of North Miami Beach. SW¼SW¼ sec. 21, T. 52 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Mar. 1	9.24	May 2	8.78	June 26	8.79	Oct. 29	6.95
Apr. 8	8.30	20	9.16	Aug. 27	7.16		

F297 (*1017, p. 64). Town of North Miami. NW¼NW¼ sec. 29, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.67; May 20, 8.87; June 26, 8.51.

F299 (*1017, p. 65). Village of Biscayne Park. SE¼SE¼ sec. 30, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.34; May 20, 7.42; Dec. 4, 6.72.

F300 (*1017, p. 66). Town of North Miami Beach. SW¼SW¼ sec. 9, T. 52 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 10.36; May 20, 10.58; June 2, 10.35.

F302 (*1017, p. 67). City of Coral Gables. NE¼NE¼ sec. 17, T. 54 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 9, 9.30.

F307 (*1017, p. 68). City of Coral Gables. NW¼NW¼ sec. 20, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 12.02; May 19, 11.96.

F309 (*945, p. 37; *987, p. 23; 1017, p. 68). City of Coral Gables. NE¼SE¼ sec. 18, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 10.65; May 19, 10.59.

F310 (*1017, p. 68). City of Coral Gables. NW¼NE¼ sec. 7, T. 54 S., R. 41 E. No measurements made in 1945.

F317 (*1017, p. 69). City of Coral Gables. SW¼NW¼ sec. 7, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 9.36; May 19, 9.37.

F319 (*1017, p. 70). Town of South Miami. SE¼SE¼ sec. 25, T. 54 S., R. 40 E. Water-stage recorder installed Aug. 17, 1945.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Aug. 20-26	9.88	10.08	Oct. 29-Nov. 4	6.16	7.15
Aug. 27-Sept. 2	9.72	9.88	Nov. 5-11	7.10	8.01
Sept. 3-9	9.20	9.72	12-18	8.01	8.45
10-16	8.07	9.46	19-25	8.45	8.79
17-23	7.94	8.34	Nov. 26-Dec. 2	8.79	9.05
24-30	8.34	8.76	Dec. 3-9	9.05	9.12
Oct. 1-7	8.76	8.86	10-16	9.06	9.11
8-14	8.62	8.86	17-23	9.11	9.13
15-21	8.04	8.62	24-30	9.13	9.20
22-28	7.79	8.10			

F322 (*1017, p. 71). Town of South Miami. NW¼SE¼ sec. 25, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 13.64; May 19, 13.50.

F331 (*945, p. 37; *987, p. 23; 1017, p. 71). Town of South Miami. NE¼NE¼ sec. 35, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 8.71; May 19, 9.08.

F332 (*1017, p. 71). City of Hialeah. SW¼NW¼ sec. 18, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.15	Apr. 12	5.44	June 29	5.49	Oct. 30	2.35
Mar. 2	5.57	30	5.07	July 30	4.67	Nov. 28	3.33
30	5.60	May 19	5.48	Aug. 29	4.75	Dec. 29	4.07
Apr. 9	5.59	31	5.76	Sept.26	4.36		

F334 (*1017, p. 72). Town of Homestead. SE¼NE¼ sec. 7, T. 57 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 9.62; May 19, 10.15.

F358 (*1017, p. 73). Town of Homestead. NE¼NE¼ sec. 13, T. 57 S., R. 38 E. Water-stage recorder installed July 27, 1945.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
July 30-Aug. 5	6.46	6.59	Oct. 8-14	2.29	3.21
Aug. 6-12	6.11	6.66	15-21	2.34	2.98
13-19	6.20	6.52	22-28	....	3.09
20-26	4.81	6.55	Oct. 29-Nov. 4	1.54	2.76
Aug. 27-Sept.2	4.73	4.94	Nov. 5-11	2.76	3.21
Sept. 2-7	3.64	4.82	12-18	1.76	3.21
17-23	2.14	2.94	19-25	3.06	3.66
24-30	2.94	3.16	Nov. 26-Dec. 2	3.66	4.12
Oct. 1-7	2.83	3.29	Dec. 17-23	4.69	4.96

F364 (*1017, p. 74). Town of Homestead. NE¼NE¼ sec. 12, T. 57 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 10.00; May 19, 10.62.

F378 (*1017, p. 75). Town of Florida City. SW¼SE¼ sec. 24, T. 57 S., R. 38 E. Water-stage recorder installed Aug. 8, 1945.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Aug. 27-Sept.2	3.91	4.38	Oct. 29-Nov. 4	2.11	2.75
Sept. 3-9	2.88	4.19	Nov. 4-11	2.75	3.06
10-16	1.54	4.08	12-18	1.91	3.06
17-23	1.60	2.91	19-25	2.90	3.36
24-30	2.91	3.18	Nov. 26-Dec. 2	3.36	3.87
Oct. 1-7	2.73	3.04	Dec. 3-9	3.87	4.09
8-14	1.45	3.22	10-16	4.09	4.36
15-21	2.16	2.92	17-23	4.36	4.59
22-28	1.57	3.04	24-30	4.59	4.77

F379 (*1017, p. 75). Town of Naranja. NW¼NW¼ sec. 34, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 9.76; May 19, 10.18.

F380 (*1017, p. 76). Town of Princeton. NW¼NW¼ sec. 26, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 11.10; May 19, 10.78; May 23, 12.20; Nov. 13, 6.30.

F381 (*1017, p. 76). J. D. DeBuchananne. SW¼SW¼ sec. 21, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 12.75; May 19, 13.45.

F384 (*1017, p. 77). Bjorkman. SW¼SW¼ sec. 10, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 10.45; May 19, 11.16.

F385 (*1017, p. 77). Town of Goulds. SE¼NW¼ sec. 13, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 11.00; May 19, 11.58.

F387 (*1017, p. 78). State of Florida. NW¼SE¼ sec. 15, T. 58 S., R. 37 E.

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F387--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Apr. 8	5.90	May 24	6.68	Nov. 13	1.61
May 19	6.55	June 14	6.13		

F393 (*1017, p. 79). City of Miami Springs. NW¼NE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.76	Apr. 30	5.19	July 30	4.81	Oct. 30	2.11
Mar. 2	4.89	May 30	5.89	Aug. 29	4.47	Nov. 28	3.66
30	5.66	June 29	5.46	Sept.26	4.07	Dec. 29	4.07

F394 (*1017, p. 79). City of Miami Springs. SE¼NE¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.42	Apr. 30	5.47	July 30	5.06	Oct. 30	2.59
Mar. 2	5.72	May 30	5.94	Aug. 29	4.76	Nov. 28	4.02
30	5.84	June 29	5.64	Sept.26	4.40	Dec. 29	4.43

F396 (*1017, p. 79). City of Miami Springs. NW¼SW¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	3.25	May 1	4.27	July 31	3.77	Oct. 30	0.93
Mar. 3	4.14	31	5.15	Aug. 29	3.46	Nov. 29	1.78
30	4.15	June 29	4.91	Sept.27	3.06	Dec. 29	2.17

F397 (*1017, p. 80). City of Miami Springs. SW¼SW¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	4.17	May 1	5.22	July 31	4.87	Oct. 30	2.15
Mar. 3	5.10	31	6.16	Aug. 30	4.51	Nov. 29	2.82
30	5.61	June 29	5.89	Sept.27	4.16	Dec. 29	3.19

F398 (*1017, p. 80). City of Miami Springs. SW¼SW¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet above land-surface datum, 1945

Jan. 27	4.84	May 1	5.85	July 31	5.47	Oct. 28	2.74
Mar. 3	5.70	30	6.79	Aug. 30	5.11	Nov. 29	3.47
30	6.25	June 29	6.53	Sept.27	4.77	Dec. 29	3.86
Apr. 13	6.06						

F399 (*1017, p. 80). City of Miami Springs. SE¼SW¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet above land-surface datum, 1945

Jan. 27	5.33	May 1	6.33	July 31	5.90	Oct. 30	3.07
Mar. 3	6.20	31	7.24	Aug. 30	5.55	Nov. 28	3.92
30	6.73	June 29	7.01	Sept.27	5.16	Dec. 29	4.21

F408. City of Miami Springs. SW¼NW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on northwest corner of Westward Drive and Florida Avenue. Drilled fire well, diameter 6 inches, depth 51 feet. Measuring point, lip of hydrant, 2.5 feet above land-surface datum and 9.42 feet above mean sea level, 1929 adjustment.

Water level, in feet above land-surface datum, 1945

June 30	6.79	Aug. 30	5.61	Oct. 30	3.20	Dec. 29	4.22
July 31	5.88	Sept.27	5.29	Nov. 29	3.85		

F409. City of Miami Springs. NW¼SW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on northeast corner of Pine Court and Whitehorn Drive. Drilled fire well, diameter 6 inches, depth 58 feet. Measuring point, lip of hydrant, 2.5 feet above land-surface datum and 8.91 feet above mean sea level, 1929 adjustment.

Water level, in feet above land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 30	6.28	Aug. 30	4.99	Oct. 30	2.63	Dec. 29	3.63
July 31	5.33	Sept.27	4.66	Nov. 28	3.29		

F410. City of Miami Springs. SW¼SW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, at intersection of Melrose and Canal Drives. Drilled fire well, diameter 6 inches, depth 61 feet. Measuring point, lip of hydrant, 2.8 feet above land-surface datum and 9.21 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	6.55	Aug. 30	5.18	Oct. 30	2.73	Dec. 29	3.89
July 31	5.90	Sept.27	4.80	Nov. 29	3.53		

F411. City of Miami Springs. NE¼SW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on southwest corner of Whitehorn and Beverly Drives. Drilled fire well, diameter 6 inches, depth 50 feet. Measuring point, lip of hydrant, 2.7 feet above land-surface datum and 8.86 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	6.66	Aug. 30	5.16	Oct. 30	2.57	Dec. 29	3.90
July 31	5.50	Sept.27	4.73	Nov. 29	3.53		

F412. City of Miami Springs. SE¼SW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on southeast corner of Melrose and Beverly Drives. Drilled fire well, diameter 6 inches, depth 48 feet. Measuring point, lip of hydrant, 3.0 feet above land-surface datum and 9.32 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	7.02	Aug. 30	5.39	Oct. 30	2.82	Dec. 29	4.17
July 31	5.81	Sept.27	4.98	Nov. 29	3.83		

F413. City of Miami Springs. SE¼SW¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on southeast corner of Beverly and Carlisle Drives. Drilled fire well, diameter 6 inches, depth 49 feet. Measuring point, lip of hydrant, 2.5 feet above land-surface datum and 9.52 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	7.84	Aug. 30	6.14	Oct. 30	3.43	Dec. 29	5.16
July 31	6.69	Sept.27	5.73	Nov. 29	4.85		

F414. City of Miami Springs. SE¼SE¼ sec. 24, T. 53 S., R. 40 E. In Miami Springs, on south side of Hunting Lodge Drive, 0.2 mile west of Red Road. Drilled fire well, diameter 6 inches, depth 56.3 feet. Measuring point, lip of hydrant, 2.7 feet above land-surface datum and 8.46 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	7.64	Aug. 30	5.80	Oct. 30	3.06	Dec. 29	5.02
July 31	6.45	Sept.27	5.32	Nov. 29	4.75		

F415. City of Miami Springs. NW¼SE¼ sec. 19, T. 53 S., R. 41 E. In Miami Springs, on south side of Eastward Drive between DeLeon and South Drives. Drilled fire well, diameter 6 inches, depth 44 feet. Measuring point, lip of hydrant, 3.0 feet above land-surface datum and 9.08 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

June 30	6.02	Aug. 29	5.06	Oct. 30	2.81	Dec. 29	4.77
July 30	5.44	Sept.26	4.71	Nov. 28	4.42		

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F416. City of Miami Springs. NW¼SW¼ sec. 18, T. 53 S., R. 41 E. In Miami Springs, on southwest corner of Bridge Street and Oriole Drive. Drilled fire well, diameter 6 inches, depth 50 feet. Measuring point, lip of hydrant, 2.2 feet above land-surface datum and 7.61 feet above mean sea level, 1929 adjustment.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 30	5.50	Aug. 29	4.64	Oct. 30	2.57	Dec. 29	4.30
July 31	5.34	Sept.27	4.75	Nov. 29	3.45		

G2 (*1017, p. 80). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	2.82	May 1	4.06	July 31	3.10	Oct. 30	0.59
Mar. 3	3.49	June 1	4.70	Aug. 30	3.10	Nov. 29	1.26
31	4.30	30	4.35	Sept.27	2.79	Dec. 29	1.84

G3 (*945, p. 38; *987, p. 23; 1017, p. 81). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 13, T. 53 S., R. 40 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	3.43	4.00	July 2-8	3.91	4.21
8-14	3.36	3.80	9-15	4.01	4.12
15-21	3.69	3.87	16-22	3.65	4.21
22-28	3.30	3.80	23-29	3.54	3.73
Jan. 29-Feb. 4	3.37	3.58	July 30-Aug. 5	3.68	3.85
Feb. 5-11	3.55	3.68	Aug. 6-12	3.50	3.79
12-18	3.65	3.69	13-19	3.23	3.68
19-25	3.68	3.70	20-26	3.27	3.62
Feb. 26-Mar. 4	3.68	3.82	Aug. 27-Sept.2	3.55	3.70
Mar. 5-11	3.82	3.96	Sept. 3-9	3.06	3.56
12-18	3.96	4.27	10-16	1.97	3.70
19-25	4.27	4.67	17-23	2.24	3.22
Mar. 26-Apr. 1	4.62	4.67	24-30	3.20	3.37
Apr. 2-8	4.61	4.68	Oct. 1-7	3.18	3.33
9-14	4.47	4.64	8-14	2.49	3.26
15-22	....	....	15-21	2.27	2.49
23-29	4.47	4.67	22-28	1.63	2.32
Apr. 30-May 6	4.28	4.49	Oct. 29-Nov. 4	.85	1.67
May 7-13	4.41	4.73	Nov. 5-11	1.62	1.77
14-20	4.73	4.92	12-18	1.41	1.70
21-27	4.92	5.08	19-25	1.62	1.79
May 28-June 3	5.08	5.18	Nov. 26-Dec. 2	1.77	2.03
June 4-10	5.13	5.22	Dec. 3-9	1.91	2.08
11-17	5.22	5.39	10-16	2.06	2.23
18-24	5.16	5.40	17-23	2.19	2.33
June 25-July 1	4.20	5.16	24-30	2.21	2.34

G4 (*1017, p. 82). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.43	May 1	5.47	July 31	4.99	Oct. 30	2.45
Mar. 3	4.90	June 1	6.32	Aug. 30	4.76	Nov. 29	3.00
31	5.77	30	5.77	Sept.27	4.53	Dec. 29	3.39

G5 (*1017, p. 83). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	2.68	May 1	3.69	July 30	3.13	Nov. 29	1.28
Mar. 3	3.01	June 1	4.48	Aug. 30	2.95	Dec. 29	1.70
31	3.99	30	3.90	Sept.27	2.72		

G6 (*1017, p. 84). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.41	May 1	6.49	July 31	5.67	Oct. 30	2.75
Mar. 3	6.09	June 1	7.25	Aug. 30	5.54	Nov. 29	3.91
31	6.83	30	6.71	Sept.27	5.22	Dec. 29	4.42

G7 (*1017, p. 85). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.72	May 1	8.05	July 31	7.67	Oct. 30	4.45
Mar. 3	7.90	31	8.82	Aug. 30	7.17	Nov. 29	6.35
30	8.67	June 29	8.47	Sept.27	6.68	Dec. 29	6.63
Apr. 13	8.22						

G8 (*1017, p. 85). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 25, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	7.53	May 1	8.33	July 31	7.80	Oct. 30	4.39
Mar. 3	8.00	31	9.07	Aug. 30	7.23	Nov. 29	6.22
30	8.75	June 29	8.93	Sept.27	6.78	Dec. 29	6.53
Apr. 13	8.48						

G9 (*1017, p. 86). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 3, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 3.35; Apr. 13, 3.40; May 19, 4.00.

G10 (*987, p. 24; 1017, p. 87). Geol. Survey, U. S. Dept. of Interior. NW¼SW¼ sec. 4, T. 54 S., R. 40 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	2.43	2.56	May 28-June 3	4.82	4.95
8-14	1.74	2.56	June 4-10	4.94	4.97
15-21	2.05	2.34	11-17	4.97	5.09
22-28	2.34	2.59	18-24	4.98	5.11
Jan. 29-Feb. 4	2.59	2.78	June 25-July 1	4.89	4.98
Feb. 5-11	2.78	2.94	July 2-8	4.66	4.89
12-18	2.94	3.06	9-15	4.64	4.66
19-25	3.06	3.18	16-22	4.39	4.67
Feb. 26-Mar. 4	3.18	3.28	23-29	4.15	4.39
Mar. 5-11	3.28	3.39	July 30-Aug. 5	4.10	4.15
12-18	3.38	3.51	Aug. 6-12	3.82	4.15
19-25	3.51	3.67	13-19	3.64	3.82
Mar. 26-Apr. 1	3.67	3.86	20-26	3.35	3.69
Apr. 2-8	3.86	4.00	Aug. 27-Sept.2	3.34	3.38
9-15	3.96	4.08	Sept. 3-9	1.74	3.38
16-22	4.08	4.25	10-16	1.06	2.75
23-29	4.25	4.33	17-23	.57	1.39
Apr. 30-May 6	4.30	4.40	24-30	1.18	1.46
May 7-13	4.40	4.56	Oct. 1-7	.91	1.51
14-20	4.56	4.73	8-14	.66	1.60
21-27	4.73	4.82	15-21	.65	.98

G10--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Oct. 22-28	0.10	1.35	Nov. 26-Dec. 2	0.80	1.11
Oct. 29-Nov. 4	a .17	1.48	Dec. 3-9	.86	1.21
Nov. 5-11	.31	.56	10-16	1.21	1.36
12-18	.30	.66	17-23	1.32	1.48
19-25	.65	.91	24-30	1.34	1.56

a Water level, in feet above land-surface datum.

G11 (*1017, p.88). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 5, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 5.10; Apr. 13, 5.13; May 19, 5.83.

G12 (*1017, p. 88). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 23, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 6.33; Apr. 13, 6.22.

G15 (*1017, p. 89). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 25, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.34	May 1	5.71	July 31	5.40	Oct. 30	2.41
Mar. 3	5.67	21	6.15	Aug. 30	4.88	Nov. 29	4.20
30	6.09	31	6.20	Sept.27	4.50	Dec. 29	4.52
Apr. 13	5.85	June 29	6.11				

G18 (*1017, p. 90). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 7, T. 57 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 2.74; May 19, 3.35; May 24, 3.38.

G23 (*1017, p. 91). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 25, T. 55 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.98; May 19, 7.85.

G24 (*1017, p. 91). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 13, T. 55 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.36; May 19, 7.15.

G25 (*1017, p. 92). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 1, T. 55 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 5.83; May 19, 6.62.

G28 (*1017, p. 92). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 34, T. 55 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.61; May 19, 7.28.

G36 (*1017, p. 93). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 19, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 5.76; Apr. 13, 5.82; May 19, 6.54.

G38 (*1017, p. 93). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 1, T. 57 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 4.34; May 19, 4.91; May 24, 4.99; Nov. 14, 1.77.

G39 (*1017, p. 94). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 22, T. 54 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.24; Apr. 9, 6.21; Apr. 12, 6.35.

G66 (*1017, p. 95). Geol. Survey, U. S. Dept of Interior. SE¼SE¼ sec. 29, T. 57 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 6.53; May 19, 7.00.

G67 (*1017, p. 95). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 19, T. 55 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 8.67; May 19, 9.36.

G69 (*1017, p. 96). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 11, T. 52 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 3.31, Apr. 12, 3.37; May 20, 4.11.

G70 (*1017, p.96). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 10, T. 52 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 3.43; Apr. 12, 3.49; May 20, 3.95.

G71 (*1017, p. 97). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 3, T. 52 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 3.73; Apr. 12, 3.76; May 20, 4.44.

G72 (*945, pp. 39-40; *987, p. 25; 1017, p. 97). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 3, T. 52 S., R. 39 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	1.27	1.44	May 28-June 3	4.00	4.17
8-14	.65	1.44	June 4-10	3.96	4.21
15-21	1.29	1.61	11-17	4.01	4.18
22-28	1.61	1.75	18-24	3.38	4.19
Jan. 29-Feb. 4	1.75	1.97	June 25-July 1	2.50	3.38
Feb. 5-11	1.97	2.18	2-8	2.54	2.71
12-18	2.18	2.34	9-15	2.57	2.70
19-25	2.31	2.40	16-22	.90	2.74
Feb. 26-Mar. 4	2.40	2.57	23-29	1.20	1.70
Mar. 5-11	2.57	2.80	July 30-Aug. 5	1.61	1.97
12-18	2.74	3.03	Aug. 6-12	1.62	2.18
19-25	3.03	3.26	13-19	.84	1.40
Mar. 26-Apr. 1	3.26	3.39	20-26	1.05	1.48
Apr. 2-8	3.28	3.44	Aug. 27-Sept.2	.83	1.21
9-15	3.30	3.47	Sept. 3-9	.53	1.21
16-22	3.28	3.49	10-16	a .03	1.00
23-29	3.35	3.58	17-23	a .02	a .01
Apr. 30-May 6	3.54	3.59	24-30	a .35	a .02
May 7-13	3.59	3.59	Oct. 1-7	a .37	a .34
14-20	3.59	4.06	8-14	a .44	a .36
21-27	3.85	4.00	15-21	a .53	a .44

a Water level, in feet above land-surface datum.

G81 (*1017, p. 98). Geol. Survey, U. S. Dept of Interior. NW¼SW¼ sec. 15, T. 52 S., R. 41 E. Well destroyed; measurements discontinued.

G82 (*1017, p. 98). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 15, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.65.

G83 (*1017, p. 99). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 28, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 2.38; May 20, 2.02.

G86 (*1017, p.100). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 34, T. 52 S., R. 41 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	6.37	6.41	July 2-8	6.46	6.51
8-14	6.31	6.41	9-15	6.46	6.50
15-21	6.34	6.38	16-22	6.33	6.53
22-28	6.36	6.47	23-29	6.25	6.33
Jan. 29-Feb. 4	6.47	6.56	July 30-Aug. 5	6.25	6.26
Feb. 5-11	6.56	6.67	Aug. 6-12	6.21	6.25
12-18	6.67	6.70	13-19	6.23	6.27
19-25	6.70	6.73	20-26	5.62	6.26
Feb. 26-Mar. 4	6.71	6.73	Aug. 27-Sept.2	5.62	5.72
Mar. 5-11	6.73	6.78	Sept. 3-9	5.29	5.72
12-18	6.72	6.78	10-16	4.63	5.60
19-25	6.73	6.80	17-23	4.64	5.06
Mar. 26-Apr. 1	6.80	6.83	24-30	5.06	5.33
Apr. 2-8	6.66	6.87	Oct. 1-7	5.33	5.44
9-15	6.58	6.66	8-14	5.15	5.44
16-22	6.61	6.64	15-21	4.97	5.15
23-29	6.64	6.65	22-28	4.99	5.10
Apr. 30-May 6	6.62	6.65	Oct. 29-Nov. 4	3.64	5.10
May 7-13	6.64	6.71	Nov. 5-11	4.53	4.93
14-20	6.71	6.77	12-18	4.93	5.14
21-27	6.77	6.80	19-25	5.11	5.45
May 28-June 3	6.80	6.84	Nov. 26-Dec. 2	5.45	5.67
June 4-10	6.75	6.85	Dec. 3-9	5.66	5.71
11-17	6.75	6.78	10-16	5.71	5.78
18-24	6.70	6.78	17-23	5.78	5.86
June 25-July 1	6.48	6.70	24-30	5.48	5.87

G103 (*1017, p.102). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 34, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 4.00; May 20, 4.50.

G105 (*1017, p.102). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 29, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 2.20; May 20, 3.01.

G107 (*1017, p.103). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 18, T. 53 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 11.42; May 10, 11.45.

G108 (*1017, p.104). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 18, T. 53 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 4.42; May 19, 4.77.

G109 (*1017, p.104). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 13, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 10.45; May 10, 10.52.

G110 (*1017, p.105). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 21, T. 53 S., R. 41 E. No measurements made in 1945.

G111 (*1017, p.105). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 9, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 7.96; May 20, 8.07.

G112 (*1017, p.106). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 25, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 14.25; May 19, 14.31.

G113 (*945, p. 40; *987, p. 25; 1017, p.107). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 25, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 12.45; May 19, 12.55.

G114 (*1017, p.107). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 25, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 12.33; May 19, 12.46.

G115 (*1017, p.107). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 36, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 11.71; May 19, 10.98.

G116 (*1017, p.108). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 36, T. 53 S., R. 41 E. No measurements made in 1945.

G117 (*1017, p.109). Geol. Survey, U. S. Dept. of Interior. North area of sec. 38, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 7.04; May 19, 7.12.

G118 (*1017, p.109). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 15, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 9.98; May 20, 9.94.

G119 (*1017, p.110). Geol. Survey, U. S. Dept. of Interior. Sec. 36, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 10.51; May 19, 10.63.

G120 (*1017, p.110). Geol. Survey, U. S. Dept. of Interior. NW¼SW¼ sec. 31, T. 53 S., R. 42 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 3.30; May 19, 3.56.

G121 (*945, p. 41; *987, p. 25; 1017, p.111). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 35, T. 53 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 7.47; May 10, 7.56.

G122 (*1017, p.111). Geol. Survey, U. S. Dept. of Interior. Sec. 38, T. 54 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 10, 14.45.

G123 (*945, pp. 41-2; *987, p. 26; 1017, p.112). Geol. Survey, U. S. Dept. of Interior. Sec. 38, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 10, 7.32; May 10, 7.43.

G158A (*1017, p.112). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 15, T. 54 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 9, 11.05.

G165 (*1017, p.112). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 12, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 5.05; Apr. 12, 4.89.

G193 (*1017, p.113). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 29, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.89	Apr. 30	4.67	July 30	5.27	Oct. 30	3.18
Mar. 2	5.06	May 31	5.37	Aug. 29	4.69	Nov. 28	4.45
30	5.23	June 29	5.29	Sept.26	4.78	Dec. 29	4.57

G195 (*1017, p.113). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	4.28	Apr. 30	4.53	July 30	4.29	Oct. 30	1.91
Mar. 2	4.50	May 31	5.06	Aug. 29	3.90	Nov. 28	3.37
30	5.00	June 29	4.78	Sept.26	3.69	Dec. 29	3.73

G197 (*1017, p.113). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.48	Apr. 30	5.48	July 30	5.66	Oct. 30	3.55
Mar. 2	5.80	May 31	6.02	Aug. 29	5.20	Nov. 28	4.90
30	6.05	June 29	5.82	Sept.26	5.23	Dec. 29	5.12

G199 (*1017, p.114). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	3.72	Apr. 30	3.83	July 30	3.84	Oct. 30	1.64
Mar. 2	3.91	May 31	4.39	Aug. 29	3.44	Nov. 28	3.07
30	4.30	June 29	4.14	Sept.26	3.40	Dec. 29	3.36

G218. Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 18, T. 53 S., R. 40 E. East side of Snapper Creek, 2.1 miles south of Russian Colony Canal. Drilled observation well, diameter 6 inches, depth 71.2 feet. Water-stage recorder installed Aug. 21, 1945. Measuring point, top of casing, 1.0 foot above land-surface datum and 9.25 feet above mean sea level.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Aug. 20-26	5.07	5.23	Oct. 15-21	2.50	2.60
Aug. 27-Sept.2	5.23	5.56	22-28	2.39	2.60
Sept. 3-9	3.98	5.50	Oct. 29-Nov. 4	2.30	2.39
10-16	3.34	4.64	Nov. 5-11	2.32	2.39
17-23	3.34	3.41	12-18	2.30	2.34
24-30	3.14	3.43	19-25	2.34	2.42
Oct. 1-7	2.88	3.47	Nov. 26-Dec. 2	2.42	2.51
8-14	2.54	2.88	Dec. 3-9	2.48	2.58

G231 (*1017, p.114). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 7, T. 55 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 9.68; May 19, 9.91.

G232 (*1017, p.114). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 13, T. 55 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 18.04; May 19, 18.27.

G235 (*1017, p.115). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 11, T. 55 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 8.32; May 19, 8.48.

G238 (*1017, p.115). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 15, T. 55 S., R. 40 E. No measurements made in 1945.

G239 (*1017, p.115). Geol. Survey, U. S. Dept. of Interior. NW¼SW¼ sec. 16, T. 55 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 7.19; May 19, 8.11.

G254 (*1017, p.115). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 32, T. 54 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 14.40; May 19, 14.62.

G272 (*1017, p.116). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 22, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 4.16; Apr. 13, 4.11.

G273 (*1017, p.116). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 28, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 4.00; Apr. 13, 4.13; May 19, 4.74.

G275 (*1017, p.117). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 31, T. 53 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 3.62; Apr. 13, 3.75; May 19, 4.47.

G276 (*1017, p.117). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 33, T. 53 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 12, 5.07; May 19, 5.75.

G277 (*1017, p.117). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 9, T. 56 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 9, 9.95; May 19, 9.75.

G282 (*1017, p.118). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 5, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 9.82; May 19, 10.72.

G283 (*1017, p.118). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 17, T. 56 S., R. 40 E. Water level, in feet below land-surface datum, 1945: Apr. 9, 5.22.

G285 (*1017, p.118). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 9, T. 57 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.14; May 19, 9.35.

G348 (*1017, p.118). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	3.84	May 1	4.60	July 31	3.90	Oct. 30	0.89
Mar. 3	4.33	June 1	5.48	Aug. 30	3.74	Nov. 29	2.30
31	5.13	29	5.06	Sept.27	3.35	Dec. 29	2.87

G349 (*1017, p.119). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	2.95	May 1	3.97	July 31	3.33	Oct. 30	0.41
Mar. 3	3.50	June 1	4.81	Aug. 30	3.12	Nov. 29	1.43
31	4.35	29	4.50	Sept.27	2.77	Dec. 29	2.87

G350 (*1017, p.119). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 14, T. 54 S., R. 40 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	4.75	4.88	May 14-20	6.52	6.65
8-14	4.52	4.88	21-27	6.65	6.70
15-21	4.55	4.72	May 28-June 3	6.67	6.72
22-28	4.72	4.90	June 4-10	6.72	6.73
Jan. 29-Feb. 4	4.90	5.06	11-17	6.73	6.83
Feb. 5-11	5.06	5.22	18-24	6.83	6.87
12-18	5.22	5.35	June 25-July 1	6.83	6.85
19-25	5.35	5.48	2-8	6.63	6.84
Feb. 26-Mar. 4	5.47	5.57	9-15	6.62	6.64
Mar. 5-11	5.57	5.68	16-22	6.62	6.71
12-18	5.68	5.77	23-29	6.38	6.62
19-25	5.77	5.91	July 30-Aug. 5	6.27	6.38
Mar. 26-Apr. 1	5.91	6.03	Aug. 6-12	6.20	6.27
Apr. 2-8	6.03	6.13	13-19	6.07	6.20
9-15	6.13	6.19	20-26	5.74	6.07
16-22	6.19	6.25	Aug. 27-Sept.2	5.60	5.74
23-29	6.25	6.32	Sept. 3-9	4.89	5.60
Apr. 30-May 6	6.32	6.39	10-16	4.21	5.08
May 7-13	6.39	6.52	17-23	3.37	4.21

G350--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Sept.24-30	3.70	3.87	Nov. 12-18	2.85	3.12
Oct. 1-7	3.57	3.83	19-25	3.12	3.39
8-14	3.47	3.93	Nov. 26-Dec. 2	3.39	3.58
15-21	3.15	3.47	10-16	3.73	3.90
22-28	2.71	3.40	17-23	3.90	4.06
Oct. 29-Nov. 4	2.55	2.78	24-30	4.06	4.17
Nov. 5-11	2.78	3.07			

G351 (*1017, p.119). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 28, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.42	Apr. 30	5.18	July 30	5.61	Oct. 30	3.42
Mar. 3	5.29	May 31	5.85	Aug. 29	5.02	Nov. 28	4.85
30	6.39	June 29	5.79	Sept.26	5.28	Dec. 29	5.36

G352 (*1017, p.120). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 28, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	3.89	Apr. 30	3.87	July 30	4.45	Oct. 30	2.26
Mar. 2	4.57	May 31	4.43	Aug. 29	3.80	Nov. 28	3.80
30	4.75	June 29	3.97	Sept.26	3.93	Dec. 29	3.89

G353 (*1017, p.120). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 29, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	4.50	Apr. 30	4.43	July 30	5.13	Oct. 30	2.90
Mar. 2	4.68	May 31	5.16	Aug. 29	4.53	Nov. 28	4.21
30	5.12	June 29	5.03	Sept.26	4.45	Dec. 29	4.28

G354 (*1017, p.120). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.46	Apr. 30	5.54	July 30	5.53	Oct. 30	3.16
Mar. 2	5.69	May 31	6.08	Aug. 29	5.05	Nov. 28	4.71
30	6.05	June 29	5.85	Sept.26	5.00	Dec. 29	5.00

G355 (*1017, p.120). Geol. Survey, U. S. Dept. of Interior. NW¼SW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	3.26	Apr. 30	3.61	July 30	3.46	Oct. 30	1.08
Mar. 2	3.49	May 31	4.03	Aug. 29	2.98	Nov. 28	2.59
30	3.92	June 29	3.79	Sept.26	2.86	Dec. 29	2.87

G356 (*1017, p.120). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 20, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.18	Apr. 30	5.27	July 30	5.37	Oct. 30	3.21
Mar. 2	5.38	May 31	5.88	Aug. 29	4.96	Nov. 28	4.58
30	5.77	June 29	5.59	Sept.28	4.72	Dec. 29	4.80

G357. Geol. Survey, U. S. Dept. of Interior. In Miami Springs, NE¼NE¼ sec. 24, T. 53 S., R. 40 E., 0.1 mile west of Golf Course Canal and 0.25 mile north of Westward Drive. Driven observation well, diameter 2 inches, depth 10 feet. Measuring point, top of casing, 1.0 foot above land-surface datum and 4.07 feet above mean sea level, 1929 adjustment. Water levels, in feet below land-surface datum, 1945: Jan. 27, 2.68; Mar. 3, 3.13; Oct. 30, 0.03.

S1A (*907, p. 31; 937, p. 25; 945, p. 42; 1017, p.120). City of Miami. SW¼NW¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	8.42	Apr. 30	8.17	July 31	8.29	Oct. 30	4.45
Mar. 3	7.92	May 31	9.39	Aug. 30	7.70	Nov. 29	6.50
31	9.84	June 29	9.08	Sept.27	6.40	Dec. 29	6.31

S2A (*1017, p.120). City of Miami. NW¼SW¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	9.26	Apr. 30	9.56	July 31	9.12	Oct. 30	5.66
Mar. 3	9.18	May 31	10.70	Aug. 30	8.44	Nov. 29	7.21
31	10.63	June 29	10.00	Sept.27	7.67	Dec. 29	7.42

S3A (*1017, p.121). City of Miami. NE¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	10.12	Apr. 30	10.53	July 31	9.94	Oct. 30	6.54
Mar. 3	9.44	May 31	11.63	Aug. 30	9.50	Nov. 29	7.44
31	11.47	June 29	10.85	Sept.27	7.88	Dec. 29	8.51

S4A (*1017, p.121). City of Miami. SW¼NW¼ sec. 19, T. 53 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	8.41	Apr. 30	8.62	July 31	8.27	Oct. 30	5.23
Mar. 3	8.62	May 31	9.85	Aug. 30	7.83	Nov. 29	6.59
31	9.97	June 29	9.14	Sept.27	6.95	Dec. 29	7.10

S5A (*1017, p.121). City of Miami. NE¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	9.20	Apr. 30	10.01	July 31	8.63	Oct. 30	5.84
Mar. 3	9.67	May 31	11.08	Aug. 30	8.71	Nov. 29	7.33
31	10.81	June 29	9.87	Sept.27	8.13	Dec. 29	7.55

S6A (*1017, p.122). City of Miami. SW¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	8.88	Apr. 30	10.55	July 31	9.01	Oct. 30	6.06
Mar. 3	10.23	May 31	.....	Aug. 30	9.02	Nov. 29	7.54
31	11.45	June 29	11.00	Sept.27	8.57	Dec. 29	7.75

S7A (*1017, p.122). City of Miami. SW¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	8.17	Apr. 30	10.16	July 31	9.24	Oct. 30	5.06
Mar. 3	9.85	May 31	11.60	Aug. 30	7.90	Nov. 29	7.53
31	11.13	June 29	11.22	Sept.27	7.48	Dec. 29	7.58

S8A (*1017, p.122). City of Miami. SW¼SE¼ sec. 24, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	7.68	Apr. 30	8.64	July 31	7.67	Oct. 30	4.34
Mar. 3	8.33	May 31	9.76	Aug. 30	6.99	Nov. 29	6.02
31	9.46	June 29	9.00	Sept.27	6.68	Dec. 29	6.27

S14A (*1017, p.122). City of Miami. SE¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	6.48	Apr. 30	6.87	July 31	6.38	Oct. 30	4.21
Mar. 3	6.97	May 31	7.96	Aug. 30	6.55	Nov. 29	5.17
31	7.29	June 30	7.30	Sept.27	6.50	Dec. 29	5.79

S15A (*1017, p.123). City of Miami. SE¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 27	5.26	Mar. 31	6.49	May 31	7.01
Mar. 3	5.89	Apr. 30	6.22	June 29	6.39

S16A (*1017, p.123). City of Miami. SW¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 27	4.82	Apr. 30	6.09	June 29	6.06	Oct. 30	2.33
Mar. 3	5.64	May 31	6.81	July 31	5.15	Dec. 29	3.82
31	6.37						

S17A (*1017, p.123). City of Miami. SE¼SE¼ sec. 13, T. 53 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 27	5.17	Apr. 30	6.08	July 31	5.34	Oct. 30	2.54
Mar. 3	5.78	May 31	6.89	Aug. 30	5.29	Nov. 29	3.73
31	6.46	June 29	6.35	Sept.27	5.03	Dec. 29	4.25

S18 (*886, p. 66; *907, p. 28; 937, p. 25; 945, p. 42; *987, p. 26; 1017, p.123). Model Dairy. NW¼NW¼ sec. 15, T. 52 S., R. 41 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	8.04	8.13	Apr. 16-22	8.73	8.82
8-14	8.00	8.13	23-29	8.73	8.81
15-21	8.04	8.12	Apr. 30-May 6	8.76	8.87
22-28	8.12	8.23	May 7-13	8.86	8.97
Jan. 29-Feb. 4	8.22	8.37	14-20	8.94	9.02
Feb. 5-11	8.37	8.50	21-27	8.99	9.04
12-18	8.48	8.58	May 28-June 3	9.01	9.07
19-25	8.58	8.63	June 4-10	8.96	9.03
Feb. 26-Mar. 4	8.61	8.71	11-17	8.94	9.03
Mar. 5-11	8.71	8.80	18-24	8.69	9.01
12-18	8.73	8.80	June 25-July 1	8.68	8.71
19-25	8.80	8.89	July 2-8	8.51	8.69
Mar. 26-Apr. 1	8.87	8.91	9-15	8.56	8.71
Apr. 2-8	8.82	8.98	16-22	8.37	8.77
9-15	8.71	8.82	23-29	7.83	8.37

S18--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date-	Highest level	Lowest level	Date	Highest level	Lowest level
July 30-Aug. 5	7.87	7.98	Oct. 15-21	6.33	6.66
Aug. 6-12	7.97	8.13	22-28	6.66	6.90
13-19	8.12	8.21	Oct. 29-Nov. 4	5.72	6.84
20-26	7.94	8.20	Nov. 5-11	6.15	6.46
Aug. 27-Sept. 2	7.62	7.94	12-18	6.33	6.61
Sept. 3-9	7.10	7.62	19-25	6.61	6.91
10-16	6.25	7.41	Nov. 26-Dec. 2	6.91	7.12
17-23	6.25	6.91	Dec. 3-9	7.12	7.24
24-30	6.91	7.04	10-16	7.24	7.38
Oct. 1-7	6.76	7.20	17-23	7.38	7.45
8-14	6.35	6.91	24-30	6.93	7.48

S19 (*886, p. 66; *907, p. 29; 937, p. 26; 945, p. 43; *987, p. 26; 1017, p.124). NW¼NE¼ sec. 25, T. 53 S., R. 40.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	6.95	7.23	July 2-8	7.01	8.03
8-14	6.80	6.96	9-15	7.05	7.64
15-21	6.84	7.09	16-22	6.89	7.72
22-28	6.71	7.04	23-29	6.83	6.97
Jan. 29-Feb. 4	6.75	6.95	July 30-Aug. 5	6.97	7.23
Feb. 5-11	6.86	7.11	Aug. 6-12	7.23	7.36
12-18	7.04	7.27	13-19	6.89	7.25
19-25	7.20	7.27	20-26	6.51	7.04
Feb. 26-Mar. 4	7.13	7.31	Aug. 27-Sept.2	6.46	6.52
Mar. 5-11	7.30	7.46	Sept. 3-9	5.94	6.49
12-18	7.15	7.40	10-16	4.60	6.71
19-25	7.40	7.84	17-23	4.60	5.84
Mar. 26-Apr. 1	7.84	8.12	24-30	5.84	6.08
Apr. 2-8	7.95	8.19	Oct. 1-7	5.79	6.06
9-15	7.71	7.95	8-14	5.94	6.18
16-22	7.59	7.79	15-21	5.40	5.94
23-29	7.59	7.95	22-28	4.98	5.41
Apr. 30-May 6	7.59	7.82	Oct. 29-Nov. 4	3.58	4.98
May 7-13	7.67	8.07	Nov. 5-11	4.56	4.95
14-20	8.07	8.18	12-18	4.83	4.96
21-27	8.18	8.36	19-25	4.94	5.21
May 28-June 3	8.27	8.48	Nov. 26-Dec. 2	5.21	5.54
June 4-10	8.48	8.55	Dec. 3-9	5.41	5.64
11-17	8.55	8.64	10-16	5.41	5.73
18-24	8.34	8.65	17-23	5.73	5.88
June 25-July 1	8.03	8.35	24-30	5.71	5.95

S63 (*1017, p.124). Graham's Dairy. SE¼NW¼ sec. 30, T. 52 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 5.05; Apr. 12, 5.17; May 20, 6.05.

S68 (*1017, p.125). City of Miami. SW¼NW¼ sec. 19, T. 53 S., R. 41 E.

Highest and lowest weekly water level in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	7.05	7.37	July 2-8	6.76	7.35
8-14	6.48	7.17	9-15	7.12	7.79
15-21	6.76	7.21	16-22	6.51	7.74
22-28	6.52	7.25	23-29	6.54	6.83
Jan. 29-Feb. 4	6.39	6.85	July 30-Aug. 5	6.51	7.03
Feb. 5-11	6.85	7.04	Aug. 6-12	6.64	7.21
12-18	7.02	7.20	13-19	6.10	6.89
19-25	6.96	7.24	20-26	6.12	6.64
Feb. 26-Mar. 4	6.57	7.07	Aug. 27-Sept.2	6.10	6.60
Mar. 5-11	7.00	7.48	Sept. 3-9	5.46	6.30
12-18	7.27	7.59	10-16	5.50	6.76
19-25	7.24	7.76	17-23	4.34	5.72
Mar. 26-Apr. 1	7.76	8.38	24-30	5.44	5.92
Apr. 2-8	7.77	8.21	Oct. 1-7	5.69	6.18
9-15	7.30	7.82	8-14	6.15	6.46
16-22	6.97	7.73	15-21	5.24	6.24
23-29	7.29	7.85	22-28	5.04	5.77
Apr. 30-May 6	7.08	7.82	Oct. 29-Nov. 4	3.60	5.43
May 7-13	7.49	8.25	Nov. 5-11	4.53	5.07
14-20	7.88	8.26	12-18	4.93	5.30
21-27	7.65	8.53	19-25	5.03	5.68
May 28-June 3	7.56	8.56	Nov. 26-Dec. 2	5.15	5.77
June 4-10	8.07	8.60	Dec. 3-9	5.01	5.67
11-17	8.24	8.83	10-16	5.21	5.86
18-24	7.51	8.74	17-23	5.45	5.93
June 25-July 1	7.24	7.80	24-30	5.48	5.92

S84 (*1017, p.127). Coca Cola Bottling Co. SE¼NW¼ sec. 25, T. 53 S., R. 41 E. Water level, in feet below land-surface datum, 1945: Apr. 10, 15.47; May 19, 15.50.

S171 (*945, pp. 43-44; *987, p. 27; 1017, p.128). City of Miami. NW¼SE¼ sec. 20, T. 54 S., R. 41 E. Water level, in feet below land-surface datum, 1945: May 19, 11.35.

S182 (*945, pp. 44-45; *987, p. 27; 1017, p.128). International Fruit Co. NW¼NW¼ sec. 5, T. 56 S., R. 40 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	8.42	8.56	May 14-20	10.81	10.93
8-14	7.85	8.56	21-27	10.93	11.08
15-21	7.80	7.89	May 28-June 3	11.08	11.23
22-28	7.82	8.09	June 4-10	11.23	11.36
Jan. 29-Feb. 4	8.09	8.38	11-17	11.36	11.52
Feb. 5-11	....	....	18-24	11.46	11.58
12-18	....	....	June 25-July 1	11.43	11.46
19-25	....	....	July 2-8	11.08	11.43
Feb. 26-Mar. 4	....	....	9-15	11.06	11.08
Mar. 5-11	9.34	9.56	16-22	10.61	11.09
12-18	9.56	9.72	23-29	10.10	10.60
19-25	9.72	9.92	July 30-Aug. 5	9.98	10.10
Mar. 26-Apr. 1	9.92	10.13	Aug. 6-12	9.99	10.06
Apr. 2-8	10.13	10.31	13-19	9.88	10.06
9-15	10.31	10.42	20-26	9.65	9.89
16-22	10.31	10.49	Aug. 27-Sept.2	8.59	9.65
23-29	10.20	10.48	Sept. 3-9	6.83	8.59
Apr. 30-May 6	10.48	10.64	10-16	5.05	7.18
May 7-13	10.64	10.81	17-23	4.54	5.05

S182--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Sept.24-30	4.88	5.17	Nov. 12-18	4.21	4.69
Oct. 1-7	5.16	5.51	19-25	4.69	5.03
8-14	5.10	5.86	Nov. 26-Dec. 2	5.03	5.46
15-21	4.94	5.10	Dec. 3-9	5.46	5.85
22-28	4.33	5.09	10-16	5.85	6.20
Oct. 29-Nov. 4	3.01	4.33	17-23	6.20	6.56
Nov. 5-11	3.55	4.21	24-30	6.53	6.73

S183 (*1017, p.128). E. L. Cotton. NW¼NW¼ sec. 4, T. 55 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 12.50; May 19, 13.20.

S185 (*1017, p.129). Judge Price. SW¼SW¼ sec. 1, T. 56 S., R. 39 E. Water level, in feet below land-surface datum, 1945: May 19, 10.83.

S186 (*1017, p.130). Mr. Wellbourn. SE¼SE¼ sec. 15, T. 56 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.28; May 19, 9.05.

S187 (*1017, p.130). C. Enquist. SE¼SE¼ sec. 34, T. 56 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 9.20; May 19, 9.88.

S188 (*1017, p.131). E. C. Byars. SE¼NE¼ sec. 2, T. 57 S., R. 38 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 11.42; May 19, 12.08.

S189 (*1017, p.131). Dr. C. F. Robinson. SW¼NE¼ sec. 31, T. 56 S., R. 39 E. Water level, in feet below land-surface datum, 1945: May 19, 11.65.

S191 (*945,pp. 45-46; *987, p. 27; 1017, p.132). A. H. Singleton. SE¼SW¼ sec. 19, T. 56 S., R. 39 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 8.61; May 11, 9.40.

S196 (*907, p. 33; 937, p. 26; 945, p. 46; *987, p. 27; 1017, p.132). University of Florida Experiment Station. SW¼SE¼ sec. 35, T. 56 S., R. 38 E.

Water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	8.42	8.44	9.31	10.18	10.72	11.31	10.01	8.76	7.09	4.60	3.84	5.72
2	8.45	8.50	9.36	10.23	10.74	11.33	9.90	8.70	7.08	4.62	4.00	5.80
3	8.49	8.53	9.38	10.25	10.77	11.34	9.80	8.66	....	4.58	4.10	5.83
4	8.53	8.59	9.42	10.29	10.80	11.38	9.72	8.69	6.40	4.73	4.23	5.88
5	8.55	8.62	9.43	10.32	10.82	11.38	9.65	8.70	5.60	4.78	4.35	5.94
6	8.58	8.64	9.49	10.35	10.83	11.38	9.61	8.72	5.45	4.88	4.58	5.97
7	8.59	8.67	9.51	10.40	10.85	11.36	9.59	8.76	5.50	4.73	4.60	6.00
8	8.55	8.71	9.53	10.42	10.89	11.37	9.57	8.80	5.62	4.79	4.67	6.07
9	8.17	8.74	9.59	10.40	10.92	11.53	9.59	8.84	5.70	4.74	4.70	6.10
10	7.97	8.80	9.62	10.36	10.97	11.36	9.60	8.83	5.79	4.72	4.78	6.15
11	7.88	8.84	9.65	10.34	10.98	11.38	9.60	8.81	5.89	4.83	4.82	6.19
12	7.85	8.86	9.62	10.33	11.00	11.40	9.62	8.70	5.99	4.93	4.82	6.24
13	7.83	8.91	9.64	10.35	11.01	11.43	9.64	8.68	6.07	4.65	4.61	6.28
14	7.84	8.92	9.63	10.38	11.05	11.43	9.66	8.65	6.15	4.30	3.93	6.33
15	7.84	8.94	9.65	10.40	11.08	11.46	9.68	8.62	6.18	3.87	4.10	6.38
16	7.87	8.99	9.68	10.42	11.11	11.49	9.70	8.61	4.00	3.97	4.27	6.43
17	7.90	9.00	9.71	10.45	11.12	11.50	9.74	8.62	4.06	4.10	4.44	6.50
18	7.91	9.02	9.72	10.48	11.12	11.52	9.73	8.66	4.07	4.20	4.62	6.54
19	7.94	9.03	9.76	10.49	11.08	11.54	9.65	8.68	3.60	4.30	4.72	6.57
20	7.97	9.04	9.80	10.50	11.11	11.55	9.62	8.72	3.80	4.44	4.80	6.64
21	8.00	9.10	9.83	10.52	11.13	11.41	9.58	8.22	4.02	4.52	4.91	6.68

S196--Continued.

Water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
22	8.02	9.12	9.86	10.52	11.16	11.32	9.51	8.72	4.30	4.60	5.00	6.74
23	8.07	9.13	9.90	10.53	11.15	11.01	9.40	8.66	4.42	4.17	5.07	6.76
24	8.10	9.17	9.93	10.53	11.19	10.82	9.26	8.40	4.52	3.65	5.19	6.80
25	8.16	9.20	9.96	10.55	11.21	10.73	9.15	8.02	4.60	3.81	5.25	6.83
26	8.18	9.22	9.99	10.56	11.20	10.62	9.01	7.69	4.70	3.89	5.33	....
27	8.23	9.26	10.03	10.61	11.21	10.56	8.95	7.36	4.75	4.03	5.43	6.86
28	8.28	9.28	10.06	10.64	11.22	10.51	8.88	7.21	4.78	3.34	5.46	6.91
29	8.32		10.11	10.66	11.26	10.33	8.84	7.10	4.87	3.35	5.54	6.92
30	8.36		10.13	10.70	11.26	10.18	8.82	7.05	4.87	3.50	5.62	7.00
31	8.40		10.16		11.29		8.80	7.04		3.68		7.04

S233 (*945, pp. 46-47; *987, p. 28; 1017, p.132). City of Miami Beach. NE¼NE¼ sec. 32, T. 51 S., R. 42 E. Well destroyed Apr. 8; measurements discontinued.

S290 (*945, p. 47; *987, p. 28; 1017, p.132). J. C. Kersey. NE¼NE¼ sec. 3, T. 52 S., R. 41 E. Water levels, in feet below land-surface datum, 1945: Apr. 8, 18.27; May 21, 18.44.

S539. U. S. Dept. of Agriculture. At Chapman Field, in NW¼NE¼ sec. 24, T. 55 S., R. 40 E. 75 feet southeast of First Avenue, and 48 feet northeast of First Street. Drilled irrigation well, diameter 8 inches, depth 28.6 feet. Measuring point, top of casing, 0.3 foot above land-surface datum and 17.27 feet above mean sea level, 1929 adjustment. Water-stage recorder installed Aug. 8, 1945.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	15.97	16.23	.....	.....	14.46	14.76	15.85	16.12
2	.....	.....	15.95	16.23	.....	.....	14.60	14.87	15.82	16.16
3	.....	.....	15.57	16.12	.....	.....	14.74	15.00	15.74	16.12
4	.....	.....	15.40	15.85	.....	.....	14.82	15.09	15.66	16.09
5	.....	.....	15.50	15.77	15.49	15.77	14.95	15.17	15.66	16.07
6	.....	.....	15.65	15.82	15.38	15.75	14.90	15.22	15.82	16.12
7	.....	.....	15.68	15.97	15.37	15.63	14.88	15.19	15.88	16.18
8	.....	16.52	15.67	15.96	15.36	15.64	14.95	15.20	15.93	16.24
9	16.27	16.58	15.66	15.98	15.36	15.61	14.95	15.25	15.83	16.19
10	16.39	16.65	15.75	16.05	15.36	15.61	15.01	15.29	15.78	16.12
11	16.42	16.72	15.72	16.04	15.33	15.61	15.04	15.32	15.83	16.14
12	16.49	16.74	15.68	15.95	15.31	15.63	15.11	15.43	15.87	16.20
13	16.39	16.73	15.73	16.00	15.28	15.58	15.26	15.53	15.86	16.20
14	16.40	16.70	15.80	16.17	15.36	15.59	15.37	15.62	15.88	16.18
15	16.49	16.71	15.89	16.17	15.28	15.50	15.44	15.71	15.83	16.21
16	16.53	16.77	.....	.....	15.29	15.56	15.15	15.66	15.99	16.28
17	16.59	16.81	.....	.....	15.14	15.53	15.00	15.50	15.84	16.34
18	16.54	16.76	.....	.....	14.81	15.34	14.99	15.46	15.68	16.23
19	16.47	16.68	.....	.....	14.87	15.34	15.08	15.52	15.72	16.15
20	16.45	16.68	.....	.....	14.87	15.38	15.16	15.58	15.77	16.20
21	16.38	16.64	.....	.....	14.92	15.34	15.18	15.61	15.83	16.26
22	16.27	16.59	.....	.....	14.90	15.44	15.23	15.65	15.86	16.25
23	16.25	16.53	.....	.....	14.90	15.38	15.34	15.91	15.91	16.28
24	16.24	16.52	.....	.....	14.98	15.42	15.70	15.99	15.90	16.22
25	16.27	16.54	.....	.....	15.10	15.42	15.74	16.02	15.92	16.27
26	16.16	16.44	.....	.....	15.15	15.43	15.69	16.01	16.07	16.39
27	15.95	16.41	.....	.....	15.12	15.41	15.69	15.97	16.15	16.40
28	15.93	16.20	.....	.....	14.94	15.24	15.70	15.99	16.13	16.40
29	15.98	16.28	.....	.....	14.32	15.10	15.76	16.06	16.11	16.38
30	15.98	16.29	.....	.....	14.31	14.50	15.08	16.08	16.23	16.45
31	15.99	16.29			14.35	14.76			16.20	16.47

Duval County

12 (*907, p. 14; 937, p. 13; 945, p. 13; *987, p. 28; 1017, p.133). Jacksonville Motor Transit Co. In Jacksonville, about 200 feet east of Riverside Avenue, about 75 feet south of McCoy Street. No measurements made in 1945.

102 (*907, p. 14; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). V. A. Stevens. SW¼NW¼ sec. 24, T. 2 S., R. 27 E., about 240 feet north of Atlantic Boulevard, in rear of owner's residence. No measurements made in 1945.

109 (*907, p. 14; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). J. P. Young. In Floral Bluff, 3 miles northeast of Jacksonville, on north side of owner's residence. No measurements made in 1945.

115 (*907, p. 15; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). City of Jacksonville. In Ortega, 5 miles southwest of Jacksonville. Water levels, in feet above land-surface datum, 1945: Aug. 7, 32.9; Nov. 26, 33.5.

118 (*907, p. 15; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). City of Jacksonville. In Jacksonville, on west corner of intersection of Post and Dancy Streets. Water levels, in feet above land-surface datum, 1945: Aug. 7, 30.3; Nov. 26, 30.9.

122 (*907, p. 15; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). City of Jacksonville. In Jacksonville, about 20 feet north of 63d Street between Russell and Eastland Streets. Water levels, in feet above land-surface datum, 1945: Aug. 8, 40.5; Nov. 28, 41.4.

123 (*907, p. 15; 937, p. 13; 945, p. 13; 987, p. 28; 1017, p.133). City of Jacksonville. In Woodstock Park, Jacksonville. Water levels, in feet above land-surface datum, 1945: Aug. 7, 32.0; Nov. 26, 33.0.

129 (*907, p. 15; 937, p. 13; 945, p. 13; 987, p. 29; 1017, p.133). Jim Merril. In Ortega, 5.2 miles southwest of Jacksonville. Water levels, in feet above land-surface datum, 1945: Aug. 7, 38.2; Nov. 26, 39.0.

131 (*907, p. 15; 937, p. 13; 945, p. 14; 987, p. 29; 1017, p.133). G. C. Cole. SW¼ of sec. 10, T. 1 S., R. 26 E., on south side of owner's residence, and 7.0 miles north of Jacksonville. Water level, in feet above land-surface datum, 1945: Aug. 8, 36.7.

145 (*907, p. 16; 937, p. 13; 945, p. 14; 987, p. 29; 1017, p.133). Duval County School Board. In rear of Oceanway School, 0.5 mile north of Broward and 10 miles north of Jacksonville. Water levels, in feet above land-surface datum, 1945: Aug. 9, 32.8; Nov. 28, 35.8.

147 (*907, p. 16; 937, p. 13; 945, p. 14; 987, p. 29; 1017, p.134). V. C. Johnson. SW¼SW¼ sec. 32, T. 1 N., R. 26 E. Water level, in feet above land-surface datum, 1945: Aug. 8, 29.9.

149 (*907, p. 16; 937, p. 13; 945, p. 14; 987, p. 29; 1017, p.134). W. M. Bostwick. On north side of mouth of Drummond Creek, 1.2 miles southwest of Eastport, and 6 miles northeast of Jacksonville. Water level, in feet above land-surface datum, 1945: Aug. 8, 24.5.

154 (*907, p. 16; 937, p. 14; 945, p. 14; 987, p. 29; 1017, p.134). J. M. Shield. SW¼ sec. 22, T. 3 S., R. 27 E., between Florida East Coast Railway and U. S. Highway 1, 1.2 miles north of Sunbeam. No measurements made in 1945.

160 (*907, p. 16; 937, p. 14; 945, p. 14; 987, p. 29; 1017, p.134). City of Neptune Beach. In Neptune Beach, about 400 feet from Atlantic Ocean, on southeast corner of intersection of First Street and Florida Avenue. Water level, in feet above land-surface datum, 1945: Aug. 9, 36.5.

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164 (*907, p. 16; 937, p. 14; 945, p. 14; 987, p. 29; 1017, p.134). Ribault Club. On Fort George Island, in pumphouse, at Ribault Club. Water level, in feet above land-surface datum, 1945: Aug. 8, 36.9.

Escambia County

45 (*907, p. 22; 937, p. 17; 945, p. 15; 987, p. 30; 1017, p.134). Geol. Survey, U. S. Dept. of Interior. About 1,150 feet southwest of Louisville & Nashville Railroad, about 1,600 feet northeast of St. Louis-San Francisco Railway, 0.5 mile south of Cantonment.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	87.22	87.85	87.76	87.87	87.74	87.88	87.49	87.75	87.16	88.23	88.54	88.59
2	87.85	87.92	86.90	87.70	87.82	87.87	87.48	87.87	88.00	88.15	88.50	88.58
3	87.54	87.92	87.42	87.50	87.02	87.83	.....	.....	87.99	88.18	85.87	88.50
4	85.47	87.54	87.35	87.47	86.80	86.97	.....	.....	88.19	88.28	87.97	88.46
5	84.33	85.46	87.40	87.50	86.74	86.87	.....	.....	88.27	88.41	84.88	87.52
6	85.22	85.68	87.50	87.62	86.79	86.88	.....	.....	88.29	88.44	84.16	84.88
7	85.46	85.60	87.58	87.74	86.59	86.94	.....	.....	88.27	88.29	84.17	85.17
8	85.60	85.89	87.34	87.80	86.64	86.77	.....	.....	87.20	87.42	85.22	87.66
9	85.65	86.23	86.50	87.33	87.49	86.79	.....	.....	87.18	87.47	86.69	87.86
10	81.60	86.23	86.64	86.80	86.61	86.79	.....	.....	87.06	87.17	87.48	88.01
11	79.73	81.60	86.44	86.76	84.57	86.75	84.07	84.94	84.92	87.10	87.18	87.57
12	79.12	82.10	86.20	86.45	83.76	84.80	83.62	84.94	85.42	86.58	87.34	87.69
13	82.11	82.88	86.22	86.38	84.67	84.79	84.54	84.83	86.55	86.75	87.64	87.68
14	82.74	82.88	86.30	86.46	84.34	84.70	84.12	84.60	86.30	86.70	87.57	87.67
15	82.77	83.88	86.24	86.48	84.20	84.39	81.95	84.17	86.56	86.80	87.60	87.71
16	83.38	83.54	85.08	86.24	84.14	84.43	81.72	83.55	86.74	87.06	87.56	87.69
17	83.34	83.44	84.76	85.09	84.34	84.48	83.55	84.17	86.55	86.95	84.84	87.68
18	83.16	83.44	84.79	85.34	84.29	84.47	84.18	86.74	86.94	87.79	84.42	85.02
19	83.25	83.66	85.09	86.92	84.37	84.47	86.74	87.21	87.80	87.92	84.79	87.37
20	83.55	83.66	86.92	87.15	83.98	84.37	87.21	87.37	87.91	88.02	87.38	88.02
21	83.47	83.63	87.11	87.24	84.10	84.51	87.37	87.45	88.04	88.19	88.02	88.24
22	83.40	86.17	87.17	87.65	84.30	84.48	87.34	87.45	88.19	88.34	88.16	88.33
23	86.17	86.64	87.66	87.85	84.19	86.52	87.35	87.45	88.35	88.45	88.20	88.37
24	86.64	86.83	87.85	87.94	86.52	87.00	87.44	87.50	88.39	88.47	88.37	88.45
25	86.82	86.88	87.79	87.87	87.00	87.17	87.39	87.59	88.44	88.50	88.36	88.54
26	86.79	87.13	87.70	87.79	86.84	87.42	87.59	87.86	88.14	88.54	88.54	88.72
27	87.13	87.27	.....	.....	87.42	87.59	87.86	88.00	88.34	88.50	88.70	88.79
28	86.95	87.24	87.46	87.79	87.59	87.79	87.87	87.97	88.50	88.59	88.79	88.87
29	87.16	87.47			87.78	87.84	87.67	88.02	88.30	88.57	88.87	88.99
30	87.47	87.61			87.65	87.80	87.93	88.17	88.45	88.54	88.99	89.08
31	87.61	87.79			87.64	87.75			88.53	88.57	.....	.....

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	89.08	89.13	89.23	89.41	89.40	89.48	90.06	90.09	87.65	87.89	89.48	89.56
2	89.05	89.14	89.19	89.23	89.34	89.50	90.07	90.12	87.44	89.04	89.28	89.57
3	89.05	89.10	89.09	89.20	85.45	89.57	88.80	90.11	88.24	89.38	88.60	89.33
4	85.87	89.05	89.18	89.25	83.93	85.43	89.89	90.04	89.19	89.76	88.29	88.79
5	85.47	88.19	89.21	89.31	83.52	84.52	90.02	90.08	89.46	89.87	88.67	89.13
6	88.19	88.62	88.75	89.31	83.53	86.37	89.97	90.02	88.78	89.78	88.94	89.77
7	88.24	88.77	88.57	88.75	85.37	88.22	90.02	90.09	87.79	89.30	89.78	90.12
8	88.12	88.22	88.44	88.57	88.22	88.71	89.67	90.09	87.79	89.29	90.01	90.33
9	87.82	88.17	86.70	88.44	88.60	88.85	89.89	90.14	87.61	87.85	89.97	90.32
10	87.57	87.83	86.12	88.12	88.30	89.00	90.07	90.14	87.42	87.65	90.30	90.65
11	87.67	87.80	87.72	88.39	86.10	88.30	90.10	90.22	87.39	87.51	90.44	90.81
12	87.67	87.75	88.39	88.86	85.64	86.10	89.19	90.29	86.70	87.39	90.49	90.89
13	87.45	87.67	88.46	88.92	85.45	87.12	88.63	89.64	87.10	87.20	90.57	90.64
14	87.62	87.86	88.44	88.46	87.12	87.98	88.64	89.95	87.15	87.43	90.59	90.84

45--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
15	86.92	88.26	86.02	88.48	87.68	88.22	89.95	90.19	87.48	89.25	90.82	91.11
16	87.40	88.32	85.70	87.43	88.18	88.25	90.19	90.29	89.26	89.65	.....	.....
17	88.34	88.69	87.42	88.22	88.25	88.40	90.16	90.30	89.57	89.85	.....	.....
18	88.64	88.89	87.76	88.52	88.40	89.62	90.26	90.32	89.82	89.95	.....	.....
19	88.89	88.99	88.53	88.94	89.61	89.67	89.39	90.25	89.92	89.95	.....	.....
20	88.91	89.10	88.95	89.21	89.66	89.75	89.49	89.77	89.96	90.06	91.00	91.01
21	89.02	89.10	88.60	89.30	89.70	89.75	89.41	89.64	90.04	90.24	90.92	91.01
22	89.02	89.10	88.56	89.18	89.71	89.79	88.04	89.52	90.24	90.46	90.82	90.92
23	89.07	89.16	88.16	89.26	89.73	89.77	87.74	88.04	90.45	90.52	90.16	90.81
24	89.17	39.27	89.21	89.27	89.75	89.84	87.44	87.75	90.49	90.56	90.54	90.72
25	89.21	89.27	88.03	89.27	89.80	89.87	87.17	87.44	90.21	90.49	.....	.....
26	88.35	89.25	88.46	89.17	89.67	89.87	87.36	89.37	90.30	90.31	.....	.....
27	88.12	88.97	88.46	89.20	89.79	89.90	88.93	89.52	90.44	90.51	89.82	90.32
28	88.04	88.92	88.89	89.14	89.81	89.88	89.14	89.67	90.04	90.55	90.33	90.49
29	87.87	88.20	88.59	89.14	89.86	89.97	89.05	89.66	89.69	90.03	90.49	90.64
30	88.17	89.27	89.14	89.34	89.98	90.05	89.67	89.86	89.53	89.69	90.49	90.69
31	89.27	89.42	89.34	89.42			87.89	89.86			90.70	91.02

46 (*907, p. 22; 937, p. 18; 945, p. 15; 987, p. 31; 1017, p.135). Geol. Survey, U. S. Dept. of Interior. 0.4 mile east of Ensley, 43.5 feet east of center line of Louisville & Nashville Railroad, 196 feet north of center line of graded cross road.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	64.74	65.09	65.52	65.59	65.54	65.58	65.55	65.66	66.14	66.19	66.25	66.27
2	65.09	65.14	65.44	65.52	65.44	65.54	64.50	65.72	66.02	66.14	66.25	66.27
3	65.12	65.22	65.34	65.44	65.41	65.44	65.72	65.79	65.99	66.05	66.24	66.29
4	65.11	65.13	65.32	65.35	65.40	65.44	65.78	65.80	66.06	66.14	66.24	66.32
5	65.12	65.15	65.22	65.32	65.44	65.45	65.81	65.99	66.14	66.20	66.31	66.38
6	64.70	65.09	65.24	65.32	65.39	64.45	65.99	66.07	66.16	66.24	66.35	66.43
7	64.70	64.78	65.27	65.34	65.42	65.53	66.02	66.09	66.08	66.16	66.42	66.45
8	64.78	64.95	65.30	65.35	65.53	65.59	65.95	66.02	.....	.....	66.36	66.45
9	64.94	65.22	65.30	65.32	65.59	65.65	65.89	65.92	.....	.....	66.35	66.40
10	65.23	65.30	65.29	65.32	65.60	65.67	65.90	65.98	.....	.....	66.36	66.45
11	65.30	65.35	65.25	65.31	65.48	65.64	65.91	65.95	.....	.....	66.42	66.48
12	65.19	65.32	65.14	65.26	65.52	65.60	65.91	65.97	.....	.....	66.44	66.50
13	65.00	65.18	65.12	65.24	65.52	65.55	65.90	65.97	.....	.....	66.47	66.50
14	65.03	65.05	65.25	65.37	65.52	65.56	65.89	65.96	.....	.....	66.47	66.53
15	65.03	65.15	65.38	65.40	65.51	65.56	65.84	65.90	.....	.....	66.53	66.59
16	65.15	65.30	65.35	65.40	65.56	65.64	65.82	65.86	66.07	66.12	66.57	66.60
17	65.30	65.35	65.29	64.35	65.64	65.70	65.85	65.89	66.07	66.19	66.55	66.59
18	65.17	65.31	65.30	65.47	65.69	65.70	65.94	66.07	66.19	66.28	66.51	66.56
19	65.13	65.23	65.48	65.54	65.66	65.69	66.07	66.12	66.25	66.30	66.50	66.52
20	65.23	65.30	65.39	65.51	65.50	65.66	66.07	66.10	66.22	66.25	66.52	66.55
21	65.24	65.30	65.26	65.39	65.57	65.67	66.01	66.07	66.20	66.25	66.49	66.52
22	65.11	65.29	65.25	65.49	65.67	65.72	65.81	66.01	66.24	66.32	66.49	66.52
23	65.29	65.32	65.49	65.64	65.62	65.65	65.72	65.80	66.31	66.36	66.49	66.52
24	65.27	65.31	65.62	65.67	65.61	65.64	65.75	65.79	66.29	66.33	66.49	66.54
25	65.16	65.27	65.54	65.63	65.50	65.62	65.75	65.81	66.29	66.32	66.49	66.55
26	65.13	65.27	65.41	65.54	65.47	65.64	65.80	65.99	66.29	66.32	66.52	66.57
27	65.27	65.31	65.37	65.41	65.64	65.72	66.00	66.07	66.29	66.31	66.57	66.62
28	65.20	65.29	65.39	65.56	65.72	65.79	65.92	66.04	66.29	66.34	66.59	66.66
29	65.22	65.37			65.77	65.80	65.92	66.08	66.28	66.32	66.64	66.70
30	65.37	65.42			65.66	65.77	66.09	66.15	66.27	66.30	66.70	66.74
31	65.42	65.54			65.66	65.69			66.25	66.29		

46--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	66.74	66.77	67.24	67.29	67.95	67.80	68.26	68.29	68.69	68.72	69.30	69.34
3	66.74	66.76	67.15	67.24	67.70	67.77	68.27	68.30	68.70	68.75	69.32	69.39
3	66.72	66.73	67.09	67.15	67.72	67.76	68.30	68.34	68.68	68.75	69.12	69.39
4	66.72	66.75	67.11	67.22	67.72	67.75	68.29	68.34	68.75	68.88	69.07	69.16
5	66.73	66.79	67.22	67.30	67.67	67.72	68.27	68.30	68.87	68.92	69.15	69.27
6	66.77	66.84	67.27	67.30	67.67	67.82	68.19	68.26	68.90	68.98	69.28	69.32
7	66.79	66.84	67.25	67.27	67.82	67.89	68.24	68.27	68.95	68.99	69.29	69.38
8	66.79	66.84	67.25	67.29	67.87	67.92	68.24	68.26	68.89	68.95	69.39	69.47
9	66.81	66.85	67.27	67.30	67.89	67.92	68.24	68.31	68.90	68.95	69.41	69.47
10	66.81	66.89	67.27	67.30	67.85	67.90	68.28	68.31	68.93	68.98	69.40	69.57
11	66.78	66.92	67.29	67.30	67.80	67.90	68.30	68.40	68.97	69.00	69.57	69.68
12	66.79	66.89	67.29	67.32	67.82	67.86	68.40	68.44	68.91	68.97	69.60	69.70
13	66.82	68.87	67.32	67.37	67.72	67.86	68.41	68.44	68.89	68.91	69.37	69.60
14	66.82	66.82	67.39	67.40	67.77	67.92	68.37	68.42	68.89	69.09	69.34	69.49
15	66.76	66.84	67.36	67.40	67.92	67.99	68.37	68.48	69.09	69.22	69.48	69.72
16	66.80	66.89	67.32	67.36	67.87	67.96	66.48	68.55	69.17	69.25	69.73	69.87
17	66.89	66.94	67.31	67.35	67.89	67.95	68.51	68.57	69.10	69.15	69.76	69.90
18	66.92	66.98	67.32	67.35	67.95	68.10	68.55	68.60	69.09	69.14	69.42	69.76
19	66.94	67.00	67.35	67.40	68.09	68.14	68.61	68.62	69.00	69.10	.....	.....
20	66.95	66.97	67.39	67.45	68.04	68.15	68.56	68.62	69.00	69.05	69.78	69.87
21	66.95	66.99	67.45	67.53	68.10	68.15	68.54	68.60	68.97	69.09	69.79	69.86
22	66.90	66.97	67.48	67.54	68.13	68.18	68.37	68.54	69.09	69.25	69.75	69.79
23	66.93	66.97	67.46	67.50	68.17	68.24	68.48	68.65	69.20	69.28	69.65	69.75
24	66.96	67.04	67.47	67.52	68.19	68.24	68.64	68.69	69.24	69.31	69.45	69.65
25	67.02	67.07	67.50	67.55	68.21	68.25	68.45	68.65	69.18	69.24	69.39	69.55
26	67.00	67.04	67.54	67.59	68.22	68.26	68.60	68.76	69.22	69.27	69.55	69.74
27	67.03	67.06	67.57	67.64	68.22	68.25	68.76	68.82	69.20	69.27	69.67	69.74
28	67.04	67.07	67.63	67.71	68.18	68.24	68.82	68.86	69.19	69.23	69.57	69.67
29	67.07	67.19	67.71	67.75	68.15	68.20	68.81	68.85	69.20	69.27	69.60	69.65
30	67.19	67.27	67.75	67.79	68.20	68.26	68.74	68.81	69.25	69.30	69.48	69.70
31	67.27	67.31	67.77	67.80			68.68	68.74			69.57	69.82

60. Geol. Survey, U. S. Dept. of Interior. In Pensacola, at foot of H Street. Used observation well, diameter 4 inches, depth 178 feet. Measuring point, top of 1-inch hole in base of recorder shelter, 9.34 feet above mean sea level and 2.40 feet above land-surface datum.

Water level, in feet below land-surface datum, 1940-45

Date	Water level	Date	Water level	Date	Water level
May 3, 1940	13.79	Feb. 27, 1941	10.64	July 24, 1941	9.81
10	12.02	Mar. 6	10.87	Aug. 7	9.84
23	11.19	13	10.97	14	9.99
31	10.95	20	11.07	19	10.04
June 7	10.97	25	11.07	21	11.55
14	11.08	30	11.11	28	11.12
20	11.18	Apr. 3	11.10	Sept. 4	10.77
27	11.25	10	11.09	11	10.54
July 2	11.26	17	11.11	18	10.37
9	10.85	24	11.13	25	10.27
16	10.25	May 1	10.97	Oct. 2	10.24
22	9.94	8	10.77	9	10.20
30	10.03	15	10.70	16	10.20
Oct. 10	12.59	22	10.69	23	6.58
Jan. 4, 1941	10.62	29	10.68	30	7.00
11	10.61	June 5	10.67	Nov. 6	7.36
17	10.56	12	7.85	13	7.66
24	10.62	19	9.30	20	7.93
30	10.69	26	9.84	27	8.17
Feb. 6	10.75	July 3	10.09	Dec. 4	8.35
13	10.40	10	9.77	11	8.60
20	10.48	17	9.83	18	8.75

60--Continued.

Water level, in feet below land-surface datum, 1940-45

Date	Water level	Date	Water level	Date	Water level
Dec. 24, 1941	8.98	Mar. 24, 1943	9.85	June 14, 1944	9.55
Jan. 6, 1942	9.08	31	9.70	21	9.70
14	9.20	Apr. 7	9.80	28	9.84
21	9.28	14	8.80	July 5	9.95
28	9.38	21	9.54	12	10.04
Feb. 4	9.43	28	9.75	19	10.13
11	9.48	May 5	9.95	26	10.20
18	9.49	12	10.07	Aug. 2	10.30
25	9.05	19	10.15	9	10.38
Mar. 4	9.05	26	10.18	16	10.41
11	8.73	June 2	10.18	23	10.42
18	8.72	9	10.22	30	10.44
25	8.75	16	10.25	Sept. 5	10.45
Apr. 1	8.75	23	10.28	12	10.43
8	8.78	30	10.30	19	10.34
15	8.78	July 7	10.47	27	10.35
22	8.80	14	10.50	Oct. 4	10.38
29	8.83	21	10.57	11	10.40
May 6	8.88	28	10.60	18	10.37
13	8.92	Aug. 4	10.77	25	10.47
20	8.92	11	10.84	Nov. 1	10.55
27	8.93	18	10.95	8	10.90
June 3	8.95	25	10.85	15	10.75
10	8.95	Sept. 1	11.00	22	10.85
17	9.01	7	10.90	29	10.63
24	9.05	14	10.65	Dec. 6	10.18
July 1	8.98	22	10.55	13	10.42
8	8.97	29	10.28	20	10.54
15	9.01	Oct. 6	11.30	27	10.37
22	9.05	13	10.80	Jan. 3, 1945	10.38
29	9.03	20	10.81	10	9.72
Aug. 5	9.04	27	11.05	17	9.64
12	9.05	Nov. 3	11.08	24	9.68
19	9.05	10	11.38	31	9.10
26	9.03	17	10.75	Feb. 7	8.69
Sept. 2	9.04	24	10.84	14	8.65
8	8.60	Dec. 1	10.78	21	8.71
16	8.62	8	10.81	28	8.82
23	8.64	15	10.87	Mar. 7	8.90
30	8.68	22	10.93	14	9.00
Oct. 8	8.60	29	10.23	21	9.48
14	8.65	Jan. 5, 1944	10.47	28	9.13
21	8.65	12	10.60	Apr. 4	9.18
28	8.77	19	10.63	11	9.48
Nov. 4	8.50	26	10.68	18	9.57
11	8.57	Feb. 2	10.78	25	9.64
18	8.16	9	10.70	May 2	9.70
25	8.26	16	10.72	9	9.77
Dec. 2	8.38	23	10.73	16	9.80
9	8.54	Mar. 1	10.73	23	9.82
16	8.92	8	10.43	30	9.92
23	9.53	15	10.33	June 6	10.00
30	10.00	22	10.72	13	10.04
Jan. 6, 1943	10.22	29	10.05	20	10.10
13	9.86	Apr. 4	10.37	27	9.65
20	10.57	12	9.70	July 4	10.22
27	9.65	19	10.89	11	9.94
Feb. 3	9.98	26	8.13	18	9.55
10	9.55	May 3	8.58	25	9.61
17	10.35	10	8.83	Aug. 1	9.59
24	9.97	17	8.99	8	9.50
Mar. 3	10.58	24	9.11	15	9.47
10	9.80	31	9.25	22	9.33
17	9.44	June 7	9.39	29	10.91

60--Continued.

Water level, in feet below land-surface datum, 1940-45

Date	Water level	Date	Water level	Date	Water level
Sept. 5, 1945	11.41	Oct. 17, 1945	12.14	Nov. 28, 1945	13.16
11	11.38	24	12.30	Dec. 5	13.03
19	11.64	31	12.30	12	13.54
26	11.60	Nov. 7	12.31	19	13.00
Oct. 3	11.34	14	12.30	26	12.53
10	11.42	21	12.90		

60-A. Geol. Survey, U. S. Dept. of Interior. In Pensacola, at foot of H Street. Used observation well, diameter 4 inches, depth 18 feet. Measuring point, top of coupling on 4-inch casing, 9.20 feet above mean sea level and 2.00 feet above land-surface datum.

Water level, in feet below land-surface datum, 1940-45

May 10, 1940	6.05	Dec. 11, 1941	6.12	Dec. 16, 1942	6.40
16	6.05	18	6.20	23	6.03
23	6.11	Jan. 8, 1942	5.65	30	5.87
June 25	6.02	14	5.15	Jan. 6, 1943	6.15
July 2	6.05	21	6.21	13	6.20
9	3.97	28	6.20	20	6.34
16	4.74	Feb. 4	6.31	27	5.95
22	5.00	11	6.11	Feb. 3	6.04
Jan. 4, 1941	4.38	18	4.81	10	5.90
11	5.21	25	5.10	17	6.39
17	5.33	Mar. 4	5.39	24	6.10
24	5.58	11	5.51	Mar. 3	6.26
Feb. 19	5.58	18	5.47	10	5.42
20	5.89	25	5.57	17	5.55
27	5.91	Apr. 1	5.71	24	5.79
Mar. 5	6.03	8	5.41	31	5.63
13	5.79	15	5.43	Apr. 7	5.59
30	5.76	22	5.52	14	5.78
Apr. 3	5.10	29	5.64	21	5.82
10	5.24	May 6	5.81	28	5.24
17	5.64	13	5.80	May 5	5.92
24	5.62	20	5.42	12	5.60
May 1	5.78	27	5.72	19	5.67
8	5.59	June 3	5.34	26	5.75
15	6.14	10	5.34	June 2	5.22
22	6.17	17	5.52	9	6.02
29	6.04	24	4.82	16	5.98
June 5	6.30	July 2	5.18	23	5.90
12	6.13	8	5.51	30	5.95
19	6.09	15	5.54	July 7	6.20
26	6.00	22	5.65	14	6.03
July 3	5.97	29	5.46	21	6.13
17	5.66	Aug. 5	5.41	28	6.00
24	5.78	12	5.68	Aug. 4	6.20
31	5.83	19	5.15	11	5.97
Aug. 7	5.94	26	5.05	18	6.03
14	6.16	Sept. 2	5.16	25	6.01
28	6.03	8	5.13	Sept. 1	5.95
Sept. 4	6.34	16	5.36	7	5.83
11	5.70	23	5.59	14	5.70
18	5.45	30	5.32	22	5.53
25	6.38	Oct. 7	5.27	29	5.41
Oct. 9	5.88	14	5.59	Oct. 6	5.55
16	5.90	21	5.58	13	5.59
23	6.06	28	5.76	20	5.84
30	6.10	Nov. 4	5.80	27	6.21
Nov. 6	5.94	11	5.78	Nov. 3	6.19
13	6.31	18	6.00	10	6.11
20	6.19	25	6.10	17	6.10
27	6.42	Dec. 2	6.06	24	6.24
Dec. 4	6.25	9	6.24	Dec. 1	6.34

60-A--Continued.

Water level, in feet below land-surface datum, 1940-45

Date	Water level	Date	Water level	Date	Water level
Dec. 8, 1943	6.22	Aug. 16, 1944	4.31	Apr. 25, 1945	4.70
15	6.10	23	4.33	May 2	5.18
22	6.38	30	4.95	9	5.50
29	5.89	Sept. 5	5.38	16	4.40
Jan. 5, 1944	6.11	12	5.03	23	4.86
12	6.19	19	4.57	30	5.39
19	5.80	27	4.35	June 6	5.70
26	5.81	Oct. 4	4.88	13	5.58
Feb. 2	6.14	11	5.25	20	5.67
9	5.83	18	5.60	27	5.65
16	5.84	25	5.67	July 4	5.00
23	6.05	Nov. 1	5.71	11	5.86
Mar. 1	6.14	8	5.60	18	5.43
8	5.92	15	5.71	25	5.48
15	5.86	22	6.07	Aug. 1	5.72
22	5.45	29	5.05	8	5.44
29	4.55	Dec. 6	5.18	15	5.18
Apr. 5	5.00	13	5.74	22	5.00
12	4.87	20	5.92	29	5.06
19	4.36	27	5.95	Sept. 5	5.09
26	3.04	Jan. 3, 1945	6.02	11	5.35
May 3	4.44	10	5.33	19	5.32
10	4.97	17	5.43	26	5.23
17	5.27	24	5.27	Oct. 3	4.93
24	5.30	31	5.64	10	5.33
31	5.58	Feb. 7	5.70	17	5.50
June 7	5.40	14	5.61	24	5.43
13	5.53	21	5.57	31	5.50
21	5.55	28	5.60	Nov. 7	5.70
28	5.50	Mar. 7	5.69	14	5.60
July 5	4.71	14	5.86	21	5.65
12	5.10	21	5.91	28	6.00
19	5.14	28	5.41	Dec. 5	6.19
26	5.44	Apr. 4	5.21	12	6.30
Aug. 2	5.45	11	5.52	19	5.89
9	4.85	18	5.41	26	5.33

62 (*945, p. 16; 987, p. 32; 1017, p.137). Geol. Survey, U. S. Dept. of Interior. In Petterson Addition, Pensacola, on south side of Corry Field switching lead of St. Louis-San Francisco Railway, about 1,000 feet east of railroad bridge across Bayou Chico, on west side of Twelfth Avenue extended.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	12.92	13.07	13.42	13.46	.....	.....	14.07	14.26	14.37	14.53	14.40	14.62
2	12.98	13.25	13.46	13.54	14.52	14.52	13.92	14.07	14.53	14.70	14.62	14.65
3	13.25	13.40	13.28	13.54	14.42	14.51	13.92	13.93	14.57	14.70	14.45	14.63
4	13.40	13.48	12.99	13.28	14.25	14.42	13.93	14.02	14.44	14.57	14.33	14.45
5	13.48	13.65	12.89	12.99	14.21	14.28	14.02	14.12	14.28	14.44	14.35	14.43
6	13.48	13.65	12.90	13.12	14.28	14.33	14.12	14.23	14.09	14.28	14.44	14.47
7	13.08	13.48	13.12	13.23	14.34	14.53	14.20	14.23	13.98	14.08	14.47	14.52
8	13.05	13.08	13.22	13.27	14.53	14.70	14.15	14.21	13.99	14.12	14.53	14.59
9	13.08	13.28	13.27	13.39	14.71	14.87	14.05	14.15	14.10	14.12	14.49	14.59
10	13.28	13.45	13.39	13.43	14.87	14.90	14.05	14.15	14.10	14.13	14.33	14.49
11	13.45	13.48	13.35	13.42	14.80	14.86	14.15	14.42	14.13	14.15	14.20	14.33
12	13.47	13.50	13.22	13.34	14.77	14.80	14.42	14.47	14.10	14.15	14.20	14.23
13	13.50	13.53	13.20	13.23	14.77	14.81	14.47	14.48	13.86	14.10	14.23	14.28
14	13.33	13.53	13.23	13.46	14.82	14.85	14.47	14.53	13.73	13.86	14.28	14.42
15	13.15	13.32	13.47	13.65	14.79	14.85	14.54	14.58	13.75	13.80	14.42	14.50

62--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
16	13.18	13.35	13.65	13.83	14.74	14.79	14.54	14.58	13.81	13.86	14.50	14.59
17	13.35	13.60	13.71	13.83	14.75	14.79	14.54	14.59	13.86	13.95	14.60	14.60
18	13.58	13.60	13.63	13.71	14.79	14.82	14.60	14.70	13.95	13.97	14.59	14.66
19	13.52	13.59	13.65	13.67	14.78	14.80	14.70	14.83	13.88	13.96	14.67	14.70
20	13.38	13.52	13.67	13.70	14.76	14.78	14.67	14.79	13.80	13.88	14.67	14.70
21	13.22	13.38	13.70	13.85	14.76	14.70	14.68	14.75	13.80	13.85	14.30	14.67
22	13.12	13.22	13.85	14.03	14.79	14.81	14.71	14.75	13.85	14.03	14.07	14.30
23	13.13	13.23	14.03	14.10	14.71	14.78	14.58	14.71	.....	.....	13.91	14.07
24	13.23	13.33	14.10	14.16	14.58	14.71	14.60	14.67	14.13	14.23	13.58	13.91
25	13.33	13.37	14.16	14.24	14.41	14.58	14.65	14.67	14.23	14.25	13.47	13.58
26	13.37	13.44	14.24	14.28	14.28	14.40	14.63	14.70	14.22	14.24	13.55	13.82
27	13.44	13.55	14.27	14.32	14.30	14.42	14.69	14.70	14.12	14.22	13.83	14.28
28	13.38	13.55	.....	.....	14.42	14.47	14.70	14.75	14.03	14.11	14.29	14.67
29	13.23	13.38			14.44	14.47	14.54	14.75	14.11	14.30	14.68	14.95
30	13.23	13.32			14.35	14.44	14.35	14.54	14.30	14.38	14.95	15.13
31	13.32	13.42			14.26	14.35			14.39	14.45		

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	15.13	15.18	14.69	14.75	14.60	14.68	.....	.....	14.99	15.05	15.42	15.43
2	15.18	15.21	14.73	14.75	14.47	14.60	.....	.....	15.05	15.07	15.40	15.43
3	15.21	15.28	14.73	14.80	14.30	14.47	.....	.....	15.07	15.08	15.38	15.40
4	15.28	15.29	14.80	14.81	14.27	14.30	14.34	14.38	15.05	15.07	15.37	15.42
5	15.28	15.29	14.75	14.81	14.35	14.43	14.38	14.43	15.05	15.26	15.42	15.49
6	15.20	15.28	14.70	14.75	14.40	14.43	14.43	14.44	15.26	15.51	15.49	15.57
7	15.15	15.20	14.72	14.78	14.40	14.42	14.40	14.43	15.47	15.61	15.57	15.58
8	15.08	15.15	14.78	14.81	14.42	14.45	14.39	14.40	15.61	15.73	15.57	15.58
9	15.03	15.08	14.82	14.84	14.34	14.45	14.40	14.46	15.55	15.68	15.43	15.56
10	15.05	15.09	14.79	14.84	14.28	14.34	14.47	14.54	15.43	15.55	15.33	15.43
11	15.09	15.13	14.75	14.80	14.29	14.34	14.54	14.57	15.27	15.42	15.34	15.40
12	15.14	15.16	14.70	14.75	14.34	14.35	14.55	14.57	15.18	15.27	15.41	15.47
13	15.08	15.15	14.68	14.69	14.35	14.40	14.55	14.55	15.18	15.23	15.46	15.47
14	15.10	15.13	14.68	14.71	14.41	14.50	14.52	14.55	15.24	15.32	15.46	15.48
15	14.93	15.12	14.67	14.70	14.38	14.49	14.48	14.52	15.32	15.45	15.42	15.47
16	14.60	14.93	14.55	14.67	14.16	14.38	14.50	14.60	15.45	15.48	15.38	15.42
17	14.45	14.61	14.45	14.55	14.05	14.15	14.60	14.72	15.45	15.48	15.32	15.38
18	14.44	14.47	14.48	14.51	14.05	14.12	14.73	14.79	15.38	15.45	15.30	15.30
19	14.48	14.53	14.45	14.50	.....	.....	14.79	14.82	15.25	15.37	15.30	15.35
20	14.53	14.54	14.40	14.45	14.27	14.37	14.80	14.82	15.24	15.25	15.36	15.43
21	14.50	14.53	14.43	14.48	14.37	14.43	14.75	14.80	15.24	15.26	15.43	15.48
22	14.31	14.50	14.47	14.48	14.43	14.45	14.73	14.75	15.24	15.28	15.47	15.48
23	14.17	14.30	14.48	14.50	14.37	14.44	14.73	14.80	15.26	15.28	15.40	15.46
24	14.23	14.40	14.50	14.55	14.30	14.37	14.80	14.84	15.28	15.29	15.30	15.40
25	14.40	14.53	14.54	14.55	14.30	14.32	14.84	14.88	15.28	15.28	15.02	15.29
26	14.54	14.60	14.55	14.56	14.32	14.34	14.88	14.93	15.25	15.28	.....	.....
27	14.58	14.61	14.43	14.54	14.34	14.41	14.93	14.99	15.25	15.27	14.93	14.97
28	14.61	14.63	14.40	14.43	14.41	14.46	14.94	14.99	15.27	15.32	14.97	15.02
29	14.59	14.63	14.42	14.46	14.45	14.47	14.90	14.94	15.32	15.37	15.02	15.03
30	14.55	14.59	14.46	14.59	.....	.....	14.90	14.96	15.37	15.41	14.98	15.03
31	14.57	14.69	14.59	14.68			14.97	14.99			14.96	14.98

62-A (*945, p. 17; 987, p. 33; 1017, p.138). Geol. Survey, U. S. Dept. of Interior. In Petterson Addition, Pensacola, south side of Corry Field switching lead of St. Louis-San Francisco Railway, about 1,000 feet east of railroad bridge across Bayou Chico, on west side of Twelfth Avenue extended.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	11.94	Apr. 4	12.25	July 4	12.10	Oct. 3	11.66
10	11.79	11	12.14	11	12.27	10	11.63
17	11.73	18	12.14	18	12.14	17	11.61
24	11.78	25	12.11	25	12.10	24	11.61
31	11.66	May 2	11.90	Aug. 1	12.09	31	11.72
Feb. 7	11.83	9	11.86	8	12.11	Nov. 7	11.69
14	11.71	16	11.71	15	12.04	14	11.96
21	12.05	23	11.68	22	12.03	21	12.02
28	12.01	30	11.83	29	11.98	28	12.01
Mar. 7	12.16	June 6	12.06	Sept. 5	12.04	Dec. 5	12.09
14	12.23	13	12.06	11	12.06	12	12.08
21	12.22	20	12.04	19	11.82	19	12.25
28	12.24	27	12.10	26	11.71	26	13.35
31	12.30						

Hendry County

G138 (*987, p. 34; 1017, p.138). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 12 (?), T. 48 S., R. 33 E. No measurements made in 1945.

G299 (*987, p. 35; 1012, p.139). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 22, T. 44 S., R. 32 E.

Water level, in feet below land-surface datum, 1945

Jan. 4	3.07	Apr. 5	4.02	July 7	2.24	Oct. 2	0.82
15	2.77	May 1	3.60	Aug. 11	1.75	Nov. 7	1.76
Feb. 3	3.13	June 11	3.98	Sept. 6	.62	Dec. 11	2.24
Mar. 7	3.52						

Highlands County

1 (*773-C, pp. 168 & 179; 987, p. 35; 1017, p.139). Young Men's Christian Association, Miami. At Brighton, about 17 miles west of Okeechobee, on southeast side of State Highway 8, in pumphouse. No measurements made in 1945.

Lee County

8 (*1017, p.139). R. W. Bryan. NW¼NE¼ sec. 18, T. 44 S., R. 25 E. Well plugged, measurements discontinued.

14 (*1017, p.139). J. M. Howell. SE¼SE¼ sec. 18, T. 44 S., R. 25 E. Water levels, in feet below land-surface datum, 1945: Feb. 8, 4.00; Mar. 13, 4.46; Apr. 4, 4.72.

17 (*1017, p.140). Otis Schaffer. SW¼SE¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	3.99	May 8	5.35	July 17	0.48	Sept.19	0.37
Mar. 13	4.60	June 14	4.25	Aug. 14	1.54	Oct. 22	2.21
Apr. 4	5.00						

21 (*1017, p.140). D. Velasco. SW¼SW¼ sec. 18, T. 44 S., R. 25 E. Measuring point lowered on May 7, 1945, to 1.5 feet above land-surface datum and 17.21 feet above mean sea level.

21--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	8.57	May 8	9.59	Aug. 14	6.07
Mar. 13	8.90	June 14	9.62	Sept.19	5.64

23 (*1017, p.140). Willie Hollins. SW¼SW¼ sec. 18, T. 44 S., R. 25 E. Well removed, measurements discontinued.

30 (*1017, p.140). Wash Huggins. SW¼SW¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	6.07	May 8	7.63	July 17	3.25	Sept.19	1.87
Mar. 13	6.39	June 14	7.41	Aug. 14	4.09	Oct. 22	3.46
Apr. 4	7.04						

31 (*1017, p.141). Lillian Thomas. SW¼SW¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	4.95	Apr. 4	5.94	June 14	6.88	Aug. 14	2.95
Mar. 13	5.18	May 8	6.79	July 17	2.05	Oct. 22	2.74

38 (*1017, p.141). Alice Mitchell. NW¼NW¼ sec. 19, T. 44 S., R. 25 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 3.40.

39 (*1017, p.141). Sherman Smith. NW¼NW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	8.43	May 8	9.15	July 17	6.00	Sept.19	4.17
Mar. 13	8.68	June 14	8.35	Aug. 14	6.40	Oct. 22	5.53
Apr. 4	8.84						

40 (*1017, p.141). C. D. Hope. NE¼NW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	5.52	May 8	6.34	July 17	3.13	Sept.19	2.96
Mar. 13	5.79	June 14	6.57	Aug. 14	4.28	Oct. 22	4.39
Apr. 4	6.02						

41 (*1017, p.142). City of Fort Myers. NE¼NW¼ sec. 19, T. 44 S., R. 25 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 1.55.

42 (*1017, p.142). Florence Sherman. NW¼NW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	12.25	May 8	12.90	July 17	10.62	Sept.19	6.57
Mar. 13	12.52	June 14	13.09	Aug. 15	9.06	Oct. 22	7.27
Apr. 4	12.69						

43 (*1017, p.142). T. J. Shirley. SE¼NE¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Mar. 13	2.97	May 8	3.09	July 17	0.53	Sept.19	0.50
Apr. 4	3.20	June 14	3.35	Aug. 15	.64	Oct. 22	2.22

61 (*1017, p.142). W. Bigelow. SW¼NE¼ sec. 24, T. 44 S., R. 24 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 1.55.

62 (*1017, p.143). J. B. Hicks. NW¼SE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	7.45	May 8	8.20	July 17	4.42	Sept.19	2.10
Mar. 13	7.75	June 14	8.51	Aug. 15	3.68	Oct. 23	3.99
Apr. 4	7.95						

64 (*1017, p.143). Dr. Burt Reed. SW¼SE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	4.48	May 8	5.36	July 17	1.12	Sept.19	2.20
Mar. 13	4.87	June 14	5.31	Aug. 15	1.73	Oct. 23	2.58
Apr. 4	5.10						

66 (*1017, p.143). Alvin Kitchens. NW¼SW¼ sec. 24, T. 44 S., R. 24 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 0.51.

67 (*1017, p.143). C. T. Albritton. SW¼NW¼ sec. 24, T. 44 S., R. 24 E. Water levels, in feet below land-surface datum, 1945: Feb. 8, 6.39; Mar. 13, 6.79; Apr. 4, 7.00.

68 (*1017, p.144). Mrs. Stavely. NE¼SW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	6.54	May 8	7.53	July 17	4.22	Sept.19	2.15
Mar. 13	6.95	June 14	7.78	Aug. 15	3.88	Oct. 23	2.98
Apr. 4	7.15						

72 (*1017, p.144). Jack Collier. NW¼NW¼ sec. 24, T. 44 S., R. 24 E. Water levels, in feet below land-surface datum, 1945: Feb. 8, 6.96; Mar. 13, 7.35; Apr. 4, 7.61; May 8, 7.97.

74 (*1017, p.144). Mr. Craddock. NW¼NW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	7.86	May 8	8.85	July 17	6.86	Sept.19	4.10
Mar. 13	8.22	June 14	9.20	Aug. 15	5.70	Oct. 23	4.49
Apr. 4	8.44						

75 (*1017, p.144). M. C. Jones. SW¼NW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	6.14	May 8	7.22	July 17	4.87	Sept.19	3.48
Mar. 13	7.02	June 14	7.57	Aug. 15	4.91	Oct. 23	4.31
Apr. 4	6.81						

76 (*1017, p.145). R. H. Owens. SW¼NE¼ sec. 24, T. 44 S., R. 24 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 3.80.

80 (*1017, p.145). Ludie Stevens. SE¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	15.22	May 8	15.60	July 17	13.61	Sept.19	9.87
Mar. 13	15.39	June 14	15.58	Aug. 15	11.74	Oct. 22	10.59
Apr. 4	15.59						

82 (*1017, p.145). City of Fort Myers. NE¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	15.34	May 8	16.53	July 17	15.67	Sept.19	11.75
Mar. 13	16.57	June 14	16.67	Aug. 15	14.77	Oct. 23	10.51
Apr. 4	16.47						

86 (*1017, p.145). Eloise Baker. NE¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	13.94	May 8	14.55	July 17	12.38	Sept.19	8.43
Mar. 13	14.17	June 14	14.70	Aug. 15	10.78	Oct. 22	8.70
Apr. 4	14.37						

87 (*1017, p.146). Elizabeth Patterson. NE¼NE¼ sec. 24, T. 44 S., R. 24 E. No measurements made in 1945.

88 (*1017, p.146). E. P. Raymond. NE¼NW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	10.62	May 8	11.49	July 17	9.35	Sept.19	6.05
Mar. 13	11.13	June 14	11.45	Aug. 14	8.27	Oct. 22	6.55
Apr. 4	11.36						

115 (*1017, p.146). U. S. Army. SE¼NW¼ sec. 12, T. 45 S., R. 24 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	3.41	3.60	July 2-8	1.39	2.34
8-14	2.73	3.60	9-15	1.34	2.10
15-21	2.73	3.00	16-22	a .03	1.35
22-28	3.00	3.14	23-29	.19	....
Jan. 29-Feb. 4	3.14	3.28	July 30-Aug. 5	....	2.02
Feb. 5-11	3.28	3.35	Aug. 6-12	1.94	2.34
12-18	3.35	3.40	20-26	a .14	2.18
19-25	3.40	....	Aug. 27-Sept. 2	a .06	1.40
Feb. 26-Mar. 4	....	3.59	Sept.17-23	....	2.03
Mar. 5-11	3.59	3.70	24-30	1.98	2.50
12-18	3.70	3.80	Oct. 1-7	2.04	2.68
19-25	3.78	3.91	8-14	.78	2.30
Mar. 26-Apr. 1	3.91	4.03	15-21	....	2.29
Apr. 2-8	4.03	4.16	22-28	1.18	2.29
9-15	4.16	4.20	Oct. 29-Nov. 4	2.13	2.52
16-22	4.20	4.34	Nov. 5-11	2.52	2.82
23-29	4.30	....	12-18	2.82	3.00
Apr. 30-May 6	4.24	4.48	19-25	3.00	3.18
May 7-13	4.24	4.47	Nov. 26-Dec. 2	3.18	3.28
14-20	4.41	4.47	Dec. 3-9	2.93	3.30
21-27	4.44	4.60	10-16	3.03	3.20
May 28-June 3	4.59	4.71	17-23	3.13	3.31
June 4-10	4.69	4.81	24-30	3.31	3.35
June 25-July 1	a .08	....			

a Above land-surface datum.

122 (*1017, p.147). Owner unknown. NW¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	10.35	May 8	11.23	July 17	8.87	Sept.19	5.75
Mar. 13	10.76	June 14	11.23	Aug. 15	7.95	Oct. 23	6.01
Apr. 4	11.02						

143 (*1017, p.147). City of Fort Myers. NW¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	8.60	Apr. 4	9.23	June 14	9.47
Mar. 13	8.98	May 8	9.47	July 17	7.08

145 (*1017, p.147). Atlantic Coast Line Railroad Co. NW¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	7.65	May 8	8.42	July 17	6.17	Sept.19	2.97
Mar. 13	8.07	June 14	8.41	Aug. 14	5.16	Oct. 22	3.14

149 (*1017, p.147). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 20, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.31	Apr. 4	3.41	June 14	4.30
Mar. 13	2.98	May 8	3.93		

150 (*1017, p.148). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 20, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.10	Apr. 4	2.82	June 14	3.55	Oct. 22	0.98
Mar. 13	2.32	May 8	3.28	July 17	a .53		

a Above land-surface datum.

151 (*1017, p.148). Thomas Jones. SE¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	11.27	May 8	11.87	July 17	8.75	Sept.19	4.56
Mar. 13	11.54	June 14	13.06	Aug. 15	7.47	Oct. 22	6.66
Apr. 4	11.70						

152 (*1017, p.148). Galloway. SE¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	14.11	May 8	14.53	July 17	12.09	Sept.19	8.41
Mar. 13	14.40	June 14	14.56	Aug. 15	10.30	Oct. 22	10.70
Apr. 4	14.59						

154 (*1017, p.148). Owner unknown. SE¼NE¼ sec. 25, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.74	May 8	4.24	July 17	0.36	Sept.19	1.07
Mar. 13	3.35	June 14	4.36	Aug. 15	.66	Oct. 23	1.46
Apr. 4	3.74						

157 (*1017, p.148). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	1.17	May 8	2.47	July 17 a	0.43	Sept.19 a	0.20
Mar. 13	2.00	June 14	3.32	Aug. 15 a	.02	Oct. 22	1.15
Apr. 4	2.57						

a Above land-surface datum.

158 (*1017, p.149). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	6.36	May 8	7.20	July 17	3.03	Sept.19	1.07
Mar. 13	6.67	June 14	7.42	Aug. 15	3.17	Oct. 22	3.06
Apr. 4	6.90						

159 (*1017, p.149). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	3.54	Apr. 4	4.26	June 14	4.95
Mar. 13	3.95	May 8	4.58	July 17	.49

160 (*1017, p.149). Geol. Survey, U. S. Dept. of Interior. SW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	3.54	Apr. 4	4.54	June 14	5.30	Sept.19	0.24
Mar. 13	4.14	May 8	5.02	July 17	.28	Oct. 22	1.94

161 (*1017, p.149). Arthur Tiner. SW¼SW¼ sec. 17, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	3.73	May 8	4.53	July 17	0.89	Sept.19	0.85
Mar. 13	4.33	June 14	4.77	Aug. 14	1.61	Oct. 22	2.64
Apr. 4	4.64						

172 (*1017, p.149). Joe Lee. NE¼SE¼ sec. 13, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	7.17	May 8	8.31	July 17	4.18	Sept.19	3.24
Mar. 13	7.61	June 14	8.53	Aug. 14	4.81	Oct. 22	4.36
Apr. 4	7.94						

175 (*1017, p.150). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 19, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	1.89	Apr. 4	2.67	June 14	3.65
Mar. 13	2.30	May 8	3.26		

177 (*1017, p.150). D. Duke. NE¼NE¼ sec. 30, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	1.65	May 8	3.21	July 17	0.09	Sept.19	a 0.18
Mar. 13	2.33	June 14	3.57	Aug. 15	.25	Oct. 22	.48
Apr. 4	2.83						

a Above land-surface datum.

178 (*1017, p.150). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 20, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	1.48	May 8	3.12	July 17 a	0.96	Sept.19 a	0.90
Mar. 13	2.29	June 14	3.54	Aug. 15 a	.70	Oct. 22 a	.20
Apr. 4	2.77						

a Above land-surface datum.

180 (*1017, p.150). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 20, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 8	1.61	Apr. 4	2.66	June 14	3.46
Mar. 13	2.25	May 8	3.14		

181 (*1017, p.150). City of Fort Myers. SW¼NW¼ sec. 19, T. 44 S., R. 25 E. Water level, in feet below land-surface datum, 1945: Feb. 8, 3.97.

183 (*1017, p.151). Jack Harvey. SW¼NW¼ sec. 17, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	2.28	May 8	3.61	July 17	0.23	Sept.19	0.47
Mar. 13	2.82	June 14	4.11	Aug. 14	1.29	Oct. 22	2.18
Apr. 4	3.21						

195 (*1017, p.151). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 17, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	3.01	Apr. 4	3.20	June 14	4.17	Aug. 14	0.58
Mar. 13	3.08	May 8	3.31	July 17	.10	Oct. 22	1.65

196 (*1017, p.151). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 17, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.33	Apr. 4	2.44	June 14	3.70	Aug. 14	0.90
Mar. 13	2.35	May 8	3.95	July 17	.15	Oct. 22	1.71

200 (*1017, p.151). C. W. Sherouse. SW¼SW¼ sec. 8, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	3.86	May 8	4.68	July 17	0.76	Sept.19	0.91
Mar. 13	4.40	June 14	5.03	Aug. 14	1.54	Oct. 22	2.65
Apr. 4	4.53						

202 (*1017, p.151). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 26, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.63	May 8	3.61	July 17	0.70	Sept.19	0.85
Mar. 13	3.24	June 14	3.56	Aug. 15	.80	Oct. 23	.73
Apr. 14	3.52						

208 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 30, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.77	Apr. 4	4.01	June 14	5.05	Sept.19	0.52
Mar. 13	3.51	May 8	4.61	July 17	.40	Oct. 22	2.00

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216 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 16, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	3.00	May 8	4.17	July 17	0.40	Sept.19	0.45
Mar. 13	3.53	June 14	4.28	Aug. 14	1.21	Oct. 22	2.01
Apr. 4	3.88						

217 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	5.45	May 8	6.55	July 17	2.02	Sept.19	0.52
Mar. 13	5.85	June 14	6.83	Aug. 14	2.78	Oct. 22	2.40
Apr. 4	6.17						

218 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	9.94	May 8	10.60	July 17	8.05	Sept.19	5.28
Mar. 13	10.21	June 14	10.80	Aug. 15	7.30	Oct. 23	6.66
Apr. 4	10.40						

219 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	3.90	May 8	5.61	July 17	0.78	Sept.19	0.70
Mar. 13	4.36	June 14	5.50	Aug. 14	1.05	Oct. 22	1.81
Apr. 4	4.90						

220 (*1017, p.152). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 18, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	5.94	May 8	7.27	July 17	2.26	Sept.19	0.89
Mar. 13	6.40	June 14	7.68	Aug. 14	2.41	Oct. 22	2.45
Apr. 4	6.80						

222 (*1017, p.153). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 23, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	5.97	Apr. 4	6.53	July 17	3.30	Sept.19	1.29
Mar. 13	6.36	May 8	6.96	Aug. 15	3.27		

223 (*1017, p.153). Geol. Survey, U. S. Dept. of Interior. SE¼NW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	9.10	May 8	9.90	July 17	7.14	Sept.19	4.30
Mar. 13	9.40	June 14	10.17	Aug. 15	6.40	Oct. 23	5.54
Apr. 4	9.62						

224 (*1017, p.153). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	10.74	May 8	11.25	July 17	8.69	Sept.19	5.12
Mar. 13	11.00	June 14	11.32	Aug. 15	7.41	Oct. 23	6.78
Apr. 4	11.19						

225 (*1017, p.153). J. S. Glick. NW¼SE¼ sec. 23, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 8	5.83	May 8	6.83	July 17	3.77	Sept.19	1.86
Mar. 13	6.23	June 14	7.18	Aug. 15	3.54	Oct. 23	2.55
Apr. 4	6.54						

226 (*1017, p.153). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 17, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	1.51	May 8	2.03	July 17	0.87	Sept.19	0.67
Mar. 13	1.84	June 14	3.27	Aug. 14	1.01	Oct. 22	1.72
Apr. 4	2.30						

228 (*1017, p.153). Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 18, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.39	May 8	4.36	July 17	0.85	Sept.19	0.97
Mar. 13	3.13	June 14	4.63	Aug. 14	1.35	Oct. 22	2.51
Apr. 4	3.74						

229 (*1017, p.154). Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 16, T. 44 S., R. 25 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	2.59	Apr. 4	3.58	June 14	4.31	Aug. 15	0.86
Mar. 13	3.18	May 8	3.73	July 17	.00	Oct. 22	1.52

231 (*1017, p.154). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 24, T. 44 S., R. 24 E.

Water level, in feet below land-surface datum, 1945

Feb. 8	4.65	May 8	5.47	July 17	0.97	Sept.19	0.88
Mar. 13	5.00	June 14	5.57	Aug. 15	1.24	Oct. 23	1.48
Apr. 4	5.23						

237. Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 24, T. 44 S., R. 24 E., 250 feet east of Evans Avenue and 200 feet south of Charles Street, Fort Myers. Drilled observation well, diameter 4 inches, depth 26.5 feet. Measuring point, top of casing, 1 foot above land-surface datum and 17.43 feet above mean-sea level.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	14.15	15.33	May 28-June 3	15.17	15.34
8-14	14.02	15.26	June 4-10	15.03	15.35
15-21	14.89	15.30	11-17	14.80	15.26
22-28	14.84	15.10	18-24	14.66	15.41
Jan. 29-Feb. 4	15.10	15.15	June 25-July 1	13.24	14.86
Feb. 5-11	15.00	15.26	July 2-8	12.92	14.02
12-18	15.00	15.36	9-15	12.86	13.64
19-25	15.10	15.37	16-22	11.08	13.52
Feb. 26-Mar. 4	14.56	15.20	23-29	10.34	12.74
Mar. 5-11	15.20	15.22	July 30-Aug. 5	10.16	12.10
12-18	14.70	15.40	Aug. 6-12	10.11	11.85
19-25	15.37	15.39	Oct. 22-28	9.14	11.47
Mar. 26-Apr. 1	15.00	15.45	Oct. 29-Nov. 4	9.20	11.66
Apr. 2-8	15.27	15.55	Nov. 5-11	9.45	12.27
9-15	14.82	15.27	12-18	9.73	12.48
16-22	14.58	15.39	19-25	10.21	12.60
23-29	14.92	15.54	Nov. 26-Dec. 2	10.43	12.91
Apr. 30-May 6	14.86	15.52	3-9	10.73	12.92
May 7-13	14.94	15.46	10-16	10.77	13.16
14-20	15.40	15.46	17-23	11.18	13.26
21-27	15.17	15.42	24-30	11.70	13.24

238. Geol. Survey, U. S. Dept. of Interior. SW¼NE¼ sec. 24, T. 44 S., R. 24 E., on northwest corner of Edison Avenue and North Fowler Street, Fort Myers. Drilled observation well, diameter 4 inches, depth 24 feet. Measuring point, top of casing, 1.0 foot above land-surface datum and 16.41 feet above mean sea level.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	9.96	10.02	June 25-July 1	8.83	....
8-14	9.87	10.00	July 2-8	8.63	8.83
15-21	9.96	10.04	9-15	8.33	8.65
22-28	9.94	10.06	16-22	7.60	8.45
Jan. 29-Feb. 4	9.87	10.09	23-29	7.03	7.60
Feb. 5-11	10.09	10.12	July 30-Aug. 5	7.02	7.32
12-18	10.12	10.18	Aug. 6-12	7.23	7.46
19-25	10.18	10.27	13-19	7.32	7.49
Feb. 26-Mar. 4	10.21	10.31	20-26	6.76	7.58
Mar. 5-11	10.31	10.36	Aug. 27-Sept. 2	....	6.76
12-18	10.34	10.44	Sept.17-23	5.36	5.81
19-25	10.44	10.47	24-30	5.79	6.45
Mar. 26-Apr. 1	10.46	10.54	Oct. 1-7	6.36	6.73
Apr. 2-8	10.54	10.59	8-14	6.20	6.76
9-15	10.55	10.57	15-21	6.28	6.78
16-22	10.57	10.66	22-28	6.69	6.97
23-29	10.66	10.71	Oct. 29-Nov. 4	6.84	7.12
Apr. 30-May 6	10.69	10.76	Nov. 5-11	6.91	7.23
May 7-13	10.75	10.81	12-18	7.17	7.65
14-20	10.81	10.84	19-25	7.54	7.86
21-27	10.84	10.87	Nov. 26-Dec. 2	7.74	8.15
May 28-June 3	10.86	10.90	Dec. 3-9	8.01	8.21
June 4-10	10.90	10.91	10-16	8.12	8.41
11-17	10.88	10.94	17-23	8.30	8.55
18-24	.....	11.00	24-30	8.46	8.62

239. Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 24, T. 44 S., R. 24 E., 10 feet west of northwest corner of Market Street and North Palm Avenue, Fort Myers. Drilled observation well, diameter 4 inches, depth 23 feet. Measuring point, top of casing, 1.4 feet above land-surface datum and 16.52 feet above mean sea level.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	11.70	11.77	May 28-June 3	12.67	12.70
8-14	11.72	11.81	June 4-10	12.70	12.71
15-21	11.81	11.88	11-17	12.69	12.72
22-28	11.87	11.92	18-24	12.16	12.73
Jan. 29-Feb. 4	11.92	11.97	July 2-8	10.40	10.64
Feb. 5-11	11.97	12.01	9-15	10.24	10.44
12-18	12.01	12.09	16-22	9.45	10.24
19-25	12.09	12.19	23-29	8.52	9.45
Feb. 26-Mar. 4	12.18	12.22	July 30-Aug. 5	8.33	8.52
Mar. 5-11	12.22	12.27	Aug. 6-12	8.36	8.52
12-18	12.26	12.32	13-19	8.45	8.61
19-25	12.32	12.35	20-26	8.14	8.70
Mar. 26-Apr. 1	12.35	12.41	Sept.24-30	6.01	6.57
Apr. 2-8	12.39	12.43	Oct. 1-7	6.51	6.92
9-15	12.38	12.42	8-14	6.77	7.08
16-22	12.39	12.45	15-21	6.71	7.03
23-29	12.45	12.54	22-28	7.01	7.22
Apr. 30-May 6	12.54	12.58	Oct. 29-Nov. 4	7.16	7.43
May 7-13	12.58	12.61	Nov. 5-11	7.39	7.70
14-20	12.61	12.66	12-18	7.64	8.00
21-27	12.66	12.68	Dec. 24-30	9.10	9.30

246. Geol. Survey, U. S. Dept. of Interior. SE¼NE¼ sec. 20, T. 44 S., R. 25 E., 165 feet north of Edison Avenue, and 10 feet west of Gibson Road, Fort Myers. Drilled observation well, diameter 8 inches, depth 27 feet. Measuring point, top of 8-inch coupling, at land-surface datum and 19.36 feet above mean sea level.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
May 14-20	4.75	5.09	Sept. 3-9	0.42	1.32
21-27	4.78	5.09	10-16	.34	1.38
May 28-June 3	5.09	5.19	17-23	.30	1.38
June 4-10	5.19	5.29	24-30	.57	1.72
11-17	5.29	5.37	Oct. 1-7	.53	1.74
18-24	.29	5.36	15-21	...	1.75
June 25-July 1	.26	1.11	22-28	.47	1.84
July 2-8	.38	1.13	Oct. 29-Nov. 4	1.01	1.94
9-15	.40	1.36	Nov. 5-11	1.94	2.35
16-22	.33	1.01	12-18	1.98	2.52
23-29	.36	1.12	19-25	2.52	2.86
July 30-Aug. 5	.46	1.62	Nov. 26-Dec. 2	2.86	3.09
Aug. 6-12	.49	1.43	Dec. 3-9	2.53	3.09
13-19	.42	1.49	10-16	2.79	3.06
20-26	.37	1.68	17-23	2.95	3.14
Aug. 27-Sept.2	.32	1.17	24-30	3.14	....

Leon County

36 (*987, p. 35; 1017, p.154). Dawkins Pond Church. Near north line of SE¼SW¼ sec. 30, T. 3 N., R. 2 E., in front of church, 70 feet west of U. S. Highway 319, 14.8 miles northeast of Tallahassee. Measurements discontinued.

Manatee County

92 (*987, p. 36; 1017, p.154). Ray E. Anderson. In Waterbury, in SE¼SE¼ sec. 9, T. 35 S., R. 20 E., on west side of State Highway 141. Measuring point beginning Feb. 4, 1943, top of 6-inch pipe, 85.52 feet above mean sea level and 5.75 feet above land-surface datum. Water-stage recorder installed Feb. 4.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	38.74	38.77	39.30	39.35	39.60	39.67	39.55	39.58
2	.....	.....	38.69	38.75	39.33	39.40	39.58	39.65	39.58	39.60
3	.....	.....	38.70	38.75	39.39	39.45	39.51	39.58	39.55	39.61
4	.....	.....	38.70	38.75	39.45	39.49	39.48	39.60	39.56	39.62
5	37.95	38.03	38.72	38.75	39.45	39.52	39.60	39.67	39.60	39.67
6	37.90	37.95	38.70	38.75	39.50	39.62	39.54	39.70	39.65	39.77
7	37.95	38.01	38.75	38.80	39.59	39.65	39.60	39.68	39.74	39.83
8	37.90	38.00	38.82	38.85	39.50	39.65	39.60	39.70	39.71	39.81
9	37.95	38.09	38.81	38.93	39.50	39.61	39.65	39.70	39.70	39.80
10	38.00	38.09	38.85	38.95	39.55	39.65	39.55	39.68	39.72	39.82
11	38.00	38.10	38.85	38.95	39.58	39.65	39.59	39.68	39.78	39.85
12	38.00	38.11	38.85	38.95	39.58	39.65	39.57	39.67	39.80	39.85
13	38.01	38.10	38.88	38.95	39.56	39.65	39.53	39.61	39.80	39.85
14	38.10	38.20	38.90	39.00	39.55	39.63	39.52	39.58	39.82	39.87
15	38.21	38.25	38.93	39.05	39.57	39.60	39.50	39.52	39.88	39.90
16	38.25	38.30	39.02	39.10	39.58	39.61	39.50	39.50	39.89	39.91
17	38.21	38.25	39.11	39.12	39.60	39.62	39.48	39.52	39.85	39.91
18	38.22	38.33	39.15	39.15	39.62	39.68	39.50	39.58	39.79	39.88
19	38.33	38.43	39.13	39.15	39.65	39.75	39.53	39.60	39.76	39.82
20	38.35	39.43	39.11	39.11	39.68	39.75	39.53	39.60	39.78	39.85
21	38.33	38.40	39.01	39.10	39.62	39.75	39.56	39.61	39.72	39.80
22	38.37	38.45	39.05	39.12	39.60	39.70	39.62	39.67	39.70	39.80

92--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
23	38.49	38.54	39.10	39.17	39.51	39.61	39.55	39.67	39.27	39.72
24	38.60	38.70	39.10	39.20	39.50	39.58	39.53	39.64	39.20	39.31
25	38.65	38.70	39.10	39.20	39.49	39.57	39.55	39.65	39.30	39.39
26	38.60	38.70	39.10	39.25	39.52	39.61	39.55	39.66	39.32	39.41
27	38.60	38.70	39.20	39.30	39.55	39.63	39.57	39.65	39.32	39.40
28	38.70	38.75	39.30	39.39	39.50	39.60	39.59	39.66	39.32	39.57
29			39.30	39.38	39.50	39.58	39.57	39.62	39.30	39.35
30			39.25	39.35	39.50	39.60	39.55	39.58	39.30	39.35
31			39.28	39.34			39.55	39.58		

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	.....	.....	.....	.....	37.14	37.22	37.13	37.22	37.77	37.91
2	.....	.....	.....	.....	.....	.....	37.12	37.22	37.15	37.25	37.86	37.95
3	.....	.....	.....	.....	.....	.....	37.13	37.20	37.12	37,22	37.79	37.95
4	.....	.....	.....	.....	.....	.....	37.12	37.22	37.07	37.29	37.61	37.83
5	.....	.....	.....	.....	.....	.....	37.08	37.17	37.28	37.38	37.60	37.71
6	.....	.....	.....	.....	.....	.....	37.02	37.13	37.35	37.42	37.70	37.84
7	38.93	39.06	.....	.....	.....	.....	37.00	37.07	37.31	37.42	37.83	37.89
8	38.90	39.02	.....	.....	.....	.....	37.00	37.08	37.25	37.35	37.89	37.97
9	.....	.....	.....	.....	.....	.....	37.00	37.07	37.27	37.32	37.92	37.97
10	38.67	38.71	.....	.....	.....	.....	37.02	37.07	37.21	37.35	37.86	37.92
11	.....	.....	.....	.....	.....	.....	37.02	37.08	37.28	37.36	37.89	37.98
12	.....	.....	37.88	37.95	.....	.....	37.05	37.10	37.24	37.30	37.93	38.00
13	.....	.....	37.85	37.90	.....	.....	37.07	37.12	37.17	37.25	37.83	37.93
14	.....	.....	37.85	37.88	.....	.....	37.08	37.15	37.17	38.24	37.77	37.87
15	38.67	38.71	37.82	37.87	.....	.....	36.99	37.10	37.30	37.55	37.74	37.95
16	.....	.....	37.79	37.82	.....	.....	37.03	37.15	37.49	37.58	37.94	38.12
17	.....	.....	37.73	37.79	.....	.....	37.13	37.22	37.46	37.56	37.99	38.12
18	.....	.....	37.70	37.75	.....	.....	37.15	37.25	37.45	37.56	37.75	38.05
19	.....	.....	37.68	37.77	37.13	37.25	37.13	37.23	37.40	37.53	37.74	37.85
20	.....	.....	37.67	37.78	37.12	37.23	37.15	37.25	37.42	37.50	37.84	37.94
21	.....	.....	37.63	37.74	37.13	37.22	37.17	37.25	37.43	37.52	37.87	37.95
22	.....	.....	37.57	37.68	37.13	37.21	37.12	37.23	37.45	37.59	37.80	37.91
23	.....	.....	37.55	37.63	37.07	37.22	37.15	37.19	37.59	37.65	37.72	37.73
24	.....	.....	37.56	37.63	37.15	37.23	37.19	37.23	37.54	37.69	37.65	37.73
25	.....	.....	37.47	37.62	37.13	37.20	37.10	37.23	37.67	37.72	37.58	37.65
26	.....	.....	37.50	37.53	37.11	37.17	37.13	37.20	37.70	37.77	37.60	37.68
27	.....	.....	37.51	37.55	37.09	37.14	37.10	37.29	37.70	37.80	37.63	37.70
28	.....	.....	.....	.....	37.07	37.13	37.28	37.34	37.66	37.74	37.52	37.67
29	.....	.....	.....	.....	37.08	37.15	37.27	37.35	37.68	37.77	37.48	37.57
30	.....	.....	.....	.....	37.10	37.18	37.18	37.29	37.73	37.82	37.45	37.55
31	.....	.....	.....	.....			37.10	37.20			37.38	37.57

Marion County

5 (*817, p. 32; 840, p. 52; 845, p. 50; 886, p. 67; 907, p. 25; 937, p. 19; 945, p. 18; 987, p. 37; 1017, p. 154). SE¼SE¼ sec. 11, T. 15 S., R. 23 E., about 8 miles east of Ocala, on east side of Oklawaha River and north side of road that crosses river at Sharpes Ferry.

Water level, in feet above land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	9.4	Feb. 3	9.0	Mar. 3	8.5	Mar. 31	8.0
13	9.4	10	8.9	10	8.3	Apr. 7	7.8
20	9.2	17	8.8	17	8.2	14	7.7
27	9.1	24	8.5	24	8.2	21	7.5

5--Continued.

Water level, in feet above land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 28	7.5	June 30	6.6	Sept. 1	10.4	Nov. 10	11.3
May 5	7.2	July 7	7.0	8	10.8	17	11.1
12	7.1	14	7.1	15	11.0	24	10.9
19	6.9	21	7.4	22	11.4	Dec. 1	10.8
26	6.8	28	8.1	29	12.9	8	10.5
June 2	6.7	Aug. 4	8.6	Oct. 6	13.0	15	10.6
9	6.6	11	9.0	13	12.0	22	10.3
16	6.3	18	9.4	27	11.6	29	10.4
23	6.3	25	9.9	Nov. 3	11.6		

Nassau County

2 (*907, p. 17; 937, p. 14; 945, p. 19; *987, p. 37; 1017, p.155). G. G. Gerbing. In Amelia City, 5.5 miles south from Fernandina, in southeast corner of pumphouse at owner's residence. Water level, in feet above land-surface datum, 1945: Aug. 9, 36.0.

8 (*907, p. 17; 937, p. 14; 945, p. 19; *987, p. 37; 1017, p.155). Charles Pelot. Near SE. corner of NE¼ sec. 1, T. 1 N., R. 28 E., about 400 feet from ocean, in rear of beach cottages, 1.1 miles south of Franklintown, 8.9 miles south of Fernandina. Water level, in feet above land-surface datum, 1945: Aug. 9, 37.2.

12. J. W. Sheffield. 1,600 feet east of NW. corner of sec. 4, T. 2 N., R. 28 E., about 400 feet east of U. S. Highway 13, on north side of dirt street. Used drilled domestic well, diameter 2 inches, depth 140 feet. Measuring point, top of 2-inch tee on well, 14.02 feet above mean sea level and 1.00 foot above land-surface datum. Record begins in 1939.

Water level, in feet above land-surface datum, 1939, 1944-45

Date	Water level	Date	Water level	Date	Water level
Mar. 25, 1939	40.9	July 2, 1944	a 31.0	July 10, 1944	a 18.7
June 24, 1944	12.2	3	a 31.9	11	a 17.2
26	12.5	4	a 32.5	12	a 16.0
27	a 12.0	5	a 32.8	20	13.8
28	a 21.6	6	a 33.0	Sept. 6	14.1
29	a 26.0	7	a 32.8	Nov. 2	14.0
30	a 28.4	8	a 26.1	Aug. 8, 1945	14.5
July 1	a 30.1	9	a 21.0	28	17.4

a Interpolated for 10 a.m. and adjusted for tide influence.

23 (*907, p. 17; 937, p. 14; 945, p. 19; *987, p. 37; 1017, p.155). Florida Forest and Park Service. About 1,000 feet northwest of end of south jetty to St. Marys Entrance, 2.6 miles northeast of Fernandina. No measurements made in 1945.

27. Judge Fishler and others. In Fernandina, 200 feet north of Atlantic Boulevard, on east side of North 17th Street. Unused drilled domestic well, diameter 3 inches. Measuring point, top of 3-inch cross on well, 22.45 feet above mean sea level and 2.00 feet above land-surface datum. Record begins in 1939.

Water level, in feet with reference to land-surface datum, 1939-41, 1944-45

Mar. 28, 1939	+29.5	July 1, 1944	a+15.1	July 9, 1944	a +6.4
Nov. 25, 1940	-8.5	2	a+15.9	10	a +4.5
30	-8.9	3	a+16.8	11	a +3.2
Sept.26, 1941	-7.7	4	a+17.4	12	a +1.8
June 22, 1944	-2.3	5	a+17.6	13	a +.7
27	a -1.9	6	a+17.6	Sept. 6	-.2
28	a +6.9	7	a+17.6	Nov. 2	-1.6
29	a+11.1	8	a+12.1	Aug. 9, 1945	+.4
30	a+13.6				

a Interpolated for 10 a.m. and adjusted for tide influence.

34 (*907, p. 17; 937, p. 15; 945, p. 19; *987, p. 37; 1017, p.155). W. L. Hardee. At Hardee Dock, about 150 feet east of Amelia River, 0.3 mile southwest of Fernandina. Water levels, in feet below land-surface datum, 1945: July 16, 3.24; Aug. 2, 4.14; Aug. 8, 5.02; Nov. 28, 0.35.

44 (*907, p. 17; 937, p. 15; 945, p. 19; *987, p. 37; 1017, p.156). Seaboard Railway. At Seaboard Railway station, at Yulee, south of pumphouse near elevated tank. Water levels, in feet above land-surface datum, 1945: Mar. 21, 18.13; May 8, 16.95; Aug. 8, 16.90; Nov. 28, 18.18.

50 (*907, p. 18; 937, p. 15; 945, p. 19; *987, p. 37; 1017, p.156). Mr. Higgenbotham. SW¼SE¼ sec. 4, T. 2 N., R. 26 E., about 100 feet south of Seaboard Railway in rear of owner's residence, 0.6 mile east of Italia. Water level, in feet above land-surface datum, 1945: Aug. 8, 37.2.

51 (*907, p. 18; 937, p. 15; 945, p. 19; *987, p. 37; 1017, p.156). Drew Sauls. In Callahan, near SW. corner NW¼ sec. 29, T. 2 N., R. 25 E. Water level, in feet above land-surface datum, 1945: Aug. 8, 38.6.

52 (*907, p. 18; 937, p. 15; 945, p. 19; *987, p. 38; 1017, p.156). Civilian Conservation Corps. NW¼SW¼ sec. 15, T. 3 N., R. 24 E., on site of former Civilian Conservation Corps camp, about 500 feet east of U. S. Highway 1, 1.4 miles southeast of Hilliard. Water level, in feet below land-surface datum, 1945: Aug. 8, 2.30.

55 (*1017, p.156). L. R. Church. In O'Neil, about 500 feet southeast of NE. corner sec. 27, T. 2 N., R. 28 E., between Seaboard Railway and State Highway 13, at owner's residence. Water levels, in feet above land-surface datum, 1945: Aug. 8, 27.6; Nov. 28, 29.1.

64. Mrs. D. C. Henderson. In Hilliard, SW¼SE¼ sec. 8, T. 3 N., R. 24 E., on south side of a dirt street, about 500 feet west of a brick schoolhouse. Unused drilled well, diameter 8 inches, depth 648 feet. Measuring point, top of flange on casing, 83.16 feet above mean sea level and 2.50 feet above land-surface datum. Water-stage recorder maintained on well since June 19, 1944.

Highest and lowest daily water level, in feet below land-surface datum, 1944
(From recorder charts)

Day	June		July		August		September		October	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	21.36	21.41	.....	.....	19.92	20.03	19.62	19.76
2	.....	.....	21.37	21.44	20.57	20.66	19.90	20.01	19.71	19.80
3	.....	.....	21.32	21.44	20.63	20.74	19.88	19.98	19.71	19.79
4	.....	.....	21.32	21.46	20.64	20.75	19.79	19.92	19.71	19.83
5	.....	.....	21.38	21.48	20.61	20.72	19.74	19.83	19.80	19.92
6	.....	.....	21.36	21.45	20.53	20.63	19.76	19.83	19.90	19.95
7	.....	.....	21.24	21.45	20.51	20.56	19.83	19.86	.....	.....
8	.....	.....	21.30	21.39	20.52	20.60	19.81	19.88	.....	.....
9	.....	.....	.....	.....	20.57	20.62	19.79	19.85	.....	.....
10	.....	.....	21.23	21.27	20.53	20.69	19.76	19.84	.....	.....
11	.....	.....	21.23	21.28	20.48	20.57	19.72	19.80	.....	.....
12	.....	.....	21.21	21.28	20.43	20.53	19.66	19.76	.....	.....
13	.....	.....	21.18	21.26	20.43	20.52	19.57	19.70	.....	.....
14	.....	.....	21.15	21.24	20.44	20.55	19.61	19.86	.....	.....
15	.....	.....	21.03	21.17	20.42	20.54	19.76	19.87	.....	.....
16	.....	.....	20.93	21.05	20.35	20.48	19.82	19.92	.....	.....
17	.....	.....	20.93	21.02	20.28	20.41	19.79	19.92	.....	.....
18	.....	.....	20.93	21.05	20.27	20.37	19.77	19.86	.....	.....
19	21.07	21.20	20.93	21.06	20.30	20.39	19.76	19.83	.....	.....
20	21.04	21.26	20.85	20.94	20.32	20.43	19.73	19.81	.....	.....
21	21.19	21.36	20.87	20.97	20.32	20.41	19.69	19.82	.....	.....
22	21.26	21.36	20.87	20.97	20.24	20.33	19.61	19.72	.....	.....
23	21.17	21.30	20.82	20.89	20.16	20.25	19.66	19.71	.....	.....
24	21.12	21.21	20.80	20.85	20.10	20.18	19.72	19.79	.....	.....
25	21.20	21.30	20.78	20.82	20.09	20.14	19.79	19.86	.....	.....
26	21.33	21.39	20.74	20.80	21.12	20.17	19.80	19.87	.....	.....
27	21.41	21.52	20.71	20.79	20.10	20.17	19.75	19.86	.....	.....

64--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1944
(From recorder charts)

Day	June		July		August		September		October	
	High	Low	High	Low	High	Low	High	Low	High	Low
28	21.50	21.57	20.72	20.78	20.04	20.14	19.69	19.82	.....	.....
29	.....	.....	20.72	20.80	19.97	20.07	19.61	19.74	.....	.....
30	21.37	21.46	20.72	20.79	19.94	20.04	19.59	19.70	.....	.....
31			20.65	20.76	19.90	20.00			.....	.....

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	19.90	19.95	19.85	19.94	20.30	20.36	20.70	20.76	21.02	21.06
2	.....	.....	19.85	19.92	19.82	19.94	20.30	20.35	20.64	20.70	21.04	21.06
3	.....	.....	19.85	19.87	19.80	19.85	20.35	20.43	20.56	20.64	21.03	21.06
4	.....	.....	19.82	19.89	19.80	19.86	20.43	20.44	20.55	20.70	21.03	21.11
5	.....	.....	19.67	19.80	19.85	19.87	20.44	20.60	20.70	20.75	21.08	21.18
6	.....	.....	19.64	19.75	19.77	19.85	20.63	20.70	20.72	20.84	21.18	21.30
7	.....	.....	19.67	19.80	19.77	19.86	20.57	20.67	20.72	20.80	21.22	21.33
8	.....	.....	19.57	19.65	19.85	19.90	20.55	20.65	20.71	20.80	21.18	21.33
9	.....	.....	19.66	19.75	19.90	20.00	20.54	20.60	20.76	20.86	21.18	21.30
10	.....	.....	19.69	19.80	19.90	20.00	20.52	20.64	20.67	20.80	21.20	21.35
11	.....	.....	19.65	19.75	19.92	20.04	20.50	20.60	20.74	20.85	21.26	21.40
12	.....	.....	19.60	19.75	19.90	20.05	20.55	20.60	20.76	20.82	21.34	21.40
13	.....	.....	19.50	19.66	19.90	19.96	20.55	20.62	20.70	20.80	21.35	21.41
14	.....	.....	19.62	19.80	19.92	20.03	20.55	20.60	20.73	20.80	21.34	21.47
15	.....	.....	19.80	19.85	19.97	20.02	20.55	20.57	20.75	20.81	21.46	21.52
16	.....	.....	19.74	19.83	20.02	20.10	20.55	20.60	20.77	20.85	21.53	21.55
17	.....	.....	19.65	19.74	20.10	20.13	20.60	20.64	20.78	20.80	21.47	21.54
18	.....	.....	19.66	19.85	20.11	20.16	20.60	20.69	20.79	20.90	21.43	21.51
19	.....	.....	19.81	19.96	20.12	20.15	20.70	20.80	20.89	20.93	21.42	21.50
20	.....	.....	19.75	19.93	20.00	20.14	20.73	20.80	20.93	21.00	21.40	21.45
21	.....	.....	19.66	19.79	19.96	20.02	20.67	20.76	20.97	21.03	21.40	21.47
22	.....	.....	19.64	19.73	20.00	20.05	20.62	20.72	20.97	21.05	21.40	21.49
23	19.68	19.78	19.79	19.95	20.06	20.13	20.50	20.65	21.00	21.07	21.43	21.52
24	19.65	19.75	19.95	20.01	20.10	20.20	20.50	20.57	21.00	21.10	21.11	21.43
25	19.65	19.75	19.93	20.00	20.13	20.20	20.50	20.60	21.05	21.13	21.14	21.34
26	19.56	19.75	19.76	19.96	20.07	20.20	20.55	20.60	21.03	21.13	.....	.....
27	19.73	19.80	19.75	19.81	20.18	20.27	20.56	20.73	21.04	21.10	.....	.....
28	19.65	19.80	19.77	19.85	20.32	20.40	20.60	20.69	21.06	21.13	.....	.....
29	19.65	19.80			20.36	20.43	20.54	20.66	20.97	21.07	.....	.....
30	19.79	19.85			20.26	20.37	20.54	20.70	20.97	21.04	.....	.....
31	19.85	19.87			20.25	20.32			21.01	21.05		

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	.....	.....	.....	.....	.....	.....	19.45	19.54	19.93	20.07
2	.....	.....	.....	.....	.....	.....	.....	.....	19.48	19.57	20.03	20.11
3	.....	.....	.....	.....	.....	.....	.....	.....	19.40	19.55	19.89	20.10
4	.....	.....	.....	.....	.....	.....	.....	.....	19.40	19.60	19.62	19.90
5	.....	.....	.....	.....	.....	.....	.....	.....	19.61	19.71	19.68	19.78
6	.....	.....	.....	.....	.....	.....	.....	.....	19.72	19.77	19.78	19.90
7	.....	.....	.....	.....	.....	.....	.....	.....	19.73	19.80	19.84	19.92
8	.....	.....	.....	.....	.....	.....	.....	.....	19.66	19.75	19.97	20.10
9	.....	.....	20.64	20.70	.....	.....	.....	.....	19.67	19.69	19.96	20.11
10	.....	.....	20.61	20.68	.....	.....	.....	.....	19.72	19.76	19.85	20.06
11	.....	.....	20.56	20.62	.....	.....	.....	.....	19.75	19.80	20.06	20.20
12	.....	.....	20.53	20.58	.....	.....	19.25	19.30	19.69	19.75	20.15	20.22
13	.....	.....	20.51	20.54	.....	.....	19.25	19.29	19.58	19.68	20.09	20.15
14	.....	.....	20.46	20.53	.....	.....	19.22	19.31	19.45	19.63	19.90	20.04

64--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
15	.....	.....	20.39	20.46	.....	.....	19.18	19.29	19.65	19.95	19.92	20.19
16	.....	.....	20.20	20.39	.....	.....	19.25	19.34	19.90	20.00	20.20	20.38
17	.....	.....	20.21	20.31	.....	.....	19.28	19.39	19.83	19.95	20.32	20.42
18	.....	.....	20.13	20.25	.....	.....	19.36	19.45	19.80	19.92	19.94	20.35
19	.....	.....	20.15	20.23	.....	.....	19.33	19.43	19.68	19.97	19.92	20.16
20	.....	.....	20.18	20.25	.....	.....	19.35	19.43	19.71	19.80	20.17	20.30
21	.....	.....	20.13	20.23	.....	.....	19.36	19.44	19.68	19.83	20.22	20.30
22	.....	.....	20.03	20.15	.....	.....	19.30	19.43	19.70	19.79	20.17	20.29
23	.....	.....	19.96	20.06	.....	.....	19.32	19.44	19.80	19.93	20.16	20.22
24	.....	.....	19.92	20.01	.....	.....	19.43	19.48	19.84	19.98	20.05	20.17
25	.....	.....	19.86	19.95	.....	.....	19.35	19.50	19.89	19.96	19.90	20.05
26	.....	.....	19.86	19.89	.....	.....	19.34	19.50	19.90	20.02	19.92	20.13
27	.....	.....	19.88	19.94	.....	.....	19.50	19.64	19.91	20.01	20.10	20.16
28	.....	.....	19.92	19.93	.....	.....	19.64	19.70	19.80	19.92	19.87	20.06
29	.....	.....	19.89	19.93	.....	.....	19.63	19.71	19.80	19.90	19.86	19.94
30	.....	.....	.....	.....	.....	.....	19.54	19.65	19.85	19.95	19.73	19.93
31	.....	.....	.....	.....			19.43	19.55			19.65	20.01

Orange County

47 (*987, p. 38; 1017, p.157). Well 47 in Water-Supply Paper 773-C. Orange County. Near SE. corner NE¼NE¼ sec. 26, T. 22 S., R. 28 E., at edge of sink, on west side of State Highway 413, about 1 mile northwest of Orlo Vista.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	3.33	3.45	3.64	3.66	4.35	4.40	.....	.....	6.98	7.04
2	3.47	3.48	3.65	3.66	4.36	4.42	.....	.....	6.99	7.04
3	3.47	3.48	3.66	3.70	4.40	4.43	.....	.....	6.95	7.03
4	3.39	3.47	3.70	3.74	4.43	4.46	.....	.....	6.93	6.99
5	3.42	3.45	3.68	3.70	4.47	4.50	.....	.....	6.95	7.05
6	3.28	3.38	3.69	3.70	4.48	4.53	.....	.....	7.00	7.10
7	3.33	3.37	3.74	3.77	4.52	4.55	.....	.....	7.05	7.11
8	2.86	3.29	3.71	3.80	4.56	4.60	.....	.....	7.05	7.10
9	2.75	2.88	3.79	3.83	4.60	4.67	.....	.....	7.06	7.13
10	2.86	3.00	3.84	3.86	4.64	4.68	.....	.....	7.10	7.15
11	3.00	3.10	3.85	3.89	4.66	4.71	.....	.....	7.14	7.20
12	3.05	3.10	3.86	3.90	4.69	4.74	.....	.....	7.16	7.23
13	3.05	3.08	3.87	3.92	4.70	4.76	.....	.....	7.20	7.30
14	3.07	3.15	3.95	4.00	4.75	4.80	.....	.....	7.25	7.35
15	3.15	3.20	4.04	4.05	4.80	4.85	.....	.....	7.30	7.36
16	3.20	3.30	4.05	4.05	4.85	4.90	.....	.....	7.31	7.36
17	3.32	3.35	4.04	4.05	4.90	4.91	.....	.....	7.30	7.34
18	3.35	3.35	4.04	4.11	4.93	4.95	.....	.....	7.32	7.40
19	3.35	3.36	4.12	4.18	4.95	4.98	.....	.....	7.30	7.37
20	3.36	3.40	4.12	4.16	4.95	4.99	6.61	6.67	7.25	7.30
21	3.42	3.46	4.13	4.15	4.94	4.99	6.65	6.72	7.25	7.30
22	3.40	3.45	4.15	4.20	....	....	6.70	6.75	7.25	7.34
23	3.40	3.45	4.20	4.30	....	....	6.71	6.73	7.12	7.34
24	3.40	3.45	4.26	4.31	....	....	6.74	6.80	3.67	7.10
25	3.44	3.48	4.28	4.32	....	....	6.76	6.82	....	....
26	3.39	3.50	4.25	4.32	....	....	6.80	6.85	....	....
27	3.45	3.50	4.26	4.30	....	....	6.80	6.85	....	....
28	3.45	3.51	4.32	4.35	....	....	6.85	6.90	....	....
29	3.49	3.55			....	....	6.85	6.89	....	....
30	3.55	3.58			....	....	6.85	6.90	....	....
31	3.61	3.64			....	....	6.90	6.98		

47--Continued.

Highest and lowest daily water level, in feet with reference to land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	-3.65	-3.72	-3.60	-3.63	+0.94	+0.83	-0.20	-0.32	-0.13	-0.22
2	.....	.....	-3.75	-3.81	-3.60	-3.64	+.83	+.77	-.32	-.40	-.08	-.15
3	.....	.....	-3.70	-3.75	-3.57	-3.62	+.78	+.72	-.37	-.42	-.09	-.14
4	.....	.....	-3.75	-3.80	-3.51	-3.57	+.74	+.68	-.39	-.56	-.12	-.22
5	.....	.....	-3.88	-3.95	-3.52	-3.56	+.78	+.73	-.55	-.62	-.14	-.21
6	.....	.....	-3.95	-4.02	-3.42	-3.55	+.77	+.74	-.67	-.78	-.05	-.13
7	.....	.....	-4.03	-4.08	-3.23	-3.42	+.73	+.68	-.77	-.83	-.00	-.05
8	.....	.....	-4.10	-4.15	-3.23	-3.27	+.69	+.65	-.82	-.87	+.07	-.00
9	.....	.....	-4.15	-4.20	-3.26	-3.30	+.61	+.59	-.88	-.96	+.08	+.04
10	.....	.....	-4.10	-4.20	-3.27	-3.30	+.58	+.50	-.96	-1.04	+.07	+.03
11	.....	.....	-3.85	-4.10	-3.27	-3.30	+.50	+.47	-1.03	-1.05	+.17	+.07
12	.....	.....	-3.85	-3.86	-3.30	-3.35	+.60	+.48	-1.00	-1.08	+.18	+.15
13	.....	.....	-3.86	-3.90	-3.29	-3.34	+.60	+.53	-.93	-.99	+.16	+.13
14	.....	.....	-3.86	-3.86	-3.23	-3.34	+.53	+.45	-.94	-.99	+.18	+.17
15	.....	.....	-3.83	-3.85	-2.76	-3.22	+.46	+.40	-.73	-.94	+.21	+.11
16	.....	.....	-3.49	-3.85	+3.00	-1.00	+.40	+.26	-.75	-.79	+.30	+.20
17	.....	.....	-3.27	-3.49	+3.60	+2.70	+.27	+.15	-.74	-.78	+.32	+.27
18	.....	.....	-3.27	-3.33	+3.60	+3.20	+.16	+.08	-.71	-.76	+.30	+.16
19	.....	.....	-3.03	-3.38	+3.86	+3.79	+.11	+.03	-.70	-.75	+.19	+.08
20	.....	.....	-2.78	-3.03	+3.85	+3.74	+.05	-.06	-.65	-.71	+.23	+.10
21	.....	.....	-2.84	-2.98	+3.75	+3.63	-.04	-.11	-.62	-.66	+.25	+.22
22	.....	.....	-2.97	-3.05	+3.63	+3.49	-.10	-.15	-.55	-.64	+.27	+.23
23	.....	.....	-2.98	-3.05	+3.49	+3.37	-.02	-.15	-.54	-.54	+.27	+.25
24	.....	.....	-3.04	-3.10	+3.37	+3.26	-.04	-.10	-.44	-.50	+.28	+.25
25	.....	.....	-3.09	-3.20	+3.26	+3.15	-.05	-.12	-.40	-.44	+.28	+.23
26	.....	.....	-3.20	-3.34	+3.15	+3.01	+.15	-.05	-.34	-.39	+.33	+.26
27	.....	.....	-3.34	-3.43	+3.00	+2.85	+.13	-.05	-.32	-.36	+.35	+.32
28	.....	.....	-3.43	-3.52	+2.85	+2.52	-.05	-.14	-.33	-.36	+.33	+.20
29	.....	.....	-3.52	-3.57	+2.52	+1.60	-.14	-.17	-.26	-.34	+.24	-.01
30	.....	.....	-3.57	-3.60	+1.57	+.95	-.15	-.19	-.20	-.27	....	....
31	-3.50	-3.65	-3.59	-3.63			-.16	-.22			....	....

Palm Beach County

1 (*1017, p.158). Thomas Greer. SE¼SE¼ sec. 21, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 11.35; Feb. 16, 11.77; Mar. 15, 12.06.

2 (*1017, p.158). Mr. Churlingham. SE¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	10.51	Mar. 15	11.20	May 29	11.75
Feb. 16	10.98	Apr. 23	11.36		

3 (*1017, p.158). George Krick. SE¼SE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	10.33	Mar. 13	11.13	May 29	11.86
Feb. 16	10.80	Apr. 23	11.43		

4 (*1017, p.158). E. Grapes. SE¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	11.89	Mar. 15	12.51	May 29	13.07
Feb. 14	12.25	Apr. 23	12.57		

6 (*1017, p.159). Mr. Smith. NE¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	11.35	Mar. 15	12.00	May 29	12.45
Feb. 14	11.45	Apr. 23	12.05		

8 (*1017, p.159). W. H. Williams. SW¼NE¼ sec. 28, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 12.30; Feb. 14, 12.82.

10 (*1017, p.159). J. J. Mullin. SW¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	12.65	Mar. 14	13.30	May 29	13.83
Feb. 14	13.00	Apr. 23	13.48		

11 (*1017, p.159). S. Kreel. NW¼SE¼ sec. 16, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	12.42	Mar. 14	12.88	May 29	13.28
Feb. 14	12.70	Apr. 23	12.90		

12 (*1017, p.159). L. J. Lamb. NW¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	14.21	Mar. 15	15.01	May 29	15.45
Feb. 14	14.63	Apr. 23	15.26		

14 (*1017, p.159). Mr. Nealrise. SW¼NE¼ sec. 21, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 14.06; Feb. 14, 14.41; Mar. 15, 14.77.

15 (*1017, p.160). Mr. Oakes. NW¼SE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	13.25	Mar. 15	13.97	May 29	14.61
Feb. 14	13.70	Apr. 23	14.26		

16 (*1017, p.160). Mr. Heglund. SW¼NE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	12.77	Mar. 15	13.69	May 29	14.53
Feb. 14	13.27	Apr. 23	14.20		

18 (*1017, p.160). Mr. Smallwood. SW¼SE¼ sec. 16, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 24.00; Feb. 14, 24.34; Mar. 15, 24.54.

19 (*1017, p.160). L. S. Roberts. SW¼NE¼ sec. 21, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 18.66; Feb. 14, 19.03; Mar. 15, 19.38.

20 (*1017, p.160). George Lantz. NW¼SE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	17.77	Mar. 15	18.75	May 29	19.55
Feb. 14	18.28	Apr. 23	19.25		

21 (*1017, p.160). Owner unknown. NW¼SE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	15.30	Mar. 15	16.22	May 29	16.95
Feb. 14	15.80	Apr. 23	16.64		

22 (*1017, p.161). J. Blain. SW¼SE¼ sec. 28, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 14.51; Feb. 14, 15.02; Mar. 15, 15.43.

50 (*1017, p.161). Charles Heath. SE¼NE¼ sec. 30, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.03	Mar. 15	4.03	May 29	4.99
Feb. 16	4.09	Apr. 23	4.62		

53 (*1017, p.161). Emma Tesch. SE¼SE¼ sec. 24, T. 44 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	6.07	Mar. 15	6.22	May 29	7.02
Feb. 16	6.15	Apr. 23	6.76		

56 (*1017, p.161). Mr. Merril. SW¼NW¼ sec. 21, T. 44 S., R. 43 E. Water levels, in feet below land-surface datum, 1945: Jan. 3, 10.36; Feb. 14, 10.94; Mar. 15, 10.86; Apr. 23, 10.81.

62 (*1017, p.161). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	9.95	Mar. 15	11.06	May 29	12.15
Feb. 16	10.73	Apr. 23	11.78		

63 (*1017, p.162). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	12.82	Mar. 15	13.77	May 29	13.67
Feb. 16	13.40	Apr. 23	14.21		

64 (*1017, p.162). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	17.99	Mar. 15	18.55	May 29	19.11
Feb. 14	18.33	Apr. 23	18.84		

65 (*1017, p.162). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	12.05	Mar. 15	12.98	May 29	13.63
Feb. 14	12.57	Apr. 23	13.34		

66 (*1017, p. 162). Geol. Survey, U. S. Dept. of Interior. SE¼SE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	13.56	Mar. 15	14.45	May 29	15.04
Feb. 14	14.09	Apr. 23	14.77		

67 (*1017, p.162). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 27, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	2.97	Mar. 15	3.13	May 29	3.08
Feb. 14	3.52	Apr. 23	2.96		

68 (*1017, p.163). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 27, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	2.74	Mar. 15	3.05	May 29	3.07
Feb. 14	3.06	Apr. 23	2.81		

69 (*1017, p.163). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 22, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.97	Mar. 15	5.09	May 29	5.20
Feb. 14	5.15	Apr. 23	4.97		

70 (*1017, p.163). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 21, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	10.92	Mar. 15	11.54	May 29	11.91
Feb. 14	11.30	Apr. 23	11.46		

71 (*1017, p.163). Geol. Survey, U. S. Dept. of Interior. SW¼SE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	11.98	Mar. 15	12.89	May 29	13.55
Feb. 14	12.51	Apr. 23	13.27		

72 (*1017, p.163). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	9.85	Mar. 15	10.61	May 29	11.28
Feb. 14	10.33	Apr. 23	10.84		

73 (*1017, p.164). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 33, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	14.72	Mar. 15	15.58	May 29	16.21
Feb. 14	15.23	Apr. 23	15.97		

74 (*1017, p.164). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 12, T. 44 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	3.24	Mar. 15	3.93	May 29	4.00
Feb. 16	3.70	Apr. 23	4.58		

75 (*1017, p.164). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 8, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	2.99	Mar. 15	3.07	May 29	4.18
Feb. 16	3.20	Apr. 23	3.83		

77 (*1017, p.164). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 6, T. 45 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	4.52	Mar. 15	4.65	May 29	5.64
Feb. 16	4.46	Apr. 23	4.90		

78 (*1017, p. 164). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 4, T. 45 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	14.75	Mar. 15	15.27	May 29	15.73
Feb. 16	15.10	Apr. 23	15.54		

81 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 7, T. 45 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	1.68	Mar. 15	1.20	May 29	3.13
Feb. 16	1.70	Apr. 23	1.75		

82 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. SW¼SW¼ sec. 5, T. 45 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	4.20	Mar. 15	4.00	May 29	4.35
Feb. 16	4.11	Apr. 23	4.00		

83 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. SE¼SW¼ sec. 19, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	2.04	Mar. 15	2.22	May 29	3.09
Feb. 16	2.11	Apr. 23	2.52		

84 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 27, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	12.51	Mar. 15	13.25	May 29	13.71
Feb. 14	12.95	Apr. 23	13.24		

85 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 27, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	9.31	Mar. 15	9.78	May 29	10.10
Feb. 14	9.62	Apr. 23	9.83		

87 (*1017, p.165). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 10, T. 45 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	6.54	Mar. 15	7.04	May 29	7.26
Feb. 16	6.89	Apr. 23	6.92		

88 (*1017, p.166). Geol. Survey, U. S. Dept. of Interior. NE¼NE¼ sec. 28, T. 44 S., R. 43 E.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan. 1-7	8.23	8.37	July 23-29	6.18	6.85
8-14	8.17	8.35	July 30-Aug. 5	6.40	6.61
15-21	8.35	8.43	Aug. 6-12	6.25	6.80
22-28	8.43	8.55	Sept. 24-30	3.85	4.11
Jan. 29-Feb. 4	8.55	8.67	Oct. 1-7	3.90	4.23
Feb. 5-11	8.67	8.76	8-14	2.75	4.35
Apr. 2-8	9.48	9.53	Oct. 29-Nov. 4	4.05	4.35
9-15	9.53	9.57	Nov. 5-11	4.35	4.68
June 4-10	9.85	9.93	12-18	4.68	4.82
11-17	9.93	10.00	19-25	4.82	5.22
June 25-July 1	6.70	7.33	Nov. 26-Dec. 2	5.22	5.51
July 2-8	7.05	7.62	Dec. 3-9	5.51	5.84
9-15	7.36	7.80	10-16	5.84	6.11
16-22	6.83	7.65			

89 (*1017, p.166). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.94	Mar. 15	22.73	May 29	24.38
Feb. 16	22.64	Apr. 23	23.33		

90 (*1017, p.166). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	20.06	Mar. 15	22.08	May 29	23.32
Feb. 14	21.71	Apr. 23	23.07		

91 (*1017, p.166). Geol. Survey, U. S. Dept. of Interior. NE¼NW¼ sec. 28, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	18.95	Mar. 15	20.21	May 29	21.52
Feb. 14	19.91	Apr. 23	21.06		

G300 (*987, p. 39; 1017, p.166). Geol. Survey, U. S. Dept. of Interior. Sec. 32, T. 43 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	3.97	Apr. 7	4.48	July 7	3.15	Oct. 6	1.18
13	3.25	14	4.36	14	4.56	13	1.22
20	3.83	21	4.48	21	4.38	20	2.24
27	4.20	28	4.48	28	2.35	27	2.69
Feb. 3	4.43	May 5	4.56	Aug. 4	3.54	Nov. 3	2.50
10	4.43	12	4.57	11	4.40	10	4.17
17	4.38	19	4.58	18	3.25	17	4.46
24	4.94	26	4.09	25	3.35	24	4.82
Mar. 3	4.06	June 2	4.65	Sept. 1	6.05	Dec. 1	4.82
10	4.52	9	4.50	8	2.15	8	4.90
17	6.24	16	4.69	15	3.60	15	4.74
24	4.30	23	.53	22	1.25	21	4.78
31	4.43	30	1.76	29	1.08	29	4.48

G303 (*1017, p.167). Geol. Survey, U. S. Dept. of Interior. SE¼ sec. 12, T. 45 S., R. 42 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 3	2.57	Mar. 15	2.77	May 29	3.67
Feb. 16	2.72	Apr. 23	3.33		

G309 (*1017, p.167). Geol. Survey, U. S. Dept. of Interior. NE¼SW¼ sec. 7, T. 44 S., R. 43 E.

Water level, in feet below land-surface datum, 1945

Jan. 3	3.62	Mar. 15	3.72	May 29	5.30
Feb. 16	3.89	Apr. 23	4.85		

S1042 (*945, pp. 47-48; *987, pp 39-40; 1017, p. 167). Lake Worth Drainage District. NW¼NE¼ sec. 22, T. 46 S., R. 42 E. No measurements made in 1945.

St. Johns County

2 (*907, p. 18; 937, p. 15; 945, p. 19; *987, p. 40; 1017, p.167). P. J. Manucy. At Vilano Beach, on east side of North River, about 150 feet north of Vilano Bridge, 1.9 miles northeast of St. Augustine. Water level, in feet above land-surface datum, 1945: Aug. 10, 28.3.

3 (*907, p. 18; 937, p. 15; 945, p. 20; *987, p. 40; 1017, p.167). Francis Usina. At Usina's Beach, on east side of North River, 2.4 miles north of Vilano Bridge, 4.0 miles north of St. Augustine. Water level, in feet above land-surface datum, 1945: Aug. 10, 30.1.

4 (*907, p. 19; 937, p. 15; 945, p. 20; *987, p. 40; 1017, p.168). Mill Creek School. On northwest side of Nine Mile Road, about 700 feet northeast of its intersection of State Highway 48, in rear of schoolhouse, 8.3 miles southeast of Shands Bridge. Water levels, in feet above land-surface datum, 1945: Aug. 10, 18.5; Nov. 27, 19.4.

5 (*907, p. 19; 937, p. 15; 945, p. 20; *987, p. 40; 1017, p.168). G. L. Oesterricker. On east side of Inland Waterways Canal, on north side of State Highway 306, 3.2 miles south of Palm Valley, in rear of owner's residence. Water level, in feet above land-surface datum, 1945: Aug. 9, 42.6.

8 (*907, p. 19; 937, p. 15, 945, p. 20; *987, p. 40; 1017, p.168). Parish Bros. Near SW. corner of NE¼NE¼ sec. 4, T. 5 S., R. 28 E., 0.5 mile southwest of Florida East Coast Railway, 2.5 miles southeast of Bayard. No measurements made in 1945.

35. City of St. Augustine well 6. In St. Augustine, in NW¼NE¼ sec. 26, T. 7 S., R. 29 E., west side of Holmes Boulevard, 4,070 feet south of Florida East Coast Railway. Municipal supply well, diameter 26 inches, depth 90 feet, cased to 90 feet. Measuring point, top of 1-inch board laid over top of concrete pump base, 38.62 feet above mean sea level and 2 feet above land-surface datum. Water-stage recorder maintained on well since Aug. 9, 1944.

Highest and lowest daily water level, in feet below land-surface datum, 1944
(From recorder charts)

Day	August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	....	....	4.88	4.95	4.75	4.81	2.12	2.20	4.06	4.12
2	....	....	4.92	4.99	4.80	4.87	2.11	2.16	4.12	4.19
3	....	....	4.97	5.05	4.86	4.90	2.00	2.14	4.19	4.25
4	....	....	5.03	5.09	4.89	4.95	2.05	2.16	4.23	4.27
5	....	....	5.08	5.15	4.93	4.98	2.16	2.28	4.23	4.30
6	....	....	5.14	5.27	4.96	5.00	2.28	2.40	4.29	4.33
7	....	....	5.25	5.35	4.91	4.99	....	....	4.28	4.33
8	....	....	4.90	5.36	....	....	....	....	4.33	4.46
9	....	....	4.49	4.90	4.92	4.97	2.58	2.63	4.45	4.53
10	5.01	5.19	4.40	4.48	4.95	5.03	2.61	2.72	4.50	4.54
11	4.92	5.01	4.35	4.40	4.92	5.01	2.72	2.82	4.48	4.60
12	4.84	4.92	4.33	4.40	4.89	4.93	2.82	2.99	4.59	4.67
13	4.81	4.87	4.32	4.40	4.86	4.96	2.95	2.99	4.67	4.75
14	4.68	4.83	4.39	4.53	4.93	4.97	2.95	3.04	4.75	4.90
15	....	....	....	....	4.94	4.99	3.04	3.10	4.88	4.94
16	4.43	4.53	....	....	4.83	4.99	3.09	3.15	4.93	5.03
17	4.40	4.45	4.69	4.80	4.77	4.83	3.10	3.20	5.02	5.11
18	4.39	4.44	4.39	4.79	4.56	4.76	3.20	3.28	5.10	5.18
19	4.41	4.46	4.25	4.36	....	....	3.28	3.31	....	....
20	4.44	4.49	4.22	4.25	....	....	3.29	3.38	5.37	5.43
21	4.45	4.48	4.23	4.26	1.35	1.48	3.37	3.55	5.43	5.54
22	....	....	4.22	4.30	1.47	1.58	3.54	3.60	5.52	5.63
23	4.49	4.55	4.29	4.39	1.58	1.70	3.59	3.67	5.61	5.70
24	4.53	4.63	4.38	4.48	1.69	1.82	3.66	3.75	5.68	5.73
25	4.58	4.62	4.41	4.53	1.82	1.89	3.75	3.83	5.70	5.75
26	4.59	4.69	4.52	4.60	1.87	1.93	3.81	3.88	....	....
27	4.66	4.72	4.57	4.65	1.93	2.03	3.86	3.92	5.84	5.89
28	4.67	4.73	4.61	4.66	2.02	2.05	3.92	3.98	5.88	5.94
29	4.71	4.76	4.64	4.68	2.04	2.10	3.83	3.95	5.93	5.98
30	4.73	4.86	....	....	2.10	2.16	3.95	4.06	5.97	6.01
31	4.83	4.90			2.15	2.19			5.97	6.02

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Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	5.97	6.10	6.77	6.79	7.56	7.60	8.59	8.62	9.24	9.28	9.67	9.70
2	....	....	6.78	6.80	7.60	7.63	8.63	8.67	9.23	9.25	9.70	9.72
3	6.11	6.15	6.80	6.83	7.63	7.65	8.67	8.72	9.23	9.24	9.72	9.74
4	6.12	6.17	6.82	6.84	7.66	7.70	8.72	8.76	9.24	9.26	9.74	9.76
5	6.17	6.21	6.82	6.85	7.71	7.73	8.76	8.80	9.26	9.28	9.76	9.79
6	6.19	6.22	6.84	6.88	7.74	7.77	8.81	8.85	9.28	9.30	9.79	9.80
7	6.17	6.23	6.87	6.89	7.77	7.80	8.85	8.88	9.29	9.30	9.80	9.82
8	6.18	6.23	6.86	6.90	7.79	7.83	8.89	8.92	9.29	9.30	9.81	9.83
9	....	....	6.90	6.94	7.83	7.86	8.91	8.95	9.30	9.31	9.83	9.84
10	....	....	6.93	6.95	7.85	7.88	....	....	9.30	9.31	9.84	9.85
11	6.28	6.31	6.95	6.99	7.88	7.91	8.92	8.94	9.31	9.33	9.84	9.86
12	6.23	6.29	6.98	7.00	7.91	7.94	8.94	8.97	9.33	9.34	9.86	9.88
13	6.19	6.24	6.99	7.02	7.94	7.97	8.97	9.00	9.34	9.35	9.88	9.90
14	6.20	6.27	7.02	7.07	7.97	8.00	9.00	9.03	9.35	9.36	9.90	9.91
15	6.28	6.31	7.07	7.11	8.01	8.05	9.03	9.07	9.36	9.37	9.92	9.93
16	6.31	6.38	7.11	7.15	8.05	8.08	9.07	9.10	9.37	9.38	9.93	9.96
17	6.38	6.42	7.15	7.17	8.08	8.12	9.10	9.13	9.38	9.40	9.96	9.97
18	6.40	6.43	7.18	7.23	8.13	8.16	9.13	9.17	9.40	9.41	9.97	10.00
19	6.43	6.47	7.24	7.27	8.16	8.18	9.17	9.19	9.41	9.43	9.99	10.01
20	6.47	6.53	....	....	8.18	8.19	9.20	9.22	9.43	9.44	10.01	10.03
21	6.53	6.56	....	....	8.19	8.23	9.22	9.25	....	....	10.02	10.04
22	6.54	6.56	7.32	7.35	8.23	8.26	9.25	9.27	....	....	10.04	10.06
23	6.56	6.59	7.36	7.41	8.26	8.29	9.27	9.28	9.47	9.49	10.06	10.08
24	6.59	6.63	7.41	7.45	8.29	8.33	....	....	9.49	9.51	9.69	10.06
25	6.63	6.66	7.45	7.48	8.33	8.36	....	....	9.51	9.53	9.28	9.69
26	6.64	6.70	7.48	7.51	....	....	9.30	9.31	9.53	9.55	9.02	9.28
27	....	....	7.50	7.53	....	....	9.30	9.31	9.55	9.57	8.88	9.01
28	....	....	7.53	7.56	8.42	8.46	9.29	9.31	9.57	9.60	8.79	8.88
29	....	....			8.47	8.51	9.29	9.31	9.60	9.62	8.71	8.79
30	....	....			8.51	8.54	9.28	9.30	9.62	9.64	8.64	8.71
31	6.75	6.78			8.55	8.59			9.64	9.67	....	....

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	8.57	8.64	5.31	5.36	3.98	4.08	2.27	2.39	....	....	4.80	4.92
2	8.52	8.57	5.27	5.33	4.07	4.14	2.38	2.47	2.97	3.04	4.91	4.98
3	8.48	8.52	5.29	5.39	3.97	4.18	1.93	2.56	3.04	3.08	4.95	5.00
4	8.45	8.48	5.37	5.47	....	....	1.54	1.92	2.95	3.12	4.92	5.03
5	8.42	8.45	5.47	5.57	3.91	3.96	1.39	1.54	3.12	3.21	5.02	5.10
6	8.37	8.42	5.54	5.64	3.94	4.02	1.35	1.44	3.21	3.27	5.09	5.23
7	8.32	8.37	5.62	5.71	3.96	3.99	1.36	1.44	3.26	3.31	5.22	5.32
8	8.29	8.32	5.71	5.81	3.98	4.04	1.43	1.53	....	....	5.32	5.39
9	8.25	8.29	5.76	5.83	4.02	4.10	....	....	3.35	3.42	5.36	5.41
10	8.20	8.25	5.77	5.81	4.08	4.18	....	....	3.41	3.50	5.34	5.48
11	8.15	8.20	5.75	5.80	4.12	4.18	....	....	3.49	3.53	5.48	5.55
12	8.11	8.15	5.77	5.83	4.18	4.26	1.65	1.85	3.51	3.55	5.53	5.58
13	8.04	8.11	....	....	4.24	4.30	1.85	2.04	3.54	3.58	....	....
14	7.96	8.04	....	....	4.28	4.39	2.03	2.11	3.55	3.68	....	....
15	7.85	7.96	5.87	5.90	4.35	4.45	1.94	2.12	3.67	3.80	4.68	5.37
16	7.73	7.85	5.88	5.92	1.64	4.42	2.02	2.21	3.78	3.85	4.51	4.68
17	7.64	7.73	5.90	5.97	1.32	1.64	2.19	2.28	3.84	3.91	4.35	4.51
18	7.54	7.64	5.59	5.99	1.30	1.32	2.28	2.38	3.91	3.97	3.97	4.34
19	7.24	7.54	3.94	5.58	1.30	1.38	2.37	2.44	3.97	4.03	3.75	3.96
20	6.82	7.22	3.66	3.92	1.37	1.49	2.43	2.56	4.03	4.12	3.69	3.75
21	6.50	6.81	3.59	3.66	1.48	1.62	2.55	2.61	4.12	4.19	....	....
22	6.23	6.49	3.53	3.59	1.63	1.82	2.60	2.67	4.16	4.26	....	....
23	6.06	6.23	3.51	3.56	1.77	1.96	2.46	2.67	4.25	4.33	....	....
24	5.84	6.06	3.53	3.62	1.85	2.04	2.61	2.71	4.32	4.39	....	....

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Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
25	5.65	5.83	3.56	3.60	2.03	2.16	2.71	2.74	4.38	4.45	3.02	3.60
26	5.51	5.65	3.57	3.66	2.15	2.28	2.53	2.66	4.45	4.54	2.51	3.00
27	5.42	5.51	3.63	3.71	2.26	2.35	2.66	2.81	4.52	4.57	2.43	2.62
28	5.35	5.41	3.68	3.77	2.32	2.41	2.81	2.86	4.56	4.64	2.12	2.39
29	5.32	5.36	3.75	3.84	2.30	2.45	2.84	2.89	4.63	4.71	1.97	2.13
30	5.31	5.34	3.83	3.91	2.04	2.27	2.80	2.90	4.72	4.81	1.99	2.05
31	5.30	5.36	3.91	4.00			2.80	2.91			....	....

St. Lucie County

6 (*1017, p.168). City of Fort Pierce. Sec. 23, T. 35 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	20.80	Mar. 14	21.83	May 22	24.66	Aug. 23	25.58
Feb. 25	21.24	Apr. 19	22.88	July 4	25.93	Nov. 6	20.50

7 (*1017, p.168). City of Fort Pierce. Sec. 23, T. 35 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	14.05	Mar. 14	14.91	May 22	17.78	Aug. 23	18.57
Feb. 25	14.47	Apr. 19	16.05	July 2	19.27	Nov. 6	13.66

9 (*1017, p.168). Geol. Survey, U. S. Dept. of Interior. Sec. 22, T. 35 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	3.16	Mar. 14	3.95	May 22	6.16	Aug. 23	4.65
Feb. 25	3.64	Apr. 19	5.02	July 2	6.29	Nov. 6	2.19

10 (*1017, p.168). Geol. Survey, U. S. Dept. of Interior. Sec. 22, T. 35 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	3.54	Mar. 14	4.46	May 22	5.69	Aug. 23	4.28
Feb. 25	4.09	Apr. 19	5.14	July 2	5.26	Nov. 6	2.16

11 (*1017, p.168). Mr. McDonald. NW¼NW¼ sec. 1, T. 36 S., R. 40 E. Water levels, in feet below land-surface datum, 1945: Jan. 19, 19.06; Feb. 25, 19.48.

13 (*1017, p.169). Mrs. Mason. NW¼NW¼ sec. 1, T. 36 S., R. 40 E. No measurements made in 1945.

15 (*1017, p.169). Geol. Survey, U. S. Dept. of Interior. NW¼NW¼ sec. 1, T. 36 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	2.67	Mar. 14	3.54	May 22	4.88	Aug. 23	4.35
Feb. 25	3.10	Apr. 19	4.30	July 2	4.65	Nov. 6	1.94

16 (*1017, p.169). Geol. Survey, U. S. Dept. of Interior. NW¼NE¼ sec. 2, T. 36 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	1.79	Mar. 14	3.15	May 22	4.78	Aug. 23	3.87
Feb. 25	2.49	Apr. 19	4.33	July 2	4.25	Nov. 6	.97

17 (*1017, p.169). Geol. Survey, U. S. Dept. of Interior. NW¼ sec. 2, T. 36 S., R. 40 E.

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Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	2.63	Mar. 14	3.77	May 22	4.95	Aug. 23	3.77
Feb. 25	3.23	Apr. 19	4.08	July 2	3.76	Nov. 6	1.83

19 (*1017, p.169). Geol. Survey, U. S. Dept. of Interior. SW¼NW¼ sec. 2, T. 36 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	4.02	Mar. 14	5.20	May 22	6.44	Aug. 23	4.45
Feb. 25	4.66	Apr. 19	6.00	July 2	5.68	Nov. 6	2.39

20 (*1017, p.169). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 32, T. 36 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	10.30	Mar. 14	10.93	May 22	12.25	Aug 23	11.18
Feb. 25	10.60	Apr. 19	11.62	July 2	11.88	Nov. 6	9.00

21 (*1017, p.170). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 32, T. 36 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	3.83	Mar. 14	4.54	May 22	5.96	Aug. 23	5.14
Feb. 25	4.17	Apr. 19	5.33	July 2	5.58	Nov. 6	3.07

22 (*1017, p.170). Geol. Survey, U. S. Dept. of Interior. NE¼SE¼ sec. 31, T. 36 S., R. 41 E.

Water level, in feet below land-surface datum, 1944

Jan. 19	2.73	Mar. 14	3.20	May 22	4.21	Aug. 23	2.86
Feb. 25	3.04	Apr. 19	3.78	July 2	3.30	Nov. 6	2.24

24 (*1017, p.170). Geol. Survey, U. S. Dept. of Interior. NW¼SW¼ sec. 31, T. 36 S., R. 41 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	4.30	Mar. 14	5.10	May 22	6.22	Aug. 23	4.62
Feb. 25	4.75	Apr. 19	5.87	July 2	5.86	Nov. 6	3.47

25 (*1017, p.170). Geol. Survey, U. S. Dept. of Interior. NW¼SE¼ sec. 36, T. 36 S., R. 40 E.

Water level, in feet below land-surface datum, 1945

Jan. 19	3.05	Mar. 14	3.80	May 22	5.01	Aug. 23	2.96
Feb. 25	3.50	Apr. 19	4.47	July 2	4.09	Nov. 6	1.73

Sarasota County

5 (*945, p. 20; *987, p. 41; 1017, p.170). Designated as well 46 in Florida Geol. Survey 23d-24th Ann. Rept. (combined). R. M. Canty. SE¼NE¼ sec. 19, T. 36 S., R. 20 E., about 300 feet south of State Highway 18, about 12 miles east of Sarasota.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	5.80	5.85	6.29	6.34	....	....	7.05	7.11	6.94	6.98
2	5.81	5.85	....	....	....	....	7.00	7.05	6.96	6.99
3	5.80	5.84	....	....	....	....	6.97	7.00	6.95	7.00
4	5.83	5.88	....	....	....	....	6.94	7.05	6.94	7.01
5	5.77	5.83	....	....	....	....	7.02	7.09	6.97	7.06
6	5.73	5.82	6.32	6.38	....	....	....	....	7.01	7.11
7	5.77	5.83	6.33	6.41	7.04	7.12	....	....	7.06	7.16

5--Continued.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low
8	5.72	5.83	6.35	6.43	6.97	7.11	....	....	7.04	7.15
9	5.83	5.87	6.40	6.47	6.99	7.10	....	....	7.04	7.13
10	5.80	5.89	6.39	6.49	7.01	7.12	....	....	7.02	7.17
11	5.81	5.90	6.40	6.51	7.02	7.12	....	....	7.10	7.18
12	5.81	5.91	6.42	6.52	7.03	7.13	....	....	7.12	7.19
13	5.82	5.89	6.44	6.52	7.02	7.13	....	....	7.14	7.18
14	5.89	5.98	6.48	6.57	7.03	7.11	....	....	7.18	7.20
15	5.99	6.03	6.52	6.61	7.04	7.08	6.85	6.89	7.19	7.22
16	6.00	6.05	6.58	6.68	7.05	7.10	6.85	6.89	....	....
17	5.98	6.01	6.67	6.72	7.07	7.11	....	....	7.15	7.22
18	5.99	6.09	6.72	6.75	7.09	7.14	....	....	7.08	7.19
19	6.08	6.16	6.72	6.76	7.10	7.19	....	....	7.05	7.12
20	6.08	6.16	6.69	6.73	7.12	7.18	6.91	6.98	7.03	7.19
21	6.07	6.15	6.64	6.72	7.07	7.18	6.93	7.00	6.99	7.08
22	6.10	6.21	6.68	6.75	7.03	7.14	6.94	7.03	6.96	7.08
23	6.19	6.32	6.71	6.80	6.95	7.06	6.91	7.03	6.37	6.98
24	6.25	6.35	6.72	6.82	6.94	7.01	6.89	7.00	6.27	6.43
25	6.27	6.35	6.74	6.83	6.93	7.02	6.93	7.02	6.40	6.49
26	6.19	6.34	6.73	6.86	6.97	7.07	6.93	7.04	6.43	6.51
27	6.20	6.28	6.81	6.91	6.98	7.08	6.94	7.03	6.41	6.49
28	6.26	6.32	6.89	6.97	6.95	7.04	6.95	7.03	6.41	6.47
29			6.87	6.97	6.96	7.02	6.94	6.99	6.38	6.46
30			....	....	6.96	7.06	6.94	6.98	6.38	6.45
31			....	....			6.93	6.96		

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	6.28	6.39	....	....	....	....	....	....	5.50	5.62
2	6.18	6.33	....	....	....	....	....	....	5.56	5.65
3	6.16	6.27	....	....	4.70	4.79	4.83	4.93	5.51	5.64
4	6.14	6.24	5.35	5.44	4.71	4.80	4.79	5.00	5.37	5.53
5	6.13	6.26	5.37	5.46	4.73	4.82	4.97	5.09	5.34	5.44
6	6.12	6.22	5.33	5.44	4.72	4.80	5.04	5.12	5.41	5.52
7	6.09	6.21	5.31	5.41	4.70	4.76	5.01	5.11	5.47	5.55
8	6.07	6.18	5.29	5.39	....	....	4.98	5.06	5.54	5.60
9	6.06	6.17	5.29	5.36	....	....	5.01	5.07	5.53	5.60
10	6.03	6.13	....	....	....	....	5.06	5.12	5.47	5.53
11	5.98	6.08	....	....	4.70	4.78	5.05	5.12	5.53	5.61
12	5.80	6.03	....	....	4.28	4.75	5.03	5.08	5.55	5.62
13	....	....	....	....	4.69	4.75	4.96	5.03	5.50	5.67
14	5.81	5.84	....	....	4.65	4.75	4.96	5.09	5.47	5.55
15	5.78	5.82	5.13	5.19	4.57	4.67	5.09	5.31	5.46	5.66
16	5.70	5.78	5.11	5.19	4.61	4.72	5.24	5.32	5.62	5.75
17	5.71	5.76	5.05	5.11	4.65	4.75	5.22	5.32	5.60	5.72
18	5.68	5.76	4.89	5.09	4.67	4.78	5.22	5.31	5.40	5.62
19	5.58	5.72	4.89	5.06	4.69	4.79	5.19	5.30	5.35	5.48
20	5.55	5.63	4.85	5.08	4.73	4.85	5.21	5.30	5.46	5.56
21	5.45	5.63	4.73	5.07	4.77	4.85	5.23	5.31	5.48	5.56
22	5.49	5.57	4.89	5.00	4.75	4.84	5.25	5.41	5.46	5.54
23	5.51	5.60	4.86	4.97	4.77	4.88	5.35	5.43	5.43	5.51
24	5.51	5.64	4.82	4.98	4.82	4.88	5.39	5.44	5.39	5.45
25	5.47	5.61	4.54	4.93	4.77	4.89	5.40	5.46	5.34	5.40
26	5.47	5.55	4.71	4.77	4.79	4.87	5.44	5.49	....	....
27	5.46	5.53	....	....	4.87	4.92	5.42	5.51	....	....
28	5.46	5.50	....	....	4.90	4.96	5.39	5.47	....	....
29	5.49	5.55	....	....	4.89	4.97	5.40	5.49	5.32	5.37
30	5.52	5.55	....	....	4.82	4.92	5.45	5.54	5.28	5.37
31	....	....	....	....	....	....			5.18	5.35

9 (*945, p. 22; *987, p. 42; 1017, p.171). Designated as well P-100 in Florida Geol. Survey 23d-24th Ann. Rept. (combined). Palmer Corporation. At Palmer Farms, near SE. corner of SW¼SE¼ sec. 20, T. 36 S., R. 19 E., about 7 miles east of Sarasota.

Highest and lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	2.22	2.30	2.30	2.48	2.73	2.81	3.18	3.25	2.84	2.89	2.23	2.53
2	2.22	2.30	....	....	2.70	2.89	3.15	3.60	2.83	3.12	2.35	2.49
3	2.24	2.30	....	....	2.89	3.12	3.58	3.67	2.77	2.86	2.25	2.35
4	2.20	2.27	....	....	3.12	3.23	3.33	3.59	3.70	3.78	2.18	2.62
5	2.23	2.29	....	....	3.15	3.23	3.24	3.58	2.65	2.99	2.35	2.45
6	2.25	2.28	....	....	3.19	3.31	3.24	3.73	2.55	2.64	2.37	2.50
7	2.24	2.25	2.36	2.44	3.02	3.29	3.34	3.71	2.42	2.66	2.40	2.50
8	1.78	2.23	2.34	2.43	2.90	3.01	3.25	3.57	2.27	2.78	2.37	2.45
9	1.60	1.77	2.42	2.77	2.88	3.09	3.08	3.45	2.19	2.27	2.36	2.46
10	1.56	1.69	2.60	2.83	2.95	3.32	3.06	3.23	2.12	2.34	2.33	2.44
11	1.57	1.68	2.50	2.64	2.90	3.22	3.15	3.24	2.05	2.15	2.33	3.13
12	1.56	1.80	2.50	2.74	2.90	3.38	3.16	3.56	2.02	2.18	2.40	2.89
13	1.72	1.86	2.55	2.73	2.95	3.20	3.28	3.67	1.97	2.07	2.45	2.66
14	1.64	1.76	2.85	2.93	3.02	3.56	3.30	3.71	1.98	2.07	2.37	2.47
15	1.63	1.86	2.65	2.93	3.38	3.55	3.21	3.50	2.02	2.10	2.34	2.43
16	1.86	2.31	2.72	3.00	3.25	3.50	3.14	3.21	2.02	2.10	....	....
17	2.16	2.38	2.90	3.05	3.17	3.48	3.16	3.20	2.06	2.25	2.23	2.30
18	2.16	2.24	2.70	2.90	3.14	3.25	3.19	3.37	2.23	2.32	2.15	2.22
19	2.11	2.22	2.72	2.81	....	....	3.15	3.30	2.10	2.30	2.00	2.15
20	2.21	2.29	2.75	2.80	....	....	3.10	3.30	2.04	2.16	1.96	2.02
21	2.20	2.27	2.69	2.92	....	....	3.07	3.17	2.02	2.40	1.90	1.98
22	2.19	2.29	2.76	2.85	....	....	2.84	3.07	2.18	2.45	....	....
23	2.24	2.33	2.73	2.89	....	....	2.59	2.84	2.06	2.20	....	....
24	2.25	2.34	2.83	2.95	3.27	3.65	2.54	2.80	2.00	2.14	....	....
25	2.26	2.32	2.74	2.95	3.31	3.65	2.76	2.85	2.05	2.23	....	....
26	2.34	2.57	2.50	2.70	3.23	3.55	2.79	2.90	2.02	2.23	1.58	1.66
27	2.32	2.40	2.50	2.67	3.26	3.62	2.84	3.10	1.98	2.09	1.58	1.69
28	2.33	2.40	2.65	2.75	3.26	3.45	2.95	3.16	1.95	2.31	1.50	1.71
29	2.30	2.38			3.29	3.59	2.81	3.09	2.15	2.31	1.50	1.84
30	2.33	2.39			3.26	3.56	2.73	2.92	2.15	2.30	1.73	1.91
31	2.30	2.39			3.25	3.52			2.20	2.53		

Highest and lowest daily water level, in feet with reference to land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	-1.89	-2.00	-0.30	-0.40	+0.82	+0.68	....	.....	-1.05	-1.39	-1.99	-2.13
2	-1.65	-1.93	-.20	-.31	+.86	+.75	....	.....	-1.14	-1.50	-2.02	-2.12
3	-1.50	-1.74	-.11	-.24	+.86	+.65	....	.....	-1.38	-1.57	-2.01	-3.50
4	-1.45	-1.81	-.05	-.12	+.88	+.63	....	.....	-1.39	-1.57	-1.54	-3.58
5	-1.55	-1.83	-.03	-.14	+.89	+.57	....	.....	-1.31	-1.85	-1.26	-1.52
6	-1.50	-1.92	-.03	-.16	+.81	+.56	....	.....	-1.57	-3.31	-1.25	-1.46
7	-1.67	-1.92	-.06	-.87	+.88	+.80	....	.....	-1.73	-3.20	-1.35	-1.62
8	-1.58	-1.87	+.03	-.72	+.93	+.83	....	.....	-1.62	-3.14	-1.57	-1.63
9	-1.49	-1.80	+.15	-.49	+.89	+.81	....	.....	-1.67	-1.91	-1.36	-1.56
10	-1.40	-1.74	+.19	+.07	+.91	+.14	....	.....	-1.66	-1.97	-1.27	-2.94
11	-1.30	-1.45	+.21	+.15	+.92	+.74	....	.....	-1.68	-1.98	-1.90	-3.03
12	-1.25	-1.35	+.25	+.17	+.78	+.18	....	.....	-1.65	-3.08	-1.86	-2.90
13	-1.24	-1.35	+.23	+.20	+.90	+.34	....	.....	-2.76	-3.07	-1.85	-1.98
14	-1.18	-1.23	+.26	+.22	+.40	-.81	....	.....	-1.64	-3.56	-1.77	-1.89
15	-1.15	-1.19	+.28	+.25	....	....	....	.....	-3.44	-3.94	-1.35	-1.79
16	-1.08	-1.15	+.29	+.23	....	....	....	.....	-3.68	-3.85	-1.21	-1.59
17	-1.08	-1.13	+.24	-.82	....	....	....	.....	-3.36	-3.83	-1.10	-1.30
18	-1.05	-1.15	+.31	+.05	....	....	....	.....	-2.29	-3.42	-.97	-1.19
19	-.98	-1.07	+.40	+.30	....	....	....	.....	-3.17	-3.43	-1.03	-1.16
20	-.93	-1.00	+.41	+.14	+.22	+.14	-.77	-1.07	-3.14	-3.39	-1.11	-1.40
21	-.77	-.97	+.50	+.11	+.25	-.05	-.97	-1.08	-2.77	-3.68	-1.40	-1.50
22	-.78	-.87	+.60	+.48	.....	.....	-.96	-2.25	-2.27	-3.65	-1.46	-1.61

9--Continued.

Highest and lowest daily water level, in feet with referenct to land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
23	-0.58	-0.89	+0.62	+0.55	.....	.....	-1.15	-1.88	-2.15	-2.34	-1.49	-1.62
24	-.45	-.61	+.68	+.56	.....	.....	-.97	-1.10	-2.10	-2.33	-1.35	-1.48
25	-.44	-.54	+1.01	+.64	.....	.....	-1.02	-1.08	-1.89	-2.09	-1.30	-1.36
26	-.45	-.59	+1.02	+1.00	.....	.....	-.96	-1.05	-1.87	-2.18	-1.35	-1.50
27	-.46	-.60	+1.00	+.96	.....	.....	-1.02	-1.18	-2.06	-2.23	.....	.....
28	-.44	-.62	+.99	+.96	.....	.....	-1.16	-1.24	-1.89	-2.76	.....	.....
29	-.52	-.57	+1.00	+.95	.....	.....	-1.20	-1.42	-1.79	-2.07	-1.29	-1.65
30	-.49	-.55	+1.00	+.75	.....	.....	-1.16	-1.36	-1.77	-2.04	-1.05	-1.28
31	-.41	-.59	+.68	+.65			-1.02	-1.29			-.65	-1.05

Seminole County

35 (*845, p. 51; 886, p. 68; 907, p. 19; 943, p. 20; 987, p. 43; 1017, p.172). C. S. Lee. Owner's well 1, on farm 3. SE¼NW¼ sec. 26, T. 20 S., R. 31 E., near edge of marsh bordering southeast side of Lake Jessup, 4.2 miles northeast of Oviedo. Measurements temporarily discontinued.

GEORGIA

By S. M. Herrick

PROGRAM OF WORK

Measurements of water level and artesian pressure in selected observation wells in the Georgia Coastal Plain were begun in November 1938 as a part of the ground-water investigation in cooperation with the Division of Mines, Mining and Geology of the Georgia State Division of Conservation.

The geologic map of Georgia shows the State divided into three major geologic provinces: The Paleozoic area, the Crystalline area, and the Coastal Plain. The Coastal Plain is larger than the other two provinces combined and covers an area of about 35,000 square miles, about 60 percent of the entire area of the State. It consists of that part of the State lying south of the Fall Line, a line that extends approximately through Columbus, Macon, Milledgeville, and Augusta and marks the northern extent of the sedimentary formations which overlie the older crystalline rocks. The Coastal Plain is underlain by water-bearing formations that range in age from Upper Cretaceous to Recent.

Most of the observation wells reported on in the Coastal Plain area end in the limestones of Oligocene and upper Eocene ages, which are the principal artesian formations in southeast Georgia. A shallow well, Chatham County well 343, 12 miles southwest of Savannah, represents the fluctuation of the water table in formations of Recent age in this locality. The majority of the observation wells reported on in north Georgia terminate in crystalline rocks of pre-Cambrian age. One well, Spalding County well 12, at Experiment, represents the fluctuations of the water table in the unconsolidated, weathered material that overlies rocks of igneous origin.

During the period 1939 to 1943, inclusive, the observation-well program in the Georgia Coastal Plain was continued and steadily expanded and at the end of 1943 included 171 observation wells in 19 counties. In 1944,

however, this program was somewhat curtailed, but during 1945 was again maintained on virtually the same level as in 1943. In 1945, the program included 181 observation wells in 21 counties. In this area, automatic water-stage recorders were maintained on three wells for the entire year and on one well for a part of the year. A total of 618 individual tape measurements and pressure readings were made during the year on 177 observation wells on which water-stage recorders were not installed. In addition, in Baker and Early Counties, 259 individual tape measurements on 13 observation wells were made during the year. These measurements, which are given in this report, were supplied through the courtesy of the Emory University Field Station, 11 miles southwest of Newton. These measurements made in wells in Baker and Early Counties are part of the hydrologic data collected by the Emory University Field Station in connection with malaria-control research work. In north Georgia, this program included 50 observation wells in 6 counties. An automatic water-stage recorder was maintained on one well for the entire year. In this area a total of 85 individual tape measurements was made during the year on 49 observation wells on which water-stage recorders were not installed.

The following table lists all counties in Georgia for which water-level measurements are given in this report, and gives, for each county, the number of observation wells, number of measurements made, and the number of water-stage recorders maintained in operation for all or part of the year.

Distribution, by counties, of observation wells in Georgia, 1945

County	Number of wells at end of 1945	Tape measurements and pressure readings	Number of wells with recording gages in 1945	
		1945	Throughout year	Part of year
Appling	1	1	0	0
Baker	10	198	0	0
Brantley	2	1	0	0
Bryan	27	52	0	0
Camden	18	37	0	0
Charlton	2	3	0	0
Chatham	66	288	1	1
Clayton	10	10	0	0
Cobb	18	27	0	0
Coffee	1	0	0	0
DeKalb	7	17	0	0
Dougherty	1	0	0	0
Early	3	61	0	0
Effingham	6	6	0	0
Evans	1	3	0	0
Fulton	13	27	0	0

Distribution, by counties, of observation wells in Georgia, 1945--Continued

County	Number of wells at end of 1945	Tape measurements and pressure readings	Number of wells with recording gages in 1945	
		1945	Throughout year	Part of year
Glynn	14	71	1	0
Henry	1	4	0	0
Liberty	14	44	0	0
Long	1	2	0	0
McIntosh	15	37	0	0
Mitchell	1	5	0	0
Montgomery	1	1	0	0
Oconee	1	0	0	0
Pierce	2	4	0	0
Screven	2	2	0	0
Spalding	1	53	1	0
Ware	1	3	0	0
Wayne	4	5	0	0

FLUCTUATIONS OF WATER LEVEL

Except in the city of Savannah and a few additional localities, water levels in wells ending in the Ocala limestone in the Coastal area of Georgia rose somewhat in nearly all wells during 1945. In Savannah and in the industrial area northeast of Savannah, artesian water levels averaged 3.17 feet lower during 1945 than during 1944. In 1945 the total metered pumpage in the Savannah area, which is the combined pumpage of the Savannah municipal waterworks and the Union Bag & Paper Corporation, was greater by 129 million gallons than it was in 1944. Figures of the total pumpage in 1945 by other users in the Savannah area were not obtained, but it is thought that this amount certainly equalled that of 1943 when 11 to 11½ million gallons a day was pumped. The artesian water levels in Chatham County, outside Savannah, showed a slight decline, which was greatest in that area bordering the Savannah area but least in the area situated to the south and southeast of the Savannah area. In Wilmington and Tybee Islands the average decline during 1945 amounted to 0.56 foot. North of Savannah (as far north as the county line) water levels declined about 0.20 foot. In the northwestern part of Chatham County two wells together indicate an average decline of 0.99 foot. In the south and southeastern parts of the county water levels declined only 0.11 foot as compared with 1944.

In Bryan County all water levels averaged higher than those prevailing in 1944, ranging from 0.27 to 0.86 foot higher than the average for these same wells in 1944. Average water levels in observation wells

in Liberty County were above those recorded during 1944. Practically all wells in McIntosh County also showed rises in average water levels. In Glynn County all water levels, except those on St. Simons Island, showed slight rises as compared with the previous year. All water levels in Camden County, except those within the town of St. Marys, showed increases over those of 1944. The decline in the water levels at St. Marys was probably due to pumpage of wells owned by the St. Marys Kraft Corporation. Most of the rise of water levels in the Coastal counties, with the exception of Chatham County, appears to have been due to natural conditions, as the artesian water levels in wells in Camden, Wayne, Pierce, Brantley, and Charlton Counties, which are west and south of Glynn County, were 0.78 foot to 1.24 feet higher during 1945 than during 1943. No measurements were made on observation wells in Wayne, Pierce, Brantley, and Charlton Counties during 1944.

Chatham County well 343 is situated at the Plant Introduction Station, 12 miles southeast of Savannah. This is a dug well, 14.5 feet in depth, that shows the effect of precipitation. Accordingly, the average monthly water levels for this well were 1.09 feet lower in 1945 than in 1944. According to U. S. Weather Bureau records this area received 15.51 fewer inches of rainfall in 1945 than in 1944.

In north Georgia, where water-table conditions prevail, all water levels show the effect of precipitation. Fulton County well 26 may be taken as an index of water-table conditions in the Atlanta area during 1945. This well showed an average yearly water level of 21.76 feet in 1945 as compared with 24.17 feet in 1944. Precipitation during 1945, according to U. S. Weather Bureau records, exceeded that of 1944 by 19.75 inches, a fact which largely accounts for the increased water levels in this area. Further, during April 1944, the city of East Point discontinued the use of its drilled wells for its water supply, instead, going over to a surface-water supply. Stoppage of well-pumpage in East Point affected the 1945 water levels in wells 7, 8, 20, 29, 32, 39, and 43, all in Fulton County. It is possible that Fulton County well 26 was also somewhat affected by the shutting down of all drilled wells owned by the city of East Point.

Spalding County well 12, is situated at the Georgia State Experiment Station, Experiment. This dug well is 30.5 feet in depth and shows the effect of precipitation. The average monthly water level during 1945 for this well was 16.61 feet as compared with 16.63 feet in 1944. According to U. S. Weather Bureau records in 1945 this area received an increase of 8.59 inches of rainfall as compared with the total for 1944. Although the figures indicate little difference between the average monthly water levels for this well during the years 1944 and 1945, water levels remained higher throughout the summer and fall months of 1945 than was the case in 1944. The distribution of rainfall received by this area in 1944 and 1945 appears to be the reason for this.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Appling County

3 (*945, p. 55;*987, p. 50; 1017, p. 176). Filtered Rosin Products Co. Near Baxley, about 0.1 mile east of Baxley city-limit sign, and 300 feet south of U. S. Highway 341. Water level, in feet below land-surface datum, 1945: Dec. 12, 129.42.

Baker County

1 (*937, p. 33; 945, p. 55; *987, p. 50; 1017, p.176). Emory University Field Station well 1. Fred Cross. About 1.1 miles east of Baker-Miller county line, 0.3 mile north of State Highway 91, about 0.25 mile northwest of Nochaway Church, and 30 feet southwest of pond.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	8.60	Feb. 21	1.50	Apr. 12	3.14	Oct. 6	7.56
16	5.40	Mar. 7	1.95	May 4	.04	Nov. 29	18.42
30	2.0	26	2.58	Aug. 3	2.32		

5 (*937, p. 34; 945, p. 56; *987, p. 51; 1017, p.176). Emory University Field Station well 5. D. G. Jones. About 1.8 miles northwest of Crestview , and 75 feet east of county road.

Water level, in feet below land-surface datum, 1945

Jan. 9	20.40	May 15	7.08	Aug. 8	22.95	Oct. 24	16.79
25	12.60	22	7.40	15	16.48	31	17.60
Feb. 7	13.60	29	8.71	22	17.15	Nov. 1	18.42
28	8.60	June 5	10.10	29	18.98	14	18.98
Mar. 16	9.62	12	11.68	Sept.12	19.15	23	19.61
28	12.18	19	12.92	19	15.67	28	19.95
Apr. 10	13.64	26	14.58	26	14.27	Dec. 5	20.28
18	14.47	July 3	15.82	Oct. 3	14.30	12	20.63
27	8.25	10	16.96	11	15.05	19	20.49
May 1	5.64	17	17.87	17	15.80	26	6.73
8	6.40	24	18.14				

9 (*937, p. 35; 945, p. 56; *987, p. 51; 1017, p.176). Emory University Field Station well 9. Matthew Clias. About 5.2 miles north of Elmodel, 170 feet east of county road, about 0.25 mile east of State Highway 37.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	26.0	Mar. 7	10.35	May 5	10.69	Oct. 25	17.79
30	25.38	26	12.30	Aug. 3	12.65	Nov. 29	20.90
Feb. 21	10.03						

12 (*937, p. 36; 945, p. 56;*987, p. 51; 1017, p. 177). Emory University Field Station well 12. Alton Kidd. 0.14 mile north of Milford, and 75 feet east of county road.

Water level, in feet below land-surface datum, 1945

Jan. 3	20.19	May 16	12.98	Aug. 1	17.39	Oct. 24	18.66
16	20.99	23	12.67	8	18.0	31	18.95
30	20.65	30	12.47	15	17.26	Nov. 1	19.37
Feb. 21	17.07	June 6	12.69	22	17.85	14	19.82
Mar. 7	12.55	13	12.90	29	18.25	21	20.30
26	11.66	20	13.23	Sept.12	18.96	28	20.70
Apr. 2	11.91	27	13.70	19	18.90	Dec. 5	21.0
11	12.32	July 4	14.38	26	18.88	12	21.54
18	13.40	11	14.65	Oct. 3	18.46	19	21.70
25	12.80	18	15.37	10	18.33	26	21.63
May 9	13.50	25	15.89	17	18.29		

15 (*937, p. 36; 945, p. 57; *987, p. 51; 1017, p.177). Emory University Field Station well 15. R. L. Hall. About 7.3 miles north of Baker County courthouse at Newton, about 1,500 feet east of county road, at Old Hickory Hill Plantation.

Water level, in feet below land-surface datum, 1945

Jan. 16	13.20	Mar. 7	5.85	May 5	3.86	Oct. 25	10.96
30	10.80	26	8.16	Aug. 4	4.22	Nov. 29	12.92
Feb. 21	5.10						

25 (*937, p. 37; 945, p. 57; *987, p. 52; 1017, p.177). Emory University Field Station well 35. P. H. Thompson, Jr. About 3.6 miles west of Patmos, 1 mile east of Baker-Early county line, and 0.6 mile north of Pine Grove Church.

Water level, in feet below land-surface datum, 1945

Jan. 9	16.39	May 8	9.24	July 24	17.06	Oct. 17	15.84
25	11.70	15	11.02	Aug. 8	15.24	31	16.60
Feb. 7	9.50	22	11.92	15	15.88	Nov. 7	16.93
28	9.66	29	12.93	22	16.34	14	17.14
Mar. 16	10.81	June 5	13.87	29	16.39	21	17.37
28	13.26	12	14.89	Sept.12	16.17	28	17.44
Apr. 3	13.60	19	15.59	19	11.63	Dec. 5	17.41
10	14.13	26	16.19	26	12.80	12	17.53
18	14.71	July 3	16.81	Oct. 3	14.0	19	13.90
27	9.71	10	16.27	10	15.05	26	7.90
May 1	7.49	17	17.40				

27 (*937, p. 38; 945, p. 57; *987, p. 52; 1017, p.177). Emory University Field Station well 37. Doc Davis. About 6.3 miles northwest of Baker County courthouse at Newton, 2.9 miles south of Baker-Dougherty county line, 5.2 miles east of State Highway 37, and 150 feet north of county road. Measurements discontinued.

29 (*937, p. 38; 945, p. 57; *987, p. 52; 1017, p.177). Emory University Field Station well 39. Ichaway Plantation, Inc. (W. R. Woodruff). About 1.6 miles northeast of Pilgrims Home Church, 0.5 mile southeast of State Highway 91.

29 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 16	11.90	May 23	6.75	Aug. 8	9.59	Oct. 24	(a)
30	9.10	30	9.22	15	9.18	31	(a)
Feb. 21	7.0	June 6	12.20	22	9.83	Nov. 7	(a)
Mar. 7	7.52	13	(a)	29	11.83	14	(a)
26	(a)	20	5.57	Sept. 4	(a)	21	(a)
Apr. 2	(a)	27	5.95	12	(a)	28	(a)
11	(a)	July 4	8.65	19	12.24	Dec. 5	(a)
18	3.43	11	10.70	Oct. 3	(a)	12	(a)
28	5.64	18	5.0	10	(a)	19	(a)
May 9	4.54	24	6.37	17	(a)	26	5.94
16	5.18	Aug. 1	7.13				

a Dry.

Brantley County

1 (*937, p. 39; 945, p. 58; *987, p. 52; 1017, p.178). N. S. McVeigh. At Waynesville, on north side of State Highway 50. No measurements made in 1945.

9 (*945, p. 58;*987, p. 52; 1017, p. 178). U. S. Government. About 1.4 miles north of Atlantic Coast Line Railroad, at Waynesville, about 0.1 mile east of county road from Waynesville to Browntown at site of abandoned Civilian Conservation Corps camp. Water level, in feet below land-surface datum, 1945: Dec. 11, 2.4.

Bryan County

41 (*886, p. 69; 907, p. 39; *937, p. 39; 945, p. 58; 987, p. 53; 1017, p.178). U. S. War Department. At Roding. No measurements made in 1945.

43 (*945, p. 58; *987, p. 53; 1017, p.178). U. S. War Department. At Roding, 0.5 mile west of State Highway 63, on south side of State Highway 144. No measurements made in 1945.

50 (*945, p. 58; *987, p. 53; 1017, p.178). U. S. War Department. At Clyde, about 100 feet southwest of intersection of State Highway 63 and county road. No measurements made in 1945.

51 (*886, p. 71; 907, p. 39; 937, p. 39; 945, p. 59; *987, p. 53; 1017, p.178). U. S. War Department. At Clyde, about 600 feet southwest of former site of schoolhouse. No measurements made in 1945.

52 (*886, p. 71; 907, p. 39; *937, p. 39; 945, p. 59; *987, p. 53; 1017, p.178). U. S. War Department. At Clyde, a short distance northeast of former site of schoolhouse. Water levels, in feet above land-surface datum, 1945: Feb. 17, 5.75; June 15, 5.48; Aug. 25, 5.68; Dec. 7, 6.25.

55 (*945, p. 59; *987, p. 53; 1017, p.178). U. S. War Department. At Clyde, a short distance east of former site of old Bryan County courthouse. Water levels, in feet below land-surface datum, 1945: Feb. 17, 2.72; June 15, 2.80; Aug. 25, 2.65; Dec. 7, 2.24.

63 (*907, p. 39; *937, p. 39; 945, p. 59; 987, p. 53; 1017, p.178). U. S. War Department. About 7 miles west of Richmond Hill, 4.5 miles north of Fleming, on east side of county road that connects Bashlor's Bridge with U. S. Highway 17. No measurements made in 1945.

71 (*907, p. 39; *937, p. 39; 945, p. 59; 987, p. 53; 1017, p.178). U. S. War Department. On south side of River Road, 5.5 miles west of State Highway 63. No measurements made in 1945.

85 (*937, p. 39; 945, p. 59; *987, p. 53; 1017, p. 178). Henry Ford. About 0.1 mile southwest of Belfast road, and 150 feet southeast of Seaboard Air Line Railway. Water levels, in feet above land-surface datum, 1945: Feb. 17, 6.63; June 15, 6.0; Aug. 25, 6.40; Dec. 7, 6.45.

87 (*886, p. 71; 907, p. 39; *937, p. 40; 945, p. 59; *987, p. 53; 1017, p. 178). Henry Ford. At Richmond Hill, about 500 feet west of intersection of U. S. Highway 17 and Bryan Neck road. Water levels, in feet below land-surface datum, 1945: Feb. 17, 0.11; June 15, 0.32; Aug. 25, 0.27; Dec. 7, +0.46.

87a (*945, p. 59; *987, p. 54; 1017, p.178). Henry Ford. At Richmond Hill, about 500 feet west of intersection of U. S. Highway 17 and Bryan Neck road. Water levels, in feet below land-surface datum, 1945: Feb. 17, 0.6; June 15, 1.01; Aug. 25, 0.88; Dec. 7, 0.29.

96 (*907, p. 39; *937, p. 40; 945, p. 59; *987, p. 54; 1017, p.178). J. W. Harden. About 1.7 miles south of Keller, about 300 feet east of Bryan Neck road. Water level affected by tide. Water levels, in feet above land-surface datum, 1945: Feb. 17, 7.85; June 15, 7.45; Aug. 25, 7.91; Dec. 7, 8.08.

112 (*907, p. 39; *937, p. 40; 945, p. 60; 987, p. 54; 1017, p.178). U. S. War Department. 12 miles west along River Road from State Highway 63 on south side of River Road. No measurements made in 1945.

119 (*907, p. 39; *937, p. 40; 945, p. 60; *987, p. 54; 1017, p.179). Henry Ford. At Kilkenny, about 4.5 miles southeast of Keller. Water level affected by tide. Water level, in feet above land-surface datum, 1945: Dec. 7, 6.35.

143 (*937, p. 40; 945, p. 60; *987, p. 54; 1017, p.179). A. M. Casin. Near west end of Morgan's Bridge over Ogeechee River on north side of Pine Barren road. No measurements made in 1945.

144 (*987, p. 54; 1017, p.179). U. Butler. At Eldora, about 200 feet east of county road, on north side of two-story brick store. Water levels, in feet below land-surface datum, 1945: Feb. 10, 21.15; Dec. 8, 20.98.

145 (*987, p. 54; 1017, p.179). Henry Ford. On east side of Belfast road, about 0.3 mile southeast of U. S. Highway 17, on north side of turpentine still. Water level, in feet above land-surface datum, 1945: Feb. 17, 8.33.

146 (*937, p. 40; 945, p. 60; *987, p. 54; 1017, p.179). L. W. Smith. About 2.25 miles northeast of Lanier, south side State Highway 30, at site of abandoned Civilian Conservation Corps camp. Water levels, in feet below land-surface datum, 1945: Apr. 28, 22.03; Feb. 9, 22.22; Aug. 22, 22.12; Nov. 2, 22.16.

148 (*937, p. 40; 945, p. 60; *987, p. 54; 1017, p.179). Henry Ford. At Keller, about 80 feet west of Bryan Neck road and 200 feet north of Belfast road. Water levels, in feet above land-surface datum, 1945: Feb. 17, 5.78; June 15, 5.40; Aug. 25, 5.45; Dec. 7, 6.0.

149 (*937, p. 40; 945, p. 60; *987, p. 54; 1017, p.179). Henry Ford. About 5.5 miles southeast of Richmond Hill, at the Jack Griswold Place. Water levels, in feet above land-surface datum, 1945: Feb. 17, 3.60; June 15, 3.25; Aug. 25, 3.36; Dec. 7, 3.85.

150 (*945, p. 60; *987, p. 54; 1017, p.179). Henry Ford. At Richmond Hill, 1 mile north of U. S. Highway 17, about 200 feet east of State Highway 63. Water levels, in feet above land-surface datum, 1945: Feb. 17, 9.14; June 15, 9.10; Aug. 25, 9.49; Dec. 7, 9.25.

151 (*945, p. 60; *987, p. 55; 1017, p.179). Henry Ford. About 0.9 mile west of Keller, on west bluff of Tivoli River, on north side of Belfast road. Water levels, in feet above land-surface datum, 1945: Feb. 17, 6.45; June 15, 6.0; Aug. 25, 6.05; Dec. 7, 6.71.

161 (*945, p. 60; *987, p. 55; 1017, p.179). Henry Ford. At Kilkenny, about 4.5 miles southeast of Keller, about 300 feet north of club house near edge of marsh at oyster house. Water level affected by tide. Water level, in feet above land-surface datum, 1945: Dec. 7, 10.01.

162 (*987, p. 55; 1017, p.179). Henry Ford. About 7.5 miles southeast of Richmond Hill, about 0.1 mile west of Fort McAllister, on south bank of Ogeechee River. No measurements made in 1945.

171 (*987, p. 55; 1017, p.179). Deal Purvis. At Belfast, about 110 feet east of bluff, near center of nearly right-angle bend in Belfast River. Water level affected by tide. Water levels, in feet above land-surface datum, 1945: Feb. 17, 7.47; Aug. 25, 7.13; Dec. 7, 7.80.

Camden County

3 (*907, p. 40; *937, p. 40; 945, p. 60; *987, p. 55; 1017, p.179). Town of St. Marys. On east side of State Highway 40, 0.25 mile north of Riverview Hotel, in St. Marys. No measurements made in 1945.

8 (*886, p. 71; 907, p. 40; *937, p. 41; 945, p. 60; *987, p. 55; 1017, p.179). M. L. Hill. In Kingsland, at owner's residence. Water levels, in feet above land-surface datum, 1945: Feb. 20, 23.92; June 18, 22.66; Aug. 28, 23.94; Dec. 11, 23.25.

12 (*907, p. 40; *937, p. 41; 945, p. 60; *987, p. 55; 1017, p.179). J. J. Godley. In Kingsland, about 300 feet north of St. Marys road, on west side of U. S. Highway 17. Water levels, in feet below land-surface datum, 1945: Feb. 20, 23.34; June 18, 22.17; Aug. 28, 23.55; Dec. 11, 23.34.

14 (*945, p. 61; *987, p. 56; 1017, p.180). R. T. Clark. At Scotchville, on northeast side of St. Marys road, 4.5 miles southeast of Kingsland. Water levels, in feet above land-surface datum, 1945: Feb. 20, 30.39; June 17, 24.96; Aug. 29, 29.53.

18 (*886, p. 71; 907, p. 40; *937, p. 41; 945, p. 61; *987, p. 56; 1017, p.180). L. O. Harris. At St. Marys, about 0.8 mile north of Riverview Hotel, on east side of State Highway 40. Water levels, in feet above land-surface datum, 1945: Feb. 20, 29.03; June 17, 27.84; Aug. 29, 29.87; Dec. 11, 29.19.

19 (*886, p. 71; 907, p. 40; *937, p. 41; 945, p. 61; *987, p. 56; 1017, p.180). Camden Training School. At St. Marys, one mile north of Riverview Hotel, on east side of State Highway 40. No measurements made in 1945.

39 (*886, p. 72; 907, p. 40; *937, p. 41; 945, p. 61; *987, p. 56; 1017, p.180). Southern Fertilizer & Chemical Co. At St. Marys, about 1.5 miles north of Riverview Hotel near west bank of North River. No measurements made in 1945.

42 (*945, p. 61; *987, p. 56; 1017, p.180). South Camden Turpentine Co. About 0.2 mile east of Spring Bluff, on northeast side of road to Dover Bluff. No measurements made in 1945.

59 (*937, p. 42; 945, p. 61; *987, p. 56; 1017, p.180). Zack Colson. About 3.5 miles southeast of Woodbine, 0.6 mile south of Satilla River. Water level, in feet above land-surface datum, 1945: Aug. 28, 29.33.

61 (*907, p. 41; *937, p. 42; 945, p. 61; 987, p. 56; 1017, p.180). Camden Properties. At Billysville, 2 miles east of Colesburg, at west end of tenant quarters. Water levels, in feet above land-surface datum, 1945: Feb. 20, 36.76; June 17, 35.43; Aug. 28, 37.05; Dec. 11, 36.24.

66 (*886, p. 72; 907, p. 41; 937, p. 42; 945, p. 61; 987, p. 56; 1017, p.180). Lucas. At Point Peter, about 2 miles east of St. Marys. No measurements made in 1945.

68 (*907, p. 41; *937, p. 42; 945, p. 61; 987, p. 56; 1017, p.180). Kings Bay Club. At Kings Bay, about 10 miles east of Kingsland and about 4 miles north of St. Marys. Water levels, in feet above land-surface datum, 1945: Aug. 29, 43.87.

78 (*907, p. 41; *937, p. 42; 945, p. 61; 987, p. 56; 1017, p.180). White Oak Public School. At White Oak, on west side of Seaboard Railway, at schoolhouse. Water levels, in feet above land-surface datum, 1945: Feb. 20, 42.63; June 17, 40.76; Aug. 28, 42.23; Dec. 11, 41.21.

87 (*937, p. 42; 945, p. 61; 987, p. 56; 1017, p.180). Camden Properties. At Cabin Bluff, 13 miles southeast of Woodbine, near west bank of Cumberland River. No measurements made in 1945.

92a (*937, p. 42; 945, p. 61;*987, p. 56; 1017, p.180). Camden Race Track. About 2.2 miles southeast of Kingsland, on north side of St. Marys road, at race track. Water levels, in feet above land-surface datum, 1945: Feb. 20, 33.06; June 17, 31.86; Aug. 29, 33.06; Dec. 11, 32.94.

118 (*937, p. 43; 945, p. 61;*987, p. 56; 1017, p.180). Oscar Silcox. Formerly owned by L. B. Harrel. About 9.5 miles west of Kingsland, along old Folkston Road, about 0.1 mile south of road. Water levels, in feet above land-surface datum, 1945: Feb. 20, 38.96; June 18, 37.45; Aug. 29, 38.83; Dec. 11, 38.10.

144 (*907, p. 41; *937, p. 43; 945, p. 61; *987, p. 57; 1017, p. 180). T. C. Haygood. At Woodbine, on east side of U. S. Highway 17, 0.5 mile south of road to Folkston. Water levels, in feet above land-surface datum, 1945: Feb. 20, 37.24; June 17, 35.08; Aug. 28, 36.12; Dec. 11, 35.10.

Charlton County

7 (*937, p. 43; 945, p. 62; *987, p. 57; 1017, p. 181). State of Georgia. 1 mile southwest of Folkston, at State convict camp. Water levels, in feet below land-surface datum, 1945: June 18, 15.22; Aug. 29, 13.68; Dec. 11, 13.98.

Chatham County

8 (*845, p. 53; 886, p. 72; 907, p. 41; *937, p. 43; 945, p. 62; *987, p. 57; 1017, p.181). City of Savannah. In Savannah, on west side of Stiles Avenue, about 600 feet south of Louisville road. Water level affected by pumpage in Savannah area. Average daily range of fluctuation during 1945 was 5.32 feet.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Jan. 1-6	Jan. 1	54.28	Jan. 5	60.74
7-12	8	55.86	12	60.59
13-23		(a)		(a)
24-27	24	56.84	27	59.70
28-Feb. 3	29	56.89	31	60.87
Feb. 4-10	Feb. 5	56.67	Feb. 4	59.68
11-17	12	56.75	11	59.63
18-24	22	56.81	24	60.20
25-Mar. 3	26	56.45	Mar. 3	61.21
Mar. 4-10	Mar. 5	56.84	5	60.25
11-18	12	56.89	18	62.95
19-24		(a)		(a)
25-31	26	57.88	28	63.85
Apr. 1-7	Apr. 2	58.31	Apr. 4	62.34
8-13	9	57.86	13	61.40
14-21	21	57.67	16	61.93
22-26	26	53.35	23	58.53
27-28		(a)		(a)

a No record.

8 --Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Apr. 29-May 4	Apr. 29	54.96	May 4	59.27
May 5-8		(a)		(a)
9-12	May 9	57.52	11	60.0
13-19	14	56.65	18	60.30
20-26		(a)		(a)
27-June 1	28	58.60	June 1	65.55
June 2-6		(a)		(a)
7-9	June 9	63.15	8	68.50
10		(a)		(a)
11-14	11	61.48	14	71.11
15-July 29		(a)		(a)
July 30-Aug. 4	July 30	62.57	July 30	68.83
Aug. 5-6		(a)		(a)
7-9	Aug. 7	64.05	Aug. 7	69.87
10-13		(a)		(a)
14-18	17	58.53	14	69.45
19-25	19	60.16	23	68.17
26-Sept. 1	27	61.95	31	68.89
Sept. 2-8	Sept. 5	56.93	Sept. 2	64.77
9-15	9	62.19	14	66.88
16-22	18	57.0	21	63.74
23-29	24	60.10	25	67.37
30-Oct. 6	Oct. 1	60.37	Oct. 3	63.13
Oct. 7-9		(a)		(a)
10-13	13	60.20	11	63.62
14-20	15	59.22	17	63.09
21-27		(a)		(a)
28-Nov. 3	29	58.20	Nov. 1	62.15
Nov. 4-10	Nov. 5	57.05	8	61.52
11-17	17	53.54	12	60.82
18-24	19	52.96	21	61.0
25-30	25	53.62	27	57.56
Dec. 1-8	Dec. 1	53.65	Dec. 6	58.57
9-14	10	53.80	14	57.95
15		(a)		(a)
16-22	16	53.54	21	59.21
23-29	29	45.50	23	55.15
30-31		(a)		(a)

a No record.

28 (*886, p. 72; 907, p. 42; *937, p. 44; 945, p. 63; *987, p. 58; 1017, p.181). Reliance Fertilizer Co. In Savannah, about 200 feet south of Louisville road, 2 miles west of West Broad Street. No measurements made in 1945.

29 (*907, p. 42; *937, p. 44; 945, p. 63; *987, p. 58; 1017, p.181). Portwentworth Corporation. At Port Wentworth about 300 feet east of U. S. Highway 17, near elevated steel tank. No measurements made in 1945.

30 (*845, p. 53; *886, p. 73; 907, p. 42; *937, p. 44; 945, p. 63; *987, p. 58; 1017, p.182). Dixie Asphalt Corporation. Near west bank of Savannah River, 1 mile northeast of U. S. Highway 17, and 3.4 miles northwest of Savannah city hall. Water levels, in feet below land-surface datum, 1945: Feb. 10, 54.24; June 14, 58.17; Aug. 24, 57.98; Dec. 8, 50.77.

43 (*907, p. 43; *937, p. 45; 945, p. 63; *987, p. 59; 1017, p.182). Southern Cotton Oil Co. well 215A, south well. 40 feet north of Lathrop Avenue, 1,200 feet southwest of southwest bank of Savannah River, 1.75 miles northwest of city hall. Water levels, in feet below land-surface datum, 1945: June 14, 68.54; Nov. 1, 66.11.

46 (*886, p. 73; 907, p. 43; *937, p. 45; 945, p. 63; *987, p. 59; 1017, p. 182). Union Bag & Paper Corporation well 5. About 800 feet southwest of Savannah River and 2.4 miles northwest of Savannah city hall. Well in continuous use. Measurements furnished through courtesy of Union Bag & Paper Corporation. Well pumping about 3,500 gallons per minute.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	115.3	May 2	116.5	July 25	122.3	Oct. 23	119.9
10	118.8	12	115.3	Aug. 2	117.6	Nov. 5	124.6
26	119.9	18	119.9	30	119.9	16	131.5
Feb. 19	117.6	24	117.6	Sept.27	113.0	19	131.5
Mar. 15	115.3	June 21	117.6	Oct. 8	119.9	29	122.3
Apr. 3	115.3						

47 (*886, p. 73; 907, p. 43; 937, p. 45; 945, p. 63; *987, p. 59; 1017, p. 182). National Gypsum Co. Near west bank of Savannah River, 1 mile northeast of U. S. Highway 17, 3.25 miles northwest of Savannah city hall. No measurements made in 1945.

48 (*907, p. 43; *937, p. 45; 945, p. 63; *987, p. 59; 1017, p. 182). U. S. War Department. Savannah Army Service Forces Depot. On west bank of Savannah River, 3.8 miles northwest of Savannah city hall. No measurements made in 1945.

50 (*886, p. 74; 907, p. 43; *937, p. 45; 945, p. 63; *987, p. 59; 1017, p. 182). Hercules Powder Co. In Savannah, about 95 feet south of Louisville road, 3.2 miles west of West Broad Street. No measurements made in 1945.

63 (*907, p. 43; *937, p. 46; 945, p. 64; *987, p. 59; 1017, p. 182). Colonial Ice Co. In Savannah 5 feet northwest of McGuire Street, about 105 feet northeast of Indian Street. Water levels, in feet below land-surface datum, 1945: Feb. 12, 65.10; Apr. 26, 63.56; Aug. 25, 70.75; Nov. 1, 68.74.

76 (*907, p. 44; *937, p. 46; 945, p. 64; *987, p. 59; 1017, p. 182). Pierpont Manufacturing Co. About 600 feet southwest of Savannah River, 2.1 miles northwest of Savannah city hall. Water levels, in feet below land-surface datum, 1945: Feb. 10, 73.98; June 14, 79.02; Aug. 24, 78.10; Nov. 1, 77.32.

79 (*886, p. 75; 907, p. 44; *937, p. 46; 945, p. 64; *987, p. 60; 1017, p. 183). Benton Transfer Co. In Savannah, about 25 feet west of centerline of Whitaker Street extended, about 55 feet south of Victory Drive. Water levels affected by pumpage in Savannah area.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Jan. 1-Apr. 27		(a)		(a)
Apr. 28	Apr. 28	73.94	Apr. 28	75.57
29-May 5	29	73.32	May 5	76.52
May 6-12	May 7	74.08	11	77.29
13-19	14	74.36	18	77.61
20-26	21	75.02	25	78.60
27-June 2	28	75.80	June 1	82.24
June 3-9	June 4	78.16	7	85.20
10-16	11	78.92	16	84.98
17-23	22	80.41	23	83.83
24-30	25	78.96	29	82.85
July 1-7	July 7	79.58	July 2	83.64
8-14	8	79.0	10	82.87
15-21	19	78.60	21	82.18
22-28	23	81.26	23	83.38
24-Aug. 23		(a)		(a)

a No record.

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79 --Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Aug. 24-25	Aug. 25	80.21	Aug. 24	82.77
26-Sept. 1	26	79.31	31	82.25
Sept. 2-8	Sept. 6	76.98	Sept. 3	82.02
9-15	10	77.23	14	80.03
16-22	17	76.47	21	79.28
23-29	24	76.72	25	80.34
30-Oct. 6	Oct. 6	76.87	Oct. 3	79.14
Oct. 7-13	8	75.93	12	87.31
14-20	15	75.72	19	78.22
21-27	22	75.36	24	78.05
28-Nov. 3	Nov. 3	75.10	31	77.08
Nov. 4-10	10	73.05	Nov. 6	76.04
11-17	12	71.81	14	75.0
18-24	24	71.04	20	75.33
25-Dec. 1	26	70.43	27	73.60
Dec. 2-8	Dec. 3	69.78	Dec. 3	72.49
9-15	11	67.75	9	71.86
16-22	17	67.43	16	70.78
23-29	29	65.47	24	70.80
30-31	31	65.25	31	67.17

a No record.

81 (*907, p. 45; *937, p. 47; 945, p. 65; *987, p. 61; 1017, p.183). Gordon Saussy. Near west bank of Savannah River, 5.3 miles northwest of Savannah city hall, a short distance south of Savannah Sugar Refining Corporation. Water levels, in feet below land-surface datum, 1945: Feb. 10, 40.60; June 14, 43.13; Aug. 24, 42.59; Dec. 8, 38.22.

84 (*907, p. 45; *937, p. 47; 945, p. 65; *987, p. 61; 1017, p.183). Standard Oil Co. About 150 feet south of Savannah River, and 2.9 miles east of Savannah city hall. Water levels, in feet below land-surface datum, 1945: Feb. 12, 30.06; Nov. 1, 31.10.

86 (*945, p. 66; *987, p. 61; 1017, p.183). Southern Cotton Oil Co. well 215C. In Savannah, about 180 feet north of Lathrop Avenue property line, about 1,050 feet south of Savannah River, and 1.8 miles northwest of city hall. Water levels, in feet below land-surface datum, 1945: Feb. 10, 62.63; June 14, 78.28; Aug. 24, 65.96.

87 (*907, p. 45; 937, p. 47; 945, p. 66; *987, p. 61; 1017, p.183). Savannah Gas Co. In Savannah, about 80 feet south of Bay Street on east side of Reynolds Street, about 55 feet west of Central of Georgia Railway. No measurements made in 1945.

88 (*945, p. 66; *987, p. 61; 1017, p.183). W. P. Dowling. About 1,100 feet northwest of Central Junction, 100 feet northeast of Seaboard Railway, and 3.9 miles northwest of Savannah city hall. Water levels, in feet below land-surface datum, 1945: Feb. 9, 46.44; June 13, 50.02; Aug. 30, 50.32; Nov. 1, 47.64.

100 (*987, p. 62; 1017, p. 184). Producers Cooperative Association. In Savannah, about 1.1 miles east-southeast of city hall, 1,000 feet south of Savannah River, and 100 feet north of west end of main building. Water levels, in feet below land-surface datum, 1945: Feb. 12, 39.52; June 14, 43.56; Aug. 24, 44.92; Nov. 1, 40.75.

105 (*845, p. 54; 886, p. 75; 907, p. 45; 937, p. 47; 945, p. 67; *987, p. 63; 1017, p.184). Pratt Gay. On south side of Louisville road, near intersection with Pine Barren road, and 8 miles west of Savannah. Water level, in feet below land-surface datum, 1945: Feb. 9, 6.78.

109 (*845, p. 54; 886, p. 75; 907, p. 45; *937, p. 47; 945, p. 67; *987, p. 63; 1017, p. 184). Georgia State Highway Department. South of west abutment of bridge over Savannah River on U. S. Highway 17, and 7 miles northwest of Savannah. Water level, in feet below land-surface datum, 1945: Aug. 24, 17.25.

112 (*907, p. 46; *937, p. 47; 945, p. 67; *987, p. 63; 1017, p. 184). Mrs. L. O. Givern. At Bloomingdale, about 200 feet north of Central of Georgia Railway station, about 90 feet west of town street. Water levels, in feet below land-surface datum, 1945: Feb. 9, 3.05; June 13, 3.52; Aug. 30, 3.82; Dec. 8, 2.94.

117 (*907, p. 46; *937, p. 47; 945, p. 67; *987, p. 63; 1017, p. 184). U. S. War Department. At Fort Screven, on Tybee Island, about 300 feet south of old lighthouse. No measurements made in 1945.

121 (*886, p. 75; 907, p. 46; 937, p. 48; 945, p. 68; *987, p. 63; 1017, p. 184). Robert Schneider. About 50 feet north of Tybee road, in northwestern part of Tybee Island. Water levels, in feet below land-surface datum, 1945: Feb. 13, 6.93; June 13, 7.92; Aug. 24, 8.12; Dec. 9, 5.07.

122 (*907, p. 46; 937, p. 48; 945, p. 68; *987, p. 63; 1017, p. 184). Georgia State Highway Department. Near southwest end of steel truss bridge over Bull River on Tybee road, 7 miles east of Savannah. Water levels, in feet below land-surface datum, 1945: Feb. 13, 12.97; June 13, 14.54; Aug. 24, 14.93; Dec. 9, 12.92.

123 (*886, p. 75; 907, p. 46; *937, p. 48; 945, p. 68; *987, p. 64; 1017, p. 184). Henry Walthour Estate. On Wilmington Island, on southwest side of dirt road, about 0.5 mile south of Tybee road. Water levels, in feet below land-surface datum, 1945: Feb. 13, 9.10; June 13, 11.37; Aug. 24, 11.91; Dec. 9, 10.02.

126 (*845, p. 54; 886, p. 76; 907, p. 47; *937, p. 49; 945, p. 69; *987, p. 65; 1017, p. 185). Atlantic Mutual Fire Insurance Co. At south end of Wilmington Island. No measurements made in 1945.

128 (*945, p. 69; *987, p. 65; 1017, p. 185). Southeastern Medical Center. On Oatland Island, about 4 miles southeast of Savannah, on east side of main building. Water levels, in feet below land-surface datum, 1945: Feb. 12, 30.84; June 13, 33.08.

131 (*886, p. 76; 907, p. 47; *937, p. 49; 945, p. 69; *987, p. 65; 1017, p. 185). C. E. Oliver. On east side of State Highway 21, 0.8 mile northwest of crossing of Atlantic Coast Line Railroad at Monteith. Water levels, in feet below land-surface datum, 1945: Feb. 10, 9.12; June 14, 9.81; Aug. 24, 9.96; Dec. 8, 8.59.

133 (*945, p. 69; *987, p. 65; 1017, p. 185). Georgia State Highway Department. About 2.6 miles north of Monteith, at foot of shoulder east of State Highway 21, on north bank of Black Creek. Water levels, in feet above land-surface datum, 1945: Feb. 10, 1.1; June 14, 0.6.

134 (*945, p. 69; 987, p. 65; 1017, p. 185). J. C. Sheffield. Formerly owned by Mrs. Americus Oglesby. 4 miles south of Savannah, about 100 feet southwest of intersection of Waters Avenue and Montgomery road. Water level, in feet below land-surface datum, 1945: Feb. 11, 30.41.

137 (*907, p. 47; *937, p. 49; 945, p. 70; *987, p. 65; 1017, p. 185). C. P. Rowland. In Montgomery, in northern part, on east side of Ferguson Avenue. Water levels, in feet below land-surface datum, 1945: Feb. 11, 14.0; June 14, 15.16; Dec. 8, 13.30.

143 (*886, p. 76; 907, p. 47; *937, p. 49; 945, p. 70; *987, p. 65; 1017, p. 185). M. B. Lane. In Anderson, about 600 feet north of Seaboard Railway. No measurements made in 1945.

144 (*945, p. 70; *987, p. 66; 1017, p.185). J. F. Zipperer. On north side U. S. Highway 17, 0.2 mile east of intersection with Fort Argyle road. No measurements made in 1945.

145 (*886, p. 76; 907, p. 47; *937, p. 49; 945, p. 70; *987, p. 66; 1017, p.185). A. G. Gillespie. On north side of U. S. Highway 17, about 0.25 mile east of Little Ogeechee River. Water levels, in feet below land-surface datum, 1945: Feb. 17, 0.55; June 15, 1.41; Aug. 25, 1.35; Dec. 7, +0.05.

166 (*945, p. 70; *987, p. 66; 1017, p.185). Chatham County. At school, on north side of Pine Barren Road, 0.8 mile west of Louisville road. No measurements made in 1945.

169 (*907, p. 48; *937, p. 49; 945, p. 70; *987, p. 66; 1017, p.186). L. J. Carter. On north side of Pine Barren Road, 2.75 miles east of Ogeechee River. Water levels, in feet below land-surface datum, 1945: Feb. 9, 3.63; June 13, 7.65; Dec. 3, 4.77.

174 (*907, p. 48; *937, p. 49; 945, p. 70; *987, p. 66; 1017, p.186). Mrs. Eda W. Sapp. About 750 feet north of Pine Barren Road, and 0.5 mile east of Ogeechee River. Water levels, in feet above land-surface datum, 1945: Feb. 9, 6.75; June 13, 4.80; Dec. 8, 6.90.

194 (*886, p. 76; 907, p. 48; *937, p. 50; 945, p. 70; *987, p. 66; 1017, p.186). Mrs. W. W. Keller, Sr. At Drakie's Bluff, on west bank of Savannah River, about 8 miles northwest of Savannah. water levels, in feet below land-surface datum, 1945: Feb. 10, 19.82; Aug. 24, 20.57.

199 (*886, p. 76; 907, p. 48; *937, p. 50; 945, p. 70; *987, p. 66; 1017, p.186). Mrs. Hattie F. Keller. At Meinhard, about 0.25 mile south of Monteith road, about 750 feet west of Savannah & Atlanta Railway. No measurements made in 1945.

203 (*845, p. 54; 886, p. 76; 907, p. 48; 937, p. 50; 945, p. 70; *987, p. 66; 1017, p.186). Atlantic Coast Line Railroad. At house of section foreman, in Cherokee Hill. No measurements made in 1945.

213 (*886, p. 76; 907, p. 48; 937, p. 50; 945, p. 70; *987, p. 66; 1017, p.186). J. L. Budreau. At intersection of Burroughs road and U. S. Highway 17. Water levels, in feet below land-surface datum, 1945: Feb. 17, 1.38; June 15, 1.62; Aug. 25, 1.52; Dec. 7, 0.45.

242 (*945, p. 71; *987, p. 66; 1017, p.186). J. L. Budreau. On east side of Burroughs road, 0.9 mile south of U. S. Highway 17. No measurements made in 1945.

256 (*937, p. 50; 945, p. 71; *987, p. 67; 1017, p.186). Mrs. W. M. Price. At Bloomingdale, on south side of Central of Georgia Railway, opposite depot. No measurements made in 1945.

265 (*1017, p.186). Mrs. S. B. Macon. At Pooler, near southeast end of bridge over Central of Georgia Railway on U. S. Highway 80. No measurements made in 1945.

266 (*907, p. 48; *937, p. 50; 945, p. 71; *987, p. 67; 1017, p.186). Dr. J. F. Chisholm. 1 mile east of Augusta road, 3.5 miles north of Monteith. Water levels, in feet below land-surface datum, 1945: Feb. 10, 5.33; June 14, 5.73; Aug. 24, 6.10; Dec. 8, 5.06.

269 (*907, p. 48; *937, p. 51; 945, p. 71; *987, p. 67; 1017, p.186). J. W. Pierpont Estate. In east part of Isle of Hope. Water levels affected by tide. Water levels, in feet below land-surface datum. 1945: Feb. 11, 16.87; June 14, 18.34; Aug. 24, 18.46; Dec. 8, 16.1.

273 (*907, p. 49; *937, p. 51; 945, p. 71; *987, p. 67; 1017, p.186). C. A. Gross. On west side of Isle of Hope road, 1.5 miles north of Isle of Hope. Water levels, in feet below land-surface datum, 1945: Feb. 11, 22.79; June 14, 25.43; Aug. 24, 25.77; Dec. 8, 21.61.

275 (*886, p. 77; 907, p. 49; *937, p. 51; 945, p. 71; *987, p. 67; 1017, p.186). Mrs. R. J. Travis. At Avalon. No measurements made in 1945.

279 (*907, p. 49; *937, p. 51; 945, p. 71;*987, p. 67; 1017, p.186). J. B. Pound Hotel Corporation. On Wilmington Island, at General Oglethorpe Hotel. Water level affected by tide. Water levels, in feet below land-surface datum, 1945: Feb. 13, 21.06; June 13, 22.48; Aug. 24, 24.47; Dec. 9, 19.59.

312 (*907, p. 49; *937, p. 51; 945, p. 71; *987, p. 67; 1017, p.187). Miss Mamie Taylor. About 50 feet northeast of Louisville road, about 0.4 mile northwest of intersection with Pine Barren Road. No measurements made in 1945.

314 (*907, p. 49; *937, p. 52; 945, p. 71;*987, p. 67; 1017, p.187). J. M. Breckenridge. About 600 feet west of White Bluff Road, 0.3 mile north of Buckhalter road. Water levels, in feet below land-surface datum, 1945: Feb. 11, 32.54; June 14, 35.60; Dec. 8, 30.53.

321 (*907, p. 49; *937, p. 52; 945, p. 72; *987, p. 68; 1017, p.187). R. C. Hinley. About 8.25 miles south of Savannah city hall, 100 feet north of Vernonburg Avenue, and 0.1 mile east of White Bluff road. Water levels, in feet below land-surface datum, 1945: Feb. 11, 12.97; June 14, 14.35; Dec. 8, 12.08.

326 (*937, p. 52; 945, p. 72; *987, p. 68; 1017, p.187). R. E. Heller. In eastern part of Coffee Bluff. No measurements made in 1945.

328 (*907, p. 50; *937, p. 52; 945, p. 72;*987, p. 68; 1017, p.187). U. S. War Department. At Fort Screven, on Tybee Island. Water levels, in feet below land-surface datum, 1945: Feb. 13, 10.90; June 13, 12.05; Aug. 24, 12.09; Dec. 9, 8.69.

330 (*937, p. 53; 945, p. 73; *987, p. 69; 1017, p.187). State Highway Department. On southeast side of U. S. Highway 17, 6 miles southwest of Savannah. Water levels, in feet below land-surface datum, 1945: Feb. 13, 2.58; June 15, 3.53; Aug. 25, 3.47; Dec. 7, 1.74.

331 (*945, p. 73; *987, p. 69; 1017, p.187). J. E. Poythress. At Jelma Inn, about 13 miles northwest of Savannah, 0.4 mile southeast of Chatham-Effingham county line, along State Highway 21, about 50 feet northeast of highway. Water levels, in feet below land-surface datum, 1945: Feb. 10, 11.63; June 14, 12.03; Aug. 24, 12.32; Dec. 8, 11.47.

332 (*945, p. 73; *987, p. 69; 1017, p.187). Louis Lucas. At Bloomingdale, about 50 feet north of U. S. Highway 80, 0.3 mile east of Bloomingdale crossroad. Water levels, in feet below land-surface datum, 1945: Feb. 9, 2.79; June 13, 3.20; Aug. 30, 3.46; Dec. 6, 2.60.

343 (*945, p. 73; *987, p. 70; 1017, p.188). U. S. Department of Agriculture. At Barbour Lathrop Plant Introduction Station, about 12 miles southwest of Savannah, 300 feet north of U. S. Highway 17, and 200 feet northeast of Fort Argyle road.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Jan. 1-7	Jan. 1	4.91	Jan. 7	4.99
8-14	9	4.97	14	5.06
15-21	21	5.11	15	5.14
22-28	26	4.53	22	5.06
29-Feb. 4	29	4.57	Feb. 4	4.91
Feb. 5-11	Feb. 8	4.24	5	4.85
12-18	13	4.19	18	4.44
19-25	25	4.12	19	4.51
26-Mar. 4	26	4.12	Mar. 4	4.50
Mar. 5-11	Mar. 5	4.61	11	5.01

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Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Mar. 12-18	Mar. 12	5.06	Mar. 18	5.28
19-20	19	5.33	20	5.35
21-25		(a)		(a)
26-Apr. 1	26	5.52	Apr. 1	5.78
Apr. 2-8	Apr. 8	5.84	3	5.98
9		(a)		(a)
10-14	10	5.85	14	6.03
15		(a)		(a)
16-21	16	6.13	21	6.27
22		(a)		(a)
23-29	29	6.12	23	6.27
30-May 6	May 6	5.54	30	6.12
May 7-12	7	5.49	May 12	5.81
13-14		(a)		(a)
15-20	15	6.04	20	6.30
21-24	21	6.34	24	6.67
25-27		(a)		(a)
28-June 3	28	6.74	June 3	7.14
June 4-10	June 4	7.23	10	7.63
11-17	11	7.71	17	7.87
18-24	18	7.91	24	8.06
25-July 1	25	8.07	July 1	8.26
July 2-8	July 2	8.30	7	8.50
9-15	9	8.49	15	8.63
16-22	22	6.35	16	8.67
23-29	25	4.06	29	4.64
30-Aug. 5	30	4.76	Aug. 5	5.27
Aug. 6-12	Aug. 6	5.38	12	5.93
13-19	13	6.0	19	6.30
20-26	23	3.60	20	6.32
27-Sept. 2	27	4.0	Sept. 2	4.68
Sept. 3-9	Sept. 5	2.20	3	4.70
10-16	14	3.06	13	3.67
17-23	17	.12	23	1.95
24-30	29	2.05	26	2.37
Oct. 1-6	Oct. 1	2.51	Oct. 5	2.95
7		(a)		(a)
8-14	8	2.94	14	3.52
15-21	15	3.54	21	3.97
22-28	27	3.98	25	4.28
29-Nov. 4	29	4.13	Nov. 4	4.48
Nov. 5-11	Nov. 5	4.49	11	4.75
12-18	12	4.81	18	5.08
19-25	19	5.11	25	5.39
26-Dec. 2	26	5.47	Dec. 2	5.75
Dec. 3-9	Dec. 4	5.71	9	5.90
10-16	16	5.75	12	6.01
17-23	23	4.93	17	5.53
24-30	30	3.60	24	4.94
31		(a)		(a)

a No record.

Clayton County

7 (*987, p. 71; 1017, p. 188). H. P. Lieuppo. At Forest Park, 0.5 mile south of highway bridge over Central of Georgia Railway, and 43 feet west of center of U. S. Highway 41. Water levels, in feet below land-surface datum, 1945: July 27, 30.0; Dec. 20, 33.52.

11 (*987, p. 71; 1017, p. 188). Pete Kacoonis. At Hapeville, about 0.26 mile south of Fulton-Clayton county line and 192 feet east of center of U. S. Highway 41. Well filled with debris; measurements discontinued.

14 (*987, p. 71; 1017, p.189). John E. Dawson. At Mountain View, 0.6 mile east of U. S. Highway 41, and about 100 feet south of east-west road. Water levels, in feet below land-surface datum, 1945: July 27, 64.60; Dec. 20, 64.10.

15 (*987, p. 71; 1017, p.189). W. M. Lyle. At Mountain View, 0.6 mile east of U. S. Highway 41, and about 100 feet south of east-west road. Water levels, in feet below land-surface datum, 1945: July 27, 61.93; Dec. 20, 63.05.

18 (*987, p. 71; 1017, p.189). Aristocrat Dairy. At Morrow, about 0.9 mile south of Central of Georgia Railway station, and 600 feet west of center of State Highway 54. Casing removed; measurements discontinued.

26 (*987, p. 71; 1017, p.189). A. C. Crane. At Forest Park, about 3 miles south of Fulton-Clayton county line along U. S. Highway 41, and 100 feet south of tourist court on east side of highway. Water levels, in feet below land-surface datum, 1945: July 27, 27.49; Dec. 20, 27.97.

27 (*987, p. 71; 1017, p.189). J. L. Paul. In vicinity of Forest Park, about 4.0 miles south of Fulton-Clayton county line along U. S. Highway 41 and about 150 feet east of center of highway. Water levels, in feet below land-surface datum, 1945: July 27, 39.74; Dec. 20, 35.46.

41 (*987, p. 71; 1017, p.189). Estes Manufacturing Co. At Rex, about 0.05 mile west of Southern Railway and 6 feet west of southwest corner of chair factory. Well filled with debris; measurements discontinued.

42 (*987, p. 71; 1017, p.189). Estes Manufacturing Co. At Rex, about 0.05 mile west of Southern Railway and 36 feet northwest of northwest corner of dwelling. Well filled with debris; measurements discontinued.

44 (*987, p. 71; 1017, p.189). City of Forest Park. At Forest Park, about 0.4 mile south of Central of Georgia Railway, on eastern edge of municipal baseball field. Casing removed; measurements discontinued.

Cobb County

5 (*987, p. 72; 1017, p.189). City of Smyrna. At Smyrna, about 340 feet west of center of Whitfield Street, in open field. Water levels, in feet below land-surface datum, 1945: Aug. 13, 11.70; Dec. 21, 11.20.

6 (*987, p. 72; 1017, p.189). City of Smyrna. At Smyrna, at junction of Old Roswell, New Roswell, and Highland roads. Water levels, in feet below land-surface datum, 1945: Aug. 13, 16.10; Dec. 21, 17.14.

11 (*987, p. 72; 1017, p.189). Mrs. J. H. Carmichael. At Oakdale, about 0.8 mile northwest of Log Cabin Drive underpass under Georgia Power Co. electric railway and 100 feet east of center of Log Cabin Drive. Water levels, in feet below land-surface datum, 1945: Aug. 13, 30.43; Dec. 21, 28.84.

14 (*987, p. 72; 1017, p.189). J. A. Rust. At Smyrna, about 1.75 miles along U. S. Highway 41, northwest of Locust Grove Baptist Church in Oakdale, and 250 feet west of center of U. S. Highway 41. Water levels, in feet below land-surface datum, 1945: Aug. 13, 45.17; Dec. 21, 45.05.

21 (*987, p. 72; 1017, p.189). Dr. Lewis Ray. At Oakdale, on U. S. Highway 41, about 0.45 mile north of highway bridge over Nashville, Chattanooga & St. Louis Railway, and about 42 feet east of center of highway. Water levels, in feet below land-surface datum, 1945: Aug. 13, 32.81; Dec. 21, 33.99.

25 (*987, p. 72; 1017, p.190). J. T. Cox. At Oakdale, on Log Cabin Drive, about 0.35 mile northwest of underpass under Georgia Power Co. electric railway, and 300 feet west of center of Log Cabin Drive. Water levels, in feet below land-surface datum, 1945: Aug. 13, 15.36; Dec. 21, 14.10.

27 (*987, p. 72; 1017, p.190). R. D. Webb. At Oakdale, on Log Cabin Drive, about 0.45 mile northwest of underpass under Georgia Power Co. electric railway and approximately 150 feet north of center of Log Cabin Drive. Water levels, in feet below land-surface datum, 1945: Aug. 13, 22.67; Dec. 21, 22.17.

32 (*987, p. 72; 1017, p.190). Mrs. F. C. Arnold. At Oakdale, about 1.15 miles south of Southern Railway, along Oakdale road, and 35 feet east of center of road. Water level, in feet below land-surface datum, 1945: Aug. 13, 43.89.

36 (*987, p. 72; 1017, p.190). E. W. Bruton. Near Bolton, on U. S. Highway 78, about 0.5 mile west of highway bridge over Chattahoochee River, and 200 feet south of center of highway. Electric pump installed on well. No measurements made in 1945.

44 (*987, p. 73; 1017, p.190). Mrs. J. A. West. At Oakdale, about 0.65 mile south of Southern Railway along Oakdale road, and 62 feet east of center of road. Electric pump installed on well. No measurements made in 1945.

48 (*987, p. 73; 1017, p. 190). J. J. Watkins. At Oakdale, about 0.3 mile south of Southern Railway along the Oakdale road, 17 feet southeast of southeast corner of dwelling. Water levels, in feet below land-surface datum, 1945: Aug. 13, 40.23; Dec. 21, 40.92.

52 (*987, p. 73; 1017, p. 190). C. C. Johnson, At Oakdale, about 0.2 mile north of Southern Railway along Oakdale road, and 100 feet west of center of road. Water levels, in feet below land-surface datum, 1945: Aug. 13, 17.04; Dec. 21, 15.94.

57 (*987, p. 73; 1017, p. 190). Jim Lawson. At Oakdale, about 0.35 mile north of Church Street and 80 feet west of center of north-south road, inside private dwelling. Electric pump installed on well. No measurements made in 1945.

71 (*987, p. 73; 1017, p. 190). D. W. Cook. Formerly owned by Mrs. Lillian Mavell. At Oakdale, about 0.1 mile east of Camp Highland Road and 27 feet northeast of northeastern corner of dwelling. Water levels, in feet below land-surface datum, 1945: Aug. 13, 56.65; Dec. 21, 57.35.

74 (*987, p. 73; 1017, p. 190). A. P. Hogan. At Marietta, about 0.55 mile southeast of intersection of State Highways 3E and 220, on State Highway 3E and 28 feet southwest of southwest corner of dwelling. Water levels, in feet below land-surface datum, 1945: Aug. 13, 44.30; Dec. 21, 45.66.

83 (*987, p. 73; 1017, p.190). National Park Service, U. S. Dept. of Interior. At Kennesaw Mountain National Park, about 0.55 mile west of U. S. Highway 41 and 250 feet north of center of east-west road. Water levels, in feet below land-surface datum, 1945: Aug. 13, 5.02; Dec. 21, 4.13.

85 (*987, p. 73; 1017, p. 190). D. C. Hames. Near Kenesaw Mountain National Park, on U. S. Highway 41, about 0.4 mile northwest of highway bridge over Nashville, Chattanooga & St. Louis Railway, and 45 feet east of center of highway. Water levels, in feet below land-surface datum, 1945: Aug. 13, 23.12; Dec. 21, 23.07.

Coffee County

3 (*945, p. 74; *987, p. 73; 1017, p.190). Town of Nicholls. In Nicholls, about 0.1 mile north of Atlanta, Birmingham & Coast Railroad, on east side of city street, near elevated steel water tank. No measurements made in 1945.

DeKalb County

17 (*987, p. 74; 1017, p.191). Mrs. J. H. Anderson. Formerly owned by Frank Carter. In Atlanta, on U. S. Highway 42, about 0.55 mile south of highway bridge over Southern Railway, 100 feet east of center of highway. Water levels, in feet below land-surface datum, 1945: July 27, 30.37; Dec. 20, 34.97.

29 (*1017, p.191). Mrs. A. H. Daniel. In Decatur, about 0.75 mile north of intersection of Glenwood Road and Columbia Drive, 75 feet east of center of Columbia Drive and 85 feet west of private dwelling. Water levels, in feet below land-surface datum, 1945: July 27, 37.10; Aug. 12, 37.25; Dec. 20, 38.35.

34 (*1017, p.191). I. W. Williams. In Panthersville, about 0.35 mile west of intersection of Candler and Flat Shoals roads and about 150 feet south of center of Flat Shoals road, on top of hill. Water levels, in feet below land-surface datum, 1945: July 27, 49.01; Aug. 12, 49.12; Dec. 20, 50.05.

39 (*1017, p.191). L. N. Fassett. In Decatur, about 0.45 mile north of intersection of Columbia Drive and Glenwood Road, 138 feet east of center of Columbia Drive, and about 22 feet southeast of southeast corner of private dwelling. Water levels, in feet below land-surface datum, 1945: July 27, 37.59; Aug. 12, 37.62; Dec. 20, 38.71.

40 (*1017, p.191). Lamar Westfall. In Decatur, about 0.75 mile east of intersection of Glenwood and Candler roads, 370 feet south of center of Glenwood Road in bottom of valley, and 55 feet west of west side of outdoor concrete swimming tank. Water levels, in feet below land-surface datum, 1945: July 27, 2.73; Aug. 12, 2.97; Dec. 20, 3.04.

50 (*1017, p.191). Miss A. M. Lyle. In Atlanta, about 2.4 miles south of intersection of Moreland Avenue and Memorial Drive, 125 feet east of center of Moreland Avenue, and 15 feet southeast of southeast corner of private dwelling. Water levels, in feet below land-surface datum, 1945: July 27, 33.67; Aug. 13, 33.66; Dec. 20, 33.89.

Early County

2 (*937, p. 53; 945, p. 75; *987, p. 74; 1017, p.191). Emory University Field Station well 19. Plez Douglas. About 2.4 miles northeast of Damascus, 1.4 miles east of Seaboard Railway, and 60 feet south of county road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	10.40	May 8	1.91	July 24	10.28	Oct. 23	8.23
25	5.49	15	1.59	Aug. 7	12.30	30	10.16
Feb. 7	4.58	22	2.34	14	11.21	Nov. 6	11.80
28	2.24	29	3.09	21	13.08	13	12.81
Mar. 16	3.50	June 5	4.07	28	13.74	20	13.13
28	4.08	12	5.23	Sept. 3	14.18	27	13.38
Apr. 3	4.69	19	6.64	11	7.47	Dec. 4	13.50
10	5.64	26	7.65	Oct. 2	3.86	11	13.94
17	6.87	July 3	9.58	9	4.75	21	6.70
24	5.29	10	11.62	16	6.17	28	1.10
May 1	1.65	17	8.96				

6 (*937, p. 54; 945, p. 75; *987, p. 74; 1017, p.192). Emory University Field Station well 23. P. F. Chandler. About 1.3 miles north of Douglasville, 2.7 miles east of Seaboard Railway, and 50 feet west of T-junction of county roads.

Water level, in feet below land-surface datum, 1945

Jan. 9	10.30	Feb. 28	1.80	Apr. 10	4.21	Oct. 25	10.62
25	4.50	Mar. 16	2.93	May 4	1.66	Nov. 29	(a)
Feb. 7	2.87	28	3.55	Aug. 3	5.86		

a Dry.

18 (*937, p. 54; 945, p. 75; *987, p. 74; 1017, p.192). Emory University Field Station well 53. E. B. Davis. About 0.8 mile southeast of Douglasville, 3,125 feet south of county road, north of Big Cypress pond.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	9.32	Feb. 7	3.70	Mar. 16	3.79	Oct. 25	9.34
25	4.85	28	3.20	28	4.06	Nov. 29	12.05

Effingham County

6 (*937, p. 54; 945, p. 75; *987, p. 75; 1017, p.192). W. B. Butler. At Eden, on east side of U. S. Highway 80, about 0.3 mile northwest of crossing of Central of Georgia Railway and U. S. Highway 80. Water levels, in feet below land-surface datum, 1945: Feb. 9, 2.18; June 13, 2.30; Aug. 30, 2.53; Dec. 6, 1.94.

7 (*886, p. 77; 907, p. 51; *937, p. 54; 945, p. 76; *987, p. 75; 1017, p. 192). Central of Georgia Railway. At Meldrim, between Central of Georgia and Seaboard Railways, about 200 feet west of station. No measurements made in 1945.

16 (*937, p. 55; 945, p. 76; *987, p. 75; 1017, p.192). Coastal Service Co. At Springfield, in northern part, near bottom of valley south of Jacks Branch, about 300 feet east of State Highway 21. No measurements made in 1945.

18 (*937, p. 55; 945, p. 76; *987, p. 75; 1017, p.192). Steel Bridge Club. 4 miles southwest of Guyton, near east end of steel bridge over Ogeechee River, on Springfield-Statesboro road on south side of road. No measurements made in 1945.

20 (*937, p. 55; 945, p. 76; *987, p. 75; 1017, p.192). J. D. Hagin. At Pineora, 3 miles south of Guyton, 0.2 mile west of Central of Georgia Railway. Water levels, in feet below land-surface datum, 1945: Feb. 10, 39.18; Dec. 8, 39.15.

Evans County

3 (*945, p. 76; *987, p. 75; 1017, p. 192). City of Claxton. At Claxton, at city waterworks plant, about 300 feet south of Seaboard Railway. Water levels, in feet below land-surface datum, 1945: Aug. 22, 113.13; Nov. 2, 112.38; Nov. 15, 112.65.

Fulton County

7 (*987, p. 76; 1017, p.192). City of College Park. In College Park, at base of west side of large steel filter tank of city waterworks. Water level, in feet below land-surface datum, 1945: Dec. 20, 41.76.

8 (*987, p. 76; 1017, p.193). City of College Park. At College Park, about 30 feet north of Oglethorpe Street extended. Water level, in feet below land-surface datum, 1945: Dec. 20, 26.79.

20 (*987, p. 76; 1017, p.193). City of East Point. At East Point, on Plant Street about 0.1 mile south of Taylor Avenue, and 38 feet east of center of street. Water levels, in feet below land-surface datum, 1945: July 27, 25.73; Dec. 20, 25.88.

26 (*987, p.76; 1017, p.193). O'Neill Bros. At East Point, about 98 feet east of Central of Georgia Railway and 6 feet west of O'Neill Bros. warehouse. Recorder removed from well Dec. 31, 1944, but reinstalled Dec. 28, 1945.

26 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 5	24.75	Dec. 28	20.95	Dec. 30	20.80
Mar. 31	22.25	29	20.87	31	20.76

29 (*987, p. 76; 1017, p.193). Adair & McCarthy. At East Point, about 275 feet northeast of center of Central Street and 40 feet northeast of corner of Furman Fertilizer Co.'s shed. Water levels, in feet below land-surface datum, 1945: July 27, 14.31; Dec. 20, 13.52.

31 (*987, p. 76; 1017, p.193). City of East Point At East Point, about 0.25 mile southwest of junction of Semmes Street and Neely Avenue and 15 feet south of small surface stream. Water level, in feet below land-surface datum, 1945: Dec. 20, 12.48.

32 (*987, p. 77; 1017, p.193). International Minerals & Chemical Corporation. At East Point, about 0.25 mile south of junction of Taylor Avenue and Central Street and 52 feet east of main fertilizer shed. Water levels, in feet below land-surface datum, 1945: July 27, 32.66; Dec. 20, 32.57.

39 (*987, p. 77; 1017, p.194). Gate City Cotton Mill. At East Point, about 170 feet south of center of Willingham Drive, and 50 feet east of cotton mill. Casing probably defective. Water levels, in feet below land-surface datum, 1945: July 27, 2.98; Dec. 20, 2.84.

43 (*987, p. 77; 1017, p.194). American Agriculture & Chemical Co. At East Point, about 130 feet northeast of center of Central Street and 28 feet east of fertilizer shed. Water levels, in feet below land-surface datum, 1945: July 27, 22.04; Dec. 20, 22.01.

75 (*1017, p.194). Pure Oil Co. At Bolton, about 140 feet north of intersection of Bolton Road and U. S. Highway 78, 50 feet east of center of Bolton Road and 8 feet east of northeast corner of shed. Water levels, in feet below land-surface datum, 1945: Aug. 13, 33.25; Dec. 21, 35.74.

76 (*987, p. 77; 1017, p.194). Mason Public School. At Bolton, about 140 feet south of center of U. S. Highway 78 and 53 feet southeast of southeast corner of school building. Water levels, in feet below land-surface datum, 1945: Aug. 13, 42.80; Dec. 21, 44.79.

77 (*987, p. 77; 1017, p.194). Mrs. Cory C. Helms. At Bolton, about 0.1 mile north of intersection of Bolton Road and U. S. Highway 78, and 95 feet east of center of Bolton Road. Water levels, in feet below land-surface datum, 1944: Aug. 13, 22.32; Dec. 21, 25.09.

82 (*987, p. 77; 1017, p.194). Chattahoochee Brick Co. At Bolton, about 0.5 mile northwest of Bolton Road, 0.1 mile west of Southern Railway, and 25 feet south of nearest tenement house. Water levels, in feet below land-surface datum, 1945: Aug. 13, 23.04; Dec. 21, 18.63.

Glynn County

1 (*907, p. 51; *937, p. 55; 945, p. 76; 987, p. 77; 1017, p.194). Atlantic Refining Co. well 1. At Arco, about 1 mile north of Brunswick, about 1,400 feet west of U. S. Highway 17, and 1,400 feet northwest of office of Atlantic Refining Co. No measurements made in 1945.

3 (*845, p. 54; 886, p. 78; 907, p. 51; *937, p. 56; 945, p. 77; *987, p. 77; 1017, p.194). Atlantic Refining Co. well 3. At Arco, about 1 mile north of Brunswick, and 1,100 feet southwest of office of Atlantic Refining Co.

3 --Continued.

Highest and lowest weekly water level, in feet above land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Jan. 1-9	Jan. 3	32.0	Jan. 9	29.4
10-16	15	30.4	10	29.1
17-23	19	30.6	17	29.1
24-30	25	30.4	24	29.3
30-Feb. 13		(a)		(a)
Feb. 14-20	Feb. 17	30.9	Feb. 19	29.3
21-27	26	33.6	24	29.2
28-Mar. 6	Mar. 4	30.9	Mar. 1	29.5
Mar. 7-13	11	30.7	10	29.1
14-20	18	30.9	15	29.3
21-27	21	31.4	22	29.3
28-Apr. 3	Apr. 1	30.6	29	29.3
Apr. 4-10	8	30.4	Apr. 6	29.1
11-17	14	30.6	17	29.1
18-24	24	30.4	19	29.0
25-30	25	30.0	28	29.0
May 1-8	May 6	30.3	May 5	29.0
9-15	10	30.2	10	28.9
16-21	16	30.0	19	28.8
22-29	29	33.5	24	28.6
30-June 4	June 2	34.8	June 4	29.7
June 5-12	5	32.1	12	29.0
13-19	13	29.4	18	28.5
20-27	20	30.5	20	28.1
28-July 3	July 3	30.7	30	28.1
July 4-10	8	31.0	July 5	28.0
11-18	15	29.0	11	28.0
19-24	23	29.3	19	28.4
25-Aug. 19		(a)		(a)
Aug. 20-27	Aug. 26	30.0	Aug. 21	28.7
28-Sept. 3	29	31.7	28	28.8
Sept. 4-10	Sept. 4	30.1	Sept. 7	29.1
11-17	17	30.3	14	29.3
18-24	19	30.1	23	29.2
25-Oct. 1	28	35.0	25	29.3
Oct. 2-8	Oct. 3	30.2	Oct. 5	29.6
9-14	9	30.0	12	29.4
15-21	21	30.2	19	29.2
22-28	23	31.2	27	29.3
29-Nov. 4	31	30.1	29	29.4
Nov. 5-11	Nov. 8	30.1	Nov. 6	29.4
12-18	14	30.3	15	29.2
19-26	21	30.4	26	28.8
27-Dec. 2	29	31.3	Dec. 2	28.8
Dec. 3-9	Dec. 4	29.8	7	28.8
10-16	15	30.1	11	28.6
17-23	20	32.2	17	29.1
24-31	26	34.3	24	29.7

a No record.

13 (*907, p. 51; *937, p. 56; 945, p. 77; *987, p. 78; 1017, p.195). U. S. Department of Commerce. On St. Simons Island, at lighthouse. Water levels, in feet above land-surface datum, 1945; June 17, 34.07; Dec. 10, 34.30.

33 (*886, p. 78; 907, p. 51; *937, p. 56; 945, p. 77; *987, p. 78; 1017, p.195). Sea Island Co. On Lanier Island, at Sea Island Yacht Club, on west bank of Frederica River, south of causeway. No measurements made in 1945.

37 (*937, p. 56; 945, p. 77; *987, p. 79; 1017, p.195). F. G. Horne. On St. Simons Island, about 0.25 mile south of Fort Frederica. Water levels, in feet above land-surface datum, 1945: June 17, 30.64; Dec. 10, 30.75.

44 (*886, p. 78; 907, p. 51; *937, p. 56; 945, p. 77; *987, p. 79; 1017, p.195). Sea Island Co. On St. Simons Island, on north side Sea Island road, 0.5 mile west of Cloister Hotel, at Gun Club. Water level affected by tide.

Water level, in feet, 1945

Date	Hour	Water level in Black Bank River, in feet with reference to mean sea level	Water level in well, in feet above land-surface datum
June 17	12:45 p.m.	+0.99	35.94
Dec. 10	4:41 p.m.	-.64	37.66

45 (*907, p. 52; *937, p. 56; 945, p. 77; *987, p. 79; 1017. p.195). City of Brunswick. In northeastern part of city, in H. E. Coffin Park. No measurements made in 1945.

63 (*945, p. 78; *987, p. 79; 1017, p.195). S. L. Lewis. About 0.7 mile west of Southern Junction, about 300 feet northeast of U. S. Highway 341, 0.5 mile southeast of Burnett Creek. Water levels, in feet above land-surface datum, 1945: Feb. 19, 18.44; Aug. 27, 18.43.

100 (*886, p. 78; 907, p. 52; *937, p. 57; 945, p. 78; *987, p. 79; 1017, p.196). New England Tourist Camp. On U. S. Highway 17, about 6.1 miles south of bridge over Altamaha River, about 300 feet east of highway. Water levels, in feet above land-surface datum, 1945: Feb. 19, 20.43; June 17, 20.08; Aug. 27, 20.57; Dec. 10, 20.69.

128 (*937, p. 57; 945, p. 78; *987, p. 79; 1017, p.196). A. C. Harrison. At Thalman, about 0.1 mile south of crossing of Seaboard Railway and Atlanta, Birmingham & Coast Railway. Water levels, in feet above land-surface datum, 1945: Feb. 19, 33.86; Aug. 28, 34.10.

138 (*886, p. 79; 907, p. 52; 937, p. 57; 945, p. 78; *987, p. 79; 1017, p.196). G. F. Cowman. About 300 feet south of marsh edge of South Brunswick River, east side of U. S. Highway 17. Water levels, in feet above land-surface datum, 1945: Feb. 19, 33.70; June 17, 32.72; Aug. 28, 33.68; Dec. 10. 33.47.

143 (*907, p. 52; *937, p. 57; 945, p. 78; *987, p. 80; 1017, p.196). J. F. McKee. On St. Simons Island, about 0.5 mile east of Frederica Road, 0.4 mile north of Sea Island road at Black Banks. Water level, in feet above land-surface datum, 1945: June 17, 14.79.

192 (*907, p. 52; *937, p. 57; 945, p. 78; *987, p. 80; 1017, p.196). Edgar Rittenhouse. In Brunswick, 0.25 mile north of Palmetto Cemetery, about 400 feet east of old canal. Water levels, in feet above land-surface datum, 1945: Feb. 19, 23.09; June 17, 21.79; Aug. 27, 22.36; Dec. 10, 22.43.

207 (*987, p. 80; 1017, p.196). Glynn County. In Brunswick, south side of Palmetto Cemetery, about 0.25 mile west of Atlantic Coast Line Railroad, 25 feet north of northeast corner of swimming pool at Negro recreation center. No measurements made in 1945.

Henry County

11 (*987, p. 80; 1017, p.196). D. J. Arnold. At Hampton, about 70 feet west of center of U. S. Highway 41, and 6 feet south of wooden shed. Water levels, in feet below land-surface datum, 1945: Feb. 8, 30.50; Oct. 3, 28.72; Nov. 2, 28.93; Nov. 11, 28.97.

Liberty County

18 (*937, p. 57; 945, p. 78; *987, p. 80; 1017, p.196). E. P. Way. In McIntosh, about 0.25 mile northwest of Atlantic Coast Line Railroad, on southwest side of State Highway 38. No measurements made in 1945.

19 (*907, p. 52; *937, p. 58; 945, p. 78; *987, p. 80; 1017, p.196). Atlantic Coast Line Railroad. In McIntosh, about 300 feet southwest of crossing of railroad and State Highway 38, and 10 feet northwest of railroad. Water levels, in feet above land-surface datum, 1945: Feb. 18, 2.95; June 16, 2.39; Aug. 27, 3.02; Dec. 9, 3.10.

28 (*945, p. 78; *987, p. 80; 1017, p.196). Midway Church. In Midway, in front of Church, at northeast corner of intersection of U. S. Highway 17 and road to Colonels Island. Water levels, in feet above land-surface datum, 1945: Feb. 17, 9.0; June 15, 7.55; Aug. 25, 9.30; Dec. 9, 3.10.

36 (*907, p. 52; *937, p. 58; 945, p. 78; *987, p. 80; 1017, p.196). W. M. Woods. Dorchester Station, about 0.1 mile east of Seaboard Railway station, on north side of Sunbury road. Water levels, in feet above land-surface datum, 1945: Feb. 18, 15.5; June 16, 15.83; Aug. 26, 15.56; Dec. 9, 14.90.

38 (*907, p. 52; *937, p. 58; 945, p. 78; *987, p. 81; 1017, p.196). Dana Stevens. About 0.4 mile south of Dorchester Village schoolhouse. Water levels, in feet below land-surface datum, 1945: Feb. 18, 9.05; Aug. 26, 8.88; Dec. 9, 8.74.

43 (*907, p. 53; *937, p. 58; 945, p. 79; *987, p. 81; 1017, p.197). C. H. Ricks. About 2 miles southeast of Dorchester Village, on north side of road to Colonels Island. Water level, in feet below land-surface datum, 1945: June 16, 2.44.

45 (*907, p. 53; *937, p. 58; *945, p. 79; *987, p. 81; 1017, p.197). E. P. Way. At Sunbury, 0.3 mile north of Fort Morris. Water levels, in feet above land-surface datum, 1945: June 16, 2.1; Aug. 26, 4.5; Dec. 9, 4.1. (Tide measurements not taken because dock, from which measurements were obtained, was destroyed during a hurricane that occurred during the fall of 1944.)

53 (*886, p. 79; 907, p. 53; *937, p. 58; 945, p. 79; *987, p. 81; 1017, p.197). F. F. Branan. About 2.5 miles south of Midway, on west side of U. S. Highway 17. Water levels, in feet above land-surface datum, 1945: Feb. 17, 26.41; June 16, 26.53; Aug. 25, 26.20; Dec. 9, 26.56.

75 (*937, p. 58; 945, p. 79; *987, p. 81; 1017, p.197). Mrs. E. P. Way. About 3.7 miles south of Riceboro, along U. S. Highway 17, about 100 feet east of highway. Water levels, in feet above land-surface datum, 1945: Feb. 18, 21.90; June 16, 22.09; Aug. 26, 22.07; Dec. 9, 21.99.

95 (*937, p. 58; 945, p. 79; *987, p. 81; 1017, p.197). W. M. S. Howard. On Colonels Island, in northwestern part, near marsh. Water levels, in feet above land-surface datum, 1945: Feb. 18, 14.59; June 16, 15.25; Aug. 26, 16.48; Dec. 9, 14.64.

137 (*907, p. 53; *937, p. 59; 945, p. 79; *987, p. 81; 1017, p.197). H. A. Bacon. At Hinesville, about 0.5 mile northeast of Liberty County courthouse, along State Highway 38, on north side of highway. Water levels, in feet below land-surface datum, 1945: June 16, 1.25; Aug. 27, 0.73; Dec. 9, 0.21.

140 (*907, p. 53; *937, p. 59; 945, p. 79; *987, p. 81; 1017, p.197). Mrs. Amber Kiddy. At Allenhurst, about 0.1 mile southeast of Atlantic Coast Line Railroad, at site of old sawmill. Water levels, in feet below land-surface datum, 1945: June 16, 1.25; Aug. 27; 1.10.

170 (*937, p. 59; 945, p. 79; *987, p. 81; 1017, p.197). J. H. Woodall. On north side of U. S. Highway 17, 0.3 mile northeast of Freedman's Grove. Water levels, in feet above land-surface datum, 1945: Feb. 17, 13.80; June 15, 13.51; Aug. 25, 13.80; Dec. 9, 13.37.

177 (*987, p. 82; 1017, p.197). P. E. Youmans. In northeastern part Colonels Island, about 20 feet north of owner's residence. Water levels, in feet above land-surface datum, 1945: Feb. 18, 10.73; June 16, 11.34; Aug. 26, 12.37; Dec. 9, 11.24.

Long County

8 (*907, p. 53; *937, p. 59; 945, p. 79; *987, p. 82; 1017, p.197). Town of Ludowici. In Ludowici about 100 feet northwest of Atlantic Coast Line Railroad. Water levels, in feet below land-surface datum, 1945: Mar. 30, 11.37; Aug. 27, 11.57.

McIntosh County

11 (*886, p. 79; 907, p. 52; *937, p. 59; 945, p. 80; *987, p. 82; 1017, p.197). C. A. Stebbins. At Darien, southeast of State Highway 131, northeast of city park, and about 25 feet west of swimming pool. Water levels, in feet above land-surface datum, 1945: Feb. 19, 8.39; June 17, 8.26; Aug. 27, 8.65; Dec. 10, 9.15.

14 (*937, p. 59; 945, p. 80; *987, p. 82; 1017, p.197). C. H. Stebbins. At South Newport, northeast of intersection of U. S. Highway 17 and Harris Neck road. Water levels, in feet above land-surface datum, 1945: Feb. 14, 19.01; June 16, 19.21; Aug. 26, 19.30; Dec. 10, 19.16.

22 (*937, p. 60; 945, p. 80; *987, p. 82; 1017, p.198). D. E. McDonald. At Eulonia, on west side of U. S. Highway 17, about 0.25 mile south of road to Townsend. Water levels, in feet below land-surface datum, 1945: Feb. 19, 19.08; Aug. 28, 19.19.

25 (*937, p. 60; 945, p. 80; *987, p. 82; 1017, p.198). A. D. Burns. At Crescent, on south side of State Highway 131, a short distance southeast of post office. Water levels, in feet above land-surface datum, 1945: Feb. 19, 2.50; June 16, 2.60; Aug. 28, 2.57; Dec. 10, 3.20.

27 (*907, p. 54; *937, p. 60; 945, p. 80; *987, p. 82; 1017, p.198). C. B. Mallard. On east side of State Highway 131, about 0.4 mile south of right-angle bend in road near Crescent, near bluff on south branch of Sapelo River. Water levels, in feet above land-surface datum, 1945: Feb. 17, 6.08; June 16, 6.15; Aug. 28, 6.22; Dec. 10, 6.56.

38 (*937, p. 60; 945, p. 80; *987, p. 82; 1017, p.198). E. P. Maggioni & Co. At Harris Neck, on west bank of Barbours Island River, southeast of Harris Neck airport. No measurements made in 1945.

43 (*937, p. 60; 945, p. 80; *987, p. 82; 1017, p.198). Shellman Bluff public well. At Shellman Bluff, between houses of Mallard Jones and Doby Hamons. Water level, in feet above land-surface datum, 1945: Aug. 26, 18.68.

45 (*937, p. 60; 945, p. 80; *987, p. 83; 1017, p.198). New Masonic Lodge. Half a mile south of Shellman Bluff. Water level, in feet above land-surface datum, 1945: Aug. 26, 3.75.

53 (*907, p. 54; *937, p. 60; 945, p. 80; *987, p. 83; 1017, p. 198). Townsend Band Mill. In Townsend, about 300 feet east of Seaboard Railway, north of Townsend, on Eulonia road. Water levels, in feet below land-surface datum, 1945: Feb. 18, 22.14; Aug. 28, 23.13.

85 (*907, p. 54; *937, p. 60; 945, p. 80; *987, p. 83; 1017, p.198). R. C. Collins. About 0.7 mile west of Crescent, on south side of State Highway 131. Water levels, in feet below land-surface datum, 1945: Feb. 19, 4.52; Aug. 28, 4.03.

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103 (*907, p. 54; *937, p. 60; 945, p. 80; *987, p. 83; 1017, p.198). A. M. Durant. At Valona, east side of owner's residence. Water level, in feet above land-surface datum, 1945: Aug. 28, 23.63.

130 (*907, p. 54; *937, p. 60; 945, p. 80; *987, p. 83; 1017, p.198). James O'Brien Estate. At Ridgeville, on east side of State Highway 131, 0.5 mile south of road to dock. Water levels, in feet above land-surface datum, 1945: Feb. 19, 16.67; Aug. 27, 16.67.

141 (*907, p. 54; *937, p. 61; 945, p. 80; *987, p. 83; 1017, p.198). Sam Gardner. About 6 miles southeast of Townsend, on east side of Briardam road. Water levels, in feet above land-surface datum, 1945: Feb. 18, 20.97; Aug. 28, 20.45; Dec. 10, 20.44.

144 (*907, p. 54; *937, p. 61; 945, p. 80; *987, p. 83; 1017, p.198). Col. Talbot Smith. About 1.5 miles northeast of Darien, 0.25 mile east of State Highway 131 near marsh. Water levels, in feet above land-surface datum, 1945: June 17, 21.12; Aug. 27, 21.58; Dec. 10, 21.90.

180 (*987, p. 83; 1017, p.198). D. C. Cowart. In Eulonia, about 75 feet west of centerline of U. S. Highway 17, and about 50 feet south of centerline of State Highway 131 extended. Water levels, in feet below land-surface datum, 1945: Feb. 18, 22.19; June 16, 22.28; Aug. 27, 22.58; Dec. 10, 22.41.

Mitchell County

9 (*987, p. 83; 1017, p.198). City of Camilla. At Camilla, at water works plant, about 80 feet east of centerline of Ellis Street, and 50 feet north of centerline of Twitty Street.

Water levels, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 14	55.80	Mar. 15	55.58	Aug. 3	52.04
Feb. 17	54.86	June 6	50.85		

Montgomery County

1 (*945, p. 81; *987, p. 84; 1017, p.199). H. V. Thompson. In Ailey, about 0.25 mile southeast of Seaboard Railway station, about 200 feet south of railroad. Water level, in feet below land-surface datum, 1945: Nov. 14 109.55.

Pierce County

2 (*907, p. 54; 937, p. 61; 945, p. 81; *987, p. 85; 1017, p.199). City of Blackshear, in northeastern part of town, about 25 feet northwest of elevated concrete municipal water tank. Water levels, in feet below land-surface datum, 1945: Aug. 29, 59.28; Dec. 12, 60.86.

5 (*937, p. 61; 945, p. 81; 987, p. 85; 1017, p.200). Town of Patterson, in Patterson, about 140 feet east of Atlantic Coast Line railroad station. Water levels, in feet below land-surface datum, 1945: Aug. 29, 32.66; Dec. 12, 33.07.

Screven County

3 (*987, p. 85; 1017, p. 200). City of Sylvania. In Sylvania, 0.1 mile west of State Highway 21, at waterworks plant. Water level, in feet below land-surface datum, 1945: Mar. 30, 105.77.

8 (*987, p. 85; 1017, p.200). W. W. Yant. In Dover, on southwest side of Central of Georgia Railway. Water level, in feet above land-surface datum, 1945: Dec. 6, 14.30.

Spalding County

12 (*987, p. 85; 1017, p.200). Georgia State Agricultural Experiment Station. At Experiment, about 240 feet west of Central of Georgia Railway and 15 feet northeast of northeast corner of Flynt Building.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week	Date	High level	Date	Low level
Jan. 1-7	Jan. 7	19.86	Jan. 2	20.15
8-14	14	19.73	11	20.04
15-18	15	19.68	17	19.79
19-21		(a)		(a)
22-28	26	19.43	23	19.54
29-Feb. 4	Feb. 3	19.43	Feb. 1	19.52
Feb. 5-11	11	19.15	5	19.35
12-18	18	18.14	12	19.08
19-25	25	16.40	19	17.97
26-Mar. 4	Mar. 4	15.36	26	16.07
Mar. 5-11	11	15.25	Mar. 5	15.36
12-18	13	15.19	18	15.31
19-25	21	15.14	25	15.33
26-Apr. 1	26	15.31	28	15.47
Apr. 2-8	Apr. 2	15.41	Apr. 6	15.71
9-15	9	15.60	14	15.70
16-22	16	15.73	19	15.96
23-29	29	15.43	24	15.95
30-May 6	May 3	15.20	30	15.49
May 7-13	10	15.11	May 8	15.19
14-20	17	15.07	20	15.23
21-27	21	15.20	23	15.29
28-June 3	June 1	15.18	28	15.26
June 4-10	4	15.27	June 6	15.38
11-17	11	15.37	16	15.49
18-24	24	14.92	18	15.46
25-July 1	25	14.87	July 1	14.94
July 2-8	July 2	14.90	8	15.05
9-15	9	15.09	15	15.31
16-22	16	15.31	20	15.55
23-29	23	15.56	29	15.84
30-Aug. 5	Aug. 2	15.76	30	15.94
Aug. 6-12	6	15.87	Aug. 9	15.93
13-19	17	15.73	13	15.88
20-26	22	15.79	26	15.89
27-Sept. 2	27	16.0	Sept. 1	16.12
Sept. 3-9	Sept. 5	16.17	9	16.35
10-16	10	16.33	15	16.55
17-23	17	16.50	23	16.82
24-30	24	16.81	30	17.0
Oct. 1-7	Oct. 2	16.98	Oct. 4	17.11
8-14	8	17.08	14	17.25
15-21	15	17.26	21	17.43
22-28	22	17.45	27	17.69
Oct. 29-Nov. 4	31	17.54	Nov. 4	17.67
Nov. 5-11	Nov. 5	17.78	11	17.88
12-18	14	17.71	16	18.01
19-25	25	17.79	22	17.96
26-Dec. 2	29	17.60	26	17.78
Dec. 3-9	Dec. 4	17.29	Dec. 3	17.57
10-16	14	17.21	11	17.45
17-23	23	16.78	17	17.32
24-31	31	15.46	24	16.73

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Ware County

6 (*945, p. 81; *987, p. 86; 1017, p.201). State of Georgia. At Laura S. Walker State Park, 9 miles southeast of Waycross, 1.7 miles south of State Highway 50, along State Highway 177, near elevated tank. Water levels, in feet below land-surface datum, 1945: Mar. 29, 53.47; Oct. 10, 52.62; Dec. 17, 53.0.

Wayne County

1 (*907, p. 54; *937, p. 61; 945, p. 81; *987, p. 86; 1017, p.201). City of Jesup. In Jesup, west of crossing of Southern Railway and Atlantic Coast Line Railroad. No measurements made in 1945.

3 (*907, p. 55; *937, p. 61; 945, p. 81; *987, p. 86; 1017, p.201). A. W. Hurn. In Gardi, at northwest side of Hurn residence, about 200 feet southwest of Southern Railway. Water levels, in feet below land-surface datum, 1945: Aug. 27, 3.92; Dec. 12, 3.72.

4 (*907, p. 55; *937, p. 61; 945, p. 81; *987, p. 86; 1017, p.201). State Highway Department. On southeast side of State Highway 25, 0.3 mile southeast of Mt. Pleasant. Water levels, in feet above land-surface datum, 1945: Aug. 27, 4.23; Dec. 12, 4.54.

10 (*937, p. 61; 945, p. 81; *987, p. 86; 1017, p.201). Town of Screven. In Screven, about 600 feet west of Atlantic Coast Line Railroad station. Water level, in feet below land-surface datum, 1945: Dec. 12, 57.25.

KENTUCKY

By M. I. Rorabaugh

PROGRAM OF WORK

The investigation of ground-water resources in the Louisville area, begun in 1943, was continued in 1945 in cooperation with Jefferson County, the city of Louisville, and the Geological Division, Kentucky Department of Mines and Minerals. This investigation, being conducted because of a critical shortage of ground water created by heavy industrial pumpage for war purposes, includes an intensive observational program. The Rubber Reserve Company furnished funds to explore the ground-water resources in the area southwest of the city of Louisville and to investigate possible development of additional supplies by infiltration from the Ohio River.

In October 1945 the Geological Survey began an investigation of the ground-water resources in Bourbon, Fayette, Jessamine, and Scott Counties, in central Kentucky, in cooperation with the Geological Division, Kentucky Department of Mines and Minerals.

As part of the investigation periodic water-level measurements were made in 122 wells in the Louisville area. A total of 1,830 water-level measurements was made during 1945. Observations were made monthly on all wells and extra measurements were made during floods in wells affected by the Ohio River and in wells in heavily pumped areas. Additional observations were made in connection with pumping tests. Automatic water-stage recorders (float type) were maintained on 5 wells during the entire year and on 13 wells during part of the year. Records for nine wells in the Louisville area, located in Indiana are published in Water-Supply Paper 1023.

The following mimeographed reports were released through the Kentucky Department of Mines and Minerals:

1. "Drillers logs of wells and test borings in the Louisville area, Kentucky", January 1945.
2. "Chemical quality of ground water in the Louisville area, Kentucky", by H. E. Sublett, April 1945.

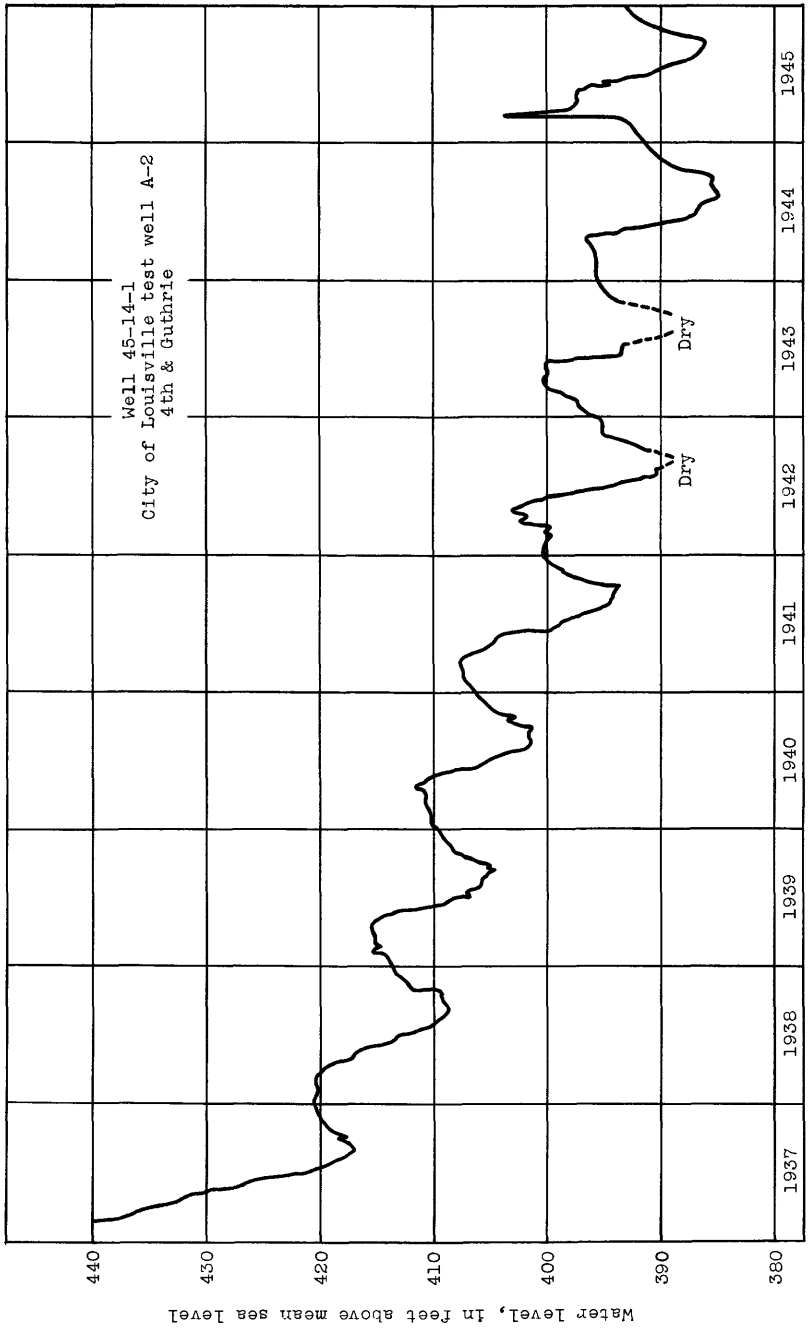

Figure 3.--Graphs showing fluctuations of water level in the downtown area, Louisville, Ky.

FLUCTUATIONS OF WATER LEVEL

A rapid decline in water levels in the Louisville area began in 1943 when the increased activity of existing industries and the establishment of new industries resulted in large demands for ground water, especially for cooling. Reduced pumpage in late 1944 and early 1945 was brought about by conservation measures, including artificial recharge, cooling towers, refrigeration, recirculation, and redesign of plant equipment.

The following table of yearly pumpage shows the increase brought on by the war and the decrease resulting from conservation measures.

Estimated average pumpage from wells in the Louisville area
(Million gallons per day)

1937	36.6	1942	50.8
1938	37.3	1943	61.5
1939	37.6	1944	55.5
1940	41.2	1945	44.9
1941	45.4		

Generally the water table was higher at the close of 1945 than at the close of 1944. In addition to the effect of reduced pumpage, the Ohio River flood of February 1945 caused a large recharge to the area, particularl in the southwestern section where the rubber industries are located. In the downtown area, heavy pumping for air conditioning usually exceeds the normal recharge. The recharge caused by the flood raised the water table about 4 feet in this area (see fig. 3) thereby delaying the steady annual decline in water levels by about 1½ years.

Rainfall in the Louisville area has only a minor effect on water levels. The fine clay which covers the water-bearing sand of the Ohio River flood plain permits very little percolation. Principal sources of recharge to the area of glacial deposit are infiltration from the Ohio River and flow from the limestone areas east of the city.

WELL-NUMBERING SYSTEM

The Louisville area lies between latitude 85° and 86° north and longitude 38° and 39° west. The area has been subdivided into quadrangles formed by the 1-minute meridians and parallels. Wells in each small quadrangle are numbered beginning with 1. Of nearly 700 wells inventoried only the ones selected for observation are shown on figure 4 . Wells are designated by a composite of three numbers; the minutes of longitude of the quadrangle, the minutes of latitude of the quadrangle, and the number of the well in that quadrangle. Thus well number 45-15-2 is

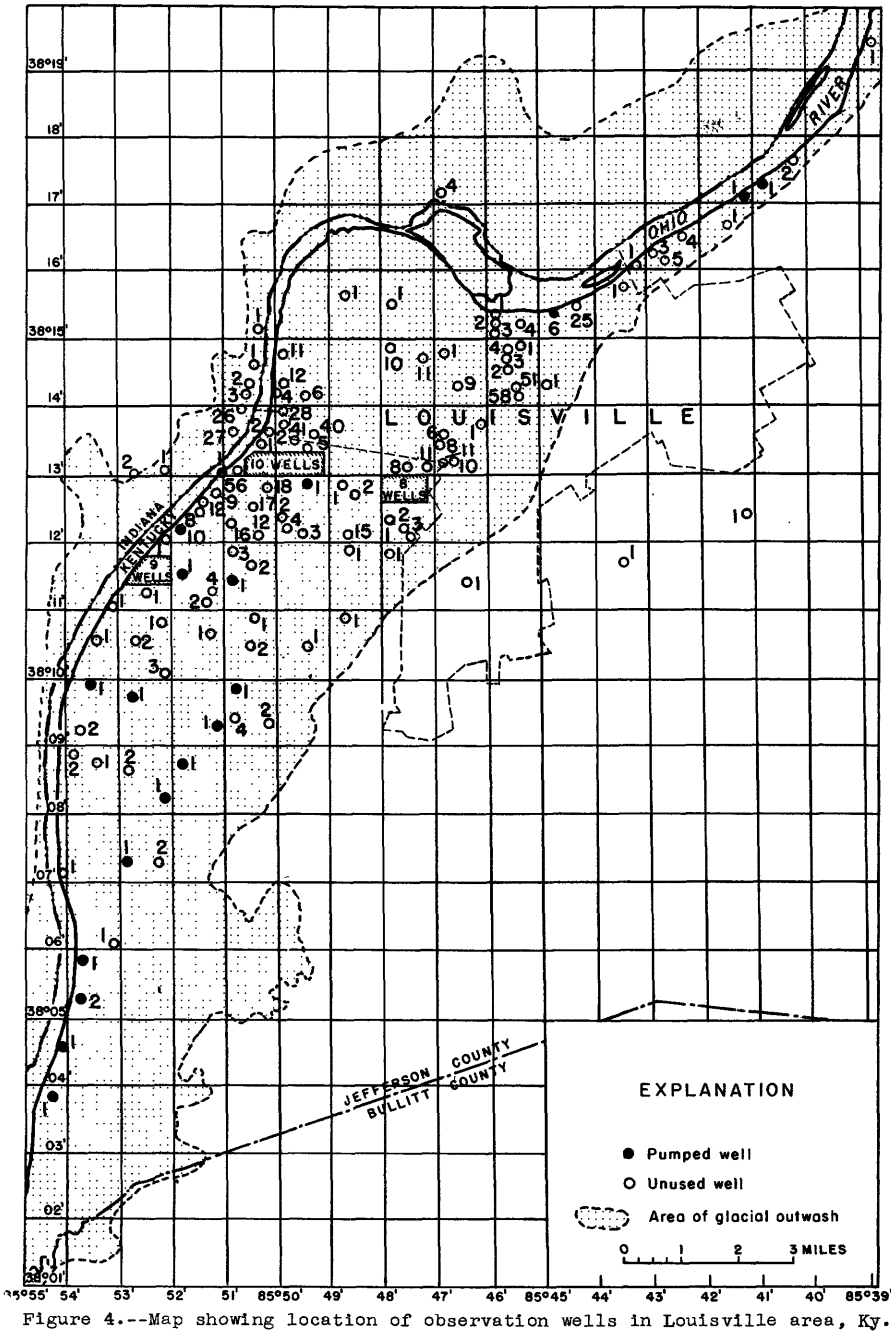

Figure 4.--Map showing location of observation wells in Louisville area, Ky.

the second well inventoried in the 1-minute quadrangle west of 85°45' longitude and north of 38°15' latitude. (See fig. 4 for well locations.) Measurements in each well were made from fixed measuring points which are referenced to land surface and to mean sea level (adjustment of 1912). All water levels are expressed in feet below land surface.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Jefferson County

38-19-1 (*1017, p. 207). Harrods Creek. 0.2 mile southwest of Harrods Creek Baptist Church.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	17.40	Jan. 16	17.47	Apr. 30	18.08	Aug. 14	19.21
4	16.06	Feb. 23	13.80	May 14	18.20	28	19.10
5	14.70	Mar. 19	11.73	23	16.56	Sept. 11	19.20
6	13.80	22	13.59	June 18	17.55	Oct. 3	18.75
7	14.55	28	11.20	July 18	18.87	Nov. 5	18.87
8	15.48	Apr. 11	16.10	31	19.08	Dec. 5	18.40
9	16.10						

38-20-2 (*1017, p. 208). W. W. Liter. 1.5 miles north of Harrods Creek.

Water level, in feet below land-surface datum, 1945

Jan. 2	15.80	Jan. 9	16.90	Apr. 30	17.87	Aug. 14	18.83
4	13.80	16	18.28	May 14	17.55	28	18.38
5	12.70	Feb. 7	18.62	23	15.25	Sept. 11	18.80
6	13.20	23	12.14	June 18	17.72	Oct. 3	18.05
7	15.00	Mar. 28	11.80	July 18	19.17	Nov. 5	18.69
8	16.22	Apr. 11	16.75	31	18.77	Dec. 5	18.61

40-17-1 (*1017, p. 208). Union Park Club 89. On River Road, northeast of Indian Trail.

Water level, in feet below land-surface datum, 1945

Jan. 2	22.53	Jan. 16	22.80	Apr. 30	22.88	Aug. 14	23.64
4	21.42	Feb. 7	23.37	May 16	22.78	28	23.35
5	20.70	23	20.65	23	21.84	Sept. 11	23.62
6	20.21	Mar. 19	14.76	June 18	20.80	Oct. 3	23.21
7	20.61	22	18.44	July 18	23.42	Nov. 5	23.45
8	21.20	28	17.54	31	23.57	Dec. 5	23.33
9	21.68	Apr. 11	21.60				

40-17-2 (*1017, p. 208). Louisville Trust Co. Blankenbaker Lane, south of River Road.

Water level, in feet below land-surface datum, 1945

Jan. 2	15.18	Jan. 16	16.29	Apr. 30	16.27	Aug. 14	16.94
4	13.40	Feb. 7	16.54	May 16	15.98	28	16.45
5	12.40	23	11.92	23	14.68	Sept. 11	16.85
6	12.44	Mar. 19	12.47	June 18	16.00	Oct. 3	16.26
7	13.88	22	13.55	July 18	16.76	Nov. 5	16.72
8	14.88	28	10.10	31	16.88	Dec. 5	16.68
9	15.41	Apr. 11	15.15				

41-12-1 (*1017, p. 208). Lighthouse Lake. On Gardiner Avenue between Newberg and Bardstown Roads. Water levels, in feet below land-surface datum, 1945: Feb. 8, 0.65; Aug. 7, 1.15; Dec. 3, 0.66.

41-16-1 (*1017, p. 209). Attilla Cox. 0.2 mile southeast of a point on River Road opposite Wagner Beach road sign.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	14.48	Jan. 16	14.06	Apr. 11	12.23	Aug. 14	14.87
4	13.93	Feb. 7	14.76	30	13.75	28	14.75
5	13.40	23	13.20	May 24	13.25	Sept.11	14.90
6	12.92	Mar. 1	7.60	June 22	13.89	Oct. 3	14.68
7	12.91	19	5.65	July 18	14.50	Nov. 5	14.74
8	13.19	22	8.34	31	14.74	Dec. 5	14.58
9	13.46	28	8.80				

41-17-1 (*1017, p. 209). Sam J. Hamrick. 500 feet south of River Road, and 1.0 mile northeast of Zorn Avenue.

Water level, in feet below land-surface datum, 1945

Jan. 2	23.18	Jan. 16	23.29	Apr. 11	22.00	Aug. 14	24.26
4	22.22	Feb. 7	24.14	30	23.28	28	23.90
5	21.20	23	21.47	May 16	23.27	Sept.11	24.17
6	21.06	Mar. 1	15.28	24	22.40	Oct. 3	23.73
7	21.42	19	14.20	June 18	23.32	Nov. 5	24.00
8	21.95	22	18.63	July 18	23.89	Dec. 5	23.86
9	22.34	28	18.08	31	24.07		

42-16-3 (*1017, p. 209). Louisville Gas & Electric Co. At Beargrass Plant.

Water level, in feet below land-surface datum, 1945

Jan. 1	8.08	Jan. 16	7.52	Apr. 30	6.48	Aug. 14	7.63
4	6.27	Feb. 7	7.94	May 16	6.55	28	7.44
5	5.43	23	4.52	24	6.22	Sept.11	7.74
6	5.57	Mar. 19	2.45	June 22	6.57	Oct. 3	7.36
7	6.57	22	3.43	July 18	7.38	26	7.67
8	7.10	28	1.37	31	7.66	Dec. 5	7.87
9	7.31	Apr. 11	5.20				

42-16-4 (*1017, p. 210). Louisville Gas & Electric Co. 93 feet south of Ohio River bank, 225 feet west of white cabin about 0.3 mile north of River Road at a point 0.5 mile northeast of owner's plant property.

Water level, in feet below land-surface datum, 1945

Jan. 1	8.21	Jan. 8	7.60	May 16	7.48	Aug. 28	8.55
2	7.95	9	7.90	24	7.22	Sept.11	8.88
4	6.51	16	8.14	June 18	7.72	Oct. 3	8.44
5	5.61	Feb. 7	8.35	July 18	8.44	26	8.62
6	5.87	23	4.93	31	8.67	Dec. 5	8.42
7	6.79	Apr. 30	7.40	Aug. 14	8.80		

42-16-5 (*1017, p. 210). Henry Chambers. 600 feet south of River Road opposite Louisville Gas & Electric Co.'s power plant.

Water level, in feet below land-surface datum, 1945

Jan. 1	14.13	Jan. 9	12.88	Apr. 11	8.86	Aug. 14	12.85
2	13.54	16	13.01	30	10.89	28	12.86
4	13.67	Feb. 7	14.01	May 16	11.17	Sept.11	12.93
5	13.05	23	12.35	24	11.02	Oct. 3	12.85
6	12.55	Mar. 19	2.10	June 22	11.58	26	13.07
7	12.50	22	4.84	July 18	12.58	Dec. 5	13.28
8	12.63	28	5.57	31	12.90		

43-11-1 (*1017, p. 210). L. Cave. At 1324 Morgan Street. Water levels, in feet below land-surface datum, 1945: Feb. 8, 13.35; Aug. 7, 13.30; Dec. 3, 13.15.

43-15-1 (*1017, p. 211). City of Louisville well M-1. 12 feet west of northwest corner of Point Sewerage Pumping Station on Letterle Avenue, 0.2 mile south of intersection with River Road.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.63	.....	a24.60	25.19	30.10	.....	32.12	32.87	33.61	32.74	32.79	32.88
2	34.64	34.28	a23.04	25.49	30.18	.....	32.19	32.97	33.16	32.83	32.81	32.75
3	34.43	34.48	.....	25.85	30.27	.....	32.35	32.97	33.02	32.82	32.82	32.92
4	33.88	34.51	.....	25.88	.....	a31.49	32.37	32.97	33.07	32.77	32.68	33.21
5	33.37	34.56	.....	.....	.....	31.36	32.33	32.97	33.05	32.77	32.84	33.39
6	32.92	34.69	.....	.....	.....	31.46	32.48	32.75	33.01	32.76	32.99	33.40
7	32.82	34.69	.....	.....	30.70	31.56	32.54	33.36	32.96	32.66	33.01	33.47
8	a32.69	34.70	.....	.....	30.69	31.67	32.20	33.37	32.99	32.67	33.03	33.45
9	33.12	34.70	.....	26.86	30.71	31.56	31.94	33.37	32.82	32.77	33.02	33.03
10	33.30	34.71	.....	27.06	30.71	31.63	32.25	.....	32.84	32.77	33.07	33.36
11	33.35	34.66	.....	27.26	30.79	31.45	32.35	.....	32.88	32.86	32.83	33.29
12	33.38	34.66	.....	27.46	30.89	31.31	32.39	.....	32.94	32.81	32.69	33.25
13	33.39	34.66	.....	27.72	30.92	31.42	32.67	a33.42	32.91	32.95	32.93	33.26
14	33.02	34.61	.....	27.92	30.85	31.55	32.79	33.80	32.86	32.60	33.01	33.33
15	33.03	34.61	.....	28.00	30.70	31.92	32.26	33.86	32.92	32.88	33.07	33.36
16	33.20	34.64	.....	28.16	30.50	31.82	32.34	33.79	32.68	33.01	32.99	33.00
17	33.30	34.64	.....	.....	30.51	31.50	32.79	33.65	32.72	33.08	33.03	32.26
18	33.35	34.60	.....	.....	30.60	31.55	32.95	33.82	32.88	33.17	32.81	33.38
19	33.39	34.53	19.00	.....	30.60	.....	32.99	33.19	32.96	33.16	32.90	33.55
20	33.50	34.53	19.37	.....	30.52	.....	32.99	32.99	32.97	33.14	32.85	33.88
21	33.20	34.51	19.52	.....	a30.52	.....	33.00	33.59	32.97	32.70	32.80	33.97
22	33.19	34.23	22.58	.....	30.65	31.74	32.58	33.84	33.01	32.89	32.87	34.11
23	33.44	.....	23.22	.....	30.66	31.91	32.49	33.84	32.67	32.94	32.89	33.72
24	33.45	.....	23.76	.....	30.65	32.00	32.99	33.70	32.70	32.99	32.92	34.00
25	33.46	.....	23.92	.....	30.65	32.17	32.98	33.82	32.55	33.00	32.70	.....
26	33.26	a30.96	23.62	.....	30.77	32.14	32.99	33.26	32.85	33.10	32.82	.....
27	33.43	29.06	23.43	.....	30.82	32.01	32.99	33.31	32.82	33.09	32.90	.....
28	33.43	26.93	23.43	.....	a30.92	32.04	32.99	33.71	32.89	33.01	32.97	.....
29	33.46		23.82	.....	.....	32.19	32.61	33.80	32.87	32.97	32.94	.....
30	33.74		24.26	30.02	.....	32.20	32.75	33.79	32.66	32.91	32.87	.....
31	.....		24.83		.....		32.80	33.98		32.94		33.77

a Tape measurement at another hour.

43-16-1 (*1017, p. 212). City of Louisville. 150 feet east of Municipal Boat Harbor.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	9.01	Jan. 9	8.34	Apr. 11	5.75	Aug. 14	8.61
2	8.78	16	8.67	30	7.05	28	8.30
4	7.26	30	9.05	May 16	7.30	Sept.11	8.55
5	6.26	Feb. 23	5.80	24	7.06	Oct. 3	8.22
6	6.36	Mar. 19	2.53	June 22	7.66	30	8.31
7	7.51	22	3.63	July 18	8.23	Dec. 5	8.91
8	8.08	28	1.50	31	8.46		

44-14-1 (*1017, p. 213). Duffy Ice Co. 6 feet north of east-west alley between Caldwell and Kentucky Streets, 60 feet west of north-south alley between Preston and Floyd Streets.

Water level, in feet below land-surface datum, 1945

Jan. 3	65.70	Mar. 14	65.27	May 15	62.55	Aug. 7	61.50
Feb. 2	65.65	16	65.25	June 6	61.69	Sept. 1	61.95
Mar. 8	65.50	17	65.28	29	61.25	Nov. 27	63.24
9	65.42	Apr. 11	64.40	July 21	62.82	Dec. 26	63.89
12	65.33						

44-15-6. Ohio River Sand Co. At 129 River Road, in company yard, 25 feet east of back door of machine shop and about 50 feet south of Ohio River normal pool. Unused drilled industrial well, diameter 6 inches, depth 130 feet. Measuring point, top of recorder floor, 1.1 feet above land surface and 441.20 feet above mean sea level.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 19	a 31.23	July 16	32.06	Aug. 11	33.03	Sept. 6	33.73
20	31.30	17	32.08	12	33.06	7	33.70
21	31.30	18	32.21	13	33.11	8	33.76
22	31.37	19	32.26	14	33.16	9	33.73
23	31.40	20	32.22	15	33.14	10	33.80
24	31.36	21	32.27	16	33.18	11	33.81
25	31.40	22	32.24	17	33.24	12	33.81
26	31.46	23	32.31	18	33.29	13	33.88
27	31.42	24	32.36	19	33.24	14	33.98
28	31.50	25	32.45	20	33.22	15	33.93
29	31.48	26	32.43	21	33.23	16	33.88
30	31.65	27	32.57	22	33.26	17	33.94
July 1	31.52	28	32.56	23	33.31	18	34.11
2	31.56	29	32.61	24	33.34	19	34.04
3	31.55	30	32.70	25	33.37	20	34.00
4	31.45	31	32.70	26	33.39	21	34.04
5	31.63	Aug. 1	32.82	27	33.33	22	33.98
6	31.64	2	32.72	28	33.38	23	33.91
7	31.75	3	32.75	29	33.53	24	33.97
8	31.73	4	32.94	30	33.53	25	33.92
9	31.75	5	32.77	31	33.55	26	34.03
10	31.84	6	a 32.72	Sept. 1	33.52	27	34.04
11	31.89	7	32.89	2	33.55	28	34.09
12	31.96	8	32.95	3	33.58	29	34.11
13	31.97	9	32.96	4	33.71	30	34.04
14	32.06	10	32.98	5	33.60	Oct. 1	34.08
15	31.98						

a Tape measurement at another hour.

44-15-25 (*1017, p. 213). New York Central System. Directly under railroad bridge over Ohio River.

Water level, in feet below land-surface datum, 1945

Jan. 1	14.81	Jan. 9	14.44	Apr. 11	9.55	Aug. 14	13.61
2	14.64	16	14.57	30	10.85	28	13.48
4	13.45	30	14.96	May 16	11.38	Sept.11	13.80
5	12.87	Feb. 23	13.04	25	11.35	Oct. 3	13.60
6	12.92	Mar. 19	4.97	June 22	12.40	30	13.50
7	13.70	22	6.80	July 18	13.03	Dec. 5	14.35
8	14.21	28	5.52	31	13.36		

45-14-1 (*1017, p. 213). City of Louisville well A-2. In Lincoln Park, on South 4th Street, at Guthrie Street.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	69.77	69.09	68.46	63.33	63.83	66.67	70.24	73.39	74.78	74.78	71.05	69.33
2	69.77	69.07	68.29	63.30	63.81	66.93	70.32	73.50	74.68	74.72	71.04	69.27
3	69.75	69.06	68.09	63.43	63.78	66.99	70.53	73.62	74.50	74.60	71.01	69.23
4	.....	69.00	67.17	63.43	63.80	66.76	70.45	73.73	74.52	74.19	70.89	69.20
5	.....	68.98	.....	63.53	63.83	66.60	.....	73.59	74.65	73.93	70.78	69.15
6	.....	68.96	.....	63.53	63.81	66.48	.....	73.61	74.85	73.73	70.72	69.08
7	.....	68.92	a63.73	63.50	63.75	66.30	.....	73.85	74.96	73.52	70.68	69.03
8	69.60	68.90	61.75	63.47	63.94	66.16	.....	73.93	75.12	73.43	70.65	69.00
9	69.61	68.86	59.75	63.41	63.94	66.22	a71.00	73.96	74.98	73.26	70.72	68.97
10	69.58	68.84	58.34	63.57	63.88	66.40	71.14	74.01	75.04	73.05	70.61	68.93
11	69.57	68.82	57.71	63.63	63.87	66.52	71.26	74.07	75.18	72.84	70.55	68.89

a Tape measurement at another hour.

45-14-1 --Continued.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
12	69.53	68.79	57.52	63.74	63.85	66.93	71.28	73.95	75.10	72.68	a70.47	68.88
13	69.50	68.77	57.75	63.85	63.84	67.28	71.34	73.94	75.09	72.60	70.45	68.82
14	69.47	68.77	58.13	63.89	63.92	67.65	71.48	74.22	.....	72.41	70.39	68.81
15	a69.43	68.71	58.66	63.84	64.34	67.94	71.37	74.01	.....	72.24	70.33	68.80
16	.....	68.75	59.31	63.81	64.63	.....	71.38	73.81	.....	72.11	70.24	68.78
17	.....	68.70	60.03	a63.96	64.85	.....	71.60	73.88	a74.72	72.01	70.16	68.74
18	.....	68.69	60.68	63.89	64.87	a68.60	71.70	74.02	74.50	71.94	70.15	68.69
19	.....	68.67	61.17	63.89	64.80	68.72	71.83	73.93	74.42	71.90	70.07	68.62
20	.....	68.68	61.63	63.85	64.70	68.82	71.98	73.93	74.42	71.85	70.02	68.59
21	.....	68.64	61.90	63.96	64.92	68.90	72.16	74.27	.....	71.80	69.90	68.58
22	69.26	68.70	62.05	63.96	65.16	69.05	72.20	74.40	.....	71.81	69.85	68.52
23	69.21	68.68	62.18	63.84	65.15	69.25	72.31	74.45	.....	71.71	69.78	68.49
24	69.21	.....	62.38	63.92	65.26	69.24	72.56	74.34	a74.70	71.56	69.73	68.40
25	69.17	.....	62.52	64.01	65.48	69.30	72.69	74.32	74.77	71.47	69.65	68.37
26	69.16	.....	62.64	63.99	65.63	69.67	72.81	74.13	74.87	71.37	69.60	68.35
27	69.12	68.60	62.86	63.93	65.76	69.78	72.94	74.09	75.01	71.25	69.56	68.32
28	69.09	68.57	63.00	63.86	65.93	69.94	73.04	74.24	75.19	71.20	69.52	68.27
29	69.09		63.13	63.84	66.32	70.14	73.06	74.37	75.27	71.11	69.46	68.23
30	69.09		63.25	63.82	66.32	70.33	73.06	74.51	74.96	71.07	69.40	68.22
31	69.09		63.32		66.43		73.26	74.65		71.06		68.19

a Tape measurement at another hour.

45-14-2 (*1017, p. 216). City of Louisville A-1. About 40 feet east of South 4th Street, on northeast corner of intersection of South 4th and York Streets.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	63.91	Mar. 12	61.18	Mar. 21	60.70	July 21	63.27
Feb. 2	63.38	13	61.05	Apr. 11	60.56	Aug. 7	64.27
Mar. 7	62.83	14	60.95	May 15	60.13	Sept. 1	65.14
8	62.73	15	60.87	June 6	61.18	Nov. 27	63.87
9	62.54	16	60.84	29	62.17	Dec. 26	62.97
10	62.00	17	60.88				

45-14-3 (*1017, p. 218). Thompson's Restaurant. At 668 South 4th Street.

Water level, in feet below land-surface datum, 1945

Jan. 3	66.48	Mar. 12	60.35	Mar. 21	61.26	June 29	67.92
Feb. 2	65.73	13	60.20	Apr. 11	61.90	July 7	70.66
Mar. 8	63.23	14	60.20	May 15	62.23	Sept. 1	71.38
9	62.28	15	60.35	June 7	63.84	Nov. 27	66.46
10	61.46	17	60.76				

45-14-4 (*1017, p. 219). Blue Boar Cafeteria. At 644 South 4th Street.

Water level, in feet below land-surface datum, 1945

Mar. 8	64.40	Mar. 14	60.65	Apr. 11	63.00	July 21	a 66.7
9	63.10	15	60.84	May 15	63.50	Aug. 7	a 66.7
10	62.00	17	61.39	June 6	65.45	Sept. 1	a 66.7
12	60.66	21	62.04	29	a 66.00	Nov. 27	a 66.7
13	60.55						

a Dry at this depth.

45-14-51 (*1017, p. 219). Kentucky Dairies. At 981 South 3d Street. Measurements discontinued after Sept. 1.

Water level, in feet below land-surface datum, 1945

Jan. 3	66.05	Mar. 12	27.71	Mar. 14	27.88	Aug. 7	42.77
Feb. 2	65.98	13	27.80	July 21	41.05	Sept. 1	44.80

45-14-58. Kentucky Dairies. At 981 South 3d Street, in Kentucky Dairies building basement under sidewalk on north side of Kentucky Street. Air lift well about 8 feet west of well 45-14-51. Abandoned drilled industrial well, diameter 8 inches, depth 90 feet. Measuring point, top of casing, 0.4 feet below land surface and 446.4 feet above mean sea level. Water levels, in feet below land-surface datum, 1945: Aug. 7, 62.31; Sept. 1, 62.78; Nov. 27, 63.32; Dec. 26, 63.04.

45-15-1 (*1017, p. 219). City of Louisville well B-1. At North 9th Street and Ohio River. No measurements made in 1945.

45-15-2 (*1017, p. 222). City of Louisville well B-2. In sidewalk at southwest corner of South 9th and Congress Streets.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	61.93	Mar. 13	59.39	Mar. 21	56.35	Aug. 7	59.64
Feb. 7	61.50	14	58.87	Apr. 11	55.90	Sept. 1	60.80
Mar. 8	60.75	15	58.35	May 15	56.52	Oct. 5	61.80
9	60.68	16	57.91	June 5	57.00	Nov. 27	61.57
10	60.54	17	57.50	29	57.78	Dec. 26	61.14
12	59.88	19	56.76	July 20	58.78		

45-15-3 (*1017, p. 224). City of Louisville B-3. In sidewalk at southwest corner of South 8th and Cedar Streets.

Water level, in feet below land-surface datum, 1945

Jan. 3	68.80	Mar. 13	66.93	Mar. 21	64.10	Aug. 7	67.50
Feb. 7	68.38	14	66.67	Apr. 11	63.02	Sept. 1	68.60
Mar. 8	67.58	15	66.29	May 15	63.48	Oct. 5	69.60
9	67.50	16	65.92	June 5	64.17	Nov. 27	68.65
10	67.41	17	65.48	29	65.23	Dec. 26	68.04
12	67.16	19	64.67	July 20	66.48		

45-15-4 (*1017, p. 226). City of Louisville A-3. In southeast corner of Jefferson County courthouse yard.

Water level, in feet below land-surface datum, 1945

Jan. 3	69.08	Mar. 12	60.34	Mar. 19	58.40	June 29	66.77
Feb. 2	68.53	13	59.30	21	58.93	July 21	68.37
Mar. 7	66.42	14	58.63	Apr. 11	61.32	Aug. 7	a 69.50
8	65.65	15	58.23	30	62.27	Sept. 1	a 70.95
9	64.54	16	58.10	May 15	62.72	Nov. 27	68.56
10	63.12	17	58.10	June 6	64.20		

a Dry at this depth, well obstructed.

46-11-1 (*1017, p. 229). City of Louisville well M-2. In middle of Florence Avenue at its intersection with South 8th Street. Water level, in feet below land-surface datum, 1945: Feb. 3, 9.27. Well filled; measurements discontinued.

46-11-2. Rubber Reserve Co. well RR-25. At northeast corner of intersection of Taylor Boulevard and Hathaway Street, 10.7 feet north of edge of Hathaway Street, 52.4 feet east of Taylor Boulevard. Drilled observation well, diameter 6 inches, depth 60.5 feet. Measuring point, top of cap in casing, 1.9 feet above land surface and 460.56 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Mar. 1	52.25	Apr. 10	51.74	July 25	49.87	Nov. 1	49.14
27	51.87	May 30	50.96	Sept. 19	49.25	Dec. 4	49.29

46-13-1 (*1017, p. 230). Merchant's Ice & Cold Storage Co. At corner of South 7th and Magnolia Streets.

Water level, in feet below land-surface datum, 1945

Jan. 3	75.69	Mar. 17	75.73	June 5	77.72	Aug. 8	78.33
Feb. 2	76.12	Apr. 11	75.55	29	78.00	Sept. 1	78.40
Mar. 9	75.92	May 15	76.85	July 20	78.24	Nov. 28	75.85
13	76.18						

46-13-6 (*1017, p. 230). Brown & Williamson Tobacco Corporation well 2. At 1600 West Hill Street. No measurements made in 1945.

46-13-8 (*1017, p. 230). Brown & Williamson Tobacco Corporation well 4. At 1600 West Hill Street. Water levels, in feet below land-surface datum, 1945: Feb. 2, 79.52; Mar. 9, 79.85; Mar. 23, 79.82; Apr. 11, 79.83. Measurements discontinued.

46-13-10 (*1017, p. 231). Joseph E. Seagram & Sons Co. test well 4. At intersection of Bernheim Lane and 7th Street Road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 9	66.22	Apr. 10	63.70	July 19	60.22	Sept.20	61.22
Feb. 2	66.68	May 3	59.40	31	60.57	Oct. 4	61.20
Mar. 8	65.94	31	60.77	Aug. 14	61.00	Nov. 7	61.08
22	64.90	June 28	59.97	31	61.55	Dec. 4	61.67

46-13-11 (*1017, p. 232). Joseph E. Seagram & Sons Co. test well 5. At Bernheim Lane and 7th Street Road. Well lost; measurements discontinued.

46-14-1 (*1017, p. 232). American Tobacco Co., Inc. At intersection of 17th Street and West Broadway.

Water levels, in feet below land-surface datum, 1945

Jan. 4	69.00	Apr. 11	68.96	July 21	69.35	Oct. 5	68.95
Feb. 2	69.09	May 12	69.20	Aug. 8	69.55	Nov. 27	69.00
Mar. 7	69.26	June 5	69.22	Sept. 1	69.45	Dec. 26	68.59
17	69.00	29	69.35				

46-14-9 (*1017, p. 233). Kentucky Public Elevator Co. At intersection of Gallagher and South 15th Streets.

Water level, in feet below land-surface datum, 1945

Jan. 4	68.25	Apr. 11	68.50	July 21	68.95	Oct. 5	69.27
Feb. 3	68.50	May 12	68.80	Aug. 8	69.06	Nov. 27	69.38
Mar. 7	68.70	June 5	68.85	Sept. 1	69.20	Dec. 26	69.37
17	68.62	28	68.90				

47-11-1 (*1017, p. 233). Enterprise Coal & Ice Co. At 1847 Berry Boulevard.

Water level, in feet below land-surface datum, 1945

Jan. 3	54.14	Mar. 17	54.25	June 5	52.70	Oct. 5	(a)
Feb. 2	54.50	Apr. 10	53.70	28	52.45	Nov. 27	(a)
Mar. 8	54.74	May 22	53.28	Aug. 31	(a)		

a Pumping; no measurements made.

47-11-4. Rubber Reserve Co. well RR-42. 13 feet northwest of edge of Manslick Road at curve opposite entrance to Nichols Hospital, 0.1 mile south of the intersection of Manslick Road and Berry Boulevard, and 139 feet southwest of pole No. D7-498. Drilled observation well, diameter 6 inches, depth 103.5 feet. Measuring point, top of cap in casing, 1.3 feet above land surface and 455.21 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
July 3	46.3	Sept.14	45.74	Dec. 4	45.59
Aug. 31	45.77	Nov. 7	45.62		

47-12-1 (*1017, p. 233). City of Louisville well C-5. 1.1 miles south of intersection of Dixie Highway and Bernheim Lane.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	70.56	Mar. 20	68.85	June 28	66.12	Sept.11	65.41
Feb. 3	71.06	Apr. 10	67.50	July 24	66.08	Nov. 7	63.22
Mar. 8	70.20	May 11	65.90	Aug. 21	66.36	Dec. 4	63.73
13	69.56	26	65.90				

47-12-2 (*1017, p. 235). City of Louisville well C-6. About 440 feet west of 7th Street Road at end of secondary road which intersects 7th Street Road at George's Tavern, 0.5 mile south of Arcade Avenue.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	59.06	Mar. 8	59.03	May 26	55.30	Aug. 14	55.26
Feb. 2	59.42	13	58.08	30	55.27	31	55.15
12	59.55	16	58.02	June 27	55.17	Sept.14	54.50
19	59.63	22	58.85	July 19	55.02	Nov. 1	53.20
26	59.49	Apr. 10	56.92	31	55.05	Dec. 4	52.95

47-12-3 (*1017, p. 237). City of Louisville well C-7. About 8 feet west of concrete cover over sewer and about 730 feet east of 7th Street Road intersection with secondary road at George's Tavern, 0.5 mile south of Arcade Avenue.

Water level, in feet below land-surface datum, 1945

Jan. 3	51.52	Mar. 8	52.03	May 26	49.12	Aug. 31	47.50
Feb. 2	51.95	13	51.44	30	48.97	Sept.14	47.85
12	52.10	16	51.35	July 19	48.05	Nov. 1	47.17
19	52.19	22	51.21	31	47.95	Dec. 4	46.96
26	52.15	Apr. 10	50.75	Aug. 14	47.94		

47-12-4 (*1017, p. 239). Joseph E. Seagram & Sons Co. test well 2. In Seagram parking lot in southwestern corner of intersection of Wathens Lane and 7th Street Road. Measuring point raised 0.07 foot Jan. 1, 1945. New measuring point, top of recorder shelf, 0.57 foot above land surface and 459.21 feet above mean sea level.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	83.61	84.76	66.44	62.44	59.90	62.85	69.76	76.99	75.12	73.82	74.71	78.44
2	83.70	84.72	66.23	62.28	59.82	62.82	70.79	77.32	73.10	73.89	74.01	76.04
3	83.77	84.76	66.16	62.24	59.72	62.84	71.76	78.01	71.76	74.54	72.72	76.53
4	83.78	84.73	65.98	62.11	59.72	62.85	72.49	78.24	71.40	74.73	71.69	78.79
5	83.80	84.66	65.78	62.09	61.32	62.85	73.04	78.43	71.26	74.86	72.05	78.61
6	83.80	83.74	65.54	62.01	61.83	63.50	73.55	77.57	72.43	75.01	74.45	78.67
7	83.84	78.27	65.54	61.89	62.12	62.99	74.02	77.37	73.75	73.23	75.41	79.43
8	83.91	76.23	65.39	61.76	62.32	63.34	74.37	77.70	74.31	74.03	76.16	80.12
9	83.67	74.77	65.23	61.67	62.53	62.87	74.66	76.81	74.61	74.57	77.67	76.32
10	83.95	73.66	.....	61.60	62.59	62.81	74.90	77.52	74.43	73.19	78.59	77.86
11	84.04	72.77	.....	61.82	62.73	62.66	75.12	77.04	72.48	72.84	74.28	.....
12	84.08	71.92	.....	61.58	62.77	62.63	75.36	78.48	71.81	71.94	75.36	.....
13	84.14	71.29	.....	61.45	62.83	62.61	75.56	77.90	71.40	71.52	76.79	.....
14	84.15	70.75	.....	61.34	62.87	62.57	75.80	77.35	73.34	71.06	77.40	.....
15	84.19	70.46	.....	61.18	62.89	62.55	76.05	79.28	73.00	72.12	78.11	.....
16	84.19	69.94	64.56	61.09	62.92	63.31	76.27	77.36	71.77	70.88	77.68	.....
17	84.25	69.48	64.25	61.07	62.93	62.98	76.46	77.64	71.83	69.83	77.86	76.59
18	84.18	69.11	64.15	61.00	62.97	64.06	76.69	77.65	74.75	69.64	74.31	79.16
19	84.27	68.77	64.06	60.90	63.01	62.43	76.84	77.53	75.81	69.51	74.78	79.95
20	84.32	68.48	63.85	60.80	63.00	61.93	76.87	77.93	74.55	69.35	75.43	80.50
21	84.32	68.12	63.71	60.69	62.98	61.73	77.06	76.43	74.56	68.61	77.67	80.75
22	84.38	67.92	63.58	60.60	63.04	61.57	77.13	77.18	74.87	70.07	77.39	81.11
23	84.40	67.69	63.42	60.47	63.05	.....	77.30	77.43	74.75	70.58	77.08	77.35
24	84.48	67.46	63.31	60.39	63.02	.....	77.42	79.16	74.19	70.47	77.78	75.10
25	84.38	67.19	63.18	60.31	62.93	62.68	77.55	77.77	74.56	71.81	74.84	73.95
26	84.44	66.88	63.07	60.26	62.92	63.39	77.69	79.16	74.85	72.77a	74.81	75.62
27	84.54	66.78	62.96	60.23	62.91	63.75	77.82	79.93	74.97	73.41	77.25	77.85
28	84.48	66.59	62.88	60.10	62.88	64.10	78.02	80.45	75.05	71.92	77.72	78.60
29	84.55		62.78	60.05	63.15	66.32	78.12	80.76	75.14	72.33	78.39	78.83
30	84.66		62.66	59.96	62.97	67.36	78.27	79.40	74.81	72.20	78.60	76.99
31	84.76		62.55		62.91		77.34	78.53		73.92		79.38

a Tape measurement at another hour.

47-12-6 (*1017, p.240). Joseph E. Seagram & Sons Co. In brick pumphouse near center of Seagram's parking lot at intersection of 7th Street Road and Wathens Lane.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 6	88.30	Mar. 27	60.00	July 20	83.80	Sept.14	77.03
12	68.90	May 3	56.00	Aug. 1	81.80	Nov. 7	80.87
19	65.60	June 4	63.06	14	81.57	Dec. 4	84.82
26	62.80	28	64.71	31	82.89		

47-12-8 (*1017, p.241). Joseph E. Seagram & Sons Co., pump well 2. In Pumphouse No. 10 at intersection of 7th Street Road and Wathens Lane. Measurements discontinued after Nov. 7, well filled and destroyed.

Water level, in feet below land-surface datum, 1945

Jan. 8	79.85	Mar. 9	69.85	May 30	64.32	Aug. 14	72.80
Feb. 2	80.62	16	68.85	June 28	64.18	Sept.14	71.08
12	76.50	23	67.80	July 20	70.55	Nov. 7	70.73
19	73.69	Apr. 9	65.81	Aug. 1	71.93	Dec. 4	(a)
26	71.79	May 3	63.60				

a Abandoned.

47-12-9 (*1017, p.241). Joseph E. Seagram & Sons Co., pump well 3. In Pumphouse No. 11 near intersection of railroad and Wathens Lane. Measuring point lowered 0.2 foot Jan. 1, 1945. New measuring point, top of casing, 2.0 feet below land surface and 455.86 feet above mean sea level. Measurements discontinued after Oct. 8, well filled and destroyed.

Water level, in feet below land-surface datum, 1945

Jan. 1	77.35	Mar. 2	70.60	May 30	62.90	Aug. 31	71.29
8	77.54	9	69.12	June 28	62.55	Sept.10	69.46
15	77.85	16	67.98	July 20	69.48	14	69.20
22	78.07	23	66.95	Aug. 6	70.15	17	68.93
Feb. 2	78.36	27	65.50	13	70.40	Oct. 1	69.50
12	75.58	Apr. 9	65.00	20	70.60	8	69.37
19	72.95	May 3	62.65	27	70.87	Nov. 6	(a)
26	71.13						

a Abandoned.

47-12-14 (*1017, p.242). National Distillers Products Corporation test well 2. 20 feet north of south fence property line, and about 275 feet west of east property line of Old Grand Dad Distillery between Bernheim and Wathens Lanes.

Water level, in feet below land-surface datum, 1945

Jan. 11	74.13	Mar. 22	64.08	June 28	59.03	Aug. 31	66.74
22	74.18	Apr. 3	62.58	July 20	63.22	Sept.20	66.98
Feb. 6	73.85	12	61.69	Aug. 1	66.56	Nov. 7	64.30
19	69.91	June 1	59.44	14	65.93	Dec. 4	66.05
Mar. 8	66.38						

47-12-15 (*1017, p.243). National Distillers Products Corporation test well 4. About 6 feet north of south property line fence, about 10 feet east of west property line fence, on property of Old Grand Dad Distillery between Bernheim and Wathens Lanes.

Water level, in feet below land-surface datum, 1945

Jan. 11	71.96	Mar. 22	70.22	June 28	59.58	Aug. 31	64.70
22	72.13	Apr. 3	68.66	July 20	61.37	Sept.20	64.58
Feb. 6	72.40	12	67.72	Aug. 1	62.72	Nov. 7	63.83
19	72.47	June 1	60.44	14	63.94	Dec. 4	64.74
Mar. 8	71.55						

47-12-16 (*1017, p.244). National Distillers Products Corporation test well 1. About 85 feet east and 20 feet north of southeast corner of Warehouse C, on property of Old Grand Dad Distillery between Bernheim and Wathens Lanes.

47-12-16 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	72.33	Mar. 22	64.67	Aug. 1	62.28	Oct. 15	56.58
15	59.58	Apr. 3	64.09	14	63.55	20	56.87
22	72.50	12	63.10	31	64.31	30	57.46
Feb. 2	71.83	June 1	60.19	Sept.20	64.01	Nov. 7	63.24
6	72.70	28	59.12	Oct. 11	56.67	15	58.08
19	71.66	July 20	61.02	13	56.50	Dec. 4	64.26
Mar. 8	68.43						

47-12-20 (*1017, p.245). Brown-Forman Distillers Corporation test well 1. 6 feet southwest of south corner of northeast warehouse, on private road 0.3 mile southeast of its intersection with Dixie Highway, on property of Early Times Distillery (formerly Old Kentucky Distillery), at Shively.

Water level, in feet below land-surface datum, 1945

Jan. 11	62.55	Mar. 8	62.60	June 26	57.18	Aug. 31	57.15
22	62.66	22	61.25	July 20	57.08	Sept.20	56.02
Feb. 6	62.91	Apr. 3	60.25	Aug. 1	57.35	Nov. 7	54.88
19	63.20	12	59.90	14	57.65	Dec. 4	55.63

47-13-8 (*1017, p.246). National Distillers Products Corporation test well 3. About 42 feet north of Warehouse D and about 75 feet south of Warehouse E, on property of Old Grand Dad Distillery, between Bernheim and Wathens Lanes.

Water level, in feet below land-surface datum, 1945

Jan. 11	71.06	Mar. 22	66.90	June 28	59.62	Aug. 31	63.40
22	71.12	Apr. 3	65.47	July 20	60.64	Sept.20	62.93
Feb. 6	71.07	12	64.55	Aug. 1	61.52	Nov. 7	62.32
19	70.62	June 1	60.55	14	62.37	Dec. 4	63.23

47-13-11 (*1017, p.247). Joseph E. Seagram & Sons Co. test well 3. On Seagram property at intersection of Wathens Lane and 7th Street Road, 0.3 mile northeast of Arcade Avenue. Measuring point lowered 4.33 feet Nov. 7, 1945. New measuring point, top of cap in casing, 0.2 foot above land surface and 462.59 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Jan. 8	71.96	Mar. 9	72.60	May 30	70.19	Aug. 31	68.15
Feb. 2	72.36	16	72.53	June 28	69.06	Sept.14	68.05
12	72.48	23	72.37	July 20	68.50	Nov. 7	67.47
19	72.57	Apr. 9	72.02	Aug. 1	68.30	Dec. 4	67.27
26	72.69	May 3	71.00	14	68.20		

47-14-10 (*1017, p.247). National Distillers Products Corporation. Near Warehouse B, on Old Sunnybrook property on corner of South 28th Street and West Broadway.

Water level, in feet below land-surface datum, 1945

Jan. 4	68.07	Mar. 17	68.03	June 29	67.90	Oct. 5	67.65
Feb. 2	67.81	Apr. 9	67.80	July 21	68.75	Nov. 28	67.22
Mar. 8	67.95	May 12	67.80	Aug. 8	68.88	Dec. 26	66.94
14	68.00	June 5	67.63	Sept. 1	68.20		

47-14-11 (*1017, p.248). Brown-Forman Distillers Corporation. Formerly owned by Independent Ice & Coal Co. At 1901 West Howard Street.

Water level, in feet below land-surface datum, 1945

Jan. 4	67.02	May 12	70.35	July 21	68.00	Oct. 5	66.35
Feb. 3	67.10	June 5	70.52	Aug. 8	68.42	Nov. 27	65.60
Mar. 9	68.69	29	68.00	Sept. 1	69.05	Dec. 26	68.81

47-15-1 (*1017, p. 248). City of Louisville well M-3. On southwest corner at intersection of South 28th and Jefferson Streets.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 12	39.55	June 29	39.50	Sept. 1	39.35	Nov. 28	40.00
May 11	40.30	July 21	39.40	Oct. 5	39.65	Dec. 26	40.02
June 5	39.27	Aug. 8	39.45				

48-10-1 (*1017, p. 249). L. A. Sanders. 1 mile south of intersection of Dixie Highway and 7th Street Road. No measurements made in 1945.

48-11-1 (*1017, p. 249). Charles Matheis. 20 feet west of back door of residence on Matheis Lane. 0.5 mile west of Dixie Highway.

Water level, in feet below land-surface datum, 1945

Jan. 11	53.13	Apr. 10	52.28	June 28	51.46	Sept.19	51.48
Feb. 10	53.47	May 11	51.76	July 25	51.30	Nov. 7	51.67
Mar. 9	53.62	June 1	49.60	Aug. 21	51.35	29	51.79

48-12-1 (*1017, p. 250). City of Louisville well C-2. 0.25 mile north of Glencoe Distillery, east of Cane Run Road.

Water level, in feet below land-surface datum, 1945

Jan. 4	60.65	Mar. 20	60.95	June 26	60.35	Sept.11	60.38
Feb. 2	61.02	Apr. 10	60.57	July 24	60.65	Nov. 8	60.30
Mar. 8	61.19	May 10	60.37	Aug. 21	60.65	30	60.32
13	61.08	26	60.55				

48-12-2 (*1017, p. 251). City of Louisville well C-3. 0.2 mile north of Stitzel-Weller Distillery, 0.1 mile east of Tucker Lane.

Water level, in feet below land-surface datum, 1945

Jan. 4	71.50	Mar. 20	71.50	June 28	71.24	Sept.11	71.44
Feb. 3	71.79	Apr. 10	71.28	July 24	71.73	Nov. 7	71.42
Mar. 8	71.90	May 11	71.25	Aug. 21	71.66	Dec. 4	71.29
14	71.66	26	71.70				

48-12-15. Rubber Reserve Co. well RR-41. On Farnsley Road right-of-way, northside, 241 feet west of lane leading north from Farnsley Road at a point 0.57 mile west of Dixie Highway, and 6 feet southwest of (Ky-JC) right-of-way marker. Drilled observation well, diameter 6 inches, depth 90.8 feet. Measuring point, top of cap in casing, 2.0 feet above land surface and 459.25 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
June 29	49.10	Aug. 21	49.12	Nov. 7	49.60
July 25	49.10	Sept.19	49.34	29	49.71

48-15-1 (*1017, p. 253). Klarer Provision Co. At 210 Amy Avenue.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	50.05	Mar. 7	50.18	Mar. 15	47.76	Mar. 17	47.50
Feb. 2	49.78	14	47.90	16	47.65	Apr. 9	(a)

a Obstructed.

798998 O—48——9

49-10-1 (*1017, p.254). T. W. Blackwell. In basement of white house, southeast of intersection of Dixie Highway and Rockford Lane, south of Shively.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	38.39	Apr. 10	37.33	June 28	36.34	Sept.19	36.47
Feb. 10	38.62	May 11	36.85	July 24	36.10	Oct. 26	36.77
Mar. 9	38.40	June 1	36.65	Aug. 21	36.03	Nov. 29	37.06

49-11-1. Rubber Reserve Co. well RR-32. On property of Louis Risinger, east side of driveway, 125 feet south of Garrs Lane and 0.6 mile west of Dixie Highway. Drilled observation well, diameter 6 inches, depth 107.6 feet. Measuring point, top of cap in casing, 2.6 feet above land surface and 458.15 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
May 8	43.5	Aug. 21	41.29	Oct. 26	41.76
July 24	41.24	Sept.19	41.50	Nov. 29	42.02

49-12-1 (*1017, p.254). Henry Bramer, Jr. In red pump house, 125 feet north of Camp Ground Road, and 0.4 mile west of Cane Run Road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 9	72.63	May 10	71.30	July 24	70.45	Sept.11	(a)
22	72.50	31	71.15	Aug. 21	(a)	Oct. 25	(a)
Apr. 10	70.98	June 26	70.40				

a Pumping; no measurements made.

49-12-2 (*1017, p.254). Henry Vogt. 0.25 mile west of Cane Run Road and 0.25 mile north of Kramers Lane.

Water level, in feet below land-surface datum, 1945

Jan. 9	56.25	Mar. 13	52.37	May 31	55.62	Sept.11	54.31
Feb. 9	56.50	22	56.85	June 26	55.15	Oct. 25	54.02
Mar. 7	56.97	Apr. 10	56.71	July 24	54.75	Nov. 29	53.88
9	(a)	May 10	56.05	Aug. 21	54.40		

a Flooded.

49-12-3 (*1017, p.254). Mrs. Ridley. East of white house, 0.35 mile south of intersection of Cane Run Road and Ridley's Court.

Water level, in feet below land-surface datum, 1945

Jan. 9	47.88	Apr. 10	48.42	June 26	49.90	Sept.11	49.85
Feb. 3	48.09	May 10	(a)	July 24	49.85	Oct. 25	49.85
Mar. 9	48.24	31	49.90	Aug. 21	49.85	Nov. 29	49.85
22	48.30						

a Dry.

49-12-4. Rubber Reserve Co. well RR-40. East side of Cane Run Road on highway right-of-way, at southeast corner of intersection of Cane Run Road and Farnsley Road, 6.9 feet northeast of concrete right-of-way marker No. 7-JC. Drilled observation well, diameter 6 inches, depth 118.4 feet. Measuring point, top of cap in casing, 0.9 foot above land surface and 450.66 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

June 27	51.8	July 24	54.15	Sept.11	53.62	Nov. 29	53.29
28	54.45	Aug. 21	54.85	Oct. 26	53.38	Dec. 29	53.15

49-13-2 (*1017, p.255). Aetna Oil Co. In pump house about 700 feet south of Algonquin Parkway and about 150 feet west of company road which enters plant from Algonquin Parkway. No measurements made in 1945.

49-13-5. Synthetic Rubber Co. test well 10. On Illinois Central Railroad property, midway between Algonquin Parkway and Bells Lane, 75 feet west of main switch to Bond Brothers Tie Plant and 25 feet south of pump well. Drilled observation well, diameter 2 inches, depth 115 feet. Measuring point, top of casing, 0.2 foot above land surface and 456.67 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	92.80	Mar. 13	90.35	May 26	84.69	Sept.12	84.60
20	92.90	15	90.10	June 26	88.10	Oct. 3	84.16
Feb. 9	93.00	16	90.10	July 18	88.20	Nov. 5	83.16
Mar. 1	92.30	17	89.99	31	88.39	30	81.77
8	91.65	20	89.44	Aug. 29	84.63	Dec. 28	81.33
10	91.20	Apr. 9	87.04				

49-13-22 (*1017, p. 255). Bond Bros. On tie plant property which is 0.5 mile west of intersection of Bells Lane and Cane Run Road.

Water level, in feet below land-surface datum, 1945

Jan. 20	80.68	Mar. 17	77.39	June 26	73.50	Sept.12	73.12
Feb. 9	81.26	20	76.90	July 19	72.70	Oct. 2	72.65
Mar. 1	79.95	Apr. 9	76.05	Aug. 1	72.56	Nov. 6	72.34
14	77.90	May 10	75.28	14	72.99	30	71.42
15	77.73	26	74.70	29	72.90	Dec. 28	70.90
16	77.78						

49-13-24 (*1017, p. 255). B. F. Goodrich Co. well 17. On koroseal plant property, in field north of plant, about 15 feet south of Bells Lane, and about 300 feet east of west property line.

Water level, in feet below land-surface datum, 1945

Jan. 20	94.71	Mar. 13	88.15	May 10	82.03	Aug. 29	82.19
Feb. 9	95.00	15	87.13	30	81.24	Sept.12	81.90
Mar. 1	94.70	16	86.95	June 26	81.49	Oct. 3	81.16
7	93.33	17	86.82	July 19	82.13	Nov. 6	78.92
8	92.05	20	86.53	Aug. 1	82.64	30	77.36
10	90.50	Apr. 9	83.67	14	82.69	Dec. 28	76.94

49-13-26 (*1017, p. 255). B. F. Goodrich Co. test well 14. On north side of Pumphouse No. 1A, on property of koroseal plant.

Water level, in feet below land-surface datum, 1945

Jan. 20	97.07	Mar. 13	81.07	May 30	80.55	Sept.12	79.28
Feb. 9	96.85	15	81.77	June 26	79.12	Oct. 3	78.60
Mar. 1	90.95	17	84.24	July 19	79.35	Nov. 6	76.82
7	89.33	20	83.80	Aug. 1	79.05	30	75.04
8	87.43	Apr. 9	82.25	14	79.57	Dec. 28	75.13
10	84.18	May 10	81.75	29	79.50		

49-13-27 (*1017, p. 256). B. F. Goodrich Co. test well 15. 20 feet west of east property line, on property of koroseal plant, south of Bells Lane.

Water level, in feet below land-surface datum, 1945

Jan. 20	90.72	Mar. 13	77.38	May 30	77.13	Sept.12	75.82
Feb. 9	90.67	15	78.15	June 26	75.72	Oct. 3	75.17
Mar. 1	87.17	17	80.25	July 19	75.79	Nov. 6	73.54
7	85.68	20	79.48	Aug. 1	75.50	30	71.59
8	83.68	Apr. 9	78.76	14	76.04	Dec. 28	71.81
10	80.20	May 10	78.25	29	76.00		

49-13-28 (*1017, p. 256). Fish & Wildlife Service, U. S. Dept. of Interior. In stucco well house, on fish hatchery property, which is about 0.2 mile west of intersection of Gibson Lane and Western Parkway.

49-13-28 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	80.87	Mar. 17	74.04	June 26	74.72	Sept.12	77.23
Feb. 9	80.80	20	72.18	July 18	75.82	Oct. 3	76.75
Mar. 1	80.42	Apr. 9	73.00	31	76.38	31	76.97
14	75.85	May 10	73.20	Aug. 14	76.93	Nov. 28	77.01
15	75.10	24	74.26	29	76.20	Dec. 28	76.76
16	74.88						

49-13-33 (*1017, p. 256). National Carbide Corporation pump well 2. In pump house about 700 feet south of Bells Lane. Measuring point lowered 0.3 foot. New measuring point, edge of iron curb at northeast corner, 0.8 foot above land surface and 441.2 feet above mean sea level.

Water level, in feet below land-surface datum, 1945
(Daily noon water levels from recorder charts, for period Sept. 22-Oct. 10)

Jan. 20	85.70	May 26	72.54	Sept.24	71.62	Oct. 4	71.88
Feb. 9	86.50	June 26	73.45	25	71.59	5	71.83
Mar. 1	86.40	July 19	73.82	26	71.56	6	71.81
14	71.65	Aug. 1	74.37	27	71.95	7	71.84
15	71.15	14	75.53	28	a 71.98	8	71.73
16	70.65	29	74.19	29	72.16	9	71.78
17	70.11	Sept.12	72.83	30	72.06	10	71.74
20	69.45	21	71.78	Oct. 1	71.99	Nov. 6	67.50
Apr. 9	71.35	22	71.71	2	72.03	30	65.87
May 10	72.00	23	71.66	3	72.06	Dec. 28	65.77

a Tape measurement at another hour.

49-13-34 (*1017, p. 257). B. F. Goodrich Co. pump well 4. In pump house, on southwest corner of property of koroseal plant.

Water level, in feet below land-surface datum, 1945

Jan. 20	95.57	Mar. 13	82.57	June 26	82.43	Sept.12	79.43
Feb. 9	95.96	17	81.20	July 19	82.83	Oct. 3	78.40
Mar. 1	96.01	20	83.33	Aug. 1	82.57	Nov. 6	77.90
7	92.63	Apr. 9	84.75	14	80.92	30	74.92
8	90.40	May 30	81.87	29	80.50	Dec. 28	75.50
10	86.10						

49-13-40. Rubber Reserve Co. well RR-26. In southeast corner of intersection of 39th Street and Algonquin Parkway, 74 feet east of 39th Street, and 44 feet south of Algonquin Parkway. Drilled observation well, diameter 6 inches, depth 115.4 feet. Measuring point, top of cap in casing, 1.4 feet above land surface and 451.83 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Mar. 13	71.80	June 26	68.73	Aug. 29	68.60	Oct. 31	68.42
27	69.85	July 19	68.50	Sept.12	68.66	Nov. 28	68.30
Apr. 9	70.40	31	68.46	Oct. 3	68.63	Dec. 28	68.14
May 24	69.29	Aug. 14	68.44				

49-13-41. Synthetic Rubber Co. test well 12. On Illinois Central Railroad property, between Algonquin Parkway and Bells Lane, 111 feet west of main switch to Bond Bros. Tie Plant and about 250 feet south of Algonquin Parkway. Drilled observation well, diameter 2 inches, depth 95 feet. Measuring point, top of casing, 0.2 foot above land surface and 445.93 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Jan. 11	81.24	Mar. 16	79.38	June 26	73.17	Sept.12	73.14
Feb. 9	81.48	17	79.30	July 18	73.57	Oct. 3	72.75
Mar. 1	81.28	20	78.59	31	73.91	Nov. 5	72.18
13	79.80	Apr. 9	75.58	Aug. 14	73.44	30	71.20
15	79.38	May 30	72.80	29	73.17	Dec. 28	70.60

49-14-6 (*1017, p. 257). Tube Turns. 25 feet east of poultry house, and 200 feet north of main gate of Kentucky State Fairgrounds.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 20	65.18	Mar. 15	63.37	June 5	61.06	Sept. 1	61.55
Feb. 8	65.32	17	63.68	28	60.97	Oct. 5	61.85
Mar. 1	65.56	20	63.75	July 21	61.00	Nov. 28	62.49
8	(a)	Apr. 9	62.93	Aug. 8	61.25	Dec. 26	62.67
14	63.25	May 12	61.68				

a Flooded.

49-14-11 (*1017, p. 257). Geol. Survey, U. S. Dept. of Interior. At foot of Brewster Avenue, at Ohio River.

Water level, in feet below land-surface datum, 1945

Jan. 1	23.78	Feb. 20	24.05	May 25	18.98	Sept.12	21.60
7	23.50	22	(a)	June 26	19.98	Oct. 3	21.75
8	23.19	Mar. 20	10.40	July 18	20.72	Nov. 6	22.30
13	23.64	27	(a)	31	20.95	Dec. 5	22.40
20	23.94	Apr. 9	15.57	Aug. 14	21.15	28	22.76
Feb. 8	24.52	May 12	19.07	28	21.40		

a Flooded.

49-14-12 (*1017, p. 257). Louisville Refining Co. On property, 175 feet north of northeast corner of office building.

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

Jan. 4	75.38	Feb. 22	75.72	Mar. 17	72.64	July 31	81.80
6	75.22	24	75.60	20	71.55	Aug. 14	83.20
7	75.28	28	75.63	27	70.45	29	84.20
8	75.33	Mar. 5	75.20	Apr. 9	69.56	Sept.12	72.80
13	75.30	7	75.65	May 10	69.80	Oct. 3	73.28
20	75.24	14	73.40	24	69.82	Nov. 5	73.51
Feb. 8	75.06	15	73.09	June 26	83.85	28	73.65
20	74.98	16	72.80	July 18	84.70	Dec. 28	73.64

50-9-1 (*1017, p. 257). William Genenwein. In shed northwest of brick house, 0.4 mile west of old bridge which is west of Upper Hunters Trace at a point 0.7 mile west of Dixie Highway.

Water level, in feet below land-surface datum, 1945

Jan. 11	47.36	Apr. 10	45.95	July 24	44.74	Oct. 25	44.90
Feb. 10	47.28	June 1	48.27	Aug. 21	44.50	Nov. 29	45.20
Mar. 9	47.10	28	44.85	Sept.19	44.55	Dec. 29	45.14

50-9-2 (*1017, p. 258). Harvey Fluhr. On Dixie Highway, at Fluhr's Garage. No measurements made in 1945.

50-9-4. Rubber Reserve Co. well RR-37. Intersection of Lower Hunters Trace and Upper Hunters Trace, 7 feet south of Lower Hunters Trace pavement, and 25.2 feet west of road intersection sign. Drilled observation well, diameter 6 inches, depth 105.2 feet. Measuring point, top of cap in casing, 2.7 feet above land surface and 452.73 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

June 16	20.50	July 24	33.77	Sept.19	33.63	Nov. 29	33.93
28	34.00	Aug. 21	33.70	Oct. 25	33.75	Dec. 29	34.03

50-10-1 (*1017, p. 258). Robert Lee. In a field 35 feet northwest of a point on August Avenue, about 100 feet southwest of wooden bridge.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	26.13	May 11	24.90	July 24	24.40	Oct. 25	24.68
Feb. 9	26.29	31	24.72	Aug. 21	24.40	Nov. 29	24.92
Mar. 21	25.60	June 28	24.50	Sept.18	24.52	Dec. 29	25.04
Apr. 10	25.23						

50-10-2. Rubber Reserve Co. well RR-30. 7.8 feet south of south edge of Rockford Lane, 1.05 miles east of its intersection with Cane Run Road, 0.95 mile west of its intersection with Dixie Highway and 80.3 feet west of concrete culvert. Drilled observation well, diameter 6 inches, depth 94.0 feet. Measuring point, top of cap in casing, 4.0 feet above land surface and 446.96 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Apr. 6	28.20	May 31	27.36	Aug. 21	27.15	Nov. 29	27.70
10	28.04	June 28	27.18	Sept.18	27.30	Dec. 29	27.89
May 11	27.60	July 24	27.08	Oct. 25	27.48		

50-11-1 (*1017, p.258). George Dienes. About 600 feet south of intersection of Crums Lane and Cane Run Road. No measurements made in 1945.

50-11-2. Rubber Reserve Co. well RR-33. Southeast corner of intersection of Crums Lane and Cane Run Road, 100 feet south of centerline of Crum Lane, on east edge of Cane Run Road right-of-way. Drilled observation well, diameter 6 inches, depth 101.5 feet. Measuring point, top of cap in casing, 2.0 feet above land surface and 441.54 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

May 11	42.50	July 24	41.23	Sept.18	40.58	Nov. 29	40.35
June 21	41.82	Aug. 21	40.85	Oct. 25	40.36	Dec. 29	40.24

50-11-3. Rubber Reserve Co. well RR-39. On Schenck's property, 0.5 mile west of intersection of Crums Lane and Cane Run Road, 11 feet north of Schencks Lane, 4.2 feet east of fence line. Drilled observation well, diameter 6 inches, depth 112.1 feet. Measuring point, top of cap in casing, 4.9 feet above land surface and 451.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

June 25	51.50	Aug. 21	50.89	Oct. 25	50.75	Dec. 29	50.62
July 24	50.98	Sept.18	50.80	Nov. 29	50.75		

50-12-12 (*1017, p.258). Patrick Whelan. In basement of frame house on Kramers Lane, 0.2 mile west of its intersection with Cane Run Road.

Water level, in feet below land-surface datum, 1945

Jan. 9	54.80	Mar. 22	55.07	May 31	54.07	Aug. 21	52.75
Feb. 9	54.95	Apr. 10	55.00	June 28	53.46	Dec. 29	51.71
Mar. 12	55.10	May 10	54.70	July 24	53.10		

50-12-16. Rubber Reserve Co. well RR-27. On south side of Kramer's Lane right-of-way, 8 feet from edge of roadway, 245 feet east of Camp Ground Road and 62 feet east of fence corner. Drilled observation well, diameter 6 inches, depth 111.6 feet. Measuring point, top of cap in casing, 3.6 feet above land surface and 449.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Mar. 23	64.47	June 21	59.62	Aug. 30	59.43	Oct. 26	58.60
27	64.37	July 19	60.62	Sept. 6	59.32	Nov. 30	58.05
Apr. 10	62.40	Aug. 1	60.00	Oct. 2	59.21	Dec. 29	57.69
May 31	60.10	14	59.60				

50-12-17. Rubber Reserve Co. well RR-34. On Z. C. Long's farm, east side of Camp Ground Road, 0.4 mile north of Kramers Lane and 300 feet north of Fern Leaf Road, 0.2 mile east of farm entrance on south side of farm lane 94 feet east of fertilizer shed, north side of cultivated field. Drilled observation well, diameter 6 inches, depth 115.5 feet. Measuring point, top of cap in casing, 2.7 feet above land surface and 452.24 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 15	64.80	Aug. 14	63.94	Oct. 2	64.03	Nov. 6	62.99
June 23	64.00	30	64.03	26	63.30	30	62.70
July 19	63.94	Sept. 8	64.00				

50-12-18. Rubber Reserve Co. well RR-35. On Bond Bros. property, 28 feet north of Camp Ground Road and 8 feet north of main railroad track east of No. 6 spur track switch and 0.3 mile east of intersection of Camp Ground Road and extension of Ralph Avenue. Drilled observation well, diameter 6 inches, depth 120.4 feet. Measuring point, top of cap in casing, 1.6 feet above land surface and 457.14 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

May 2	72.60	Aug. 1	71.68	Sept. 8	71.75	Nov. 6	71.20
June 25	71.85	14	71.62	Oct. 2	71.60	30	70.72
July 19	71.62	30	71.74	26	71.40		

50-13-1 (*1017, p.259). Standard Oil Co. well 2. On company property, north of Bells Lane. Well lost; measurements discontinued.

50-13-2 (*1017, p.259). Standard Oil Co. About 80 feet west of company road entering plant and about 750 feet north of south property fence. No measurements made in 1945.

50-13-28 (*1017, p.259). National Carbide Corporation test well 1. On company property at Bells Lane and Ohio River. Filled; measurements discontinued.

50-13-29 (*1017, p.260). National Carbide Corporation test well 2. About 300 feet west of well 50-12-28. Water level, in feet below land-surface datum, 1945: Jan. 23, 17.35; measurements discontinued.

50-13-41 (*1017, p.261). National Carbide Corporation test well 4. On company property, at Bells Lane and Ohio River. Water levels, in feet below land-surface datum, 1945: Jan. 1, 44.60; Jan. 2, 40.98; Jan. 4, 40.85; Jan. 23, 40.82; measurements discontinued.

50-13-42 (*1017, p.261). National Carbide Corporation test well 5. On company property at Bells Lane and Ohio River. Measurements discontinued after Feb. 9.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Jan. 1	42.01	Jan. 4	39.48	Jan. 23	41.10
2	41.23	20	40.35	Feb. 9	44.45

50-13-56. Rubber Reserve Co. well RR-24. In E. I. du Pont de Nemours upper field, about 200 feet east of Ohio River, near Lower Paddy Run. Drilled observation well, diameter 6 inches, depth 91.8 feet. Measuring point, top of cap in casing, 4.7 feet above land surface and 430.48 feet above mean sea level.

50-13-56 --Continued.

Water level, in feet below land-surface datum, 1945
(Daily noon water levels, from recorder charts, for period Sept. 29-Oct. 11)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 20	39.75	Sept.25	42.46	Oct. 3	38.15	Oct. 8	39.37
22	37.50	28	39.35	4	38.41	9	39.15
24	34.26	29	39.08	5	38.97	10	39.19
Aug. 30	43.55	30	38.59	6	39.37	11	39.48
Sept.12	43.95	Oct. 1	38.41	7	39.51	Dec. 5	38.53
21	42.90	2	38.04				

50-14-4. Rubber Reserve Co. well RR-23. On Louisville Refining Co's. property at 1300 Western Parkway, on edge of third terrace above Ohio River barge landing, 82.5 feet south of power-line tower. Drilled observation well, diameter 6 inches, depth 101.5 feet. Measuring point, top of recorder floor, 0.8 foot above land surface and 454.66 feet above mean sea level.

Water level, in feet below land-surface datum, 1945
(Daily noon water level , from recorder charts, for period July 10-Dec. 31)

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	.....	70.43	71.51	72.25	73.10	73.39
2	.....	.....	.....	.....	.....	.....	70.44	71.57	a72.33	73.15	73.35
3	.....	.....	.....	.....	.....	.....	70.45	71.60	72.34	73.16	73.33
4	.....	.....	.....	.....	.....	.....	70.47	71.64	72.35	73.15	73.31
5	.....	71.87	.....	.....	.....	.....	70.48	71.67	72.38	73.16	73.29
6	.....	.....	.....	.....	.....	69.88	70.49	71.71	72.40	73.18	73.27
7	.....	69.35	.....	.....	.....	.....	70.51	71.74	72.45	73.19	73.25
8	.....	.....	.....	.....	.....	.....	70.55	71.79	72.49	73.19	73.21
9	.....	.....	67.61	.....	.....	69.98	70.59	71.83	72.51	73.26	73.20
10	.....	.....	.....	.....	.....	70.02	70.62	71.87	72.53	73.26	73.18
11	.....	.....	.....	.....	.....	70.04	70.67	71.89	72.55	73.28	73.12
12	.....	.....	.....	68.61	.....	70.04	70.7	71.95	72.56	73.28	73.06
13	.....	.....	.....	.....	.....	70.05	a70.80	71.96	72.61	73.35	72.97
14	.....	57.95	.....	.....	.....	70.05	70.82	72.01	72.62	73.36	73.02
15	75.20	57.70	.....	.....	.....	70.1	70.87	72.06	72.66	73.39	73.00
16	75.87	58.09	.....	.....	.....	a70.13	70.91	72.10	72.66	73.38	73.04
17	.....	58.85	.....	.....	.....	70.16	70.94	72.11	72.69	73.40	73.05
18	.....	.....	.....	.....	.....	70.17	71.00	72.15	72.72	73.43	73.04
19	.....	.....	.....	.....	.....	70.19	71.05	72.16	72.76	73.48	73.10
20	.....	61.81	.....	.....	.....	70.19	71.08	72.15	72.78	73.45	73.11
21	.....	.....	.....	.....	.....	70.22	71.13	72.17	72.79	73.40	73.16
22	.....	.....	.....	.....	.....	70.22	71.15	72.17	72.86	73.48	73.20
23	.....	.....	.....	.....	.....	70.23	71.19	72.14	72.89	73.49	73.21
24	75.62	.....	.....	68.90	.....	70.24	71.22	72.11	72.89	73.45	73.19
25	.....	.....	.....	.....	.....	70.28	71.25	72.12	72.91	73.49	73.22
26	.....	.....	.....	.....	69.45	70.31	71.31	72.14	72.97	73.47	73.29
27	.....	65.38	.....	.....	.....	70.33	71.34	72.17	72.99	73.43	73.31
28	75.04	.....	.....	.....	.....	70.34	71.38	72.18	73.01	73.43	73.28
29		.....	.....	.....	.....	70.40	71.43	72.24	73.06	73.40	73.26
30		.....	.....	.....	.....	70.41	71.46	72.25	73.07	73.40	73.27
31		.....		.....		70.42	71.50		73.09		73.32

a Tape measurement at another hour.

51-8-1 (*1017, p. 261). Mrs. Ethel Waller. In yard of house on private drive, 0.25 mile north of Greenwood School.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	46.82	May 11	46.15	July 25	45.07	Oct. 24	44.49
Feb. 10	46.99	June 1	45.85	Aug. 21	44.80	Nov. 29	44.59
Mar. 12	46.98	28	45.42	Sept.19	44.57	Dec. 27	44.71
Apr. 10	46.52						

51-9-1 (*1017, p. 261). George Nagel. North of house on private drive, 0.2 mile south of Lower Hunters Trace. Measuring point raised 0.1 foot Jan. 11, 1945. New measuring point, bottom edge of iron pump base, 0.1 foot above land surface and 460.36 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	46.50	May 11	45.55	July 24	44.58	Oct. 25	44.40
Feb. 10	46.72	June 1	45.09	Aug. 21	44.43	Nov. 29	44.54
Mar. 9	46.63	28	45.81	Sept.18	44.36	Dec. 29	44.62
Apr. 10	45.90						

51-10-1. Rubber Reserve Co. well RR-29. On Rockford Lane right-of-way, 0.3 mile east of its intersection with Cane Run Road, 23 feet south of edge of pavement, and 7 feet east of fence corner. Drilled observation well, diameter 6 inches, depth 64.0 feet. Measuring point, top of cap in casing, 3.6 feet above land surface and 447.78 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Apr. 3	34.57	May 31	32.92	Aug. 21	32.73	Nov. 29	33.36
10	33.68	June 28	32.82	Sept.18	32.86	Dec. 29	33.56
May 11	33.08	July 24	32.70	Oct. 25	33.06		

51-11-1 (*1017, p. 262). Thieneman Bros. About 75 feet west of barn, 0.2 mile east of Camp Ground Road on private drive which intersects Camp Ground Road at a point 0.2 mile north of its intersection with Lees Lane. Measuring point raised 0.36 foot Jan. 1, 1945. New measuring point, top of 1¼ inch pipe, 1.0 foot above land surface and 454.64 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Jan. 11	56.70	Apr. 10	53.85	June 28	51.27	Sept.18	52.37
Feb. 9	56.77	May 10	51.95	July 24	51.42	Oct. 25	52.85
Mar. 13	56.18	31	51.46	Aug. 21	51.95	Nov. 29	53.37

51-11-2 (*1017, p. 262). Kaufman Bros. 50 feet east of barn, 0.1 mile west of Cane Run Road at a point 0.1 mile south of its intersection with Rockford Lane.

Water level, in feet below land-surface datum, 1945

Jan. 11	49.82	May 11	46.30	July 24	45.80	Oct. 24	45.50
Feb. 9	50.10	31	46.00	Aug. 21	45.92	Nov. 29	46.98
Mar. 21	49.18	June 28	45.85	Sept.18	46.12	Dec. 27	47.30
Apr. 10	47.30						

51-11-4. Rubber Reserve Co. well RR-31. On Paul Baugh's property, west side of Cane Run Road, 0.1 mile north of its intersection with Rockford Lane and 0.8 mile southeast of its intersection with Crums Lane. Drilled observation well, diameter 6 inches, depth 61.0 feet. Measuring point, top of cap in casing, 0.1 foot above land surface and 445.76 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

May 1	41.50	July 24	39.99	Sept.18	40.00	Nov. 29	40.56
June 1	40.67	Aug. 21	39.90	Oct. 25	40.17	Dec. 29	40.77
28	40.37						

51-12-8 (*1017, p. 262). Lake Dreamland Country Club. At pump house on south side of road, at curve at west end of Lake Dreamland Road.

Water level, in feet below land-surface datum, 1945

Jan. 1	54.52	Jan. 13	49.50	Mar. 17	(a)	Aug. 1	49.25
2	53.90	23	48.98	27	30.93	14	48.70
4	52.69	Feb. 9	50.55	Apr. 10	34.30	30	49.89
6	51.17	20	48.92	May 10	42.67	Sept.12	50.22
7	50.66	22	47.98	31	40.00	Oct. 3	45.97
8	50.27	24	46.53	June 23	41.00	25	48.68
9	49.82	28	43.57	July 19	48.95	Nov. 30	43.36
11	49.37						

a Obstructed.

51-12-9 (*1017, p. 262). E. W. Owen. About 3 feet south of south property fence, at southwest corner of Rubber Reserve Co's. Carbide & Carbon Chemicals plant property.

Water level, in feet below land-surface datum, 1945
(Daily noon water level from recorder charts, for period Jan. 7-Feb. 16)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	51.58	Jan. 22	a52.44	Feb. 7	56.43	Mar. 16	b 0.68
4	49.33	23	52.72	8	56.48	20	b .60
6	46.60	24	53.30	9	56.48	27	34.10
7	46.37	25	53.48	10	56.48	Apr. 10	39.50
8	46.42	26	53.84	11	56.48	May 10	49.78
9	46.76	27	54.34	12	a56.49	31	45.24
10	47.14	28	54.62	13	56.33	June 23	44.69
11	47.84	29	54.94	14	56.03	July 19	56.02
12	48.53	30	55.13	15	55.21	Aug. 1	56.09
13	49.36	31	55.38	16	54.57	14	55.32
14	50.08	Feb. 1	55.62	19	51.60	30	56.73
15	50.95	2	55.87	20	50.79	Sept. 8	57.05
16	51.30	3	56.01	22	48.18	Oct. 2	48.77
17	51.79	4	56.16	24	45.53	26	55.88
18	51.84	5	56.36	Mar. 1	21.85	Nov. 30	46.66
19	51.88	6	56.38	14	b .10		

a Tape measurement at another hour.
b Above land surface.

51-12-10 (*1017, p. 263). C. A. Speith. About 300 feet north of Henry Schulte residence which is about 800 feet north of the west end of Bramers Lane. No measurements made in 1945.

51-12-12. Rubber Reserve Co. well RR-20. In E. I. du Pont de Nemours lower field, on edge of second terrace above Ohio River normal pool, at end of lane, 0.14 mile northwest of Pump 16 at west end of old Drury Lane, which is 0.6 mile west of Camp Ground Road and 0.1 mile north of Dreamland Road. Drilled observation well, diameter 6 inches, depth 115.8 feet. Measuring point, top of recorder floor, 2.2 feet above land surface and 450.16 feet above mean sea level. Automatic water-stage recorder maintained on well from Feb. 23 to Dec. 31.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	47.00	42.75	52.91	57.19	62.71	63.82	64.94	57.77	63.74	55.62
2	.....	a63.46	45.19	43.44	53.32	57.95	63.04	63.65	64.91	57.16	63.95	56.34
3	.....	.....	43.08	44.19	53.87	58.32	63.40	63.29	65.05	57.26	63.92	56.46
4	.....	.....	40.15	44.62	55.06	59.21	63.55	62.75	65.23	57.50	63.73	56.45
5	.....	.....	37.41	45.51	56.70	60.54	63.88	62.42	65.00	58.27	63.52	56.30
6	.....	.....	34.76	46.22	57.81	60.89	64.08	61.93	65.04	58.83	63.23	56.35
7	.....	.....	31.43	46.58	58.77	61.28	64.29	62.73	65.02	58.83	62.81	56.48
8	.....	.....	27.83	46.73	58.78	61.46	64.69	63.62	64.90	58.50	62.39	56.49
9	.....	a64.04	25.41	46.78	58.45	61.65	64.88	63.75	65.11	58.14	62.11	56.28
10	.....	.....	.....	46.78	57.66	62.12	65.05	63.76	64.90	58.12	62.99	55.94
11	.....	.....	.....	46.81	57.26	61.90	65.29	63.91	65.05	58.49	63.69	55.62
12	.....	.....	a25.05	47.03	56.79	61.34	65.15	64.25	65.04	59.19	63.06	56.46
13	.....	.....	25.70	47.54	56.28	60.31	65.00	64.35	64.97	60.14	62.84	55.46
14	.....	.....	26.65	48.80	55.65	.....	64.77	64.63	65.08	61.29	62.60	55.78
15	.....	.....	27.84	50.64	54.94	.....	64.72	64.63	65.20	62.64	62.19	56.10
16	.....	61.62	29.70	52.65	54.12	.....	64.64	64.60	64.97	63.02	61.71	57.00
17	.....	.....	31.93	53.37	53.37	.....	64.45	64.90	64.94	63.19	61.21	58.05
18	.....	.....	34.28	53.54	52.67	a54.75	64.32	64.80	64.68	63.24	59.95	59.25
19	.....	.....	36.90	53.33	.....	.....	64.30	64.90	64.64	63.69	58.78	60.29
20	.....	a58.20	a39.14	52.60	.....	.....	64.30	64.80	64.34	63.56	57.76	62.23
21	.....	.....	39.85	51.97	49.51	.....	.....	64.64	63.72	63.66	57.07	62.81
22	.....	a55.80	40.68	51.65	48.68	.....	.....	64.90	62.17	63.88	56.73	63.03
23	.....	a54.52	41.40	51.56	48.04	.....	64.42	64.92	60.22	64.24	56.05	63.13
24	.....	53.41	41.96	51.93	47.81	.....	64.61	64.94	59.18	64.24	55.12	63.28
25	.....	52.54	42.01	52.15	48.06	54.62	64.15	64.90	59.03	64.25	54.50	63.40

a Tape measurement at another hour.

51-12-12--Continued.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	51.93	41.71	.....	48.76	56.90	64.37	64.67	59.09	63.94	54.09	61.26
27	62.59	50.67	41.34	.....	49.83	59.48	64.52	64.51	39.18	.....	53.91	59.77
28	.....	48.72	41.07	a53.00	51.86	61.15	64.81	64.52	59.06	.....	54.13	58.76
29	.....		41.10	52.77	53.95	61.87	64.79	64.83	58.65	53.13	54.55	58.22
30	.....		41.45	52.67	55.47	62.26	64.49	64.89	58.00	63.52	55.05	57.40
31	.....		41.96		56.36		64.31	64.96		63.74		56.70

a Tape measurement at another hour.

51-13-1. Rubber Reserve Co., well RR-21. On Carbide & Carbon Chemical Corporation property, on edge of second terrace from Ohio River, inside west boundary fence about 150 feet north of pump house. Drilled observation well, diameter 6 inches, depth 105.08 feet. Measuring point, top of cap in casing, 1.9 feet above land surface and 442.10 feet above mean sea level. Automatic water-stage recorder maintained on well Feb. 23 to Oct. 11.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.
1	.....	39.88	36.67	46.42	49.80	.....	56.17	57.71	50.82	.....
2	.....	38.48	37.47	46.70	50.55	55.17	56.09	57.72	50.38	.....
3	.....	.....	38.16	47.11	50.94	55.39	55.81	57.81	50.42	.....
4	.....	.....	38.59	47.92	51.71	55.39	55.29	57.96	50.70	.....
5	.....	.....	39.49	49.38	53.05	55.62	55.03	57.79	51.38	.....
6	.....	.....	40.06	50.38	53.52	55.72	54.59	57.85	51.89	.....
7	a57.73	.....	40.47	51.31	53.88	55.90	55.35	57.85	52.11	.....
8	.....	.....	40.66	.....	54.04	56.30	56.22	57.78	51.88	.....
9	.....	.....	a40.77	50.92	54.17	56.34	56.42	57.95	51.57	.....
10	.....	.....	.....	50.47	54.68	56.51	56.46	57.76	51.55	.....
11	.....	.....	.....	50.11	54.46	56.68	56.59	57.91	a51.88	.....
12	.....	.....	.....	49.78	53.95	56.83	56.92	57.91	.....	.....
13	.....	.....	.....	49.41	53.06	56.95	57.03	57.84	.....	.....
14	.....	.....	.....	a49.00	52.00	56.83	57.32	57.93	.....	.....
15	.....	.....	.....	.....	50.53	56.94	57.33	58.02	.....	.....
16	a55.48	.....	.....	.....	49.65	56.93	57.33	57.81	.....	.....
17	.....	.....	a46.23	.....	48.85	56.76	57.54	57.76	.....	.....
18	.....	.....	46.31	.....	47.58	56.57	57.50	57.42	.....	.....
19	.....	.....	46.20	.....	46.66	56.57	57.58	57.33	.....	.....
20	a51.47	.....	45.74	.....	46.42	56.69	57.53	56.99	.....	.....
21	.....	.....	45.32	42.71	46.56	56.59	57.43	56.32	.....	.....
22	a48.95	.....	45.10	41.87	46.71	57.00	57.62	54.71	.....	.....
23	a47.29	.....	45.08	41.24	46.88	56.96	57.65	53.00	.....	.....
24	46.04	.....	45.50	41.11	47.21	57.12	57.69	52.09	.....	.....
25	45.14	.....	45.74	41.56	47.81	56.72	57.67	51.91	.....	.....
26	44.48	.....	46.00	42.52	49.50	56.97	57.48	52.03	.....	.....
27	43.23	.....	46.22	43.55	52.02	56.77	57.32	52.16	.....	.....
28	41.44	.....	46.36	44.79	.....	56.85	57.31	52.03	.....	.....
29		a35.09	46.34	46.68	.....	56.92	57.52	51.60	.....	.....
30		35.41	46.33	48.16	.....	56.70	57.65	51.05	.....	a48.85
31		36.01		49.04		56.63	57.68		.....	

a Tape measurement at another hour.

52-7-1 (*1017, p. 263). Lanson Beahl. In shed north of stucco house, 0.15 mile north of Johnstown Road and 0.9 mile east of Lower River Road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	41.83	May 11	37.35	July 25	37.25	Oct. 24	38.25
Feb. 10	41.78	June 1	37.15	Aug. 21	37.47	Nov. 29	38.55
Mar. 21	37.60	28	37.10	Sept.19	37.87	Dec. 27	38.86
Apr. 10	37.75						

52-7-2. Rubber Reserve Co. well RR-47. In bush hedge 6.4 feet south of edge of Johnstown Road, 1.48 miles east of its intersection with Lower River Road and 0.84 mile west of its intersection with Dixie Highway, and 101.6 feet east of the center-line of a lane which branches north from Johnstown Road. Drilled observation well, diameter 6 inches, depth 103.0 feet. Measuring point, top of cap in casing, 2.5 feet above land surface and 452.41 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
July 26	38.80	Sept.13	38.96	Nov. 29	39.25
Aug. 21	39.02	Oct. 24	39.05	Dec. 27	39.40

52-8-1 (*1017, p. 263). Mrs. Anna Dohn. In east side of shed at end of private road which is 0.45 mile south of Greenwood Road. Measuring point raised 0.74 foot Dec. 27, 1945. New measuring point, hole in top of wooden platform, south side of pump, 0.7 foot above land surface and 458.17 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	48.11	May 11	47.25	July 25	46.19	Oct. 24	45.56
Feb. 10	51.21	June 1	46.97	Aug. 21	45.87	Nov. 29	45.65
Mar. 12	51.19	28	46.50	Sept.19	45.68	Dec. 27	45.82
Apr. 10	50.42						

52-8-2. Rubber Reserve Co. well RR-38. On south side of Greenwood Road right-of-way, 19.9 feet south of edge of pavement, at a point 500 feet east of its intersection with Sylvania Road, 39.5 feet east of pole 3A7-74 and 5.8 feet west of corner fence post. Drilled observation well, diameter 6 inches, depth 122.5 feet. Measuring point, top of cap in casing, 0.4 foot above land surface and 448.24 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

June 21	39.8	July 25	39.57	Sept.19	39.68	Nov. 29	40.24
28	39.83	Aug. 21	39.56	Oct. 24	39.94	Dec. 27	40.45

52-9-1 (*1017, p. 254). Mrs. F. B. Smith. 15 feet east of house at end of line opposite Arrowhead Farms on Lower River Road. No measurements made in 1945.

52-10-1 (*1017, p. 264). George Nalley. In yard of house, 0.48 mile northwest of intersection of Murrays Lane and Cane Run Road. No measurements made in 1945.

52-10-2 (*1017, p. 264). H. F. Foggenkamp. About 150 feet east of road north of house, 0.2 mile east of Lower Hunters Trace on Lower River Road.

Water level, in feet below land-surface datum, 1945

Jan. 11	47.71	May 11	40.74	July 24	42.00	Oct. 25	44.29
Feb. 9	48.42	June 1	40.93	Aug. 21	42.85	Nov. 29	44.94
Mar. 21	42.40	28	41.39	Sept.18	43.62	Dec. 27	45.11
Apr. 10	40.73						

52-10-3. Rubber Reserve Co. well RR-36. Northeast corner of intersection of Murrays Lane and Lower Hunters Trace, 15 feet east of center-line of Murrays Lane and 60 feet north of centerline of Lower Hunters Trace. Drilled observation well, diameter 6 inches, depth 84 feet. Measuring point, top of cap in casing, 2.5 feet above land surface and 449.96 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

June 14	35.83	Aug. 21	37.71	Oct. 24	38.00	Dec. 27	(a)
July 24	(a)	Sept.18	a38.50	Nov. 29	37.50		

a Obstructed.

52-11-1 (*1017, p. 264). Mr. Snyder. About 20 feet southwest of southwest corner of residence, 0.38 mile southwest of intersection of Camp Ground Road and Lees Lane. No measurements made in 1945.

52-11-3 (*1017, p. 265). Rubber Reserve Co. well P-1. About 305 feet west of southwestern corner of frame church which is about 515 feet north of west end of Lees Lane. Measuring point raised 0.28 foot Jan. 5, 1945. New measuring point, top of recorder floor, 3.4 feet above land surface and 431.85 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	a33.65	.....	.....	20.55	26.19	28.61	31.58	33.52	34.97	33.32	55.31	34.48
2	a33.02	36.23	.....	20.90	26.39	28.91	31.68	33.59	35.00	33.10	55.50	34.51
3	.....	36.33	.....	21.29	26.67	29.14	31.86	33.51	35.13	33.23	55.60	34.33
4	a31.95	36.33	.....	21.52	27.15	29.64	31.86	33.37	35.20	33.37	55.70	34.16
5	a30.78	36.49	.....	22.41	27.86	30.16	32.02	33.32	34.96	33.67	55.69	34.02
6	30.69	36.61	.....	22.76	28.17	30.12	32.13	33.16	35.05	33.80	55.72	33.94
7	30.71	36.48	.....	22.71	28.47	30.38	32.28	33.93	b35.00	33.70	55.71	33.96
8	31.18	36.57	.....	22.51	28.61	30.47	32.49	34.04	b35.10	33.52	55.66	33.84
9	31.76	36.54	.....	22.35	28.53	30.64	32.44	33.95	b35.15	33.35	55.72	33.64
10	32.21	36.59	.....	22.27	28.29	30.87	32.61	33.94	35.12	33.40	56.22	33.45
11	.....	36.54	.....	22.33	28.25	30.80	32.75	34.07	35.14	33.60	39.24	33.26
12	a32.97	36.45	.....	22.70	28.07	30.53	32.84	34.28	35.18	33.82	56.20	33.22
13	33.34	36.25	.....	23.23	27.93	30.14	32.88	34.28	35.19	34.14	56.30	33.22
14	33.63	35.78	.....	23.87	27.68	29.46	32.90	34.32	35.28	34.46	56.33	33.37
15	33.90	35.14	.....	24.44	27.44	29.00	32.98	34.36	35.36	34.78	56.25	33.53
16	34.00	34.79	.....	25.06	26.98	28.84	33.11	34.39	35.28	34.86	56.20	33.86
17	33.82	34.09	a15.60	25.45	26.72	28.23	33.05	34.55	35.31	34.92	56.07	34.08
18	33.65	33.55	.....	25.57	26.33	27.67	33.04	34.47	35.25	34.82	55.57	34.30
19	33.61	33.10	.....	.....	25.54	27.48	33.21	34.54	35.25	34.8	55.02	34.57
20	33.83	32.51	a18.70	.....	24.91	27.61	33.23	34.56	35.20	50.88	54.80	34.99
21	34.06	31.61	.....	.....	24.39	27.77	33.28	34.50	34.97	53.40	54.55	35.18
22	34.34	30.86	.....	.....	24.09	27.91	33.46	34.68	34.39	53.87	54.44	35.30
23	34.64	30.06	.....	a25.15	24.01	28.07	33.44	34.71	33.96	54.26	36.83	35.30
24	34.94	29.62	.....	25.32	24.16	28.41	33.57	34.73	34.77	54.28	35.44	35.44
25	35.12	29.34	.....	25.59	24.68	28.99	33.39	34.74	34.75	54.39	34.73	35.38
26	35.33	28.85	a19.22	25.79	25.60	29.82	33.51	34.68	34.83	54.53	34.28	34.49
27	35.63	27.92	19.07	26.07	26.23	30.65	33.64	34.60	.....	54.67	34.00	34.10
28	35.76	a26.60	18.98	25.94	26.85	31.07	33.58	34.75	.....	54.76	34.04	33.90
29	.....		19.10	25.90	27.55	31.26	33.68	34.95	.....	54.83	34.13	33.69
30	.....		19.31	25.95	28.03	31.41	33.72	34.92	.....	55.05	34.26	33.41
31	.....		19.85		28.33		33.70	34.98		55.24		33.11

a Tape measurement at another hour.
b Estimated.

52-11-4 (*1017, p. 265). Rubber Reserve Co. well E-1. 105 feet east of well 52-11-3, and about 500 feet north of Lees Lane. Measuring point raised 0.09 foot Oct. 9, 1945, when water-stage recorder was installed. New measuring point, top of recorder floor, 2.7 feet above land surface and 430.18 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Water level, in feet below land-surface datum, 1945
(Daily noon water level from recorder charts, for period Oct. 10-Dec. 31)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	32.86	Jan. 16	33.04	Feb. 20	31.86	July 19	31.66
2	32.28	17	32.83	22	30.46	Aug. 1	32.13
4	31.31	18	32.66	24	29.36	14	32.84
5	30.61	19	32.61	28	27.03	30	33.51
6	30.43	23	33.46	Mar. 17	15.76	Sept. 13	33.85
7	30.43	26	34.09	20	18.36	Oct. 4	32.24
8	30.71	Feb. 2	34.88	27	18.59	9	32.30
9	31.16	9	35.20	Apr. 10	21.29	10	32.32
10	32.17	13	35.09	May 31	26.85	11	32.50
12	32.06	16	33.88	June 23	26.93	12	32.71

52-11-4 --Continued.

Water level, in feet below land-surface datum, 1945
(Daily noon water level from recorder charts,
for period Oct. 10-Dec. 31)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 13	33.00	Nov. 2	43.57	Nov. 22	42.53	Dec. 12	32.25
14	33.30	3	43.68	23	36.09	13	32.22
15	33.57	4	43.74	24	34.73	13	32.38
16	33.66	5	43.76	25	34.02	15	32.48
17	33.71	6	43.76	26	33.55	16	32.75
18	33.79	7	43.76	27	33.29	17	32.94
19	33.60	8	43.74	28	33.18	18	33.10
20	40.29	9	43.79	29	33.20	19	33.39
21	41.34	10	44.14	30	33.27	20	33.68
22	41.81	11	38.07	Dec. 1	33.37	21	33.84
23	42.22	12	44.01	2	33.40	22	33.95
24	42.37	13	44.11	3	33.27	23	33.99
25	42.59	14	44.12	4	33.11	24	34.10
26	42.70	15	44.07	5	33.00	25	34.08
27	42.78	16	44.03	6	32.89	26	33.42
28	42.92	17	43.92	7	32.92	27	33.09
29	42.99	18	43.48	8	32.82	28	32.90
30	43.21	19	43.05	9	32.66	29	32.70
31	43.35	20	42.80	10	32.46	30	32.46
Nov. 1	43.42	21	42.63	11	32.30	31	32.27

52-11-5 (*1017, p.265). Rubber Reserve Co. well E-2. 252 feet east of well 52-11-3, and about 500 feet north of Lees Lane. Measuring point raised 6.25 feet on Oct. 11, 1945, when water-stage recorder was installed. New measuring point, top of recorder floor, 3.8 feet above land surface and 454.24 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Water level, in feet below land-surface datum, 1945
(Daily noon water level , from recorder charts,
for period Oct. 22-Dec. 31)

Jan. 1	56.63	Aug. 1	55.73	Nov. 4	63.28	Dec. 3	56.22
2	56.19	14	56.52	5	63.32	4	56.06
4	55.25	30	57.19	6	63.34	5	55.96
5	54.74	Sept.13	57.65	7	63.37	6	55.87
6	54.37	Oct. 3	55.60	8	63.37	7	55.87
7	54.29	11	55.30	9	63.40	8	55.78
8	55.32	12	55.48	10	63.65	9	55.65
9	52.70	13	55.70	11	60.52	10	55.50
10	54.75	14	55.94	12	63.59	11	55.34
12	55.58	15	56.21	13	63.70	12	55.27
16	55.66	16	56.29	14	63.73	13	55.21
17	55.98	17	56.33	15	63.73	14	55.30
18	56.05	18	56.32	16	63.68	15	55.36
19	56.00	19	56.28	17	63.63	16	55.58
23	56.60	20	59.86	18	63.31	17	55.74
26	56.93	21	60.78	19	63.01	18	55.87
Feb. 2	57.81	22	61.27	20	62.81	19	56.08
9	58.10	23	61.66	21	62.66	21	a56.50
13	58.27	24	61.86	22	62.58	22	56.62
16	57.40	25	62.06	23	60.06	23	56.68
20	55.62	26	62.22	24	57.90	24	56.74
22	54.51	27	62.32	25	57.28	25	56.78
24	53.56	28	62.47	26	56.80	26	56.28
28	51.50	29	62.56	27	56.50	27	56.01
Mar. 27	42.80	30	62.72	28	56.34	28	55.82
Apr. 10	44.98	31	62.88	29	56.29	29	55.63
May 31	50.60	Nov. 1	62.96	30	56.28	30	55.43
June 23	50.97	2	63.12	Dec. 1	56.33	31	55.26
July 19	55.30	3	63.20	2	56.33		

a Tape measurement at another hour.

52-11-6. Rubber Reserve Co. well E-3. On third terrace about 525 feet east of Ohio River normal pool in field at southeast corner of Riverside Tabernacle, about 500 feet north of Lees Lane and 350 feet east of well 52-11-3. Drilled observation well, diameter 6 inches, depth 115.4 feet. Measuring point, top of recorder floor, 2.5 feet above land surface and 452.39 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Water level, in feet below land-surface datum, 1945
(Daily noon water level, from recorder charts, for period Oct. 10-Dec. 30)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	53.05	Oct. 3	54.37	Nov. 6	60.65	Dec. 4	55.43
12	54.72	9	54.36	7	60.69	5	55.33
16	55.47	10	54.37	8	60.72	6	55.24
17	55.36	11	54.45	9	60.77	7	55.21
18	55.21	12	54.56	10	60.93	8	55.13
19	55.17	13	54.75	11	59.32	9	55.04
23	55.65	14	54.92	12	60.97	10	54.93
26	56.07	15	a55.12	13	61.06	11	54.80
Feb. 2	56.69	16	55.19	14	61.11	12	54.71
9	57.05	17	55.26	15	61.11	13	54.62
13	57.06	18	a55.22	16	61.09	14	54.69
16	56.42	19	55.28	17	61.07	15	54.70
20	55.16	20	57.22	18	60.84	16	54.85
22	54.33	21	58.00	19	60.65	17	54.96
24	53.52	22	58.45	20	60.45	18	55.04
28	51.79	23	58.82	21	60.28	19	55.13
Mar. 17	40.16	24	59.06	22	60.21	20	55.41
20	41.70	25	59.28	23	58.35	21	55.54
27	42.23	26	59.45	24	57.48	22	55.66
29	42.60	27	59.57	25	56.91	23	55.71
Apr. 2	43.20	28	59.62	26	56.47	24	55.77
10	43.86	29	59.82	27	56.12	25	55.80
May 31	48.35	30	59.98	28	55.90	26	55.52
June 23	49.15	31	60.12	29	55.76	27	55.30
July 19	52.95	Nov. 1	60.20	30	55.71	28	55.00
Aug. 1	53.57	2	60.35	Dec. 1	55.68	29	54.96
14	54.28	3	60.46	2	55.65	30	54.80
30	54.95	4	60.54	3	55.55	31	54.66
Sept.13	55.42	5	60.61				

a Tape measurement at another hour.

52-11-7. Rubber Reserve Co. well E-4. On third terrace about 675 feet east of Ohio River normal pool, in field east of Riverside Tabernacle, about 500 feet north of Lees Lane and 500 feet east of well 52-11-3. Drilled observation well, diameter 6 inches, depth 114.6 feet. Measuring point, top of recorder floor, 2.4 feet above land surface and 453.20 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Water level, in feet below land-surface datum, 1945
(Daily noon water level, from recorder charts, for period Sept. 21-Dec. 31)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	56.00	May 31	48.55	Sept.29	55.2	Oct. 14	55.18
23	56.27	June 23	49.80	30	55.1	15	55.30
26	56.53	July 19	52.85	Oct. 1	a55.06	16	55.44
Feb. 2	57.03	Aug. 1	53.62	2	55.02	17	55.44
9	57.34	14	54.25	3	54.99	18	55.44
13	57.47	30	54.92	4	54.96	19	55.57
16	57.24	Sept.13	55.52	5	54.98	20	56.01
20	56.38	21	55.72	6	55.00	21	56.50
22	55.99	22	55.62	7	55.02	22	56.92
24	55.25	23	55.49	8	55.00	23	57.26
28	53.90	24	55.40	9	54.94	24	57.52
Mar. 17	42.50	25	55.34	10	54.92	25	57.74
20	43.38	26	55.29	11	54.93	26	57.96
27	43.93	27	55.34	12	54.98	27	58.10
Apr. 10	44.95	28	55.28	13	55.09	28	58.26

a Tape measurement at another hour.

52-11-7--Continued.

Water level, in feet below land-surface datum, 1945
(Daily noon water level, from recorder charts, for period Sept. 21-Dec. 31)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Oct. 29	58.37	Nov. 14	59.67	Nov. 30	56.57	Dec. 16	55.45
30	58.49	15	59.70	Dec. 1	56.45	17	55.52
31	58.63	16	59.71	2	56.36	18	55.54
Nov. 1	58.72	17	59.74	3	56.29	19	55.66
2	58.86	18	59.65	4	56.19	20	55.76
3	58.97	19	59.59	5	56.10	21	55.88
4	59.05	20	59.43	6	56.02	22	55.97
5	59.15	21	59.29	7	55.97	23	56.02
6	59.21	22	59.28	8	55.89	24	56.05
7	59.27	23	58.92	9	55.87	25	56.09
8	59.31	24	58.40	10	55.77	26	56.08
9	59.38	25	57.95	11	55.66	27	55.94
10	59.45	26	57.52	12	55.54	28	55.76
11	59.19	27	57.19	13	55.43	29	55.65
12	59.52	28	56.92	14	55.45	30	55.57
13	59.61	29	56.72	15	55.39	31	55.51

52-11-16 (*1017, p. 265). Rubber Reserve Co. well W-1. 100 feet west of well 52-11-3, and about 500 feet north of Lees Lane. Measuring point raised 0.20 foot July 4, 1945, when recorder was installed. New measuring point, top of recorder floor, 1.6 feet above land-surface and 410.45 feet above mean sea level. Measurements from Oct. 20 to Dec. 27 affected by pumping test.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	.....	15.65	16.11	13.98	26.78	14.98
2	.....	a17.27	.....	.....	.....	.....	14.68	16.11	13.69	26.95	15.11
3	.....	.....	.....	.....	.....	.....	14.60	16.26	13.82	27.04	14.88
4	.....	.....	.....	.....	.....	a13.10	14.42	16.34	14.06	27.05	14.66
5	.....	.....	.....	.....	.....	13.32	15.33	16.12	14.45	26.98	14.48
6	.....	.....	.....	.....	.....	13.38	14.18	16.22	14.63	26.95	14.42
7	.....	.....	.....	.....	.....	13.54	15.16	16.17	14.49	26.90	14.45
8	.....	.....	.....	.....	.....	13.82	15.24	16.17	14.28	26.79	14.35
9	.....	a17.54	.....	.....	.....	13.70	15.15	16.30	14.05	26.79	14.08
10	.....	.....	.....	.....	.....	13.87	15.11	16.24	14.09	27.53	13.84
11	.....	.....	.....	.....	.....	14.04	15.25	16.32	14.39	b20.09	c13.6
12	a13.36	.....	.....	.....	.....	14.13	15.46	16.33	14.74	27.22	c13.5
13	.....	a17.25	.....	.....	.....	14.19	15.48	16.33	15.09	27.30	c13.5
14	.....	.....	.....	.....	.....	14.17	15.53	16.44	15.70	27.28	13.87
15	.....	.....	.....	.....	.....	14.27	15.52	16.52	15.95	27.11	14.11
16	a14.62	a15.24	.....	.....	.....	14.42	15.54	15.43	16.08	26.98	.....
17	a14.35	.....	.....	.....	.....	14.36	15.78	16.47	16.12	26.72	14.87
18	a14.11	.....	.....	.....	.....	14.31	15.66	16.37	16.03	25.90	15.18
19	a14.09	.....	.....	.....	.....	14.45	15.72	15.38	16.04	25.05	16.12
20	.....	a12.45	.....	.....	.....	14.50	15.72	16.30	24.21	24.87	16.11
21	.....	.....	.....	.....	.....	14.52	15.65	15.92	25.05	24.69	18.47
22	.....	.....	.....	.....	a 8.75	14.74	15.88	15.15	25.48	24.51	16.56
23	a15.44	.....	.....	.....	.....	14.74	15.92	14.64	25.91	16.77	16.57
24	.....	.....	.....	.....	.....	15.92	15.86	14.44	26.00	15.42	16.75
25	.....	.....	.....	.....	.....	14.60	15.85	14.49	26.14	14.75	16.65
26	a16.30	.....	.....	.....	.....	14.80	15.77	14.59	26.12	14.35	15.22
27	.....	.....	.....	.....	.....	14.86	15.68	15.84	26.12	14.21	14.69
28	.....	.....	.....	.....	.....	14.82	15.88	14.54	26.26	14.28	14.51
29	.....		.....	.....	.....	14.91	16.10	14.32	26.24	14.48	14.28
30	.....		a 7.38	.....	.....	14.92	16.04	14.09	26.59	15.70	13.88
31	.....			a 9.60		14.89	16.13		26.79		13.62

a Tape measurement at another hour.
b Not pumping.
c Estimated.

52-11-21. Rubber Reserve Co. well RR-28. South edge of Lees Lane right-of-way, east of its intersection with Camp Ground Road, 50 feet east of centerline of concrete bridge over Lees Lane. Drilled observation well, diameter 6 inches, depth 102.6 feet. Measuring point, top of recorder floor, 1.6 feet above land surface and 437.38 feet above mean sea level.

Water level, in feet below land-surface datum, 1945
(Daily noon water level, from recorder charts, for period Oct. 23-Dec. 29)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 28	33.70	Nov. 3	35.49	Nov. 21	35.74	Dec. 13	36.18
Apr. 10	32.90	4	35.5	26	35.98	14	36.2
May 11	31.86	5	35.50	27	35.92	15	36.2
31	32.10	6	35.53	28	35.98	16	36.2
June 23	32.42	7	35.53	29	36.02	17	36.23
July 19	32.92	8	35.54	30	36.04	18	36.19
Aug. 1	33.32	9	35.61	Dec. 1	36.04	19	36.19
14	33.70	10	35.62	2	36.08	20	36.26
30	34.15	11	35.61	3	36.10	21	36.2
Sept. 12	34.47	12	35.65	4	36.10	22	36.2
Oct. 3	35.05	13	35.68	5	36.10	23	36.2
22	35.28	14	35.70	6	36.10	24	a36.16
23	35.31	15	35.75	7	36.12	25	36.11
24	35.35	16	35.72	8	36.15	26	36.29
29	35.40	17	35.73	9	36.16	27	36.32
30	35.39	18	35.78	10	36.2	28	36.23
31	35.41	19	35.76	11	36.09	29	36.20
Nov. 1	35.39	20	35.80	12	36.20	31	36.30
2	35.45						

a Tape measurement at another hour.

52-12-2. Rubber Reserve Co. well RR-22. On property of Americus Petrali, 0.1 mile south of Bramers Lane, 0.6 mile west of Camp Ground Road and 0.08 mile west of entrance of second house from Bramers Lane, between parking area and house on river bank. Drilled observation well, diameter 6 inches, depth 101 feet. Measuring point, top of recorder floor, 2.8 feet above land surface and 437.08 feet above mean sea level.

Water level, in feet below land-surface datum, 1945
(Daily noon water level, from recorder charts, for period July 7-Dec. 31)

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	.....	.....	.....	.....	.....	45.48	46.69	42.31	46.42	40.70
2	.....	.....	.....	.....	.....	.....	45.52	46.74	41.91	46.57	41.08
3	.....	.....	.....	.....	.....	.....	45.30	46.76	41.89	46.58	41.16
4	.....	.....	.....	.....	.....	.....	44.96	46.80	42.03	46.50	40.99
5	.....	(a)	.....	.....	.....	.....	44.75	46.75	42.67	46.41	40.82
6	.....	.....	.....	.....	.....	44.40	44.49	46.79	43.04	46.24	40.78
7	.....	.....	.....	.....	.....	44.52	45.12	46.80	43.02	46.00	40.87
8	.....	.....	.....	.....	.....	44.70	45.60	46.79	42.75	45.79	40.82
9	.....	.....	.....	.....	.....	44.78	45.72	46.86	42.38	45.68	40.64
10	.....	.....	30.61	.....	.....	44.94	45.79	46.80	42.37	46.17	40.28
11	.....	.....	.....	.....	.....	45.07	45.89	46.88	42.73	46.51	40.12
12	46.36	.....	.....	.....	.....	45.14	46.04	46.88	43.23	46.21	39.99
13	46.21	.....	.....	.....	.....	45.25	46.12	46.91	43.82	46.14	39.93
14	.....	.....	.....	.....	.....	45.27	46.20	46.96	44.39	46.03	40.23
15	.....	.....	.....	.....	.....	45.39	46.23	47.03	45.15	45.77	40.51
16	44.51	.....	.....	.....	.....	45.44	46.26	46.98	45.41	45.45	41.18
17	.....	22.81	.....	.....	.....	45.41	46.37	47.02	45.57	45.14	41.92
18	.....	.....	.....	.....	.....	45.35	46.37	46.90	45.66	44.27	42.62
19	.....	.....	.....	.....	.....	45.43	46.43	46.89	45.91	43.46	43.56
20	41.46	25.97	.....	.....	.....	45.49	46.47	46.74	45.95	42.73	44.54
21	.....	.....	.....	.....	.....	45.50	46.42	46.35	46.02	42.16	44.99
22	39.29	.....	.....	.....	.....	45.63	46.51	45.42	46.20	41.88	45.29
23	.....	.....	.....	.....	36.83	45.72	46.54	44.49	46.37	41.30	45.43
24	37.71	.....	.....	.....	.....	45.80	46.57	43.91	46.39	40.60	45.57
25	.....	.....	.....	.....	.....	45.60	46.59	43.65	46.44	40.16	45.56
26	.....	.....	.....	.....	.....	45.79	46.54	43.59	46.36	39.86	44.24

a Flooded.

798998 O—48——10

52-12-2 --Continued.

Water level, in feet below land-surface datum, 1945
(Daily noon water levels, from recorder charts, for period July 7-Dec. 31)

Day	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
27	.....	26.56	.....	.....	.....	45.75	46.41	43.55	46.13	39.68	43.40
28	34.41	.....	.....	.....	.....	45.78	46.53	43.35	46.11	39.75	42.88
29		.....	.....	.....	.....	45.87	46.64	43.02	46.03	39.98	42.48
30		.....	.....	.....	.....	45.84	46.67	42.58	46.28	40.31	41.94
31		.....		38.85		45.81	46.69		46.41		41.53

53-5-1 (*1017, p.265). R. P. Moreman. At windmill on Moreman residential property on Lower River Road. No measurements made in 1945.

53-5-2 (*1017, p.266). Mr. Weather. On residential property on Lower River Road, 0.35 mile north of Orell Road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	48.80	Feb. 10	54.77	May 11	48.65	Aug. 30	55.10
6	44.85	22	46.60	June 1	47.15	Sept.13	55.33
7	44.44	28	39.50	22	45.90	Oct. 4	51.08
9	44.84	Mar. 5	32.11	July 19	53.57	24	54.67
11	45.27	17	28.00	Aug. 1	54.12	Nov. 29	47.82
13	46.24	21	31.55	14	54.75	Dec. 27	52.89
23	49.60	Apr. 10	37.50				

53-6-1. Rubber Reserve Co. well RR-46. 8.5 feet south of edge of Bethany Lane, 0.27 mile east of its intersection with Lower River Road and 0.73 mile west of its intersection with Dixie Highway. Drilled observation well, diameter 6 inches, depth 92.0 feet. Measuring point, top of cap in casing, 1.0 foot above land surface and 434.89 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
July 24	29.9	Sept.19	31.32	Nov. 29	32.15
Aug. 21	30.63	Oct. 24	31.70	Dec. 27	32.07

53-8-1 (*1017, p.266). R. McGinnis. 0.5 mile east of Cane Run Road, about 500 feet north of Greenwood Road, about 20 feet north of log barn. No measurements made in 1945.

53-8-2. Rubber Reserve Co. well RR-45. On Greenwood Road, 0.2 mile west of its intersection with Lower River Road, north edge of right-of-way, 5 feet west of southwest corner of fence. Drilled observation well, diameter 6 inches, depth 138.8 feet. Measuring point, top of plug in casing, 0.5 foot above land surface and 433.42 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 20	38.0	Aug. 30	36.74	Oct. 4	35.75	Nov. 29	34.99
Aug. 1	35.65	Sept.13	37.10	24	36.88	Dec. 27	36.03
14	36.10						

53-9-1 (*1017, p. 267). Henry Hufflage. 50 feet south of house at Arrowhead Farms, 0.15 mile west of Lower River Road opposite lane leading to well 52-9-1.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	55.82	Feb. 28	54.63	June 1	46.94	Sept.13	54.46
13	55.60	Mar. 5	a51.85	22	50.05	Oct. 4	54.32
23	55.68	17	45.90	July 19	52.19	24	54.75
Feb. 10	56.62	21	46.00	Aug. 1	52.90	Nov. 29	54.49
20	56.20	Apr. 10	46.85	14	53.36	Dec. 27	(a)
22	56.00	May 11	49.36	30	54.00		

a Pumping.

53-9-2 (*1017, p. 267). Mrs. A. J. Seibert. In field about 15 feet west of Lower River Road and about 0.45 mile north of intersection of Lower River and Greenwood Roads.

Water level, in feet below land-surface datum, 1945

Jan. 11	47.00	Mar. 17	38.85	June 22	40.55	Sept.13	43.97
Feb. 10	45.57	21	38.32	July 19	41.81	Oct. 4	44.27
20	45.38	Apr. 10	37.78	Aug. 1	42.48	24	44.37
22	45.39	May 11	39.37	14	42.98	Nov. 29	44.77
28	45.03	June 1	44.34	30	43.56	Dec. 27	44.34
Mar. 5	45.04						

53-10-1 (*1017, p. 267). W. E. Miller. In orchard, west of red brick house on lane which intersects Cane Run Road, about 0.5 mile west of Lower Hunters Trace.

Water level, in feet below land-surface datum, 1945

Jan. 2	44.16	Feb. 22	41.77	May 11	36.77	Aug. 30	43.22
8	40.52	24	40.75	June 1	35.95	Sept.13	43.70
11	41.65	28	38.73	22	37.01	Oct. 4	42.23
13	41.81	Mar. 5	34.68	July 19	41.22	22	43.50
23	42.37	17	27.96	Aug. 1	42.00	Nov. 29	41.66
Feb. 9	44.40	21	28.75	14	42.50	Dec. 27	42.75
20	42.60	Apr. 10	30.70				

53-11-1. Rubber Reserve Co. well RR-43. On property of A. J. Miller west side of Lower River Road at end of private road which intersects Lower River Road at a point 0.15 mile south of its intersection with Lower Hunters Trace. Drilled observation well, diameter 6 inches, depth 99.0 feet. Measuring point, top of cap in casing, 1.5 feet above land surface and 432.18 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

July 9	37.25	Aug. 30	41.02	Oct. 4	35.88	Nov. 29	34.90
Aug. 1	39.32	Sept.13	41.12	24	40.72	Dec. 27	36.93
14	40.57						

54-3-1 (*1017, p. 268). Mr. Vaughn. About 80 feet east of Lower River Road, approximately 800 feet west of point where Lower River Road crosses Mill Creek. No measurements made in 1945.

54-4-1 (*1017, p. 268). Rodney Williams. Formerly owned by W. E. Augustus. In sunken well house on east side of Lower River Road 0.9 mile north of Watson Lane.

Water level, in feet below land-surface datum, 1945

Jan. 2	55.23	Feb. 22	52.22	May 11	47.85	Aug. 30	55.38
11	50.45	28	48.00	June 1	45.92	Oct. 4	53.50
13	50.26	Mar. 5	41.85	22	48.37	24	55.10
23	51.10	17	31.00	July 25	53.85	Nov. 29	52.13
Feb. 10	54.67	21	33.30	Aug. 1	53.90	Dec. 27	53.22
20	53.78	Apr. 10	38.55	14	53.95		

54-7-1. Rubber Reserve Co. well RR-44. On Mike Linnig's property on west side of Lower River Road, on edge of second terrace from Ohio River normal pool, 30 feet southwest of green cabin at end of private road which intersects Lower River Road at a point 0.2 mile north of its intersection with Johnsontown Road. Drilled observation well, diameter 6 inches, depth 100.6 feet. Measuring point, top of cap in casing, 2.9 feet above land surface and 428.41 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 12	26.43	Aug. 30	31.02	Oct. 4	28.85	Nov. 29	27.46
Aug. 1	29.76	Sept.13	31.37	24	31.35	Dec. 27	29.05
14	30.52						

55-1-1 (*1017, p. 268). W. R. Baker. 60 feet north of house which is 0.2 mile east of Dixie Highway, at Dixie View Dairy.

Water level, in feet below land-surface datum, 1945

Jan. 2	55.98	Jan. 23	51.32	June 1	37.95	Nov. 29	53.43
11	53.75	Feb. 10	51.70	July 25	49.25	Dec. 27	52.03
13	53.24	May 11	33.95	Sept.19	53.03		

MARYLAND

By R. R. Bennett

PROGRAM OF WORK

Investigations of the ground-water resources of Maryland were continued during 1945 in cooperation with the Maryland Department of Geology, Mines and Water Resources. The measurement of observation wells for the determination of the fluctuations of the water table or piezometric surface is a part of these investigations. The observation-well program is considered to have been started in 1943 with the establishment of many observation wells chiefly in the Baltimore area; however, the water level in one well, Mont-Ff 1, in Montgomery County, has been measured continuously since 1932.

During 1945 a total of 83 wells were observed and 666 individual tape measurements were made in these wells. Automatic water-stage recorders were maintained on 7 wells throughout the year and 4,472 water-level determinations were obtained from the recorder graphs.

Practically all of the observation wells are in or near Baltimore where a detailed investigation of the ground-water resources is being made.

FLUCTUATIONS OF WATER LEVEL

Most of the observation wells in the Baltimore area are near localities of large pumpage, and practically all of the major fluctuations of the water levels are caused by changes in the rates of pumpage. Only a small percentage of the pumpage is metered and therefore the changes in the rate of pumpage cannot be determined accurately. Figure 5 shows the distribution of the pumpage in the Baltimore area during 1945. Many of the pumpage values shown on this figure are estimated and therefore should be considered as approximate.

The total pumpage of ground water in the Baltimore industrial area during 1945 is estimated to be about 35 million gallons a day, of which about 700,000 gallons was pumped from the crystalline rocks, 29 million

gallons from the Patuxent formation, about 3.5 million gallons from the Patapsco formation, and about 1.5 million gallons from sediments of Pleistocene age. In general, the pumpage in the Baltimore area probably was about the same in 1945 as in 1944 but, inasmuch as the estimates of pumpage may be in error by as much as 10 percent, it is possible that the pumpage may

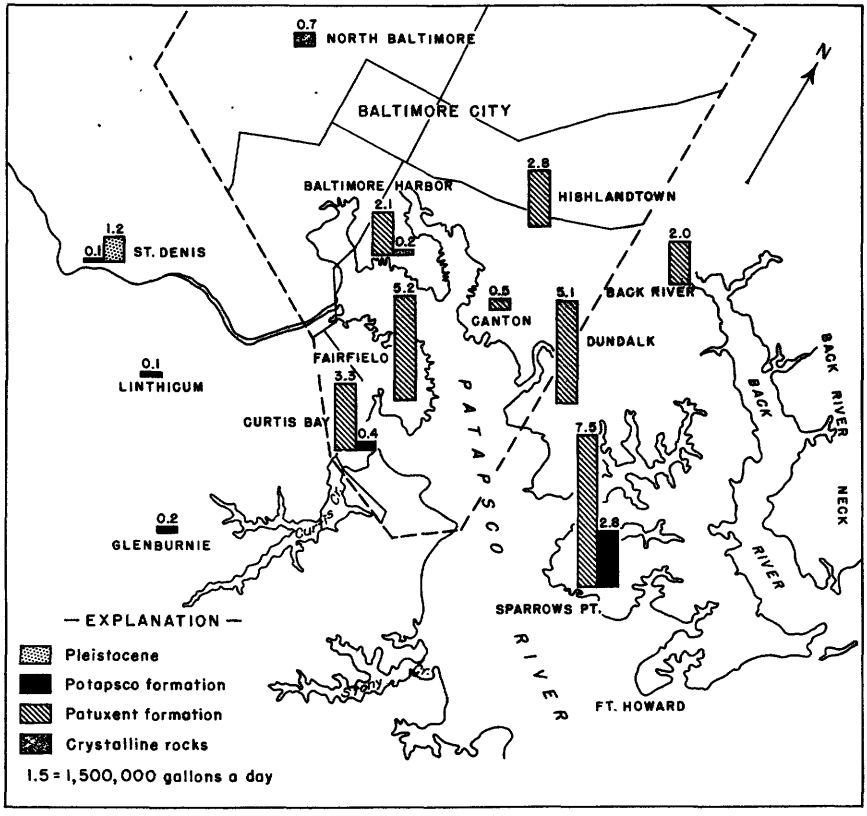

Figure 5.--Map showing, graphically, the approximate rate of ground-water pumpage during 1945, in the Baltimore, Md., industrial area.

have decreased or increased a few million gallons a day in 1945 without this change being detected.

The cone of depression formed in the Baltimore area appears to be in essential equilibrium as, in general, there has been little or no net change in artesian head during the year. However, the water levels in practically all of the observation wells fluctuate widely from day to day

making it difficult to determine the actual net change of the water level or artesian head by periodic tape measurements. For this reason the following values of change in artesian head during the year should be considered as approximate:

Patuxent formation

Sparrows Point district:	No change
Dundalk-Canton district:	Rise of 5 feet
Highlandtown district:	No change
Harbor district:	No change
Fairfield-Curtis Bay district:	Rise of 5 feet

Patapsco formation

Sparrows Point district:	Rise of 2 feet
Dundalk-Canton district:	Rise of 4 feet

Precipitation probably is the chief cause of the fluctuations of the water level in well 4N2W-9 (Baltimore Country Club), which is in the crystalline rocks on the Piedmont plateau in Baltimore City. The water level in this well was 12.07 feet below the land surface on January 4, and 9.70 feet below the land surface on December 28. During the year the water level ranged from 8.59 to 12.63 feet below the land surface.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Baltimore City

4N2W-9 (*987, p. 90; 1017, p.272). Baltimore Country Club. In Baltimore, at Falls and Harvest Roads.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	12.07	Apr. 6	11.68	July 20	11.04	Oct. 12	11.01
11	12.63	20	11.65	27	10.13	26	11.37
18	11.88	27	11.74	Aug. 3	8.59	Nov. 2	11.45
25	12.26	May 4	11.01	10	9.62	9	11.61
Feb. 1	12.54	11	11.03	17	9.98	16	11.69
8	12.50	18	11.08	24	10.16	23	11.07
15	12.31	25	11.36	31	10.12	30	10.63
22	12.12	June 1	11.12	Sept. 7	10.68	Dec. 7	9.82
Mar. 1	10.91	15	11.52	14	10.96	17	11.29
15	11.08	22	11.62	21	9.91	21	10.86
22	11.30	July 6	11.93	Oct. 5	10.99	28	9.70
30	11.45	13	12.24				

1S3E-12 (*1017, p.273). Kimball Tyler Co. In Baltimore, at Haven and Gough Streets.

Water level, in feet below land-surface datum, 1945

Jan. 4	120.37	Apr. 6	114.56	July 13	112.93	Oct. 5	117.97
11	119.94	13	113.51	20	120.31	16	118.60
18	119.76	20	113.98	27	120.40	26	117.39
25	118.74	27	113.46	Aug. 3	120.27	Nov. 2	117.30
Feb. 1	119.34	May 4	117.02	10	122.70	9	117.80
8	116.57	11	118.49	17	118.89	16	118.04
15	119.94	18	117.84	24	120.00	23	120.86
22	120.13	24	112.11	31	119.67	30	117.64
Mar. 1	118.15	June 1	116.40	Sept. 7	119.19	Dec. 7	117.53
15	115.28	15	118.33	14	118.87	17	118.11
22	114.34	22	118.73	21	118.98	21	118.05
30	114.13	July 6	119.40	28	118.24	28	117.50

2S1E-16 (*1017, p.273). Buck Glass Co. In Baltimore, at Lawrence Street and Fort Avenue.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	37.89	39.30	48.57	48.73	49.79	50.28	38.52	40.41	48.38	48.50	37.47	38.15
2	38.02	48.37	48.46	48.66	49.75	50.08	38.42	48.27	48.50	49.53	37.79	39.85
3	48.37	48.75	40.15	48.60	40.45	49.86	48.27	49.27	48.13	48.60	37.70	44.51
4	48.68	48.84	38.33	42.62	38.80	40.45	48.86	49.27	48.35	49.43	37.63	41.50
5	48.71	48.99	38.15	41.42	38.69	48.85	48.81	49.56	39.90	49.56	38.51	51.45
6	48.71	48.99	37.94	42.00	48.85	49.28	49.56	49.86	38.90	43.52	51.45	53.22
7	42.58	48.91	37.57	38.14	49.28	49.88	40.83	49.60	38.43	47.81	53.15	53.54
8	39.73	48.23	37.44	50.97	.....	.....	38.58	40.83	47.81	48.37	53.32	54.00
9	48.23	48.98	50.97	51.90	49.52	49.75	38.39	46.18	43.18	48.33	53.79	54.37
10	48.98	49.28	51.90	53.76	40.45	49.75	46.18	47.28	42.48	43.24	41.15	53.85
11	48.99	49.28	53.76	54.45	38.87	40.45	47.13	47.37	42.49	43.16	39.50	52.78
12	48.76	49.32	54.37	54.63	38.50	48.37	47.16	48.05	38.83	42.96	52.78	54.13
13	39.77	49.08	54.35	54.63	48.37	49.21	48.05	48.69	37.95	38.83	53.85	54.42
14	38.33	39.77	54.44	54.85	49.21	49.52	40.85	48.72	37.98	41.99	.....	.....
15	38.22	47.80	54.57	54.75	49.27	49.57	38.60	40.85	41.85	42.08	54.22	55.00
16	47.76	48.44	.....	.....	49.27	49.54	38.43	46.00	41.89	42.21	41.30	55.66
17	47.82	48.20	.....	.....	40.05	49.54	.....	.....	41.73	50.30	39.48	47.36
18	47.93	48.21	.....	.....	38.84	42.55	.....	.....	50.30	52.44	38.97	54.92
19	47.83	48.02	.....	.....	38.52	47.97	.....	.....	40.57	52.82	54.92	55.87
20	39.64	47.96	.....	.....	47.97	48.56	49.47	49.88	38.50	40.57	55.63	55.87
21	38.87	43.64	.....	.....	39.88	48.46	39.91	49.90	37.99	51.45	55.77	55.87

2S1E-16--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
22	38.29	46.92	49.33	49.51	47.74	48.56	38.72	39.91	51.45	52.44	55.81	56.28
23	36.92	47.57	49.50	49.90	48.05	48.66	38.34	47.32	52.44	53.59	41.75	56.30
24	47.50	48.19	49.90	50.25	39.38	48.22	47.32	47.78	42.31	53.70	39.43	41.75
25	48.06	48.47	40.31	50.31	38.74	43.42	47.65	47.95	53.18	53.84	39.05	54.00
26	47.98	48.23	39.55	48.60	38.35	48.25	47.90	48.28	41.20	53.87	54.00	55.16
27	39.65	48.22	48.60	49.82	48.25	49.02	48.18	48.75	38.67	41.20	55.10	55.30
28	38.34	39.65	49.73	49.98	49.02	49.29	39.80	48.80	38.28	38.67	55.13	55.25
29	38.22	47.28			49.09	49.36	38.35	39.80	38.15	38.34	55.03	55.42
30	47.28	47.88			49.15	49.50	38.23	48.38	37.82	38.39	.....	.....
31	47.88	48.63			40.41	49.43			37.35	37.95		

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	53.52	54.01	55.48	55.73	49.65	52.14	51.61	51.93	53.10	53.33
2	.....	.....	53.64	55.72	41.68	55.52	52.08	53.34	51.41	52.82	39.65	53.22
3	40.81	43.67	.....	.....	39.52	41.68	53.25	53.75	52.82	53.38	38.92	51.65
4	38.20	40.81	.....	.....	39.15	54.32	53.54	53.75	40.32	53.52	51.65	52.64
5	38.50	39.20	.....	.....	54.32	55.15	53.29	53.70	39.64	53.15	52.48	52.81
6	38.27	38.51	.....	.....	55.15	55.54	53.30	53.46	53.15	53.89	52.59	52.77
7	38.19	38.50	.....	.....	55.46	55.63	49.65	53.49	53.85	54.03	52.64	52.94
8	38.01	38.35	.....	.....	55.44	55.63	49.65	52.65	53.95	54.17	52.68	53.01
9	37.64	46.60	.....	.....	40.72	55.71	49.64	53.11	54.05	54.24	40.05	53.98
10	46.60	49.80	54.54	56.57	40.17	50.83	53.06	53.50	54.12	54.68	39.04	50.60
11	.....	.....	42.23	56.66	.....	.....	53.18	53.50	41.20	54.73	50.60	52.60
12	.....	.....	40.47	49.21	.....	.....	53.15	53.27	40.15	51.75	52.58	53.05
13	54.68	54.83	40.24	55.22	.....	.....	53.23	53.85	51.75	52.17	52.79	53.20
14	41.99	55.15	39.58	55.82	54.81	55.03	44.17	53.60	52.15	52.93	52.70	52.88
15	39.91	53.48	.....	.....	41.80	55.13	44.17	50.80	52.93	53.28	.....	.....
16	39.69	54.07	39.58	54.54	40.69	49.67	.....	.....	52.52	53.03	.....	.....
17	54.07	54.62	54.54	55.33	44.18	52.67	.....	.....	52.19	52.55	50.42	51.55
18	54.20	54.97	54.98	55.67	52.36	52.87	.....	.....	40.05	52.39	44.34	51.70
19	54.17	54.46	41.34	55.66	52.79	53.42	53.15	53.40	39.46	50.67	51.50	51.86
20	54.24	54.42	40.19	55.26	53.19	53.52	53.23	53.55	49.20	49.93	51.52	51.89
21	40.78	54.38	55.23	55.75	53.32	53.63	40.57	53.55	49.42	49.98	41.00	51.66
22	38.91	40.78	55.67	56.07	39.82	53.85	39.79	44.68	49.30	49.64	38.98	41.00
23	38.55	54.31	55.93	56.25	38.27	47.97	.....	.....	49.64	49.87	38.68	39.16
24	53.57	54.90	55.81	56.25	39.20	53.00	.....	.....	49.72	50.12	38.16	38.68
25	54.90	55.32	44.17	56.02	52.88	53.22	.....	.....	39.88	49.82	37.27	38.16
26	55.21	55.59	.....	.....	52.90	53.37	38.20	38.43	38.82	52.13	37.22	49.41
27	55.42	55.64	44.17	54.36	53.24	53.50	38.17	38.55	52.13	52.53	49.41	50.50
28	55.45	55.72	54.36	55.03	53.98	54.20	37.96	38.25	52.34	52.63	50.50	50.61
29	41.75	55.57	55.03	55.55	50.40	54.03	37.75	38.01	52.45	52.82	50.44	50.57
30	40.73	53.40	55.39	55.83	.....	.....	37.62	52.49	52.82	53.26	50.16	51.60
31	53.33	53.95	55.57	55.80			51.63	52.32			39.75	50.33

2S3E-9 (*987, p. 90; 1017, p.274). J. S. Young Co. In Baltimore, at Boston and Luzerne Streets. Measurements discontinued.

2S3E-11 (*987, p. 90; 1017, p.274). J. S. Young Co. In Baltimore, at Boston and Luzerne Streets.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 11	33.51	Feb. 15	33.02	Mar. 30	32.84	May 4	32.34
18	33.52	22	33.34	Apr. 6	33.09	11	32.64
25	33.62	Mar. 1	33.52	13	33.17	18	32.23
Feb. 1	33.77	15	33.12	20	32.64	25	32.70
8	33.06	22	32.61	27	32.34	June 1	32.42

2S3E-11--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
June 15	33.52	Aug. 10	33.84	Sept.28	32.58	Nov. 23	32.22
22	33.78	17	32.99	Oct. 5	32.85	30	32.16
July 8	33.18	25	33.25	16	31.87	Dec. 7	31.93
13	33.06	31	33.16	26	31.82	17	32.70
20	33.69	Sept. 7	32.96	Nov. 2	31.72	21	32.62
27	32.90	14	32.93	9	32.18	28	31.60
Aug. 3	33.43	21	32.64	16	32.49		

2S5E-1 (*987, p. 90; 1017, p.274). U. S. Army. In Baltimore, on Holabird Avenue at Pumphrey Street.

Water level, in feet below land-surface datum, 1945

Jan. 4	87.12	Apr. 27	84.49	Aug. 3	88.08	Oct. 26	85.50
11	89.29	May 4	86.50	10	86.34	Nov. 2	85.86
Feb. 8	85.31	12	86.30	17	85.15	9	84.34
15	84.54	18	89.91	24	86.22	16	86.28
22	86.90	25	88.59	31	87.03	23	85.52
Mar. 1	87.02	June 1	90.02	Sept. 9	85.68	30	85.83
15	85.37	22	89.80	21	82.68	Dec. 7	85.26
22	86.00	July 6	91.37	28	82.79	17	85.18
30	86.53	13	90.91	Oct. 5	81.37	21	85.93
Apr. 6	84.50	20	90.11	18	86.81	28	84.65
20	83.12	27	86.52				

2S5E-4 (*987, p. 90; 1017, p.275). U. S. Army. In Baltimore, on Holabird Avenue at Pumphrey Street.

Water level, in feet below land-surface datum, 1945

Jan. 4	85.77	Apr. 27	83.67	Aug. 3	84.51	Oct. 26	83.90
11	85.78	May 4	83.65	10	84.47	Nov. 2	81.19
Feb. 8	85.84	12	83.68	17	84.51	9	81.23
15	84.12	18	83.71	24	84.30	16	81.26
22	83.97	25	83.74	31	84.51	23	81.32
Mar. 1	84.01	June 1	83.81	Sept. 7	84.49	30	81.37
15	84.02	22	84.09	21	84.39	Dec. 7	81.38
22	83.99	July 6	84.30	28	84.20	17	81.43
30	83.98	13	84.42	Oct. 5	81.29	21	81.46
Apr. 6	83.97	20	84.42	18	81.08	28	81.48
20	83.76	27	84.50				

3S5E-3 (*987, p. 91; 1017, p.275). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument.

Water level, in feet below land-surface datum, 1945

Jan. 4	43.77	Apr. 6	50.81	July 13	44.24	Oct. 5	47.36
11	43.72	13	51.15	20	43.66	17	41.98
18	43.58	20	51.22	27	43.27	26	41.52
25	45.25	27	51.13	Aug. 3	43.22	Nov. 2	41.24
Feb. 1	47.10	May 4	50.59	10	45.72	9	41.10
8	48.32	11	50.72	17	47.16	16	41.02
15	49.14	18	50.74	24	47.46	23	40.99
22	48.23	25	46.55	31	48.28	30	40.87
Mar. 1	49.44	June 1	44.83	Sept. 7	47.07	Dec. 7	40.63
9	49.54	15	43.60	14	48.36	17	40.68
15	50.08	22	44.36	21	47.04	21	40.75
22	49.75	July 6	41.21	28	46.79	28	41.05
30	50.25						

3S5E-4 (*987, p. 91; 1017, p.275). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument. Measurements discontinued.

3S5E-6 (*987, p. 91; 1017, p.275). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument.

3S5E-6--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	43.64	Jan. 18	43.61	Feb. 1	a 56.98	Feb. 15	a 56.18
11	43.56	25	42.37	8	a 55.61	Oct. 17	40.89

a Pumping.

3S5E-7 (*987, p. 91; 1017, p.276). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument. Measurements resumed. Water level, in feet below land-surface datum, 1945: Oct. 17,38.86.

3S5E-8 (*987, p. 91; 1017, p.276). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument. Water level, in feet below land-surface datum, 1945: Oct. 17, 86.68.

3S5E-9 (*987, p. 92; 1017, p.277). Federal Yeast Co. In Baltimore, 2.25 miles south and 4.09 miles east of Washington Monument. Measurements discontinued.

4S2E-4. Weyerhauser Lumber Co. In Baltimore, 30 feet east of Childs Street and 800 feet southwest of docks. Unused drilled industrial well, diameter 6 inches, depth 290 feet. Measuring point, top of casing, 2 feet above land-surface.

Water level, in feet below land-surface datum, 1945

May 22	57.75	Aug. 3	63.24	Sept.21	59.14	Nov. 16	56.06
June 1	65.35	10	64.11	28	58.66	23	56.22
15	60.40	17	59.21	Oct. 5	57.11	30	57.35
22	65.11	24	61.72	15	56.78	Dec. 7	57.22
July 6	62.17	31	60.42	26	56.31	17	58.98
13	64.06	Sept. 7	60.25	Nov. 2	55.84	21	59.68
20	61.33	14	59.59	9	56.49	28	58.31
27	61.45						

5S3E-15. U. S. Industrial Chemical Co.'s well 1701. In Baltimore, on vacant lot 50 feet north of Patapsco and 800 feet west of Fairfield Road. Unused drilled industrial well, diameter 6 inches, depth 212 feet. Measuring point, top of casing, at land surface.

Water level, in feet below land-surface datum, 1945

Jan. 26	105.87	May 4	99.90	Aug. 3	103.92	Oct. 26	100.60
Feb. 1	103.93	11	99.96	10	103.84	Nov. 2	99.82
8	102.27	18	96.92	17	103.67	9	100.37
15	103.55	25	93.65	24	104.16	16	104.99
22	103.49	June 1	95.16	31	104.11	23	103.61
Mar. 1	103.36	15	93.70	Sept. 7	104.76	30	112.02
15	102.34	22	98.88	14	104.68	Dec. 7	109.82
22	102.57	July 6	98.54	21	103.70	17	121.05
Apr. 1	99.42	13	94.69	28	103.60	21	125.50
20	97.90	20	93.79	Oct. 5	101.11	28	114.54
27	97.42	27	102.78	15	99.94		

5S3E-16. U. S. Industrial Chemical Co.'s well 1702. In Baltimore, on vacant lot 150 feet north of Patapsco and 800 feet west of Fairfield Road. Unused drilled industrial well, diameter 8 inches, depth 347 feet. Measuring point, top of casing, at land surface.

Water level, in feet below land-surface datum, 1945

Jan. 26	106.73	Apr. 27	101.29	Aug. 3	103.55	Oct. 26	99.05
Feb. 11	105.56	May 4	102.93	10	104.97	Nov. 2	98.33
8	103.98	11	102.54	17	104.38	9	105.51
15	103.21	25	96.12	24	101.98	16	98.35
22	105.45	June 1	102.17	31	103.32	23	96.22
Mar. 1	95.55	15	99.21	Sept. 7	102.74	30	100.18
15	104.11	22	103.09	14	103.14	Dec. 7	94.88
22	104.18	July 6	101.65	21	101.98	17	100.46
Apr. 6	105.60	13	99.55	28	101.78	21	101.55
13	103.37	20	93.25	Oct. 5	100.42	28	95.71
20	101.41	27	88.55	15	98.87		

6S2E-1 (*987, p. 92; 1017, p.277). U. S. Industrial Alcohol Co. In Baltimore, at Birch and Curtis Streets.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	a110	Feb. 22	a111	May 4	a107	June 22	a110
11	a113	Mar. 1	a112	11	a109	July 6	a109
18	a114	15	a110	18	a109	Aug. 3	81
25	a114	22	a112	25	a108	15	a106
Feb. 1	a110	Apr. 6	a111	June 1	a109	31	a107
8	a110	20	a 99	15	a107	Nov. 16	a 96
15	a111	27	a104				

a Pumping.

6S2E-4 (*987, p. 92; 1017, p.277). U. S. Industrial Alcohol Co. In the same well field and 100 feet east of 6S2E-1. Pumping at time of each measurement.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	155	Feb. 22	158	Apr. 27	151	June 15	153
11	160	Mar. 1	157	May 4	153	22	154
18	154	15	160	11	152	July 6	151
25	159	22	160	18	151	Aug. 3	148
Feb. 1	155	Apr. 6	154	25	148	31	142
8	156	20	148	June 1	152	Oct. 12	137
15	162						

6S2E-6 (*987, p. 93; 1017, p.277). U. S. Industrial Alcohol Co. In the same well field and 100 feet east of 6S2E-1.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	115.07	Apr. 13	112.65	July 20	115.99	Oct. 12	110.54
11	121.92	20	110.80	27	120.85	26	74.10
18	124.00	27	109.86	Aug. 3	120.01	Nov. 2	71.07
24	123.66	May 4	114.87	10	117.47	9	71.54
Feb. 1	119.42	11	116.94	17	106.92	16	73.24
8	118.39	18	117.74	24	118.70	23	72.36
15	120.68	25	118.17	31	118.46	30	73.84
22	121.15	June 1	118.36	Sept. 7	118.83	Dec. 7	74.53
Mar. 1	122.25	15	118.40	14	119.46	17	73.20
15	121.94	22	119.75	21	116.37	21	71.20
22	122.04	July 6	119.05	28	115.18	28	72.47
Apr. 6	122.36	13	79.26	Oct. 5	113.38		

6S2E-9. U. S. Industrial Alcohol Co.'s well 3929. In Baltimore, at Benhill and Andard Streets, 5.30 miles south and 1.69 miles east from Washington Monument. Used drilled industrial well, diameter 10 inches, depth 293.5 feet. Water levels, in feet below land-surface datum, 1945: Apr. 25, 90, reported; May 4, 124, pumping.

Baltimore County

Bal-Ef 16 (*1017, p.278). Water hole on King Avenue, 0.1 mile southeast of Babikow Road. Water levels, in feet below land-surface datum, 1945: Jan. 31, 4.24; Feb. 12, 3.96; May 2, 4.22; Aug. 3, 4.17.

Bal-Ef 19 (*1017, p.278). United Clay Products Co. Between Highway 40 and Baltimore & Ohio Railroad, at Poplar. Water levels, in feet below land-surface datum, 1945: Jan. 31, 60.04; Feb. 12, 60.05; May 2, 59.70; Aug. 3, 59.29.

Bal-Fe 19 (*1017, p.278). Paul Jones Distillery. In Dundalk, south of Baltimore & Ohio Railroad tracks and 150 feet east of Willow Spring Street.

Bal-Fe 19--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	83.85	86.52	.....	.....	85.53	85.70	83.13	83.57	82.95	83.92	85.69	86.28
2	82.94	83.85	.....	.....	84.98	85.67	83.11	83.40	83.92	84.80	86.07	86.56
3	82.94	83.97	.....	.....	84.72	85.29	82.93	83.41	84.18	84.67	86.44	86.76
4	84.76	85.09	.....	.....	84.62	85.43	82.97	83.29	84.13	84.93	86.52	86.71
5	85.09	86.16	.....	.....	84.46	85.06	.....	.....	84.70	85.37	86.55	87.03
6	85.80	86.65	.....	.....	83.45	84.46	83.67	83.73	84.08	84.70	86.89	87.31
7	85.37	86.40	.....	.....	83.40	83.60	83.10	83.68	83.92	84.18	87.17	87.41
8	85.35	86.44	84.34	84.50	83.60	83.76	82.25	83.23	83.95	84.50	87.18	87.44
9	.....	.....	84.11	84.42	83.57	83.79	81.65	82.25	83.87	84.52	87.22	87.50
10	.....	.....	83.11	84.24	83.41	83.81	81.61	82.19	84.21	84.56	86.69	87.31
11	.....	.....	82.40	83.11	82.80	83.90	81.75	82.20	84.25	84.72	86.67	86.92
12	.....	.....	82.38	82.90	82.60	83.04	81.29	81.77	84.42	84.67	86.47	86.82
13	.....	.....	82.41	83.09	82.22	82.77	81.10	81.41	83.83	84.43	86.48	86.60
14	.....	.....	.....	.....	82.50	83.06	81.10	82.13	83.90	84.17	86.47	86.68
15	.....	.....	82.44	83.12	83.06	83.65	81.60	82.21	84.14	84.31	86.40	86.50
16	.....	.....	82.20	83.20	83.32	83.66	82.17	82.57	84.26	85.41	86.27	86.40
17	.....	.....	83.20	84.61	83.25	83.58	81.91	82.27	85.41	86.02	85.74	86.35
18	.....	.....	83.98	84.55	82.75	83.43	81.93	82.24	85.70	86.31	85.71	85.87
19	.....	.....	84.22	84.99	82.58	83.01	82.13	82.61	84.64	85.70	85.77	86.10
20	.....	.....	84.78	85.50	82.94	84.27	82.25	82.50	83.38	84.64	85.91	86.17
21	.....	.....	.....	.....	83.96	84.42	82.22	82.45	83.01	83.38	86.05	86.27
22	.....	.....	.....	.....	84.14	84.61	82.28	82.80	83.31	84.23	86.11	86.24
23	.....	.....	.....	.....	84.34	84.63	82.02	82.28	84.03	84.33	86.01	86.19
24	.....	.....	.....	.....	84.25	84.69	82.08	82.67	84.31	84.89	85.81	86.10
25	.....	.....	.....	.....	84.00	84.58	82.42	82.83	84.89	85.40	85.84	86.00
26	.....	.....	.....	.....	83.28	84.13	82.43	82.80	85.33	85.63	85.52	86.15
27	.....	.....	.....	.....	83.15	83.94	82.42	83.14	84.93	85.42	86.15	86.77
28	.....	.....	.....	.....	83.94	84.76	83.03	83.13	84.83	85.19	86.77	86.85
29	.....	.....			84.56	85.00	82.65	83.12	84.85	85.20	.....	.....
30	.....	.....			84.50	85.21	82.47	82.95	85.11	85.26	.....	.....
31	.....	.....			83.35	84.50			85.22	85.71		

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	84.45	84.68	83.51	84.48	78.75	79.47	80.88	81.32	80.23	81.03
2	.....	.....	84.67	85.05	82.70	83.51	78.62	79.23	80.96	81.80	78.92	80.23
3	87.32	87.40	84.74	84.96	82.25	82.70	78.97	79.56	80.20	81.70	78.93	79.84
4	87.09	87.46	84.32	84.39	82.13	82.59	79.39	79.63	79.01	80.20	79.77	80.72
5	87.07	87.27	83.21	84.32	82.46	82.59	79.27	80.13	79.26	80.28	80.41	80.79
6	87.20	87.28	83.18	83.28	82.37	82.96	79.29	80.23	80.16	81.35	80.24	80.73
7	87.24	87.33	83.19	83.49	83.67	84.25	79.27	79.75	81.04	81.69	80.54	80.88
8	86.09	87.26	83.28	83.62	82.69	83.15	79.75	80.05	81.35	81.83	80.86	81.18
9	86.05	86.61	83.28	83.68	81.97	82.69	79.82	80.33	81.37	81.91	79.84	80.86
10	86.49	86.74	83.58	83.75	81.87	82.57	80.18	80.57	80.57	81.76	79.78	80.50
11	86.74	86.99	83.75	84.03	82.09	82.71	79.88	80.51	78.90	80.57	80.50	81.31
12	.....	.....	83.72	84.19	82.12	82.95	79.97	80.48	79.01	79.83	81.31	81.56
13	86.94	87.13	83.73	84.08	82.67	83.16	79.51	80.16	79.83	81.77	80.83	81.42
14	86.71	87.12	83.99	84.36	82.41	82.87	79.05	79.69	80.61	80.82	80.65	81.23
15	85.63	86.71	83.68	84.23	82.38	82.79	79.24	80.22	80.81	81.51	.....	.....
16	85.63	86.10	83.16	83.68	81.52	82.58	.....	.....	81.30	81.52	.....	.....
17	.....	.....	83.17	83.41	81.19	81.64	.....	.....	80.71	81.52	80.79	81.25
18	.....	.....	83.11	83.57	30.51	81.23	.....	.....	79.79	80.71	81.08	81.41
19	.....	.....	82.96	83.24	30.34	80.88	81.86	82.02	79.75	80.46	81.22	81.42
20	86.10	86.20	82.91	83.25	30.52	80.89	80.60	82.27	80.46	81.57	81.05	82.32
21	85.70	86.20	83.14	83.39	80.41	80.67	79.63	80.60	81.18	81.74	81.95	81.49
22	84.11	85.70	83.14	83.52	80.59	81.07	79.70	80.77	80.90	81.68	80.74	81.44
23	84.11	84.61	83.38	83.72	80.38	80.76	80.70	81.07	80.66	81.19	79.93	80.85
24	84.42	84.64	83.43	83.86	80.26	80.49	81.02	81.35	81.01	81.33	79.52	79.95
25	84.04	84.56	83.36	83.85	80.12	80.81	.....	.....	80.28	81.36	78.55	79.66

Bal-Fe 19--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
26	83.81	84.13	82.93	83.40	80.34	81.00	81.34	81.50	80.03	80.44	78.21	78.85
27	83.88	84.15	83.01	83.45	80.65	81.04	81.20	81.60	80.10	80.40	78.80	79.65
28	83.53	84.17	83.38	83.69	80.63	80.96	79.95	81.20	80.04	80.38	79.65	80.48
29	82.95	83.53	83.58	83.96	80.15	80.71	79.98	80.67	80.12	80.68	80.01	80.50
30	83.20	84.27	83.85	84.30	79.49	80.15	80.66	81.18	80.35	81.12	79.20	80.51
31	84.27	84.58	84.20	84.54			80.74	81.31			78.78	79.54

Bal-Ff 1 (*987, p. 93; 1017, p. 279). City of Baltimore. At Back River sewage disposal plant. Published incorrectly in Water-Supply Paper 1017 as Bal-Ef 1.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 4	43.63	Apr. 6	43.52	July 13	42.52	Oct. 5	42.17
11	43.42	13	43.03	20	42.41	18	41.26
18	43.76	20	43.47	27	43.32	26	41.37
25	43.95	27	43.40	Aug. 3	42.20	Nov. 2	42.14
Feb. 1	44.06	May 4	42.43	10	42.32	9	41.38
8	43.41	11	43.01	17	42.31	16	41.54
15	43.32	18	42.65	24	42.13	23	41.99
22	43.43	25	42.89	31	42.25	30	41.39
Mar. 1	43.44	June 1	43.02	Sept. 7	42.23	Dec. 7	41.24
15	43.04	15	42.96	14	41.87	17	41.55
22	43.47	22	43.07	21	41.99	21	41.85
30	42.99	July 6	42.96	28	42.28	28	41.55

Bal-Gc 20 (*1017, p.279). Calvert Distillery. At St. Denis.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	39.57	40.25	40.23	40.30	39.86	40.19	39.73	39.93	39.51	39.65	39.62	39.70
2	40.20	40.77	40.20	40.30	39.79	40.15	39.48	39.85	39.63	39.68	.....	.....
3	40.64	40.77	40.24	40.45	39.57	39.84	39.53	39.92	39.25	39.65	.....	.....
4	40.42	40.66	40.00	40.42	39.84	40.12	39.53	39.93	39.24	39.30	.....	.....
5	40.42	40.57	39.91	40.35	39.84	40.15	39.46	40.12	39.30	39.38	.....	.....
6	40.48	40.62	40.24	40.39	39.36	39.84	40.12	40.32	39.38	39.51	.....	.....
7	40.02	40.52	40.22	40.33	39.43	39.99	40.18	40.36	39.45	39.55	.....	.....
8	40.03	40.10	.....	.....	39.91	40.08	39.98	40.18	39.34	39.65	.....	.....
9	40.08	40.40	.....	.....	39.96	39.96	39.96	40.02	39.65	39.82	.....	.....
10	40.40	40.59	.....	.....	39.77	39.96	39.98	40.06	39.16	39.75	.....	.....
11	40.53	40.72	.....	.....	39.89	40.11	39.92	40.03	39.43	39.71	.....	.....
12	40.23	40.71	.....	.....	39.88	40.12	39.82	39.92	39.43	39.70	.....	.....
13	40.17	40.23	.....	.....	39.88	40.01	39.65	39.84	39.33	39.48	.....	.....
14	40.15	40.27	.....	.....	39.91	40.00	39.63	39.74	39.48	39.62	.....	.....
15	40.22	40.39	39.89	40.11	39.79	39.93	39.74	39.88	39.47	39.59	.....	.....
16	40.07	40.23	39.87	40.19	39.71	39.80	39.74	39.91	39.54	39.61	.....	.....
17	40.22	40.49	40.11	40.23	39.67	39.83	39.50	39.74	39.47	39.62	.....	.....
18	40.44	40.58	40.15	40.38	39.83	40.09	39.53	39.77	39.31	39.48	.....	.....
19	40.29	40.44	40.38	40.64	39.67	40.05	39.77	39.96	39.45	39.79	.....	.....
20	40.30	40.37	40.23	40.56	39.45	39.67	39.63	39.87	39.71	39.83	.....	.....
21	40.26	40.39	40.09	40.34	39.12	39.49	39.35	39.68	39.59	39.75	.....	.....
22	39.79	40.27	39.70	40.09	39.28	39.57	39.68	39.83	39.43	39.69	.....	.....
23	39.77	39.92	39.80	40.21	39.47	39.64	39.59	39.81	39.69	39.83	.....	.....
24	39.73	40.01	40.21	40.47	39.56	39.89	39.42	39.59	39.83	39.93	.....	.....
25	40.01	40.29	40.41	40.54	39.89	40.03	39.14	39.42	39.86	39.94	.....	.....
26	40.17	40.25	39.70	40.41	39.86	39.98	39.00	39.33	39.83	39.88	39.52	39.64
27	40.25	40.34	39.65	40.12	.....	.....	39.30	39.60	39.81	39.83	.....	.....
28	40.02	40.28	39.86	40.18	39.86	39.94	39.52	39.64	39.46	39.82	39.63	39.64
29	39.86	40.21			.....	.....	39.50	39.58	39.38	39.54	39.64	39.70
30	40.13	40.31			39.69	39.75	39.52	39.58	39.38	39.57	39.70	39.76
31	40.14	40.34			39.28	39.73			39.48	39.65		

Bal-Gc 20--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	39.73	39.76	39.38	39.53	39.30	39.54	39.31	39.74	39.40	39.50	39.46	39.65
2	39.67	39.76	39.26	39.38	39.28	39.37	39.08	39.31	39.33	39.48	39.63	39.67
3	.....	.....	39.15	39.27	39.37	39.65	39.22	39.69	39.30	39.40	39.43	39.63
4	.....	.....	39.27	39.46	39.62	39.69	39.63	39.77	39.40	39.40	39.42	39.48
5	.....	.....	39.44	39.51	39.62	39.65	39.43	39.63	39.40	39.65	39.28	39.48
6	39.70	39.76	39.10	39.44	39.58	39.65	.....	.....	39.65	39.86	.....	.....
7	39.76	39.82	39.12	39.23	39.51	39.59	.....	.....	39.77	39.86	38.99	39.04
8	39.82	39.89	39.23	39.44	39.41	39.51	.....	.....	39.72	39.79	39.04	39.33
9	39.70	39.85	39.44	39.50	39.41	39.46	.....	.....	39.72	39.79	39.08	39.33
10	39.54	39.75	39.46	39.50	39.24	39.41	.....	.....	39.78	39.86	39.08	39.11
11	39.64	39.86	.....	.....	39.15	39.24	.....	.....	39.86	39.86	39.11	39.49
12	.....	.....	.....	.....	39.24	39.52	39.08	39.14	39.69	39.86	39.49	39.57
13	39.91	39.92	.....	.....	39.51	39.60	39.14	39.37	39.43	39.69	39.27	39.52
14	39.76	39.91	.....	.....	39.46	39.58	39.35	39.40	39.24	39.43	39.00	39.27
15	39.71	39.78	.....	.....	39.45	39.57	39.37	39.41	39.27	39.78	.....	.....
16	39.78	40.02	.....	.....	39.57	39.79	39.13	39.37	39.73	39.89	.....	.....
17	40.02	40.05	.....	.....	39.67	39.80	39.16	39.35	39.57	39.73	39.57	39.62
18	39.89	40.03	39.29	39.38	39.31	39.67	39.33	39.43	39.57	39.71	39.46	39.64
19	39.80	39.89	.....	.....	39.32	39.42	39.30	39.39	39.51	39.71	39.25	39.46
20	39.63	39.80	.....	.....	39.28	39.42	39.33	39.50	39.51	39.72	39.25	39.32
21	39.50	39.64	39.35	39.38	39.28	39.49	39.50	39.50	39.51	39.78	39.27	39.61
22	39.35	39.50	39.29	39.37	39.49	39.70	39.38	39.50	.....	.....	39.41	39.61
23	39.36	39.43	.....	.....	39.61	39.67	39.28	39.40	39.30	39.40	39.56	39.71
24	39.43	39.51	39.35	39.36	39.52	39.61	39.34	39.52	39.40	39.41	39.56	39.65
25	39.36	39.49	39.13	39.35	39.44	39.52	39.49	39.52	39.38	39.68	38.77	39.58
26	39.30	39.42	39.19	39.37	39.44	39.58	39.39	39.56	39.68	39.89	38.76	39.07
27	39.37	39.43	.....	.....	39.53	39.59	39.56	39.77	39.64	39.89	39.07	39.44
28	39.27	39.43	.....	.....	39.46	39.58	39.72	39.77	39.06	39.64	39.26	39.47
29	39.27	39.47	.....	.....	39.38	39.61	39.69	39.77	39.01	39.20	39.16	39.26
30	39.47	39.63	.....	.....	39.61	39.76	39.52	39.70	39.20	39.46	.....	.....
31	39.53	39.63	39.54	39.55			39.40	39.52			38.79	38.84

Bal-Gf 1 (*987, p. 93; 1017, p.280). Bethlehem Steel Co. At Sparrows Point.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	33.85	34.38	35.94	36.43	34.91	35.54	34.95	35.51	37.85	38.71	36.02	37.39
2	34.19	35.25	36.17	36.43	34.63	35.21	34.65	35.10	35.61	37.92	35.32	36.02
3	34.74	35.20	36.05	36.30	34.52	34.90	34.70	35.30	35.61	43.77	34.83	35.59
4	34.58	35.05	35.21	36.05	34.73	35.27	34.47	34.74	43.77	47.38	34.90	35.30
5	34.45	34.98	35.00	35.83	34.53	34.95	34.18	35.18	42.77	46.80	34.77	36.10
6	34.33	34.85	35.17	35.82	34.22	34.92	35.18	35.70	.....	.....	35.02	36.05
7	34.27	34.70	35.02	35.63	34.58	35.18	35.15	35.63	.....	.....	34.68	35.38
8	34.18	34.55	34.73	35.37	34.82	35.17	35.07	35.60	.....	.....	34.69	35.70
9	34.45	34.95	34.53	35.16	34.63	35.04	34.98	36.95	.....	.....	35.13	35.77
10	34.67	35.34	34.60	35.22	34.51	35.05	35.99	37.77	.....	.....	34.93	35.72
11	34.67	35.12	34.73	35.32	34.85	35.24	35.24	36.10	.....	.....	34.78	37.84
12	34.15	35.20	34.58	35.23	34.07	34.98	34.99	35.60	35.69	36.24	37.84	41.10
13	34.59	35.15	34.45	35.17	34.38	35.06	34.76	35.46	35.12	36.46	41.10	42.46
14	34.32	35.10	34.45	35.02	34.28	34.88	34.53	35.22	35.52	36.58	41.05	42.89
15	34.02	34.56	34.21	34.86	34.23	34.78	34.74	35.35	34.69	35.52	38.25	41.05
16	34.30	34.75	34.21	35.08	34.11	35.63	34.38	35.00	34.49	35.04	37.29	38.25
17	34.70	35.15	34.61	35.10	34.89	35.92	34.22	34.95	34.33	34.84	36.68	37.41
18	34.76	35.23	34.63	35.09	34.63	35.24	34.68	35.64	34.20	34.69	36.39	38.24
19	34.58	34.93	34.94	35.42	34.34	35.01	35.58	35.95	34.66	35.30	36.35	36.57
20	34.52	34.91	34.60	35.27	34.21	34.77	34.54	35.53	34.32	35.30	36.05	36.68
21	34.39	34.94	34.65	35.10	34.05	34.72	34.54	35.27	33.79	34.36	36.17	36.65
22	33.91	34.54	34.18	35.00	34.26	34.85	34.94	35.44	33.92	34.55	36.12	36.84

Bal-Gf 1--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
23	34.17	34.71	34.40	36.45	34.00	34.92	34.72	35.19	34.21	35.02	36.29	36.85
24	34.32	35.51	36.45	37.52	34.14	34.63	34.08	34.88	34.49	35.24	36.10	36.68
25	35.18	35.81	35.86	36.76	34.49	34.95	34.08	34.54	34.39	35.02	35.52	35.30
26	35.07	35.55	35.00	36.02	34.27	36.21	33.98	34.44	33.90	36.86	35.18	35.90
27	35.18	35.69	34.69	35.45	35.39	37.21	34.14	36.38	35.86	38.42	34.67	35.10
28	35.05	35.67	34.87	35.54	36.12	37.56	35.35	36.47	35.69	37.61	34.35	34.90
29	34.97	35.42			35.93	37.61	34.85	35.52	36.44	38.29	34.28	35.06
30	35.00	35.56			35.50	36.08	34.57	37.85	36.89	39.60	.....	.....
31	35.06	36.25			34.97	35.73			37.35	39.66		

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	41.49	42.48	35.48	37.41	33.35	34.69	33.25	33.81	33.05	33.62
2	.....	.....	41.73	42.83	35.01	35.63	33.23	34.07	32.74	33.55	32.16	33.20
3	38.30	39.40	41.82	43.07	34.95	35.77	34.07	34.75	32.98	33.30	31.83	32.40
4	36.52	38.30	42.02	43.46	34.45	35.18	34.25	34.75	33.22	33.55	32.30	32.95
5	35.82	38.49	39.20	42.82	34.22	34.78	33.70	34.51	32.80	33.80	32.05	33.08
6	38.49	41.79	38.67	39.72	34.27	34.78	33.50	34.07	33.80	36.51	32.13	32.47
7	51.68	42.69	38.88	41.32	34.15	34.75	33.50	33.90	33.91	36.02	31.99	32.70
8	40.41	43.02	41.31	42.48	34.00	34.52	33.22	34.18	33.15	34.05	32.02	32.82
9	38.34	40.41	40.78	42.49	33.93	34.37	33.18	34.23	32.88	33.41	32.25	32.71
10	40.27	42.10	37.95	40.78	33.76	34.18	33.87	34.75	32.88	33.62	32.25	33.02
11	42.10	43.20	37.14	37.98	33.58	35.37	34.39	36.17	32.96	33.45	32.78	33.31
12	42.60	43.27	37.17	39.43	34.51	35.20	33.94	34.39	32.59	32.98	32.78	33.42
13	42.35	43.62	36.80	38.50	34.40	36.00	33.78	34.52	32.23	32.77	33.09	33.67
14	38.73	42.35	36.12	36.80	34.77	36.78	33.44	34.12	32.20	34.36	32.68	33.22
15	37.35	38.73	35.70	36.12	35.63	36.78	33.24	34.96	34.15	35.65	.....	.....
16	37.23	40.44	35.13	35.94	35.21	35.76	33.55	34.59	33.87	35.85	.....	.....
17	40.44	42.33	34.93	36.38	34.23	35.22	33.35	35.94	33.31	34.51	32.89	33.58
18	42.16	43.38	35.52	37.35	33.13	35.25	35.94	38.71	32.98	33.67	33.02	33.72
19	43.06	43.72	35.95	37.41	35.25	35.91	35.51	38.71	32.02	33.25	32.94	33.59
20	43.28	44.03	35.17	36.03	34.48	35.50	35.62	37.03	32.05	33.41	32.65	33.18
21	43.58	44.19	34.78	35.43	34.20	34.82	34.22	35.72	32.35	33.25	32.79	33.59
22	41.80	44.20	34.65	35.25	34.40	35.06	33.18	34.22	32.08	33.58	33.01	33.50
23	38.51	41.80	34.80	35.41	34.11	34.87	33.00	33.68	32.88	34.00	33.05	33.88
24	37.25	38.51	34.40	35.46	33.88	34.57	33.11	35.50	32.85	33.46	33.22	33.67
25	36.49	38.88	34.39	34.99	33.74	34.40	33.70	35.04	32.63	33.24	32.00	33.22
26	38.88	40.71	34.28	35.22	33.74	35.77	33.37	33.88	32.85	35.65	31.85	32.86
27	40.21	41.76	34.63	35.07	34.90	36.00	32.91	34.17	33.38	34.60	32.66	33.25
28	41.23	42.43	34.25	35.87	34.60	35.09	33.66	34.56	32.79	33.93	32.95	33.52
29	39.62	42.88	35.07	35.60	34.09	34.65	33.74	34.18	32.76	33.44	32.66	33.15
30	39.35	40.98	34.88	36.93	34.40	35.00	33.35	33.74	33.35	33.68	31.82	32.78
31	40.92	41.67	35.75	37.79			33.10	33.54			32.00	32.55

Bal-Gf 3 (*987, p. 94; 1017, p.281). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 4, 89, reported; June 4, 144, reported; Oct. 16, 92.

Bal-Gf 4 (*987, p. 95; 1017, p.281). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 4, 92, reported; Oct. 16, 93.25.

Bal-Gf 6 (*987, p. 95; 1017, p.281). Bethlehem Steel Co. At Sparrows Point.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 7	98.66	Oct. 5	96.22	Nov. 9	83.77	Dec. 7	94.15
14	94.45	16	88.46	16	83.69	17	94.84
21	98.06	26	84.03	23	93.70	21	95.51
28	96.33	Nov. 2	84.16	30	93.79	28	95.89

Bal-Gf 8 (*987, p. 95; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Pumping before each measurement. Water levels, in feet below land-surface datum, 1945: June 4, 82; June 4, 133, reported; Oct. 15, 128.

Bal-Gf 9 (*987, p. 96; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 4, 74, reported; June 4, 203, reported (pumping). Oct. 16, 202, pumping.

Bal-Gf 12 (*987, p. 96; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 15, 83, reported; Oct. 15, 77.82.

Bal-Gf 14 (*987, p. 96; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 15, 71, reported; Oct. 15, 49.37.

Bal-Gf 16 (*987, p. 96; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 15, 76, reported; Oct. 15, 77.85.

Bal-Gf 18 (*987, p. 96; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 15, 46.76.

Bal-Gf 27 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 15, 64.23.

Bal-Gf 28 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 15, 71, reported; Oct. 15, 25.58.

Bal-Gf 29 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 15, 25.27.

Bal-Gf 30 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 38, reported; Oct. 15, 25.53; Dec. 28, 25.26.

Bal-Gf 31 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 15, 44.67.

Bal-Gf 32 (*987, p. 97; 1017, p.283). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 83, reported; Oct. 15, 118.14, pumping.

Bal-Gf 33 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 15, 43.85.

Bal-Gf 34 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 50, reported; Oct. 12, 25.37.

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Bal-Gf 35. Bethlehem Steel Co.'s well Hot Strip 6. At Sparrows Point. Used drilled industrial well, diameter 12 to 6 inches, depth 680 feet. Measuring point, top of air line, 3.50 feet above land surface. Water levels, in feet below land-surface datum, 1945: May 12, 126, reported: Oct. 12, 124.72, pumping.

Bal-Gf 36 (*987, p. 98; 1017, p. 284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 33, reported; Oct. 12, 85.25.

Bal-Gf 37 (*987, p. 98; 1017, p. 284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 26, reported; Oct. 15, 24.47.

Bal-Gf 38 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 12, 61, reported; Oct. 15, 44.10.

Bal-Gf 46 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945· June 8, 31, reported; Oct. 16, 26.82.

Bal-Gf 47 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 8, 77.8, reported; Oct. 16, 77.83.

Bal-Gf 48 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945: Oct. 16, 76.09.

Bal-Gf 50 (*987, p. 98; 1017, p.284). Bethlehem Steel Co. At Sparrows Point.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	46.18	46.56	49.62	49.80	48.42	49.05	48.45	49.07	52.85	57.01	50.48	52.89
2	46.26	47.78	49.55	50.10	48.29	48.63	48.25	48.68	49.77	52.85	49.23	50.48
3	47.55	47.95	49.96	50.30	47.82	48.34	48.34	48.83	49.52	62.95	48.22	49.28
4	47.40	47.75	48.05	49.96	47.88	48.12	48.22	48.64	62.95	69.73	48.01	48.68
5	47.16	47.91	47.88	48.93	47.81	48.31	.....	.....	.....	.....	48.24	51.35
6	46.90	47.78	48.53	48.95	47.75	48.19	49.44	50.25	.....	.....	48.83	50.27
7	46.23	47.12	48.67	48.95	48.19	48.74	49.47	50.06	50.90	51.36	48.88	49.55
8	46.40	49.42	48.22	48.72	48.54	48.80	49.21	49.90	49.92	50.90	49.24	49.85
9	46.56	48.35	.....	.....	48.62	48.89	48.93	55.15	49.58	52.60	49.35	49.90
10	48.29	48.55	.....	.....	48.45	48.85	50.08	53.90	49.55	51.60	48.28	49.35
11	47.93	48.35	.....	.....	48.20	48.61	49.35	50.08	49.36	51.91	47.97	56.30
12	47.56	48.25	.....	.....	47.90	48.31	48.96	49.36	49.28	50.92	56.30	59.86
13	47.10	47.56	.....	.....	47.85	48.44	48.91	49.25	48.30	51.35	59.86	61.63
14	46.63	47.43	.....	.....	47.86	48.29	48.43	49.00	48.38	50.30	55.60	61.46
15	46.70	47.58	47.48	48.19	47.86	48.31	48.37	49.02	48.23	48.88	52.42	55.60
16	46.82	47.75	47.43	48.42	47.60	51.00	48.13	48.66	48.23	48.48	50.43	52.42
17	47.63	48.22	47.68	48.19	48.60	50.00	48.24	48.67	48.10	48.29	50.33	51.39
18	47.90	48.34	47.54	47.90	48.27	48.60	48.57	49.44	47.78	48.10	50.40	52.32
19	47.37	47.97	47.90	48.62	47.85	48.20	49.12	49.55	48.00	48.73	50.20	51.16
20	46.67	47.37	48.35	48.65	47.80	48.25	48.30	49.18	47.73	48.72	50.92	51.63
21	44.33	47.38	.....	.....	47.63	48.09	47.96	48.35	47.28	47.73	51.31	51.87
22	44.19	45.89	48.19	48.34	47.58	48.25	47.84	49.28	47.08	47.54	51.56	52.25
23	45.77	46.91	48.25	45.89	47.79	48.27	48.44	49.35	47.40	49.20	50.23	51.73
24	45.80	48.15	50.31	45.70	47.57	47.98	47.72	48.44	47.98	49.35	48.37	50.23
25	48.15	48.86	49.48	50.31	47.48	47.90	47.57	48.10	47.85	48.58	47.69	48.37
26	48.57	49.07	48.70	49.48	47.29	53.00	47.80	48.10	47.42	53.92	47.13	47.79
27	48.27	48.63	48.19	48.99	49.33	54.21	47.87	51.98	50.77	55.94	46.62	47.46
28	48.27	48.81	48.53	48.94	49.72	54.98	48.65	50.65	49.42	55.21	46.16	47.00
29	48.28	48.80			49.65	52.90	47.95	48.65	50.56	56.13	47.00	48.96
30	48.61	49.06			49.32	49.99	47.87	54.62	52.30	60.52	.....	.....
31	48.70	49.67			48.83	49.60			52.85	60.52		

Bal-Gf 50--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	58.57	61.78	50.03	52.90	47.04	48.10	.....	.....	46.93	47.42
2	.....	.....	59.12	62.17	48.99	51.11	46.81	47.55	46.77	46.88	45.72	46.93
3	53.00	55.28	59.85	62.57	48.66	49.19	47.55	48.34	46.88	46.98	45.10	45.72
4	50.49	53.00	60.05	62.85	48.06	48.83	47.80	48.79	46.98	47.22	45.60	46.43
5	49.58	57.37	55.43	62.90	47.93	48.73	47.60	48.69	46.80	51.90	46.09	46.46
6	57.37	60.83	54.13	57.83	47.82	48.63	47.06	47.79	50.13	54.05	45.97	46.97
7	60.83	62.50	54.17	59.77	47.94	48.46	46.90	47.60	47.30	50.13	46.16	46.61
8	54.93	62.75	59.42	61.30	47.79	48.26	46.62	48.01	46.64	47.30	46.03	46.25
9	53.00	60.19	56.54	61.51	47.35	48.24	46.70	48.07	46.67	47.02	45.70	46.14
10	58.91	62.90	52.70	56.54	47.35	47.62	47.67	51.40	46.54	46.79	45.63	46.55
11	60.84	63.00	51.16	53.85	47.33	50.15	48.93	53.51	46.48	46.63	46.39	46.72
12	.....	.....	52.00	57.58	48.78	51.65	47.96	48.06	46.22	46.61	46.66	47.13
13	60.15	62.94	50.95	52.00	48.17	52.13	47.75	48.20	46.06	46.55	47.05	47.66
14	54.15	60.15	49.93	50.95	48.67	54.04	46.80	47.93	45.92	50.14	46.46	47.22
15	51.23	54.15	49.48	49.93	51.15	52.80	46.89	50.63	47.90	52.65	.....	.....
16	51.20	57.80	49.12	49.48	.....	.....	47.61	49.90	48.92	53.17	.....	.....
17	57.80	61.16	48.64	52.04	.....	.....	47.46	53.15	47.25	49.29	46.64	47.15
18	61.16	62.37	49.38	54.12	48.27	51.15	53.15	57.20	46.63	47.25	47.00	47.45
19	62.24	62.95	49.55	53.16	.....	.....	48.32	56.15	46.20	46.64	46.41	47.38
20	62.75	63.44	48.65	49.55	50.17	51.00	50.09	54.52	46.09	46.88	46.76	47.22
21	63.05	63.47	48.52	49.20	49.03	50.45	48.29	51.62	46.45	46.90	46.88	47.30
22	57.87	63.62	48.62	49.20	48.79	49.38	47.31	48.29	45.79	49.74	46.91	47.20
23	53.40	57.87	48.53	49.32	48.01	48.79	46.88	47.36	47.26	48.37	46.84	47.21
24	51.83	53.40	48.39	48.94	47.65	48.48	46.85	51.35	46.53	47.26	46.78	47.10
25	50.74	55.35	47.97	48.71	47.94	48.43	48.10	51.35	46.29	46.53	44.75	46.83
26	55.35	59.05	47.96	48.65	47.94	51.27	47.19	47.28	46.26	50.94	45.20	45.73
27	57.67	60.62	47.78	48.58	49.17	51.83	47.43	47.95	47.42	50.14	.....	.....
28	59.69	61.80	47.75	51.51	48.83	51.15	47.24	49.19	46.86	49.40	46.84	46.98
29	57.45	62.05	48.68	51.07	48.02	48.83	47.64	48.26	46.63	46.88	46.50	46.85
30	54.45	59.87	49.79	53.11	48.00	48.35	47.30	47.85	46.77	47.40	45.63	46.54
31	57.76	60.95	50.08	54.90			.....	.....			45.58	46.03

Bal-Gf 51 (*987, p. 99; 1017, p.285). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 8, 78, reported; Oct. 16, 76.26.

Bal-Gf 52 (*987, p. 99; 1017, p.285). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 8, 81, reported; Oct. 16, 78.44.

Bal-Gf 53 (*987, p. 99; 1017, p.285). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 8, 79, reported; Oct. 16, 78.86.

Bal-Gf 78 (*987, p. 100; 1017, p.285). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 16, 69, reported; Nov. 5, 135.89, pumping.

Bal-Gf 79 (*987, p. 100; 1017, p.285). Bethlehem Steel Co. At Sparrows Point.

Bal-Gf-79--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		February		March		April		May		June	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	29.20	29.79	31.63	32.05	30.58	30.87	30.72	30.98	.....	.....	32.66	32.86
2	29.54	30.63	32.03	32.17	30.43	30.87	30.29	30.86	.....	.....	32.13	32.75
3	30.60	30.80	32.10	32.19	30.20	30.47	30.46	30.87	.....	.....	31.88	32.39
4	30.37	30.66	31.10	32.12	30.43	30.61	30.42	30.92	31.89	32.39	31.92	32.27
5	30.36	30.57	30.86	31.36	30.21	30.58	30.14	30.92	32.34	33.10	32.03	32.49
6	30.18	30.44	31.02	31.35	29.88	30.41	30.92	31.61	33.02	33.26	32.09	32.51
7	29.75	30.34	30.86	31.08	29.98	30.58	31.40	31.61	32.29	33.22	32.10	33.00
8	30.04	30.64	30.47	30.87	30.53	30.77	31.20	31.63	31.62	32.29	.....	.....
9	30.43	30.68	30.35	30.54	30.40	30.76	31.03	31.27	31.80	32.02	.....	.....
10	30.68	30.78	30.18	30.46	30.38	30.73	31.03	31.25	31.17	32.03	.....	.....
11	30.46	30.72	30.31	30.54	30.66	30.86	30.87	31.19	31.44	31.84	.....	.....
12	29.94	30.69	30.34	30.54	30.12	30.83	30.75	31.06	31.15	31.84	33.24	33.87
13	29.98	30.44	30.21	30.50	30.34	30.60	30.80	31.04	30.83	31.15	33.69	34.22
14	30.12	30.44	30.20	30.49	30.33	30.66	30.65	30.98	30.84	31.12	33.99	34.33
15	29.74	30.16	29.96	30.40	30.27	30.72	30.85	31.12	30.53	30.91	34.02	34.36
16	29.68	30.13	29.94	30.40	30.08	30.37	30.55	31.04	30.64	30.81	33.94	34.27
17	29.99	30.57	30.31	30.63	30.18	30.48	30.94	31.26	30.58	30.86	33.85	34.25
18	30.47	30.72	30.32	30.60	30.26	30.58	31.23	32.00	30.36	30.62	33.70	34.06
19	30.29	30.64	30.54	30.93	29.97	30.40	.....	.....	30.62	31.50	33.68	33.93
20	30.18	30.46	30.53	30.94	29.92	30.27	31.06	31.50	30.69	31.50	.....	.....
21	30.05	30.46	30.44	30.74	29.77	30.25	.....	.....	30.11	30.74	.....	.....
22	29.64	30.19	30.06	30.55	29.83	30.22	.....	.....	30.08	30.37	35.10	35.58
23	29.76	30.10	30.10	30.56	29.98	30.39	.....	.....	.....	.....	35.30	35.67
24	29.96	30.57	30.51	30.89	29.90	30.20	.....	.....	.....	.....	34.60	35.49
25	30.57	31.30	30.83	31.02	30.01	30.30	.....	.....	30.66	30.97	33.23	34.80
26	31.00	31.13	30.45	30.94	29.88	30.18	.....	.....	30.70	31.20	32.22	33.23
27	31.08	31.41	30.22	30.86	29.81	30.11	.....	.....	30.52	30.93	31.83	32.70
28	31.00	31.34	30.61	30.91	30.08	30.45	.....	.....	30.50	30.91	31.26	31.83
29	30.88	31.01			30.40	30.63	.....	.....	30.49	31.41	31.33	31.54
30	30.88	31.11			30.58	30.95	.....	.....	31.41	31.52	.....	.....
31	30.88	31.67			30.57	30.94			.....	.....		

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	.....	.....	33.04	33.30	31.58	32.11	30.55	31.49	30.83	31.04	30.46	30.83
2	.....	.....	33.17	33.32	31.99	32.31	30.26	30.62	30.40	31.04	29.50	30.48
3	.....	.....	32.92	33.18	32.06	32.33	.....	.....	30.40	30.63	29.29	29.50
4	.....	.....	33.00	33.55	31.62	32.07	.....	.....	30.63	30.92	.....	.....
5	.....	.....	33.12	33.55	31.44	31.70	30.95	31.11	30.40	30.87	.....	.....
6	.....	.....	32.69	33.31	31.29	31.57	30.76	31.14	30.38	30.47	.....	.....
7	.....	.....	32.78	33.10	31.11	31.43	30.74	30.88	30.17	30.40	29.35	29.57
8	.....	.....	33.00	33.30	30.92	31.14	30.51	30.89	29.96	30.18	29.35	29.68
9	.....	.....	33.02	33.37	30.84	30.97	30.57	31.32	29.91	30.12	29.27	29.49
10	.....	.....	32.95	33.22	30.78	30.92	31.24	31.46	29.96	30.37	29.18	29.80
11	.....	.....	32.91	33.16	30.59	30.81	30.89	31.45	29.81	30.30	29.79	30.24
12	.....	.....	32.80	33.08	30.73	31.36	30.42	30.89	29.70	29.87	30.10	30.40
13	33.52	33.71	32.65	32.84	31.18	31.30	30.40	31.00	29.50	29.71	30.10	30.40
14	33.24	33.72	32.55	32.78	30.86	31.21	30.39	30.89	29.49	30.01	29.80	30.10
15	32.77	33.24	32.34	32.56	30.85	31.38	30.29	30.55	30.01	30.72	.....	.....
16	32.88	33.47	32.30	32.54	31.32	31.62	30.17	30.51	30.06	30.70	.....	.....
17	33.12	33.40	31.97	32.30	30.95	31.57	30.25	30.47	29.97	30.13	30.08	30.16
18	32.97	33.30	31.92	32.14	30.23	30.95	30.15	30.46	29.95	30.10	30.16	30.22
19	33.10	33.29	31.96	32.14	30.56	31.42	30.17	30.42	29.36	30.08	29.93	30.26
20	33.05	33.36	31.80	32.11	31.22	31.46	30.10	30.43	29.40	30.08	29.84	30.08
21	33.18	33.46	31.81	32.47	31.35	31.86	.....	.....	29.69	30.17	29.81	30.23
22	33.08	33.46	32.36	33.00	31.86	32.11	.....	.....	29.48	29.69	29.89	30.20
23	32.84	33.13	32.86	33.26	31.48	31.96	.....	.....	29.47	29.95	30.02	30.49
24	32.78	33.04	32.56	33.37	31.45	31.51	.....	.....	29.81	29.96	29.96	30.30

Bal-Gf 79 --Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July		August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
25	32.61	32.90	31.96	32.78	.....	.....	.....	.....	29.75	29.96	29.16	29.96
26	32.56	32.64	31.88	32.04	31.45	31.51	30.17	30.68	29.90	29.96	.....	.....
27	32.79	33.04	31.86	32.00	31.48	31.78	30.63	31.21	29.57	29.94	.....	.....
28	32.85	33.19	31.55	31.86	31.37	31.62	31.01	31.26	29.17	29.67	29.77	29.99
29	32.81	32.98	31.50	31.87	31.22	31.50	31.13	31.25	29.66	30.53	29.44	29.78
30	33.00	33.28	31.67	31.98	31.45	31.50	30.90	31.20	30.52	30.80	28.62	29.49
31	33.15	33.27	31.78	31.96			30.74	31.01			28.60	29.04

Bal-Gf 89 (*987, p. 100; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 16, 63, reported; Nov, 5, 49.20.

Bal-Gf 93 (*987, p. 101; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Measurements discontinued.

Bal-Gf 100 (*987, p. 101; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water level, in feet below land-surface datum, 1945; Nov. 5, 54.25.

Bal-Gf 105 (*987, p. 101; 1017, p. 287). Bethlehem Steel Co. At Sparrows Point. Measurements resumed. Water level, in feet below land-surface datum, 1945: June 16, 63, reported.

Bal-Gf 107 (*987, p. 101; 1017, p. 287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: June 4, 55, reported; Oct. 16, 55.32.

Bal-Gf 108 (*987, p. 101; 1017, p. 287). Bethlehem Steel Co. At Sparrows Point. Measurements resumed. Water levels, in feet below land-surface datum, 1945: June 4, 56, reported; Oct. 16, 56.32.

Bal-Gf 129 (*987, p. 101; 1017, p. 287). Bethlehem Steel Co. At Sparrows Point. Measurements resumed. Water levels, in feet below land-surface datum, 1945: May 31, 60, reported; Oct. 22, 61.86.

Bal-Gf 130 (*987, p. 101; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 31, 60.5, reported; Oct. 22, 67.94.

Bal-Gf 131 (*987, p. 101; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 31, 58.3, reported; Oct. 22, 61.57.

Bal-Gf 136 (*987, p. 102; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: Oct. 22, 74.73.

Bal-Gf 138 (*987, p. 102; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 31, 51, reported; Oct. 22, 56.39.

Bal-Gf 139 (*987, p. 102; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 31, 75, reported; Oct. 22, 71.

Bal-Gf 140 (*987, p. 102; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 31, 63, reported; Oct. 22, 62.23.

Bal-Gf 166 (*987, p. 102; 1017, p.287). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 28.2, reported; Oct. 16, 27.06.

Bal-Gf 167 (*987, p. 102; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 58.3, reported; Oct. 16, 56.01.

Bal-Gf 168 (*987, p. 102; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 58.1, reported; Oct. 16, 56.20.

Bal-Gf 169 (*987, p. 102; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 29.6, reported; Oct. 16, 28.83.

Bal-Gf 170 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 28.9, reported; Oct. 16, 28.01.

Bal-Gf 171 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 60.2, reported; Oct. 16, 56.73.

Bal-Gf 172 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 54, reported; Oct. 16, 52.53.

Bal-Gf 173 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 30.6, reported; Oct. 16, 29.68.

Bal-Gf 174 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 45.4, reported; Oct. 16, 54.93.

Bal-Gf 175 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 58, reported; Oct. 16, 103, pumping.

Bal-Gf 176 (*987, p. 103; 1017, p.288). Bethlehem Steel Co. At Sparrows Point. Water levels, in feet below land-surface datum, 1945: May 18, 83, reported, Oct. 16, 56.07.

Bal-Gf 177 (*987, p. 103; 1017, p.288). Baltimore Transit Co. In Bay Shore Park. Longitude 76°25'30", latitude 39°12'30". Water level. in feet below land-surface datum, 1945: Oct. 21, 30.25.

Bal-Gf 183 (*1017, p.289). Chesapeake Terrace School. At Lodge Forest.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		March		April		May		June		July	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
1	29.16	29.16	.....	.....	28.88	29.20	29.82	30.06	29.44	29.62	.....	.....
2	29.16	29.16	.....	.....	28.77	29.20	29.96	30.38	29.47	29.62	.....	.....
3	29.16	29.16	.....	.....	28.77	20.89	29.95	30.32	29.27	29.47	30.33	30.62
4	29.03	29.17	.....	.....	28.89	29.13	29.90	30.89	29.30	29.37	30.62	30.73
5	29.00	29.05	.....	.....	28.65	28.95	30.89	31.41	29.37	29.50	30.44	30.73
6	28.95	29.05	.....	.....	28.65	29.42	31.41	31.83	29.45	29.51	30.39	30.52
7	28.91	28.95	.....	.....	.....	.....	31.27	31.90	29.45	29.63	30.52	30.79
8	28.89	28.91	.....	.....	.....	.....	30.40	31.27	29.63	30.07	30.79	31.08
9	28.89	28.89	.....	.....	.....	.....	30.22	30.40	30.07	30.44	30.97	31.13
10	28.89	28.93	.....	.....	.....	.....	30.27	30.34	30.25	30.48	30.97	31.02
11	28.93	29.08	.....	.....	.....	.....	30.08	30.27	29.99	30.27	30.98	31.41
12	28.68	29.18	.....	.....	.....	.....	29.76	30.22	30.12	30.39	31.41	31.59
13	28.68	28.90	.....	.....	29.21	29.37	29.50	29.76	30.39	30.65	31.37	31.51
14	28.90	28.92	.....	.....	29.09	29.27	29.48	29.73	30.65	30.90	31.35	31.45
15	28.88	28.92	28.75	29.55	29.22	29.40	29.25	29.51	30.90	31.04	30.85	31.35
16	28.80	28.88	28.67	28.88	29.01	29.39	29.24	29.28	31.02	31.08	30.85	31.04
17	28.79	28.80	28.80	28.99	29.07	29.25	.....	.....	30.99	31.03	31.04	31.14
18	28.79	28.81	.....	.....	29.17	29.65	28.99	29.24	30.86	30.99	31.04	31.08

Bal-Gf 183--Continued.

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	January		March		April		May		June		July	
	High	Low	High	Low	High	Low	High	Low	High	Low	High	Low
19	.....	.....	.....	.....	29.65	30.15	29.07	29.58	30.84	30.86	31.04	31.11
20	.....	.....	.....	.....	29.41	30.18	29.28	29.64	30.84	31.07	31.11	31.24
21	.....	.....	.....	.....	29.25	29.59	28.75	29.28	31.07	31.43	31.24	31.27
22	.....	.....	28.48	28.75	29.27	29.58	28.75	28.81	31.43	31.78	31.27	31.35
23	.....	.....	28.32	28.80	29.44	29.55	28.81	29.05	31.78	32.19	31.02	31.27
24	.....	.....	28.32	28.53	29.05	29.44	29.05	29.13	32.19	32.28	30.97	31.08
25	.....	.....	28.47	28.75	29.00	29.05	29.09	29.15	31.26	32.25	30.80	30.98
26	.....	.....	28.52	28.75	28.98	29.00	28.78	29.13	31.12	31.66	30.78	30.80
27	.....	.....	28.45	28.52	28.95	29.40	28.68	28.78	30.64	31.17	30.82	30.88
28	.....	.....	28.45	28.65	29.40	30.10	28.71	28.81	30.33	30.64	30.88	31.01
29	.....	.....	28.65	28.80	30.10	30.37	28.72	38.90	30.32	30.33	30.87	30.96
30	.....	.....	28.80	29.08	29.82	30.21	28.90	29.15	.....	.....	30.87	31.02
31	.....	.....	28.88	29.20			29.15	29.44			31.02	31.12

Daily highest and lowest water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	August		September		October		November		December	
	High	Low	High	Low	High	Low	High	Low	High	Low
1	31.09	31.14	29.91	30.13	29.27	29.80	29.04	29.23	29.10	29.24
2	31.10	31.16	29.93	30.30	28.87	29.27	29.03	29.16	28.82	29.10
3	31.08	31.15	30.30	30.40	28.87	29.21	29.16	29.17	28.32	28.82
4	31.11	31.30	30.00	30.34	29.21	29.63	28.90	29.17	28.20	28.32
5	31.30	31.40	29.85	30.00	29.33	29.68	28.90	28.91	.....	.....
6	31.00	31.37	29.83	29.89	29.13	29.33	28.91	29.20	.....	.....
7	30.94	31.05	29.57	29.83	29.12	29.13	29.18	29.20	27.96	28.17
8	31.05	31.12	29.40	29.57	29.05	29.12	29.18	29.25	27.91	28.06
9	31.11	31.26	29.32	29.40	28.85	29.10	28.63	28.63	.....	.....
10	31.20	31.23	29.27	29.32	29.10	29.38	28.60	28.68	28.00	28.12
11	31.11	31.21	29.11	29.27	29.38	29.43	28.68	28.77	28.12	28.40
12	.....	.....	29.10	29.32	29.01	29.43	28.58	28.77	28.40	28.59
13	.....	.....	29.32	29.42	28.97	29.11	28.38	28.58	28.59	28.70
14	.....	.....	29.27	29.42	29.11	29.14	28.25	28.38	.....	.....
15	.....	.....	29.19	29.33	29.10	29.14	28.25	28.55	.....	.....
16	.....	.....	29.33	29.67	29.09	29.10	28.55	28.79	.....	.....
17	30.33	30.55	29.44	29.67	29.06	29.09	28.65	28.68	28.45	28.51
18	30.19	30.33	28.61	29.44	28.98	29.06	28.65	28.65	28.51	28.74
19	30.21	30.25	28.61	29.05	28.76	28.98	28.45	28.65	.....	.....
20	30.15	30.28	29.05	29.38	28.76	28.83	28.15	28.45	28.55	28.60
21	30.12	30.18	29.38	29.51	28.76	28.89	28.45	28.57	28.49	28.59
22	30.12	30.17	29.51	29.84	28.66	28.76	28.20	28.61	28.59	28.63
23	30.14	30.32	29.73	29.86	28.44	28.66	28.17	28.64	28.59	28.84
24	30.07	30.40	29.59	29.73	28.43	28.52	28.29	28.50	28.72	28.84
25	29.93	30.10	29.45	29.59	28.52	28.65	28.41	28.47	28.17	28.72
26	29.88	30.03	29.42	29.45	28.68	28.75	28.47	28.50	27.98	28.17
27	30.03	30.09	29.43	29.60	28.75	29.17	28.40	28.50	27.98	27.99
28	29.89	30.09	29.60	29.66	29.17	29.28	28.19	28.40	27.99	28.25
29	29.82	29.89	29.50	29.66	29.28	29.37	28.19	28.84	28.25	28.32
30	29.83	29.97	29.50	29.79	29.31	29.38	28.84	29.24	27.75	28.26
31	29.97	30.13			29.23	29.31			27.72	27.75

Calvert County

Cal-Gd 1 (*1017, p. 290). G. Francis Bevin. In Solomons. Longitude 76°27'15", latitude 38°19'05". No measurements made in 1945.

Cal-Gd 2 (*1017, p. 290). T. V. Thomas. In Solomons. Longitude 76°27'45", latitude 38°19'40". No measurements made in 1945.

Montgomery County

Mont-Ff 1 (*817, pp. 80-82; 840, p. 120; 845, p. 149; 886, p. 252; 907, pp. 56-57; 937, pp. 62-63; 945, pp. 82-83; *987, pp. 104-105; 1017, pp. 290-291). Walter M. Brown. 1.5 miles southwest of Colesville. Highest recorded stage, 11.90 feet below land-surface datum Apr. 22, 1933; lowest, 18.41 feet below land-surface datum Oct. 6, 1932. Equipped with water-stage recorder beginning June 1, 1934.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.13	14.76	13.47	14.70	15.34	15.46	15.08	12.02	14.98	15.77	16.32	15.37
2	14.76	14.80	13.47	14.72	15.38	15.47	15.10	11.95	15.04	15.77	16.32	15.40
3	14.80	14.86	13.44	14.75	15.39	15.33	15.03	12.00	15.12	15.83	16.33	15.39
4	14.83	14.91	13.50	14.79	15.36	15.32	15.13	12.15	15.19	15.87	16.35	15.38
5	14.85	14.93	13.56	14.82	15.38	15.37	15.10	12.31	15.23	15.88	16.37	15.31
6	14.88	15.00	13.52	14.91	15.42	15.42	14.89	12.41	15.28	15.89	16.39	14.58
7	14.88	15.03	13.59	14.94	15.45	15.47	14.91	12.52	15.34	15.89	16.41	14.32
8	14.89	15.05	13.70	14.95	15.47	15.51	14.97	12.72	15.39	15.92	16.41	14.36
9	14.91	15.09	13.73	14.97	15.50	15.56	15.03	12.89	15.44	15.92	16.42	14.40
10	14.92	15.13	13.75	15.02	15.49	15.57	15.03	13.01	15.47	15.95	16.44	14.39
11	14.94	15.16	13.82	15.05	15.43	15.42	14.95	13.13	15.52	15.97	16.46	14.42
12	14.94	15.19	13.87	15.08	15.42	15.38	15.00	13.27	15.59	15.98	16.46	14.45
13	14.90	15.07	13.90	15.11	15.41	15.41	.....	13.39	15.65	16.01	16.46	14.45
14	14.63	14.82	13.96	15.13	15.45	15.46	.....	13.46	15.70	16.04	16.46	14.42
15	14.61	14.82	14.00	15.19	15.48	15.51	.....	13.56	15.75	16.06	16.46	14.46
16	14.45	14.82	14.04	15.23	15.51	15.56	.....	13.71	15.80	16.06	16.49	14.48
17	14.21	14.86	14.11	15.23	15.54	15.61	.....	13.79	15.71	16.09	16.48	14.54
18	14.20	14.90	14.18	15.24	15.54	15.65	.....	13.90	15.20	16.12	16.48	14.58
19	14.21	14.97	14.21	15.28	15.58	15.60	.....	14.02	15.06	16.14	16.48	14.57
20	14.26	14.98	14.22	15.29	15.62	15.25	.....	14.10	15.19	16.15	16.47	14.59
21	14.31	14.99	14.21	15.30	15.63	15.10	.....	14.20	15.27	16.18	16.49	14.67
22	14.34	14.81	14.19	15.35	15.64	14.61	.....	14.29	15.35	16.19	16.19	14.73
23	14.33	14.48	14.26	15.37	15.69	14.52	.....	14.40	15.42	16.19	16.12	14.77
24	14.31	14.45	14.33	15.38	15.72	14.57	.....	14.46	15.45	16.22	16.15	14.85
25	14.37	14.46	14.41	15.34	15.76	14.63	.....	14.49	15.49	16.24	16.16	14.71
26	14.42	14.30	14.45	15.22	15.78	14.69	.....	14.58	15.54	16.25	16.21	13.91
27	14.49	13.81	14.48	15.23	15.77	14.78	.....	14.68	15.60	16.27	16.21	13.61
28	14.55	13.65	14.53	15.26	15.75	14.85	.....	14.73	15.65	16.29	15.93	13.58
29	14.59		14.57	15.28	15.51	14.92	.....	14.82	15.69	16.30	15.42	13.41
30	14.65		14.61	15.31	15.43	15.01	.....	14.88	15.76	16.31	15.29	13.14
31	14.71		14.62		15.44		.....	14.93		16.31		12.79

MISSISSIPPI

By J. C. Kammerer

PROGRAM OF WORK

The observation-well program in Mississippi, begun in 1938, was continued in 1945 in cooperation with the Mississippi Geological Survey. In addition to the water levels measured in 18 counties before 1945, principally near the Gulf Coast and in the Mississippi Alluvial Plain ("Yazoo Delta"), measurements were made in 5 wells in Jackson.

Jackson, with a population in 1945 of about 72,000, obtains its municipal water supply of 7 million gallons a day from Pearl River. The pumpage is supplemented by an estimated average of 3 million gallons daily from privately owned wells. The principal aquifer or water-bearing bed is a part of the Kosciusko or Sparta formation and is tapped 600 to 800 feet below land surface. There are about 70 wells within an 8-mile radius of the Capitol Building. A study of the ground-water resources of the Jackson area is currently in progress.

FLUCTUATIONS OF WATER LEVEL

The trend of water levels throughout the State during 1945 suggests a decrease in the rate of lowering as compared with the records since 1938. This may be, in part, a response to the high rainfall during the year, which averaged 59 inches for the State as a whole and was 6 inches above the normal annual rainfall, as reported by the U. S. Weather Bureau.

Of the observation wells measured in 1945, 4 are water-table wells and 44 are artesian wells; in the latter, the water levels were above land surface in 32 wells and below land surface in 12 wells. Water-stage recorders, which furnished continuous records of the fluctuations of water level, were maintained at 15 wells during part or all of the year, and seasonal and monthly measurements were made in the 33 other wells. Of the measurements made during 1945 which are included in this report, 953

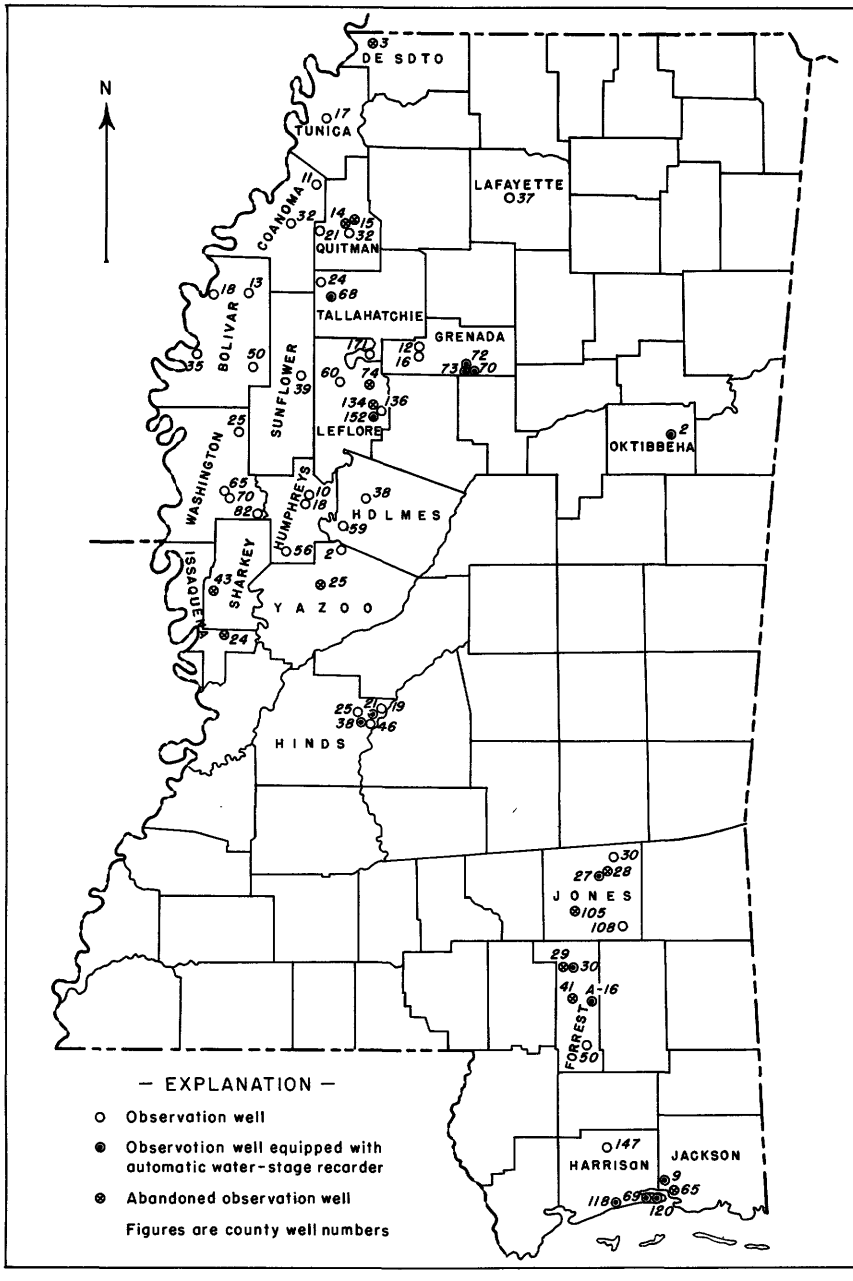

Figure 6.--Map of Mississippi showing location of observation wells, 1938-45.

were read from recorder charts and 136 were made individually by tape line, hose, or pressure gage.

During the year, as a result of the cooperative ground-water work in the State, the Mississippi Geological Survey published Bulletin 60: Geology and ground-water resources of the coastal area of Mississippi. The area described comprises George, Hancock, Harrison, Jackson, Pearl River, and Stone Counties. Other State bulletins referred to in the description of wells in this report are Bulletin 55 (1943): Geology and ground-water supply at Camp McCain (parts of Grenada and Montgomery Counties); and Bulletin 58 (1944): Geology and ground-water resources of the Camp Shelby area (parts of Forrest, Greene, Jones, Perry, and Wayne Counties).

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Bolivar County

13 (*907, p. 62; 937, p. 66; 945, p. 86; *987, p. 106; 1017, p.294). Town of Shelby. SW¼NE¼ sec. 12, T. 24 N., R. 6 W. Water levels, in feet above land-surface datum, 1945: June 16, 15.4; Sept. 4, 14.4; Dec. 27, 14.2.

18 (*886, p. 281; 907, p. 62; 937, p. 66; 945, p. 86; *987, p. 107; 1017, p. 294). Town of Gunnison. NE¼SW¼ sec. 8, T. 24 N., R. 7 W. Leaking around pump base at time of each measurement. Water levels, in feet above land-surface datum, 1945: June 16, 25.2; Sept. 4, 22.5; Dec. 27, 23.2.

35 (*886, p. 281; 907, p. 62; 937, p. 66; 945, p. 86; *987, p. 107; 1017, p.294). Town of Beulah. SW¼NE¼ sec. 27, T. 22 N., R. 8 W. Water levels, in feet above land-surface datum, 1945: Sept. 7, 25.8; Dec. 27, 26.8.

50 (*886, p. 281; 907, p. 62; 937, p. 66; 945, p. 86; *987, p. 107; 1017, p.294). Jones Bayou Gin Co. NE¼SE¼ sec. 17, T. 21 N., R. 5 W. Used artesian flowing well. Water levels, in feet above land-surface datum, 1945: Jan. 4, 15.1; Sept. 7, 15.1.

Coahoma County

11 (*907, p. 62; 937, p. 66; 945, p. 86; *987, p. 107; 1017, p.294). Norfleet & Wilsford. NW¼SW¼ sec. 7, T. 29 N., R. 2 W. Water levels, in feet above land-surface datum, 1945: June 16, 36.8; Sept. 4, 35.2; Dec. 26, 36.3.

32 (*907, p. 62; 937, p.66; 945, p. 86; *987, p. 107; 1017, p.294). Coahoma County Agricultural High School. SW¼NW¼ sec. 36, T. 28 N., R. 4 W. Temporary measuring point, top of concrete basin of drinking fountain, 10 feet west of well, 3.08 feet above permanent measuring point. Water levels, in feet above land-surface datum, 1945: June 16, 38.4; Sept. 4, 37.5; Dec. 26, 35.5.

DeSoto County

3 (*945, p. 86; *987, p. 107; 1017, p.294). H. P. Sulivan. NW¼NE¼ sec. 32, T. 1 S., R. 9 W. Measurements discontinued after Apr. 1, 1944.

Forrest County

29 (Designated as Forrest 29 in Mississippi Geol. Survey Bull. 58; *907, p. 62; 937, p. 67; 945, p. 86; *987, p. 107; 1017, p.294). City of Hattiesburg. SE¼NW¼ sec. 10, T. 4 N., R. 13 W. Measurements discontinued after Oct. 29, 1940.

30 (Designated as Forrest 30 in Mississippi Geol. Survey Bull. 58; *907, p. 62; 937, p. 67; 945, p. 86; *987, p. 107; 1017, p.294). City of Hattiesburg. SE¼NE¼ sec. 10, T. 4 N., R. 13 W.

Highest and lowest weekly water level, in feet above land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	3.90	3.48	July 7	4.81	4.59
13	3.83	3.31	14	4.69	3.20
20	3.82	3.54	21	4.00	2.94
27	3.71	3.30	28	4.29	3.96
Feb. 3	3.90	3.37	Aug. 4	4.50	4.21
10	3.81	3.18	11	4.65	4.48
17	3.79	3.12	18	4.75	4.53
24	3.97	3.68	25	4.89	4.57
Mar. 3	3.99	3.72	Sept. 1	4.95	4.72
10	4.13	3.78	8	4.96	4.67
17	4.09	3.76	15	5.09	4.94
24	4.24	3.90	22	5.09	4.84
31	4.32	3.91	29	5.16	5.00
Apr. 7	4.28	3.84	Oct. 6	5.14	4.83
14	4.41	4.05	13	5.01	4.49
21	4.53	4.25	20	5.07	4.75
28	4.41	3.95	27	5.07	4.59
May 5	4.41	4.14	Nov. 3	4.88	4.37
12	4.40	3.84	10	4.96	4.68
19	4.27	4.00	17	5.00	4.65
26	4.37	3.86	24	4.89	4.53
June 2	4.57	4.22	Dec. 1	4.78	4.40
9	4.74	4.46	8	4.72	4.43
16	4.83	4.52	15	4.77	4.46
23	4.63	4.41	22	4.63	4.12
30	4.87	4.44	29	4.47	3.90

41 (Designated as Forrest 40 in Mississippi Geol. Survey Bull. 58; *937, p. 67; 945, p. 87; *987, p. 108; 1017, p.295). William Beard. NE¼NE¼ sec. 23, T. 3 N., R. 13 W. Measurements discontinued after Apr. 16, 1944.

50 (Designated as 50 in Mississippi Geol. Survey Bull. 58; *907, p. 63; 937, p. 68; 945, p. 87; *987, p. 108; 1017, p.295). Dixie Tung Empire Corporation. NE¼NE¼ sec. 28, T. 1 N., R. 12 W. Water levels, in feet below land-surface datum, 1945: Feb. 20, 43.21; Aug. 30, 42.68; Oct. 15, 43.41.

A16 (Forrest A16 in Mississippi Geol. Survey Bull. 58). United States Army. At Camp Shelby, 8 miles south of Hattiesburg, in SW¼NE¼ sec. 27, T. 3 N., R. 12 W., in camp area, 80 feet south of Second Ave. and 70 feet east of 39th St., in small wooden recorder house. Unused drilled nonflowing artesian observation well, diameter 4 inches, depth 416 feet. Taps the Hattiesburg water-bearing sand. Drilled in 1943. Measuring point, top of casing flange, 0.51 foot above concrete floor, 2 feet above land surface, and 260.4 feet above mean sea level. Equipped with float-type water-stage recorder.

A16--Continued.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	127.60	132.19	July 7	127.19	129.59
13	127.68	130.36	14	127.05	129.72
20	127.15	129.77	21	a 127.07	128.80
27	126.65	129.89	28	126.56	129.00
Feb. 3	126.92	129.76	Aug. 4	126.54	129.73
10	126.11	129.33	11	127.00	130.17
17	126.28	129.03	18	a 128.18	130.80
24	126.08	128.90	25	128.61	131.47
Mar. 3	126.12	129.67	Sept. 1	128.93	132.05
10	126.60	130.00	8	129.05	133.75
17	126.39	130.04	15	130.28	133.50
24	126.41	128.57	22	129.90	134.49
31	126.41	129.44	29	130.74	134.75
Apr. 7	125.94	129.14	Oct. 6	130.26	134.34
14	126.14	129.10	13	129.08	132.28
21	125.76	129.06	20	128.61	131.52
28	125.74	129.63	27	127.80	130.21
May 5	126.20	129.77	Nov. 3	127.30	130.51
12	125.80	129.47	10	126.93	129.85
19	126.20	129.00	17	126.98	129.52
26	126.22	129.63	24	a 126.72	129.52
June 2	127.59	131.35	Dec. 1	a 126.35	128.58
9	127.42	131.41	8	126.28	128.61
16	127.70	131.58	15	126.13	128.51
23	127.23	129.62	22	125.90	129.97
30	127.55	130.13	29	126.14	129.87

a Part of record missing or uncertain.

Grenada County

12 (*886, p. 281; 907, p. 63; 937, p. 68; 945, p. 87; *987, p. 108; 1017, p. 295). Holcomb School. SW¼SW¼ sec. 15, T. 22 N., R. 3 E. Leaking at well head at time of each measurement. Water levels, in feet above land-surface datum, 1945: Sept. 6, 25.2; Dec. 27, 24.1.

16 (*886, p. 281; 907, p. 63; 937, p. 68; 945, p. 87; *987, p. 109; 1017, p. 295). Town of Holcomb. NW¼NW¼ sec. 22, T. 22 N., R. 3 E. Water levels, in feet below land-surface datum, 1945: Sept. 6, 11.76; Dec. 27, 11.79.

70 (Designated as Grenada 70 in Mississippi Geol. Survey Bull. 55). A. C. Riley. 2.0 miles east of Elliott, 8 miles southeast of Grenada, in SW¼SW¼ sec. 18, T. 21 N., R. 6 E., at base of small hill on south side of range road, in 10-foot high wooden recorder house. Unused drilled domestic nonflowing artesian well, diameter 3 inches, depth 670 feet. Taps the Holly Springs water-bearing sand. Measuring point, top of casing, at land surface and about 234 feet above mean sea level. Equipped with float-type water-stage recorder.

Lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Water level	Week ending	Water level	Week ending	Water level	Week ending	Water level
Jan. 6	22.14	Mar. 10	18.13	May 12	16.41	July 14	21.53
13	22.05	17	18.27	19	16.31	21	22.18
20	21.97	24	18.05	26	17.09	28	22.74
27	21.30	31	17.80	June 2	17.54	Aug. 4	23.13
Feb. 3	21.81	Apr. 7	17.08	9	18.01	11	23.54
10	21.84	14	16.51	16	18.25	18	24.00
17	ab19.86	21	16.41	23	19.16	25	24.26
24	18.54	28	15.98	30	20.17	Sept. 1	24.47
Mar. 3	18.47	May 5	16.30	July 7	ab20.78	8	24.50

a Part of record missing or uncertain.
b Interpolated in part.

70--Continued.

Lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Water level	Week ending	Water level	Week ending	Water level	Week ending	Water level
Sept.15	24.39	Oct. 13	22.48	Nov. 10	a 21.15	Dec. 8	ab20.10
22	24.01	20	22.30	17	21.21	15	ab19.43
29	23.64	27	22.26	24	a 21.25	22	a 19.11
Oct. 6	23.35	Nov. 3	21.03	Dec. 1	20.94	29	ab19.13

a Part of record missing or uncertain.
b Interpolated in part.

72 (Designated as Grenada 72 in Mississippi Geol. Survey Bull. 55). Lynn Thomas. At Elliott, 7 miles southeast of Grenada, in SW¼NW¼ sec. 14, T. 21 N., R. 5 E., east of U. S. Highway 51, 300 feet northeast of Illinois Central Railroad tracks, 50 feet north of residence, in 10-foot high wooden recorder house. Unused drilled domestic nonflowing artesian well, diameter 2 inches, depth 447.5 feet. Taps the Holly Springs water-bearing sand. Drilled in 1935. Measuring point, top of 2-inch casing, 2.0 feet above land surface and 229.55 feet above mean sea level. Equipped with float-type water-stage recorder.

Lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Jan. 6	33.77	Apr. 7	27.48	July 7	39.34	Oct. 6	39.94
13	a 33.25	14	ab28.37	14	a 39.77	13	38.58
20	a 33.63	21	ab30.00	21	ab39.45	20	38.34
27	32.49	28	31.11	28	42.34	27	a 38.34
Feb. 3	a 32.00	May 5	a 31.92	Aug. 4	a 42.34	Nov. 3	a 36.08
10	31.66	12	32.67	11	ab41.00	10	34.87
17	30.48	19	33.52	18	a 41.00	17	a 33.44
24	30.09	26	34.33	25	a 40.80	24	32.99
Mar. 3	29.56	June 2	34.91	Sept. 1	ab39.69	Dec. 1	32.62
10	29.54	9	35.29	8	40.26	8	32.01
17	28.94	16	36.17	15	a 42.46	15	33.56
24	a 28.06	23	36.57	22	a 40.04	22	a 34.52
31	a 27.30	30	ab38.33	29	a 39.94	29	a 35.55

a Part of record missing or uncertain.
b Interpolated in part.

73 (Designated as Grenada 73 in Mississippi Geol. Survey Bull. 55). Carpenter farm. At Elliott, 7 miles southeast of Grenada, in NW¼SW¼ sec.14, T. 21 N., R. 5 E., east of U. S. Highway 51, 230 feet west of Illinois Central Railroad tracks, 400 feet south of east-west road crossing tracks at Elliott, in 10-foot high wooden recorder house. Unused drilled domestic nonflowing artesian well, diameter 2 inches, depth 300 feet. Taps the Meridian water-bearing sand. Measuring point, top of casing, 1 foot above land surface and about 229 feet above mean sea level. Equipped with float-type water-stage recorder.

Lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Jan. 6	a 20.57	Apr. 7	a 19.77	July 7	19.73	Oct. 6	20.05
13	a 20.50	14	a 19.76	14	a 19.74	13	20.05
20	a 20.50	21	a 19.66	21	19.80	20	20.06
27	a 20.43	28	a 19.62	28	19.81	27	20.11
Feb. 3	a 20.48	May 5	a 19.65	Aug. 4	19.85	Nov. 3	20.11
10	20.25	12	19.64	11	19.85	10	20.13
17	a 20.17	19	a 19.59	18	19.85	17	20.15
24	20.32	26	19.66	25	19.90	24	20.15
Mar. 3	20.23	June 2	19.65	Sept. 1	19.94	Dec. 1	20.15
10	19.93	9	19.65	8	19.94	8	20.15
17	a 20.05	16	19.66	15	a 20.00	15	20.15
24	a 19.92	23	19.65	22	20.00	22	20.20
31	a 19.72	30	19.70	29	20.05	29	20.20

a Part of record missing or uncertain.

Harrison County

69 (Designated as Harrison 69 in Mississippi Geol. Survey Bull. 60). C. F. Burkhardt. 0.6 mile west of Biloxi, in SW¼SW¼ sec. 25, T. 7 S., R. 10 W., south of Veterans Administration Home, 18.5 feet west of centerline of north-south road leading into veterans home and 180 feet south of centerline of east-west Pass Christian Road in front of veterans home. Capped casing in open. Unused drilled domestic flowing artesian well, diameter 3 inches, depth 720 feet. Taps the Graham Ferry formation. Reported static head when drilled in 1925, 35 feet above land surface. Measuring point, top of casing nipple, 0.5 foot above land surface and 29.42 feet above mean sea level. Equipped with pressure-type water-stage recorder, Mar. 20, 1945, to June 13, 1945.

Water level, in feet with reference to land-surface datum, 1939, 1942-44

Date	Water level	Date	Water level	Date	Water level
Mar. 23, 1939	+19.4	June 25, 1942	-1.7	Apr. 16, 1944	+3.1
May 26, 1942	+2.2	July 26, 1943	-5.4		

Highest and lowest water level, in feet above land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Mar. 20-24	3.1	1.5	Apr. 22-29	3.5	2.2
25-31	3.4	2.4	May 6-10	4.1	2.7
Apr. 1-7	3.8	1.6	16-26	4.8	3.6
8-14	3.6	2.3	27-30	4.1	3.4
14-17	3.7	3.2	June 7-13	3.5	2.5

118 (Designated as Harrison 154 in Mississippi Geol. Survey Bull. 60; *886, p. 281; 907, p. 63; 937, p. 68; 945, p. 88; *987, p. 109; 1017, p. 295). City of Gulfport. NW¼NE¼ sec. 9, T. 8 S., R. 11 W. Equipped with pressure-type water-stage recorder.

Highest and lowest weekly water level, in feet above land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	14.4	9.6	July 7	10.6	7.1
13	14.0	8.9	14	8.9	6.9
20	10.2	8.6	21	9.4	7.4
27	11.6	8.0	28	10.6	6.9
Feb. 3	13.0	8.8	Aug. 4	8.7	6.9
10	13.7	9.7	11	9.9	5.9
17	13.5	10.2	18	10.4	6.8
24	13.7	11.1	25	10.7	6.7
Mar. 3	13.9	10.7	Sept. 1	10.3	5.5
10	14.0	10.9	8	9.5	5.4
17	13.6	10.3	15	9.7	5.4
24	13.4	10.6	22	10.7	6.8
31	14.0	11.5	29	10.9	6.9
Apr. 7	14.5	9.7	Oct. 6	12.6	7.8
14	13.0	10.8	13	14.7	10.3
21	13.1	11.2	20	14.9	9.7
28	14.1	11.4	27	12.9	9.6
May 5	14.6	11.6	Nov. 3	12.9	8.2
12	13.8	10.7	10	14.7	9.7
19	13.9	10.3	17	15.4	10.7
26	13.7	10.7	24	14.6	10.8
June 2	12.7	7.2	Dec. 1	12.2	16.0
9	11.0	6.7	8	15.8	12.4
16	9.6	4.8	15	16.7	13.7
23	10.9	5.7	22	17.5	13.9
30	10.9	7.8	29	18.7	15.6

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120 (Designated as Harrison 120 in Mississippi Geol. Survey Bull. 60). City of Biloxi. At 1332 W. Howard Ave., between West End fire station and railroad tracks, in NE¼NE¼ sec. 31, T. 7 S., R. 9 W. Used drilled municipal flowing artesian well, diameter 8 inches, depth 928 feet. Taps the Pascagoula water-bearing sand. Reported static head when drilled in 1903 44 feet. Measuring point, top of well cross, at land surface and 21.28 feet above mean sea level. Equipped with float-type water-stage recorder.

Highest and lowest weekly water level, in feet above land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	0.97	2.18	June 30	a 4.34	7.46
13	.93	2.87	July 7	5.99	7.75
20	1.23	2.67	14	a 6.00	6.83
27	1.87	3.80	21	4.40	6.80
Feb. 3	2.08	3.62	28	4.93	7.46
10	1.38	2.92	Aug. 4	5.96	7.97
17	a 1.55	3.23	11	a 6.59	8.48
24	1.36	3.60	18	a 7.21	8.48
Mar. 3	2.27	3.58	25	a 8.50	8.56
10	2.18	4.10	Sept. 1	a 8.07	10.93
17	2.85	4.68	8	8.00	10.52
24	3.02	5.06	15	7.49	9.33
31	3.11	4.73	22	6.70	9.39
Apr. 7	a 1.84	4.43	29	8.85	8.08
14	2.24	4.47	Oct. 6	6.30	7.70
21	3.04	5.36	13	4.70	6.51
28	2.27	4.18	20	4.37	5.56
May 5	1.78	3.80	27	a 4.38	5.47
12	1.74	3.78	Nov. 5	3.75	5.50
19	1.51	3.99	10	3.62	4.83
26	1.68	4.26	17	a 3.00	4.67
June 2	a 2.79	5.22	24	a 3.30	4.26
9	3.51	5.94	Dec. 1	2.70	4.20
16	3.25	6.00	15	2.37	3.56
23	4.02	6.23			

a Part of record missing or uncertain.

147 (Designated as Harrison 9 in Mississippi Geol. Survey Bull. 60; *937, p. 69; 945, p. 88; *987, p. 110; 1017, p. 296). Gulf & Ship Island Railroad. NE¼NW¼ sec. 18, T. 5 S., R. 11 W.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 20	16.06	May 10	17.43	Oct. 15	18.35
Mar. 20	17.05	Aug. 30	17.29	Dec. 29	17.93

Hinds County

J19. Alton T. Ellick. At Jackson, in SE¼NW¼ sec. 24, T. 6 N., R. 1 E., on Old Canton Road, 2.0 miles north of junction of North State Street and Old Canton Road, 400 feet south of road, in frame well house. Used drilled domestic nonflowing artesian well, diameter 4 inches, depth 640 feet. Taps the Kosciusko (Sparta) water-bearing sand. There is no heavy pumping in the immediate area. Measuring point, top of ⅛-inch hole in steel plate, flush with concrete floor and at top of casing, at land surface and 372.44 feet above mean sea level. Drilled in 1941. Water levels, in feet below land-surface datum, 1945: Nov. 2, 187.13; Dec. 11, 186.03.

J21. Virginia-Carolina Chemical Co. At Jackson, in NE¼NW¼ sec. 27, T. 6 N., R. 1 E., west of Mill Street, 0.7 mile north of Woodrow Wilson Avenue and Mill Street, 300 feet west of main Illinois Central Railroad tracks, in concrete sump. Unused industrial nonflowing artesian well, estimated depth of 700 feet. Taps the Kosciusko (Sparta) water-bearing sand. Well casing is filled to within 250 feet of surface; however, the filling is believed to be sufficiently porous to permit a delayed but otherwise faithful record of the trend of variation in artesian pressure. Measuring point, top of 6-inch steel casing, 1.0 foot below land surface and 333.12 feet above mean sea level. Equipped with float-type water-stage recorder since Oct. 19, 1944. Water levels, in feet below land-surface datum, 1944: Sept. 11, 142.73; Sept. 21, 143.00; Sept. 27, 143.16.

J21--Continued.

Highest weekly water level, in feet below land-surface datum, 1944-45
(From recorder charts)

Week ending	Water level	Week ending	Water level	Week ending	Water level
Oct. 28, 1944	a143.23	Mar. 10, 1945	143.48	Aug. 11, 1945	a143.86
Nov. 4	143.79	17	143.49	18	a143.70
11	143.80	24	143.42	25	a144.12
18	143.90	31	a143.35	Sept. 1	144.24
25	143.85	Apr. 14	a143.36	8	144.46
Dec. 2	143.88	21	a143.40	15	a144.53
9	143.75	28	143.30	22	a144.87
16	143.87	May 5	143.34	29	a144.95
23	143.98	12	143.33	Oct. 6	144.99
30	143.89	17	143.24	13	145.03
Jan. 6, 1945	143.72	26	a143.34	20	145.16
13	143.73	June 2	143.41	27	145.13
20	143.75	9	143.40	Nov. 3	a145.29
27	143.77	16	a143.46	10	a145.42
Feb. 3	143.81	23	a143.37	24	a145.57
10	143.73	30	a143.40	Dec. 1	145.54
17	143.57	July 14	a143.42	8	a145.50
25	143.50	21	a143.44	15	a145.52
Mar. 3	143.51	Aug. 4	a143.79	29	a145.51

a Part of record missing or uncertain.

J25 (Designated as Hinds 21 in U. S. Geol. Survey Water-Supply Paper 576). Country Club of Jackson. At Jackson, in SE¼SW¼ sec. 25, T. 6 N., R. 1 W., on Clinton Blvd., 0.8 mile west of viaduct at northwest city limits, 350 feet north of Clinton Blvd., 100 feet north of club building near northeast corner of tennis courts, at old steel pump base on open ground. Unused domestic nonflowing artesian well, depth 862 feet. Taps the Kosciusko (Sparta) water-bearing sand. There is no heavy pumping in the immediate area. Drilled in 1915. Measuring point, top of 6-inch steel casing, 0.4 foot above land surface and 373.34 feet above mean sea level.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Sept. 15, 1944	189.73	Oct. 8, 1945	191.50	Oct. 29, 1945	191.25
21	189.80	12	191.58	30	191.24
27	189.98	15	191.60	31	191.14
Aug. 31, 1945	190.97	19	191.48	Nov. 1	191.13
Sept. 12	191.07	28	191.29	6	191.18
27	191.49	29	191.25	Dec. 9	191.54
Oct. 4	191.64				

J38. Mississippi Cotton Oil Co. At Jackson, in NE¼SW¼ sec. 4, T. 5 N., R. 1 E., on Gallatin Street, 675 feet north of Capitol Street, 225 feet west of Gallatin St. 3-foot high casing in open area. Unused industrial nonflowing artesian well, depth about 730 feet. Taps the Kosciusko (Sparta) water-bearing sand. Drilled about 1930. Well is near center of heavily pumped area, and 40 feet north of same-depth well (J-39) used intermittently. Measuring point, top of 0.14-foot thick board above flange which is at top of 4-inch steel casing, 3.4 feet above land surface and 285.56 feet above mean sea level. Equipped with float-type water-stage recorder since January 1945.

Water level, in feet below land-surface datum, 1944

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Sept. 13	a121.33	Sept. 21	d124.75	Sept. 27	f124.56	Nov. 8	g114.20
13	b121.61	21	e124.74	Oct. 30	g115.08	25	g112.22
21	c123.76						

a Well J39 off 30 minutes.
b Well J39 off 2 hours.
c Well J39 off 6 hours.
d Well J39 off 35 minutes.
e Well J39 off 3½ hours.
f Well J39 off 3 hours.
g Well J39 not pumping.

798998 O—48——12

J38 --Continued.

Highest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Water level	Week ending	Water level	Week ending	Water level	Week ending	Water level
Jan. 13	a107.65	Apr. 7	105.04	June 30	119.45	Sept.15	a123.48
20	106.79	14	a104.62	July 7	121.33	22	120.93
27	106.55	21	a107.12	14	120.68	29	123.29
Feb. 3	a107.10	28	a106.75	21	120.40	Oct. 6	123.95
17	a106.77	May 5	104.10	28	120.88	13	117.33
24	a105.63	19	a110.57	Aug. 4	121.67	20	115.13
Mar. 3	a104.16	26	a108.57	11	121.58	27	a112.80
10	a104.71	June 2	a110.39	18	122.10	Nov. 3	a112.42
17	105.77	9	118.91	25	121.12	Dec. 15	a109.18
24	105.90	16	120.08	Sept. 1	121.43	22	a108.23
31	104.80	23	120.23	8	a123.20		

a Part of record missing or uncertain.

J46. Mississippi Power & Light Co. At Jackson, in NE¼NE¼ sec. 10, T. 5 N., R. 1 E., on Tombigbee Street, 175 feet east of railroad tracks, in center of South Commerce Street, 40 feet south of center of Tombigbee Street, between power substation buildings and near sidewalk. Casing and piping in open. Used industrial nonflowing artesian well, estimated depth 750 feet. Taps the Kosciusko (Sparta) water-bearing sand. Well is on east edge of heavily pumped area. Water level changes are chiefly caused by intermittent pumpage of well J45, 300 feet west of well J46. Drilled about 1927. Measuring point, top of 10-inch coupling at top of well casing, 1.1 feet above land surface and 281.57 feet above mean sea level.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Aug. 31	116.73	Oct. 8	116.59	Oct. 28	107.07	Nov. 2	107.48
Sept.12	118.03	12	111.17	29	108.10	Dec. 7	103.40
27	117.24	15	109.61	30	107.15	10	104.41
Oct. 4	117.57	19	110.92				

Holmes County

38 (*845, p. 162; 886, p. 282; 907, p. 63; 937, p. 69; 945, p. 89; *987, p. 110; 1017, p. 296). Town of Tchula. NW¼NW¼ sec. 8, T. 15 N., R. 1 E. Water levels, in feet above land-surface datum, 1945: Jan. 5, 19.4; May 5, 18.7; Sept. 6, 16.9; Dec. 28, 18.8.

59 (*845, p. 162; 886, p. 282; 907, p. 63; 937, p. 69; 945, p. 89; *987, p. 110; 1017, p. 296). M. L. Smith. SE¼NW¼ sec. 8, T. 14 N., R. 1 W. Temporary measuring point, top of elbow at faucet in garage north of and on opposite side of street from well, 2.89 feet above permanent measuring point. Water levels, in feet above land-surface datum, 1945: May 5, 129.2; Sept. 6, 127.5; Dec. 28, 127.2.

Humphreys County

10 (*886, p. 282; 907, p. 63; 937, p. 69; 945, p. 89; *987, p. 110; 1017, p. 296). Wister Henry. In Belzoni, in NW¼NE¼ sec. 35, T. 16 N., R. 3 W. Water levels, in feet above land-surface datum, 1945: Sept. 6, 101.2; Dec. 28, 101.6.

18 (*845, p. 162; 886, p. 282; 907, p. 64; 937, p. 69; 945, p. 89; *987, p. 110; 1017, p. 297). J. C. Halbrook. In Belzoni, in NW¼SE¼ sec. 3, T. 15 N., R. 3 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 6.90; Sept. 6, 8.05; Dec. 28, 7.26.

56 (*886, p. 282; 907, p. 64; 937, p. 70; 945, p. 89; *987, p. 110; 1017, p. 297). Town of Louise. In Louise, in NE¼NE¼ sec. 15, T. 13 N., R. 4W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 19.2; Aug. 31, 19.0; Sept. 6, 19.2; Dec. 28, 18.3.

Issaquena County

24 (*886, p. 282; 907, p. 64; 937, p. 70; 945, p. 89; *987, p. 110; 1017, p. 297). W. W. Gary. In Valley Park, in SE¼NE¼ sec. 12, T. 9 N., R. 7 W. Measurements discontinued after Apr. 14, 1944.

Jackson County

9 (Designated as Jackson 15 in Mississippi Geol. Survey Bull. 60; *907, p. 64; 937, p. 70; 945, p. 89; *987, p. 110; 1017, p. 297). Camp McClellan. SE¼NW¼ sec. 35, T. 6 S., R. 9 W. Pressure-type water-stage recorder reestablished on well Feb. 21, 1945.

Highest and lowest water level, in feet above land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Feb. 21-28	37.6	29.3	Aug. 1-31	40.1	39.6
Mar. 1-26	39.6	37.3	Sept. 1-24	39.8	38.8
Apr. 1-30	40.0	39.4	Oct. 8-31	40.3	39.1
May 1-25	39.9	38.5	Nov. 1-30	40.4	38.9
June 10-17	40.4	38.5	Dec. 1-31	40.4	37.9
July 1-31	40.1	38.7			

65 (Designated as Jackson 39 in Mississippi Geol. Survey Bull. 60; *907, p. 64; 937, p. 71; 945, p. 89; *987, p. 110; 1017, p. 297). Gulf Hills Development Co. NW¼NE¼ sec. 24, T. 7 S., R. 9 W. Measurements discontinued after Aug. 29, 1940.

Jones County

27 (*907, p. 65; 937, p. 71; 945, p. 90; *987, p. 110; 1017, p. 297). U. S. Dept. of Agriculture starch plant, at Laurel. NE¼SE¼ sec. 7, T. 8 N., R. 11 W. Equipped with float-type water-stage recorder.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	.....	a133.44	June 9	124.77	139.40
13	116.41	134.49	16	134.38	139.39
20	115.16	135.01	23	121.32	140.84
27	117.39	135.43	30	137.50	141.47
Feb. 3	117.72	136.45	July 7	124.23	140.75
10	129.84	136.03	14	137.10	140.71
17	131.04	136.60	21	127.11	140.94
24	a129.00	135.36	28	137.26	141.03
Mar. 3	a129.00	136.10	Aug. 4	125.97	141.09
10	116.09	136.76	11	128.38	141.30
17	131.05	137.18	18	135.22	140.79
24	132.24	138.18	25	138.42	140.70
31	a131.80	137.29	Sept. 1	136.40	140.78
Apr. 14	a137.40	140.82	8	135.40	141.20
21	136.40	141.17	15	138.26	140.60
28	135.53	141.02	22	137.89	139.59
May 5	a133.50	140.38	29	135.89	139.15
12	131.56	140.23	Oct. 6	139.47	139.60
19	130.21	139.90	13	136.98	139.68
26	134.62	139.51	20	a136.78	139.22
June 2	134.70	139.72			

a Part of record missing or uncertain.

28 (*907, p. 65; 937, p. 71; 945, p. 89; *987, p. 111; 1017, p. 298). Gilchrist-Fordney Lumber Co., Laurel. NE¼SW¼ sec. 32, T. 9 N., R. 11 W. Measurements discontinued after Nov. 8, 1941.

30 (*907, p. 64; 937, p. 71; 945, p. 89; *987, p. 111; 1017, p.298). Ed Howard. SE¼SE¼ sec. 11, T. 9 N., R. 11 W.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level
Feb. 19	12.10	Aug. 30	13.40	Dec. 29	12.12
Mar. 22	12.70	Oct. 15	13.62		

108 (Designated as Jones 108 in Mississippi Geol. Survey Bull. 58; *907, p. 65; 937, p. 72; 945, p. 90; *987, p. 112; 1017, p.298). Town of Ovett. NE¼SW¼ sec. 18, T. 6 N., R. 10 W. Water levels, in feet above land-surface datum, 1945: Feb. 23, 3.1; Aug. 30, 2.8; Oct. 15, 2.6; Dec. 29, 3.2.

Lafayette County

37. Dr. F. E. Linder. About 1 mile south of Oxford, in NE¼SE¼ sec. 29, T. 8 S., R. 3 W., southeast of owner's residence, 200 feet north of tenant house, about 500 feet north of east-west sand-and-gravel road, plank casing and rope-and-bucket in open. Used dug domestic water-table well, diameter 2.4 feet, measured depth 25.9 feet. Measuring point, top of rim of wooden planks, 2.3 feet above land surface and about 440 feet above mean sea level.

Water level, in feet below land-surface datum, 1940-45

June 3, 1940	20.83	Nov. 30, 1942	21.10	July 31, 1944	a20.41
8	19.50	Dec. 31	20.96	Sept.30	a20.81
15	19.72	Jan. 31, 1943	21.35	Oct. 31	a20.90
July 6	19.42	Feb. 28	21.64	Nov. 30	a20.89
15	19.64	Mar. 31	21.71	Jan. 3, 1945	20.95
21	19.53	Apr. 30	21.49	Feb. 1	20.66
Aug. 4	19.62	May 31	20.76	27	20.32
29	19.60	June 30	20.93	Mar. 29	20.01
Oct. 1	19.81	July 31	a21.06	Apr. 29	20.00
31	19.82	Sept.30	a21.27	June 1	20.34
Dec. 3	20.08	Oct. 31	a21.34	July 2	20.33
Jan. 1, 1941	19.77	Nov. 30	a21.32	Aug. 1	20.56
Dec. 26	20.64	Dec. 31	a21.58	Sept. 4	20.67
31	19.74	Jan. 31, 1944	a21.65	Oct. 1	20.61
July 31, 1942	20.86	Feb. 29	a21.70	Nov. 3	20.78
Sept.28	20.98	May 31	a20.25	Dec. 1	21.33
Oct. 29	21.09	June 30	a20.43	31	20.64

a Record identified only by "end-of-month" measurement; exact day not known.

Leflore County

60 (*845, p. 162; 886, p. 282; 907, p. 66; 937, p. 72; 945, p. 91; *987, p. 112; 1017, p.298). Mrs. D. B. Jameson. In Schlater, in NW¼SW¼ sec. 31, T. 21 N., R. 1 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 13.1; Sept. 11, 12.7; Dec. 27, 12.4.

136 (*845, p. 163; 886, p. 283; 907, p. 66; 937, p. 72; 945, p. 91; *987, p. 112; 1017, p.298). A. P. Haynes. At Greenwood, in NE¼NW¼ sec. 12, T. 19 N., R. 1 E. Water levels, in feet above land-surface datum, 1945: Sept. 6, 32.0; Dec. 28, 32.4.

152 (*907, p. 66; 937, p. 72; 945, p. 91; *987, p. 112; 1017, p.298). City of Greenwood. NE¼NW¼ sec. 15, T. 19 N., R. 1 E. Equipped with pressure-type water-stage recorder.

152--Continued.

Highest weekly water level, in feet above land-surface datum, 1945
(From recorder charts)

Week ending	Water level	Week ending	Water level	Week ending	Water level	Week ending	Water level
Jan. 6	a14.2	Apr. 7	15.4	July 7	12.8	Oct. 13	13.2
13	a14.1	14	a15.1	14	a12.5	20	14.7
20	14.1	21	a14.7	28	a11.7	27	a14.7
27	14.3	28	14.7	Aug. 4	12.5	Nov. 3	12.7
Feb. 3	17.6	May 5	14.6	11	11.2	10	14.7
10	17.9	12	14.5	18	11.5	17	16.0
17	a15.8	19	14.3	25	15.8	24	a16.2
24	a14.5	26	14.2	Sept. 1	11.5	Dec. 1	a17.3
Mar. 3	14.5	June 2	16.1	8	11.4	8	16.3
10	18.2	9	14.8	15	a11.7	15	16.8
17	16.2	16	14.6	22	11.5	22	16.4
24	15.3	23	a13.7	29	11.4	29	13.6
31	15.3	30	13.8	Oct. 6	12.9		

a Part of record missing or uncertain.

Oktibbeha County

2 (*907, p. 66; 945, p. 91; *987, p. 113; 1017, p. 299). Mississippi State College. NE¼SW¼ sec. 1, T. 18 N., R. 14 E. Equipped with float-type water-stage recorder.

Highest and lowest weekly water level, in feet below land-surface datum, 1945
(From recorder charts)

Week ending	Highest level	Lowest level	Week ending	Highest level	Lowest level
Jan. 6	a178.30	178.73	June 30	179.53	179.79
13	178.28	178.62	July 7	179.77	179.93
20	178.23	178.57	14	179.85	180.01
27	178.23	178.46	21	a179.89	180.08
Feb. 3	178.28	178.57	28	a179.87	180.12
10	178.19	178.35	Aug. 4	179.90	180.10
17	178.03	178.29	11	179.97	180.10
24	a178.13	178.36	18	180.09	180.19
Mar. 3	a178.12	178.30	25	180.10	180.21
10	a178.03	178.31	Sept.22	a179.94	180.06
17	178.04	178.28	29	179.94	180.07
24	178.03	178.22	Oct. 6	179.73	180.05
31	177.96	178.24	13	179.72	179.82
Apr. 7	177.91	178.54	20	179.73	179.87
14	a178.35	178.46	27	179.60	179.93
21	178.35	178.64	Nov. 3	179.59	179.95
28	178.40	178.74	10	179.75	179.90
May 5	178.56	178.83	17	179.60	179.88
12	178.68	178.92	24	179.39	179.64
19	178.76	179.08	Dec. 1	179.38	179.51
26	178.97	179.19	8	179.07	179.44
June 2	179.10	179.24	15	179.01	179.35
9	179.20	179.45	22	178.98	179.35
16	179.32	179.55	29	178.80	179.06
23	179.47	179.61			

a Part of record missing or uncertain.

Quitman County

15 (*907, p. 67; 937, p. 72; 945, p. 92; *987, p. 114; 1017, p.300). Town of Marks. SE¼NW¼ sec. 35, T. 28 N., R. 1 W. Measurements discontinued after July 15, 1944.

21 (*907, p. 67; 937, p. 73; 945, p. 93; *987, p. 114; 1017, p.301). W. R. Harrington. NE¼NE¼ sec. 8, T.27 N., R. 2 W. Water levels, in feet above land-surface datum, 1945: Jan. 3, 33.0; June 16, 34.6; Sept. 4, 32.4.

32 (*845, p. 163; 886, p. 283; 907, p. 67; 937, p. 73; 945, p. 93; *987, p. 114; 1017, p.301). City Cafe. In Lambert, in SW¼SE¼ sec. 15, T. 27 N., R. 1 W. Water levels, in feet above land-surface datum, 1945: Jan. 3, 6.1; Sept. 4, 5.7; Dec. 26, 6.3.

Sharkey County

43 (*886, p. 283; 907, p. 67; 937, p. 73; 1017, p.301). Cary Water Co. SE¼SW¼ sec. 9, T. 11 N., R. 7 W. Measurements discontinued after Apr. 14, 1944.

Sunflower County

39 (*907, p. 67; 937, p. 73; 945, p. 93; *987, p. 115; 1017, p.301). E. L. Coleman and others. At Doddsville, in NW¼SW¼ sec. 28, T. 21 N., R. 3 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 26.6; Sept. 11, 26.8; Dec. 26, 25.9.

Tallahatchie County

24 (*845, p. 163; 886, p. 283; 907, p. 67; 937, p. 73; 945, p. 93; *987, p. 115; 1017, p.301). Town of Tutwiler. SW¼SW¼ sec. 20, T.25 N., R. 2 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 8.2; Sept. 11, 7.5; Dec. 26, 7.8.

68 (*907, p. 68; 937, p. 73; 945, p. 93; *987, p. 115; 1017, p.301). Town of Sumner. NW¼NE¼ sec. 11, T. 24 N., R. 2 W. Equipped with pressure-type water-stage recorder.

Highest and lowest monthly water level, in feet above land-surface datum, 1945
(From recorder charts)

Date	Highest level	Lowest level	Date	Highest level	Lowest level
Jan.	63.2	61.5	July	62.6	58.8
Feb.	63.6	61.4	Aug.	61.5	59.5
Mar.	64.3	62.5	Sept.	61.5	60.2
Apr.	63.1	62.5	Oct.	a 61.3	60.3
May	64.2	62.6	Nov.	a 61.2	59.8
June	64.0	61.4	Dec.	a 60.6	59.8

a Part of record missing or uncertain.

171 (*845, p. 163; 886, p. 283; 907, p. 68; 937, p. 73; 945, p. 93; *987, p. 115; 1017, p.302). Philipp Stave Mill. At Philipp, in NW¼SW¼ sec. 21, T. 22 N., R. 1 E. Water levels, in feet above land-surface datum, 1945: Jan. 4, 13.5; Sept. 11, 12.3; Dec. 27, 13.9.

Tunica County

17 (*907, p. 68; 937, p. 73; 945, p. 94; *987, p. 116; 1017, p.302). G. D. Perry, Sr. SW¼SE¼ sec. 7, T. 5 S., R. 11 W. Temporary measuring point, top of end of pipe outlet extension on faucet southeast of well, 1.38 feet above permanent measuring point. Water levels, in feet above land-surface datum, 1945: June 16, 24.0; Sept. 4, 23.1; Dec. 26, 22.7.

Washington County

25 (*886, p. 283; 907, p. 68; 937, p. 74; 945, p. 94; *987, p. 116; 1017, p.302). Wagner Plantations. SW¼SW¼ sec. 32, T. 12 N., R. 2 W. Temporary measuring point, top of lower elbow on pipe at steel watering trough, 1.84 feet below permanent measuring point. Water levels, in feet above land-surface datum, 1945: Jan. 4, 34.4; Sept. 7, 34.6; Dec. 26, 31.8.

65 (*886, p. 283; 907, p. 68; 937, p. 74; 945, p. 94; *987, p. 116; 1017, p.302). W. D. Atterbury. At Estill, in NE¼NE¼ sec. 25, T. 16 N., R. 7 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 74.5; Sept. 7, 74.7; Dec. 28, 74.5.

70 (*886, p. 284; 907, p. 68; 937, p. 74; 945, p. 94; *987, p. 116; 1017, p.302). Town of Hollandale. SW¼SE¼ sec. 6, T. 15 N., R. 6 W. No measurements made in 1945.

82 (*845, p. 163; 886, p. 284; 1017, p.302). J. W. Jordan. At Murphy's Ferry, in NE¼SE¼ sec. 27, T. 15 N., R. 5 W. Water levels, in feet above land-surface datum, 1945: Jan. 4, 11.3; Sept. 7, 11.0; Dec. 28, 11.4.

Yazoo County

2 (*845, p. 163; 886, p. 284;*987, p. 116; 1017, p.302). Town of Eden. SE¼SW¼ sec. 8, T. 13 N., R. 1 W. Water levels, in feet above land-surface datum, 1945: Jan. 5, 29.1; Sept. 6, 28.0; Dec. 28, 25.2.

25 (*845, p. 163; 886, p. 284; 907, p. 68; 937, p. 74; 945, p. 95; *987, p. 116; 1017, p.302). Yazoo City. SW¼NE¼ sec. 32, T. 12 N., R. 2 W. Measurements discontinued after Apr. 14, 1944.

NORTH CAROLINA

By M. J. Mundorff

PROGRAM OF WORK

The program of water-level measurements in observation wells in North Carolina, begun in 1931, was continued in 1945 in cooperation with the North Carolina Department of Conservation and Development. The systematic investigation of the ground-water resources of the State was continued. Special investigations were made in 1945 at a few places in connection with the development of ground-water supplies at military bases.

Water-level measurements for 27 observation wells are published in this report. Water-stage recorders were in operation on 11 wells, 2 wells were measured daily, 2 were measured twice a week, 3 were measured weekly, and 9 were measured monthly. In all, 4,138 measurements of water level were made in 1945.

FLUCTUATIONS OF WATER LEVEL

In North Carolina fluctuations of the ground-water level correlate with precipitation. However, a number of other factors complicate the correlation.

With normal precipitation the ground-water level generally begins to rise in December or January. The rise usually continues until April after which the water level begins to decline. This decline continues, interrupted by rises of short duration caused by summer rain storms, until the following December or January.

The ground-water level rises in the late winter and early spring in spite of the fact that there is less rainfall during this season than in summer and autumn. It rises because very little water is used by vegetation or lost by evaporation and a much larger proportion of the precipitation reaches the water table. The amount of rainfall is larger

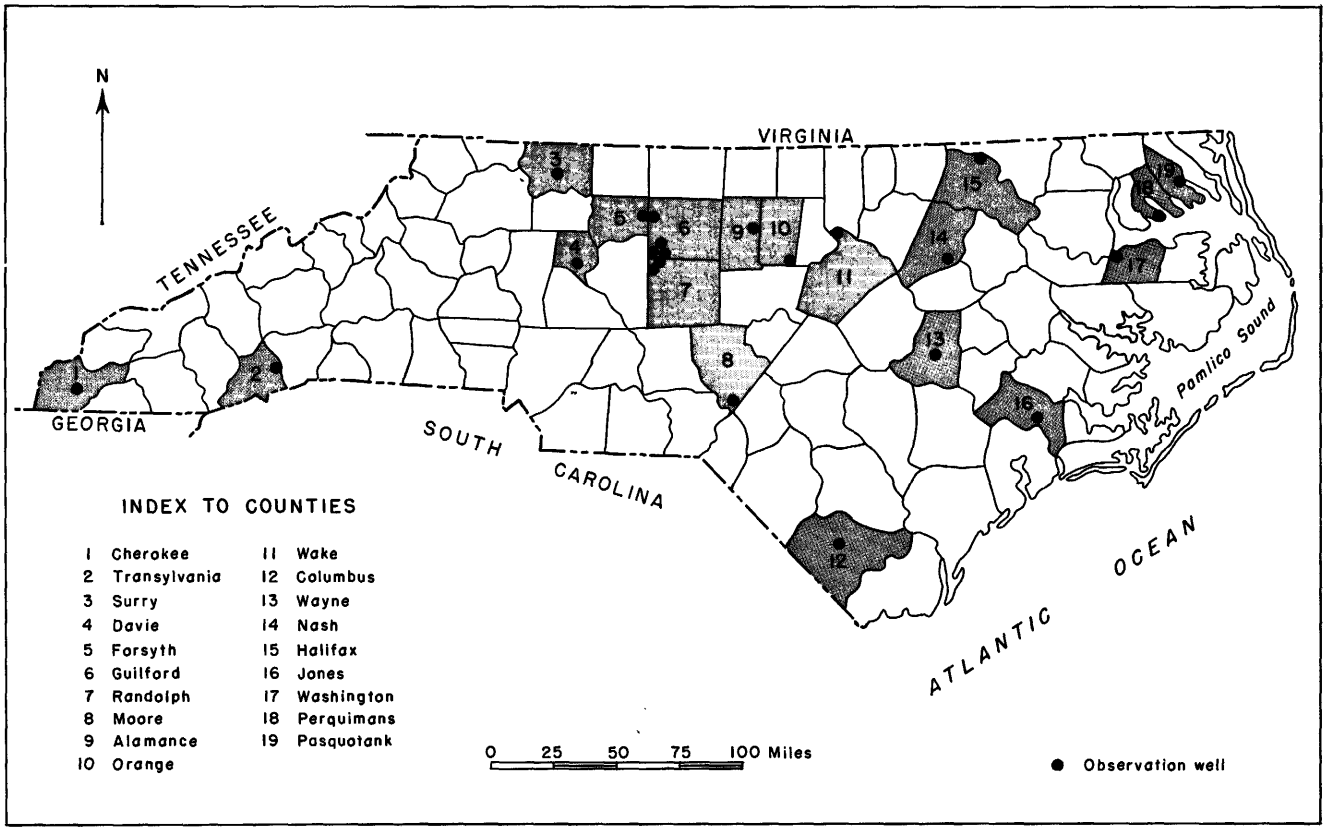

Figure 7.--Map of North Carolina showing location of observation wells, 1945.

in the late spring, summer, and autumn months; but so much of the water is used by plants, or evaporates, that very little reaches the water table, except during heavy and prolonged rainfall.

The average rainfall in 1945 for all U. S. Weather Bureau stations in the State was 55.12 inches, 5.56 inches above normal. Rainfall during the first 6 months was 3.21 inches below normal, but above-normal rainfall during the last 6 months caused a great deal more summer and autumn recharge to the water table than usual. In 1945 the fluctuations of the water level showed a reasonably close correlation with precipitation, taking transpiration and evaporation into consideration. Of the 22 wells in which the water level was measured at the end of both 1944 and 1945, 17 show a net gain during 1945, and 5 show a net loss. The number of wells showing a net gain in 1945 was one less than in 1944; and the number showing a net loss in 1945 was one more than in 1944. However, all wells showing a loss in 1944 showed a gain in 1945. There were 12 wells showing a gain in both 1944 and 1945.

The following table gives the highest and lowest level reached in each well, the range in fluctuation, and the net gain or loss during the year.

Summary of water-level fluctuations in North Carolina for 1945

County	Well No.	Highest level (feet)	Date	Lowest level (feet)	Date	Range (feet)	Net rise during year (feet)
Alamance	1	16.10	Feb. 24	24.73	Sept.14	8.63	+4.25
Cherokee	1	39.43	June 2	42.58	Dec. 3	3.13	+.10
Columbus	1	1.46	Sept. 7	9.69	June 24	8.23	+5.88
*Davie	1	17.39	Feb. 23	21.58	Sept.12	4.19	.....
Forsyth	1	43.33	Feb. 22	43.93	Nov. 25	.60	+.41
Guilford	2	25.71	Mar. 21	28.15	Dec. 2	2.44	+.12
Guilford	4	29.05	Feb. 22	30.63	Jan. 25	1.58	+1.00
Guilford	7	20.03	Mar. 29	23.19	July 26	3.16	+2.41
Guilford	8	24.60	Dec. 30	27.17	Jan. 25	2.57	+2.68
Guilford	12	30.10	Apr. 26	33.68	Dec. 30	3.58	-1.76
Guilford	14	12.98	Feb. 22	15.40	Dec. 30	2.42	-.60
Halifax	1	2.96	Feb. 23	7.41	July 9	4.44	+1.72
Jones	1	.6	Sept. 7	8.4	June 15	7.8	+2.3
Moore	1	30.31	Sept.19	43.76	Aug. 21	13.45	+.75
Nash	1	.90	Feb. 21	10.72	June 27	9.82	+6.32
Orange	1	40.41	Oct. 8	42.68	Jan. 3	2.27	+2.27
*Pasquotank	31T	.47	Sept.18	4.97	May 17	4.50	.....
*Pasquotank	33T	1.50	Sept.18	6.52	June 5	5.02	.....
*Perquimans	2	5.64	Aug. 29	15.41	June 30	9.77	.....
Randolph	20	21.88	June 28	24.42	Dec. 30	2.54	-.70
Randolph	25	26.55	Apr. 26	28.90	Nov. 25	2.35	-.38
Randolph	27	10.80	Sept.30	18.85	Nov. 25	8.05	+1.07
Surry	1	40.02	July 11	42.52	Dec. 30	2.50	-.07
Transylvania	1	30.78	June 2	34.84	Jan. 3	4.06	+1.22
Wake	1	7.24	Mar. 4	14.13	June 17	6.89	+.89
*Washington	1	11.61	Aug. 2	16.52	June 18	4.91	.....
Wayne	1	.50	Oct. 20	4.52	June 30	4.02	+2.54

*Incomplete record.

It will be noted that a number of wells reached their highest level of the year during the summer, which is very unusual. This is due directly to the abnormally heavy and prolonged rainfall during that period. In July the rainfall was 2.07 inches greater than normal and in September, during which month 6 wells reached the highest level for the year, the rainfall was 5.55 inches above normal. Hydrographs of 7 wells from different parts of the State are shown in figure 8.

Of the 27 observation wells in the State, 17 are in the Piedmont and Mountain sections. All of these are dug wells and end in soil and saprolite derived from disintegration of the underlying bedrock which includes granite, gneiss, schist, and similar rocks.

The water level in Cherokee well 1, in the extreme western part of the State, rose from February until June, when it began to decline. The decline was quite uniform from June until December. During December the water level rose slightly and was 0.10 foot higher on December 31, 1945, then on December 31, 1944. The only other well in the western part of the State, Transylvania County well 1, had a net rise for the year of 1.22 feet. The water level rose steadily during the first 5 months, then declined until October. The level rose slightly in October, declined in November, and rose again in December.

The water level in Surry County well 1, which is in the northwestern Piedmont section, rose very slowly during the first 6½ months, declined in the last half of July, in August, and the first half of September, rose near the end of September, then declined the rest of the year. The net loss for the year was 0.07 foot.

Davie County well 1 is in the west-central Piedmont section. The water level rose in January and February, declined in March and April, rose somewhat in May, declined in June, July, and August, rose again during September and October, then declined in November. The record for December is incomplete.

There are 10 observation wells in the vicinity of High Point, 1 being in Forsyth County, 6 in Guilford County, and 3 in Randolph County. One well is equipped with a water-stage recorder, and nine are measured near the end of each month. Of the 10 wells, 6 showed a gain in water level and 4 showed a decline. The range in water level during the year averaged

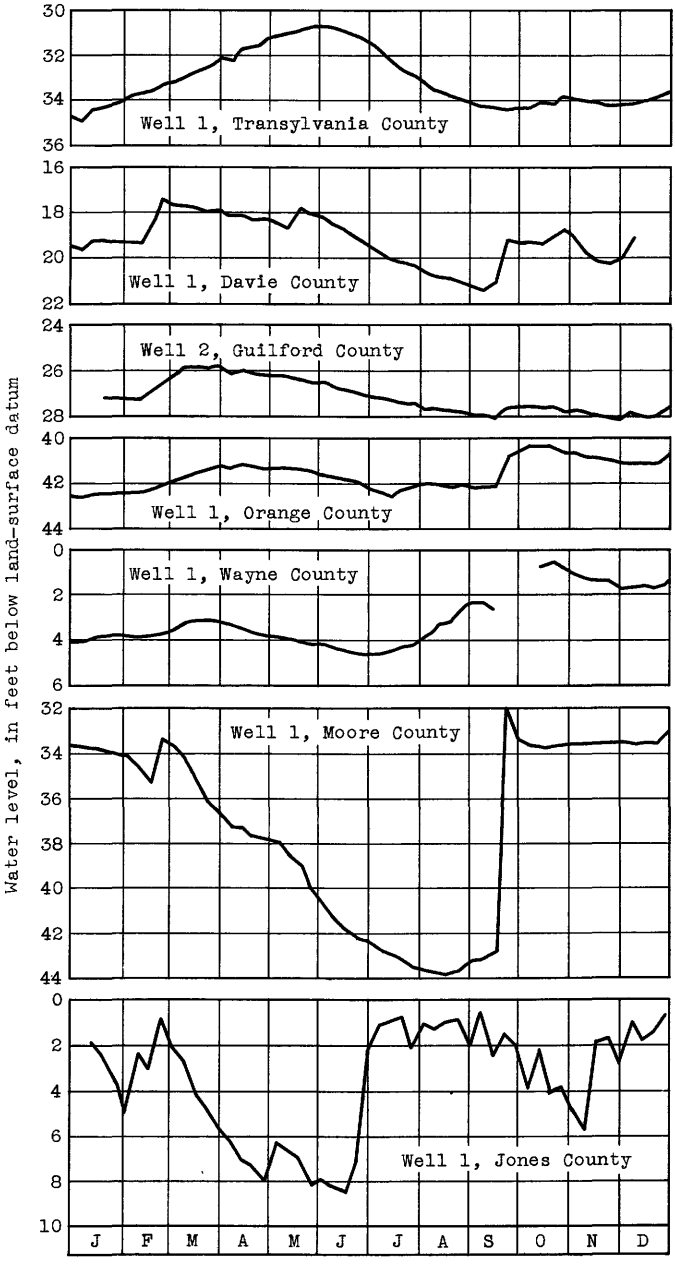

Figure 8.--Graphs showing fluctuations of water level in wells in North Carolina in 1945.

only 2.93 feet for the 10 wells as compared to an average of 4.92 feet for all 27 wells. The range for the wells in the High Point area was much less than usual due to heavy summer rainfall maintaining the water table at above-normal levels, precipitation during the summer months being greater in the central Piedmont than in the rest of the State.

The water level in all but 1 of the 10 wells in the High Point area gained slightly during January, and gained in all 10 wells during February. The water level rose in 4 wells during March and in 5 wells during April, declining in the other wells. The water level rose in 3 wells during May and in only 2 wells during both June and July. In August 5 wells showed a gain and in September and October 4 wells gained. Only one well showed a gain in November, but five gained during December. The average gain for the year was 0.43 foot.

Three observation wells are in the eastern part of the Piedmont section. These are Alamance County 1, Orange County 1, and Wake County 1. In January the water level changed only slightly in these three wells, but in February it rose considerably. In March the level rose in two wells but lowered in Alamance well 1, and during April, May, and June declined considerably in all three wells. The water level rose slightly to much in the three wells during July and dropped slightly to much during August. The level rose considerably in all three wells during September. The water level declined in all three wells in October and in two of the three in November, rising only a very little in Wake County well 1. In December the water level rose considerably in all three wells.

There are 10 observation wells in the Coastal Plain section of the State, 4 being near the Fall Zone, and the other 6 relatively near the coast. The four wells near the Fall Zone are all dug wells, three of them, Halifax County well 1, Nash County well 1, and Wayne County well 1, are in terrace deposits; and the other, Moore County well 1, is in the Tuscaloosa formation. Of these four wells, two showed slight gains in January, and two had slight declines. The water level rose in all wells in February. One well rose slightly in March, but the others declined, and all four wells declined during April, May, and June. From January to the end of June, the decline in water levels ranged from 0.48 foot in Wayne County well 1 to 8.72 feet in Moore County well 1. The decline averaged 3.46 feet. The water levels rose in all wells during August,

except in Moore County well 1, the level in that well declining 1.05 feet more. The level declined in two wells and rose in two during August, and rose in all four wells during September, in Moore County well I rising 9.78 feet. The water level declined in three of the four wells in October, declined in two of the four in November and rose in all four during December. All four wells showed a net gain for the year, ranging from 0.75 foot in Moore County well 1 to 6.32 feet in Nash County well 1.

The record for Columbus County well 1, in the southeastern Coastal Plain, is incomplete, but the water level apparently rose during January and February, then declined to 9.69 feet below the land surface on June 24. The water level rose to 5.15 feet below the land surface on June 28, and was maintained at about that position during July and August, but rose to 1.46 feet below the land surface on September 7. The water level at the end of the year was 1.84 feet below the land surface, a net gain during the year of 5.58 feet.

The water level in Jones County well 1 declined 1.3 feet during January, rose 2.7 feet during February, then declined during March and April. The water level rose slightly in May and a great deal during June. Because of excess rainfall during the summer months, the water level was maintained at a high level during July, August, and September. It declined somewhat during October and the first half of November then rose during the rest of the year, being only 0.8 foot below the land surface on December 28. The gain for the year was 2.3 feet.

Pasquotank County wells 31T and 33T, Perquimans County well 2, and Washington County well 1 are all in the northeastern Coastal Plain. The records for the Pasquotank County wells are incomplete, but the water level was high in both wells in March, declining gradually during the latter part of March, April, and May, and the first part of June. The level rose a great deal in the latter part of June and remained at a fairly high level during July, August, and September.

The water level in Perquimans County well, at Harvey Point, is affected greatly by pumpage of the wells which supplied the naval air station at that place. The water level rose nearly 3.5 feet during January and February, then declined steadily until the middle of July. At that time the Navy withdrew from the base. The water level rose steadily during

August and was 5.64 feet below the surface on August 29, the last day for which a measurement is available. The recorder was removed at that time because no one was available to tend it.

The water level in Washington County well 1 rose nearly 1.5 feet during February, but declined 3.41 feet during the following 3 months. The level rose 3.89 feet in June and July but declined 2.29 feet during August, September, and October. The level was nearly constant during November and rose 1.66 feet during December.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Alamance County

1 (*777, p. 134; 817, p. 216; 840, p. 305; 845, p. 336; 886, p. 516; 907, p. 72; 937, p. 76; *945, p. 103; *987, pp. 123-124; 1017, p. 311). Governor Holt well. J. W. Thompson. On south side of Haw River-Graham highway, 0.25 mile west of Haw River.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	21.49	21.40	17.43	19.75	20.45	21.96	23.51	23.34	24.25	20.58	22.37	23.07
2	21.25	21.47	17.62	19.83	20.49	22.01	23.57	23.39	24.35	20.71	22.40	23.10
3	21.16	21.51	17.73	19.92	20.53	22.05	23.65	23.43	24.45	20.85	22.43	23.14
4	21.10	21.57	17.88	20.02	20.55	22.13	23.70	23.51	24.54	21.02	22.46	23.14
5	21.06	21.59	17.89	20.08	20.60	22.20	23.76	23.58	24.63	21.13	22.53	22.11
6	21.06	21.64	17.55	20.20	20.69	22.27	23.80	23.64	24.68	21.17	22.60	21.16
7	20.93	21.68	17.33	20.32	20.77	22.32	23.84	23.68	24.70	21.18	22.67	20.84
8	20.46	21.69	17.38	20.37	20.84	22.33	23.91	23.71	24.70	21.16	22.72	20.83
9	20.20	21.69	17.49	20.41	20.94	22.34	23.95	23.77	24.71	21.16	22.75	20.88
10	20.12	21.74	17.61	20.48	20.99	22.36	23.98	23.84	24.73	21.23	22.82	20.94
11	20.16	21.76	17.76	20.53	21.04	22.38	24.00	23.90	24.73	21.31	22.88	21.06
12	20.24	21.80	17.90	20.57	21.11	22.42	24.08	23.94	24.71	21.37	22.91	21.20
13	20.25	21.04	18.01	20.61	21.15	22.47	24.14	24.00	24.72	21.45	22.92	21.29
14	20.30	19.66	18.13	20.64	21.20	22.52	24.18	24.07	24.73	21.54	22.93	21.33
15	20.40	19.23	18.25	20.69	21.25	22.58	24.22	24.11	24.69	21.63	22.96	21.38
16	20.44	19.09	18.35	20.75	21.31	22.64	24.05	24.11	24.31	21.73	23.02	21.43
17	20.54	18.99	18.46	20.79	21.35	22.70	23.80	23.98	21.69	21.80	23.06	21.51
18	20.61	17.98	18.59	20.78	21.36	22.76	23.33	23.88	18.96	21.86	23.11	21.57
19	20.64	17.47	18.71	20.78	21.41	22.82	22.96	23.84	18.60	21.91	23.13	21.58
20	20.68	17.39	18.77	20.78	21.49	22.87	22.80	23.82	18.56	21.95	23.16	21.61
21	20.76	17.41	18.80	20.79	21.53	22.93	22.74	23.81	18.73	21.99	23.20	21.69
22	20.78	17.04	18.86	20.83	21.57	22.99	22.73	23.79	18.99	22.04	23.19	21.74
23	20.78	16.19	18.98	20.87	21.63	23.06	22.73	23.79	19.20	22.07	23.14	21.75
24	20.82	16.10	19.12	20.88	21.68	23.10	22.76	23.80	19.37	22.10	23.12	21.75
25	20.91	16.36	19.23	20.88	21.72	23.15	22.84	23.83	19.57	22.12	23.09	21.25
26	20.99	16.63	19.32	20.81	21.75	23.19	22.92	23.87	19.76	22.14	23.10	19.92
27	21.09	16.87	19.38	20.55	21.78	23.24	22.90	23.93	19.96	22.20	23.10	19.43
28	21.15	17.19	19.47	20.46	21.82	23.30	23.05	23.99	20.14	22.28	23.10	19.26
29	21.17		19.56	20.43	21.83	23.37	23.11	24.05	20.28	22.32	23.06	18.35
30	21.29		19.61	20.44	21.87	23.45	23.20	24.10	20.43	22.35	23.05	17.88
31	21.32		19.66		21.92		23.28	24.16		22.36		17.39

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Cherokee County

1 (*987, pp. 124-125; 1017, p. 312). Elliot well. At Murphy, in rear of First Baptist Church.

Water level, in feet below land-surface datum, 1945

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.42	42.47	41.48	40.33	39.75	39.45	39.81	40.35	40.97	41.55	42.10	42.55
2	42.40	42.46	41.44	40.29	39.73	39.43	39.82	40.34	40.96	41.56	42.12	42.57
3	41.82	42.44	41.39	40.29	39.69	39.44	39.83	40.35	40.99	41.59	42.13	42.58
4	41.86	42.42	41.22	40.27	39.68	39.45	39.85	40.38	41.02	41.61	42.14	42.55
5	41.89	42.39	41.13	40.26	39.72	39.47	39.86	40.41	41.03	41.62	42.18	42.33
6	41.86	42.38	41.15	40.28	39.73	39.48	39.88	40.42	41.05	41.61	42.19	42.38
7	41.84	42.37	41.15	40.28	39.69	39.49	39.89	40.44	41.08	41.61	42.21	42.44
8	41.82	42.35	41.13	40.24	39.68	39.47	39.91	40.45	41.09	41.64	42.24	42.48
9	41.85	42.35	41.10	40.19	39.72	39.46	39.93	40.49	41.12	41.66	42.26	42.50
10	41.89	42.34	41.06	40.09	39.80	39.47	39.94	40.52	41.13	41.69	42.28	42.49
11	41.90	42.33	41.01	40.07	39.68	39.49	39.96	40.54	41.14	41.72	42.29	42.52
12	41.89	42.33	40.97	40.04	39.66	39.50	39.99	40.56	41.16	41.74	42.31	42.53
13	41.86	42.07	40.91	40.02	39.70	39.51	40.00	40.58	41.18	41.76	42.32	42.54
14	41.85	41.93	40.90	40.10	39.67	39.52	40.01	40.60	41.20	41.78	42.31	42.49
15	41.83	42.02	40.88	39.99	39.69	39.53	40.00	40.61	41.24	41.79	42.35	42.48
16	41.84	42.06	40.82	39.97	39.59	39.55	40.06	40.61	41.27	41.81	42.39	42.52
17	41.87	42.00	40.79	40.00	39.57	39.64	40.09	40.62	41.25	41.84	42.40	42.56
18	41.88	41.65	40.77	40.04	39.56	39.63	40.12	40.65	41.27	41.87	42.41	42.54
19	41.85	41.72	40.72	39.96	39.59	39.63	40.15	40.68	41.31	41.89	42.40	42.52
20	41.84	41.68	40.67	39.95	39.58	39.64	40.16	40.71	41.33	41.90	42.39	42.49
21	41.83	41.65	40.61	39.93	39.56	39.65	40.17	40.74	41.35	41.92	42.41	42.51
22	41.82	41.62	40.49	40.00	39.54	39.66	40.16	40.75	41.38	41.93	42.40	42.54
23	42.48	41.68	40.63	39.87	39.55	39.67	40.17	40.76	41.42	41.89	42.42	42.53
24	42.49	41.79	40.64	39.86	39.54	39.68	.....	40.78	41.43	41.95	42.46	42.52
25	42.48	41.77	40.62	39.81	39.52	39.67	.....	40.80	41.44	41.97	42.47	42.43
26	42.47	41.61	40.47	39.83	39.50	39.68	40.18	40.82	41.45	42.00	42.49	42.38
27	42.48	41.77	40.43	39.87	39.50	39.72	40.29	40.86	41.47	42.04	42.48	42.43
28	42.45	41.71	40.44	39.86	39.49	39.74	40.22	40.88	41.49	42.07	42.49	42.42
29	42.46		40.41	39.49	39.47	39.75	40.24	40.91	41.51	42.09	42.50	42.38
30	42.46		40.39	39.63	39.46	39.78	40.32	40.93	41.53	42.08	42.51	42.39
31	42.47		40.34		39.46		40.35	40.95		42.09		42.35

Columbus County

1 (*1017, pp. 312-313). Mrs. C. W. Maultsby. In Whiteville.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Dec.
1	7.42	....	7.16	8.68	....	5.54	5.27	5.34	....
2	7.46	....	7.22	8.69	....	5.70	5.26	5.47	....
3	7.51	....	7.28	8.70	....	5.81	5.33	5.61	....
4	7.54	....	7.35	8.70	....	5.68	5.42	5.73	....
5	7.57	....	7.41	8.72	....	5.62	5.15	3.83	....
6	7.61	5.94	7.50	8.74	....	5.63	4.91	1.66	3.65
7	7.62	6.00	7.57	8.76	....	5.62	4.93	1.46	3.08
8	7.55	6.09	7.62	8.78	....	5.62	5.02	1.97	3.30
9	7.40	6.16	7.69	8.82	....	5.73	5.18	2.36	3.62
10	7.23	6.23	7.76	8.85	....	5.88	5.31	2.67	....
11	7.09	6.32	7.83	8.88	....	6.04	5.45	2.97	....
12	6.99	6.40	7.90	8.91	....	6.17	5.60	3.33	....
13	6.91	6.47	7.97	8.94	....	6.27	5.71	3.53	....
14	6.88	6.55	8.04	8.97	....	6.10	5.80	....	....
15	6.89	6.58	8.10	9.01	....	5.29	5.91	....	....
16	6.91	6.58	8.18	....	....	4.37	5.99	....	3.44
17	6.96	6.56	8.24	....	....	3.06	6.07	....	3.30
18	7.00	6.54	8.30	....	....	2.60	6.08	....	3.61
19	7.02	6.55	8.36	....	....	2.50	6.11	....	2.71
20	6.79	6.55	8.42	....	9.47	2.62	5.68	....	1.70
21	6.22	6.56	8.48	....	9.52	2.39	4.91	....	2.04
22	....	6.60	8.54	....	9.57	3.83	4.63	....	2.37
23	....	6.67	8.58	....	9.63	3.29	4.64	2.83	2.63
24	....	6.72	8.64	....	9.69	3.72	4.68	3.06	2.97
25	....	6.79	8.67	....	9.13	4.01	4.37	3.28	3.18

1--Continued.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Mar.	Apr.	May	June	July	Aug.	Sept.	Dec.
26	....	6.85	8.69	....	7.09	4.25	4.32	3.47	1.63
27	....	6.90	8.70	....	5.41	4.45	4.49	3.65	1.69
28	....	6.96	8.70	....	5.15	4.66	4.67	....	2.04
29	....	7.01	8.70	....	5.23	4.86	4.85	....	2.06
30	....	7.06	8.69	....	5.38	5.07	5.03	....	1.84
31	....	7.10		....		5.20	5.19		1.84

Davie County

1 (*777, p. 131, 817, p. 214; 840, p. 303; 845, p. 334; 886, p. 514; 907, p. 70; 937, p. 78; *945, pp. 103-104; *987, p. 125; 1017, p. 313). Kurfee well. At Mocksville, 1 block south of courthouse, on U. S. Highways 64 and 601.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	19.55	19.38	17.58	17.97	18.46	18.20	19.52	20.49	21.32	19.43	18.89	20.09
2	19.75	19.38	17.63	17.98	18.48	18.22	19.53	20.49	21.32	19.42	19.03	20.12
3	19.80	19.38	17.63	17.98	18.47	18.26	19.59	20.49	21.38	19.45	19.14	20.10
4	19.74	19.38	17.65	18.00	18.46	18.35	19.64	20.52	21.42	19.52	19.26	19.79
5	19.69	19.34	17.72	18.01	18.49	18.43	19.67	20.57	21.44	19.53	19.37	19.07
6	19.66	19.37	17.69	18.12	18.54	18.49	19.70	20.58	21.43	19.42	19.49	19.23
7	19.34	19.40	17.69	18.14	18.57	18.52	19.75	20.59	21.46	19.43	19.57	19.31
8	19.36	19.37	17.77	18.12	18.59	18.52	19.79	20.63	21.48	19.47	19.62	.....
9	19.40	19.39	17.78	18.10	18.66	18.56	19.82	20.69	21.50	19.49	19.69	.....
10	19.45	19.43	17.78	18.11	18.65	18.59	19.84	20.71	21.52	19.52	19.77	.....
11	19.45	19.45	17.79	18.12	18.67	18.64	19.90	20.74	21.53	19.52	19.86	.....
12	19.41	19.49	17.81	18.14	18.69	18.68	19.96	20.77	21.58	19.51	19.89	.....
13	19.31	18.83	17.81	18.15	18.69	18.73	20.00	20.79	21.55	19.46	19.90	.....
14	19.30	18.87	17.82	18.16	18.73	18.78	20.01	20.81	21.13	19.41	19.90	.....
15	19.30	18.99	17.83	18.17	18.55	18.83	20.03	20.81	21.09	19.37	20.02	.....
16	19.29	18.98	17.84	18.22	18.31	18.85	20.08	20.85	20.75	19.30	20.13	.....
17	19.36	18.56	17.87	18.24	18.11	18.89	20.13	20.88	18.70	19.23	20.14	.....
18	19.37	18.18	17.92	18.27	17.86	18.92	20.15	20.92	18.55	19.19	20.16	.....
19	19.33	18.26	17.94	18.35	17.83	18.97	20.18	20.97	18.95	19.15	20.07	.....
20	19.30	18.20	17.93	18.38	17.84	19.01	20.20	21.02	19.08	19.11	20.18	.....
21	19.32	18.10	17.89	18.38	17.85	19.05	20.21	21.03	19.16	19.10	20.20	.....
22	19.27	17.76	17.91	18.37	17.87	19.09	20.23	21.03	19.24	19.07	20.06	.....
23	19.23	17.39	17.98	18.37	17.93	19.14	20.25	21.06	19.30	18.96	20.16	.....
24	19.24	17.49	18.00	18.31	17.98	19.16	20.29	21.09	19.31	18.92	20.22	....
25	19.28	17.49	18.05	18.26	18.00	19.20	20.31	21.10	19.31	18.86	20.23	.....
26	19.29	17.45	18.08	18.31	18.01	19.23	20.33	21.14	19.32	18.81	20.30	.....
27	19.33	17.41	17.99	18.40	18.05	19.31	20.36	21.20	19.34	18.80	20.31	.....
28	19.32	17.49	18.01	18.43	18.08	19.36	20.38	21.21	19.36	18.78	19.96	.....
29	19.28		18.02	18.44	18.08	19.40	20.40	21.24	19.38	18.73	20.03	.....
30	19.34		18.00	18.44	18.11	19.45	20.45	21.28	19.41	18.65	20.06	.....
31	19.35		17.95		18.16		20.49	21.30		18.71		.....

Forsyth County

19 (*777, pp. 138-139; *817, pp. 218-224; *840, pp. 309-315; 845, pp. 340, 341; 886, p. 521; 907, p. 77; 937, p. 81; *945, p. 104; *987, p. 125; 1017, pp. 313-314). W. C. Michael. On High Point-Kernersville highway, 1 mile south of Kernersville and 40 feet west of highway.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	43.88	Apr. 26	43.71	July 26	43.48	Oct. 28	43.73
Feb. 22	43.33	May 24	43.65	Aug. 29	43.66	Nov. 25	43.93
Mar. 29	43.75	June 28	43.74	Sept.27	43.76	Dec. 30	43.59

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Guilford County

2 (*777, p. 138; *817, p. 219; *840, pp. 308-315; 845, p. 339; 886, p. 519; 907, p. 78; 937, p. 81; *945, pp. 104-105; *987, p. 126; 1017, p. 314). Lindale Dairy Corporation. About 1.5 miles northwest of High Point city limits and 0.5 mile north of U. S. Highway 70.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	27.38	27.24	26.34	25.90	26.15	26.52	27.08	27.50	27.86	27.58	27.71	28.11
2	27.56	27.23	26.30	25.86	26.15	26.51	27.07	27.48	27.85	27.53	27.71	28.15
3	27.59	27.22	26.20	25.90	26.08	26.51	27.11	27.49	27.87	27.53	27.71	28.14
4	27.52	27.24	26.21	25.91	26.05	26.59	27.14	27.51	27.91	27.59	27.73	28.09
5	27.48	27.16	26.22	25.92	26.12	26.65	27.15	27.56	27.92	27.59	27.78	28.03
6	27.46	27.20	25.97	26.09	26.17	26.69	27.13	27.56	27.94	27.53	27.83	27.93
7	27.35	27.22	25.96	26.08	26.19	26.68	27.16	27.53	27.94	27.49	27.87	27.90
8	27.26	27.13	26.03	26.01	26.17	26.63	27.18	27.55	27.94	27.48	27.87	27.96
9	27.27	27.16	26.00	25.97	26.28	26.65	27.20	27.61	27.94	27.48	27.87	27.98
10	27.35	27.20	25.95	26.00	26.19	26.66	27.19	27.62	27.94	27.53	27.90	27.91
11	27.37	27.21	25.94	26.00	26.26	26.70	27.24	27.63	27.93	27.55	27.93	27.98
12	27.35	27.25	25.94	26.00	26.27	26.73	27.30	27.63	27.96	27.55	27.94	28.03
13	27.22	27.09	25.89	26.00	26.20	26.75	27.31	27.64	28.02	27.53	27.91	28.02
14	27.19	27.05	25.88	25.98	26.25	26.79	27.29	27.64	28.03	27.55	27.84	28.02
15	27.21	27.10	25.87	25.97	26.27	26.81	27.27	27.63	28.03	27.56	27.90	.....
16	27.20	27.02	25.85	26.02	26.31	26.82	27.33	27.63	28.04	27.56	28.00	.....
17	27.30	26.98	25.84	26.00	26.29	26.81	27.36	27.70	27.96	27.56	27.99	.....
18	27.30	26.91	25.90	26.03	26.27	26.81	27.37	27.72	27.21	27.59	27.96	.....
19	27.22	26.94	25.88	26.12	26.37	26.84	27.38	27.75	27.52	27.60	27.94	.....
20	27.19	26.85	25.80	26.10	26.41	26.86	27.39	27.77	27.56	27.59	27.95	28.00
21	27.22	26.72	25.71	26.05	26.40	26.87	27.38	27.78	27.58	27.60	28.00	.....
22	27.14	26.55	25.78	26.08	26.38	.....	27.36	27.78	27.60	27.61	27.93	.....
23	27.10	26.51	25.84	26.08	26.45	.....	27.35	27.78	27.61	27.59	27.98	.....
24	27.09	26.60	25.85	26.00	26.47	.....	27.39	.....	27.61	27.61	28.03	.....
25	27.14	26.56	25.89	25.98	26.48	.....	27.41	.....	27.61	27.66	28.04	.....
26	27.14	26.41	25.88	25.99	26.47	.....	27.42	.....	27.60	27.67	28.08	.....
27	27.20	26.29	25.88	26.12	26.47	.....	27.43	.....	27.59	27.73	28.10	27.85
28	27.17	26.33	25.92	26.14	26.49	27.00	27.43	.....	27.57	27.76	28.05	27.78
29	27.12		25.91	26.09	26.45	27.02	27.45	.....	27.56	27.73	28.01	27.69
30	27.20		25.87	26.12	26.47	27.05	27.49	27.85	27.56	27.78	28.04	27.59
31	27.20		25.81		26.51		27.51	27.86		27.73		27.46

4 (*777, pp. 138-139; *817, pp. 218-221; 840, pp. 308-315; 845, p. 339; 886, pp. 518-519; 907, p. 78; 937, p. 81; *945, p. 105; *987, p. 126; 1017, p. 314). W. O. Atkins. About 0.3 mile west of Colfax and 300 feet south of U. S. Highway 401.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	30.62	Apr. 26	29.65	July 26	29.65	Oct. 28	30.54
Feb. 22	29.05	May 24	29.45	Aug. 29	29.63	Nov. 25	29.65
Mar. 29	29.45	June 28	29.51	Sept. 27	29.75	Dec. 30	29.70

5 (*777, p. 138-139; *817, pp. 218-221; *840, pp. 308-315; 845, p. 339; 886, p. 518-519; 907, p. 78; 937, p. 82; *945, p. 105; 987, p. 126; 1017, p. 315). Isaac Tonkins. Near Groomtown, about 6 miles southwest of Greensboro. No measurements made in 1945.

7 (*777, pp. 138-139; *817, pp. 218-221; *840, pp. 308-315; 845, p. 339; 886, pp. 518-519; 907, p. 78; 937, p. 82; *945, p. 105; *987, p. 126; 1017, p. 315). E. J. Welch. At 1403 E. Lexington Avenue, High Point, 80 feet north of street.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	22.29	Apr. 26	20.52	July 26	23.19	Oct. 28	22.96
Feb. 22	20.12	May 24	21.22	Aug. 29	22.73	Nov. 25	23.00
Mar. 29	20.03	June 28	22.35	Sept.27	22.88	Dec. 30	20.67

8 (*777, pp. 138-139; 817, pp. 218-221; *840, pp. 308-315; 845, p. 339; 886, pp. 518-519; 907, p. 78; 937, p. 82; *945, p. 105; *987, p. 127; 1017, p. 315). Welch Place. At 1304 E. Lexington Avenue, High Point, about 800 feet west of well 7.

Water level, in feet below land-surface datum, 1945

Jan. 25	27.17	Apr. 26	26.14	July 26	26.62	Oct. 28	26.15
Feb. 22	25.07	May 24	26.35	Aug. 29	26.76	Nov. 25	26.37
Mar. 29	25.67	June 28	26.51	Sept.27	26.80	Dec. 30	24.60

12 (*777, pp. 138-139; *817, pp. 218-221; *840, pp. 308-315; 845, p. 340; 886, p. 518-520; 907, p. 78; 937, p. 82; *945, p. 106; *987, p. 147; 1017, p. 315). John Blair Estate. 113 S. Tate Street, South High Point, 80 feet northeast of street.

Water level, in feet below land-surface datum, 1945

Jan. 25	32.10	Apr. 26	30.10	July 26	32.87	Oct. 28	32.81
Feb. 22	30.95	May 24	30.53	Aug. 29	32.48	Nov. 25	33.53
Mar. 29	31.28	June 28	30.79	Sept.30	32.79	Dec. 30	33.68

14 (*777, pp. 138-139; *817, pp. 218-221; *840, pp. 308-315; 845, p. 340; 886, pp. 518-521; 907, p. 79; 937, p. 82; *945, p. 106; *987, p. 127; 1017, p. 315). Clodfelter Dairy. At southeastern corner of High Point, 0.5 mile east of U. S. Highway 311, near Springfield Church.

Water level, in feet below land-surface datum, 1945

Jan. 25	14.77	Apr. 26	13.58	July 26	15.40	Oct. 28	14.15
Feb. 22	12.98	May 24	14.14	Aug. 29	14.73	Nov. 25	15.28
Mar. 29	13.84	June 28	13.89	Sept.30	13.96	Dec. 30	15.40

15 (*777, pp. 138-139; *817, pp. 218-221; *840, pp. 308-315; 845, p. 340; 886, pp. 518-521; 907, p. 79; 937, p. 82; 945, p. 106; 987, p. 127; 1017, p. 315). C. C. Robbins. About 0.3 mile south of High Point corporation limits, 110 feet west of U. S. Highway 311. No measurements made in 1945.

Halifax County

1 (*777, p. 133; 817, p. 213; 840, p. 302; 845, p. 333; 886, p. 513; 907, p. 69; 937, p. 75; 945, pp. 106-107; *987, pp. 127-128; 1017, pp. 315-316). Freuler well. At Roanoke Rapids, 500 feet north of U. S. Highway 158, and 0.5 mile west of Seaboard Railway station.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	5.43	5.67	3.36	5.09	6.00	6.12	7.18	4.52	....	4.94	5.70	6.45
2	5.70	5.68	3.44	5.03	6.07	6.15	7.20	4.62	....	....	5.73	6.50
3	5.70	5.72	3.46	5.18	5.98	6.20	7.21	4.73	....	....	5.74	6.48
4	5.62	5.75	3.26	5.20	6.00	6.28	7.26	4.61	....	....	5.71	6.31
5	5.65	5.70	3.13	5.24	6.10	6.35	7.26	4.73	....	....	5.79	5.71
6	5.65	5.76	3.02	5.43	6.12	6.41	7.28	4.80	....	....	5.90	5.77
7	5.23	5.78	3.18	5.41	6.17	6.42	7.34	4.92	....	....	5.91	5.86
8	5.16	5.69	3.37	5.38	6.18	6.40	7.36	5.03	....	....	5.92	5.98
9	5.21	5.79	3.50	5.44	6.26	6.41	7.41	5.15	....	....	5.97	5.96
10	5.30	5.83	3.55	5.49	6.18	6.45	7.00	....	....	4.72	6.00	5.90
11	5.37	5.88	3.68	5.50	6.29	6.51	6.70	....	....	4.76	6.01	6.10
12	5.25	5.92	3.76	5.51	6.28	6.55	6.86	....	....	4.79	6.00	6.11
13	5.18	4.90	3.85	5.52	6.25	6.59	6.90	....	....	4.89	5.99	6.06

1 --Continued.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
14	5.26	4.60	3.94	5.57	6.37	6.67	6.93	....	....	4.95	5.90	5.99
15	5.30	4.77	4.00	5.61	6.36	6.70	6.61	....	....	5.02	6.04	6.04
16	5.23	4.79	4.06	5.67	6.40	6.72	5.90	....	....	5.02	6.11	6.11
17	5.39	4.80	4.14	5.67	6.36	6.74	5.04	....	....	5.12	6.08	6.19
18	5.41	4.62	4.28	5.67	6.26	6.76	4.31	....	....	5.18	6.10	6.15
19	5.33	4.65	4.32	5.75	6.39	6.80	3.70	....	....	5.22	6.05	5.91
20	5.35	4.58	4.30	5.78	6.46	6.81	3.47	....	....	5.24	6.18	6.00
21	5.40	4.30	4.22	5.77	6.47	6.85	3.41	....	....	5.31	6.19	6.04
22	5.27	3.72	4.34	5.83	6.49	6.89	3.62	....	....	5.32	6.15	6.00
23	5.27	2.96	4.51	5.86	6.52	6.92	3.90	....	....	5.28	6.22	6.02
24	5.30	2.99	4.58	5.66	6.58	6.94	4.17	....	....	5.38	6.28	6.00
25	5.46	3.09	4.71	5.69	6.59	6.93	4.36	....	....	5.42	6.31	5.70
26	5.50	3.10	4.74	5.76	6.46	6.96	4.52	....	....	5.45	6.37	5.29
27	5.52	3.10	4.76	5.89	5.81	7.05	4.62	....	....	5.58	6.34	5.40
28	5.50	3.22	4.85	5.96	5.92	7.06	4.00	....	....	5.59	6.25	5.36
29	5.52		4.87	5.92	5.98	7.10	4.08	....	....	5.60	6.25	4.39
30	5.59		5.03	5.98	6.04	7.15	4.33	5.85	4.84	5.62	6.36	4.11
31	5.62		4.90		6.10		4.50	5.86		5.59		3.84

Jones County

1 (*945, p. 107; *987, p. 128; 1017, p. 316). Geo. E. Weeks. At southeastern edge of Maysville.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	2.8	Apr. 3	6.1	July 10	1.4	Oct. 5	3.9
5	2.3	6	6.4	13	1.0	9	2.0
9	1.7	10	6.5	17	1.1	12	2.2
12	1.9	13	7.0	20	.8	16	3.7
16	2.4	24	7.5	24	1.1	19	4.1
19	2.6	27	7.9	27	2.2	23	4.2
23	3.4	May 1	8.1	31	.9	26	4.0
26	3.6	4	6.3	Aug. 3	1.1	30	4.5
30	4.4	8	6.4	7	1.1	Nov. 2	4.9
Feb. 2	4.9	11	6.6	10	1.3	6	5.4
6	3.2	15	7.3	14	1.1	9	5.7
9	2.4	18	6.9	17	1.0	13	5.0
13	2.6	22	7.9	21	.7	16	1.9
16	3.0	25	8.1	24	.9	20	2.4
20	3.0	29	7.6	28	1.9	23	1.7
23	.9	June 1	7.8	31	2.2	27	2.4
27	1.7	5	8.0	Sept. 4	.7	30	2.8
Mar. 2	2.1	8	8.2	7	.6	Dec. 4	3.2
6	2.6	12	8.1	11	2.2	7	1.0
9	2.9	15	8.4	14	2.5	11	2.2
13	3.5	18	8.2	18	.8	14	1.8
16	4.1	22	7.2	21	1.5	18	1.1
20	4.5	26	4.2	25	1.8	21	1.4
23	4.8	29	2.2	28	2.1	25	1.9
27	5.1	July 3	1.7	Oct. 2	3.0	28	.8
30	5.6	6	1.2				

Moore County

1 (*1017, p. 317) The Citizens Bank & Trust Co. In Pinebluff.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	33.62	34.13	33.76	36.72	37.87	40.48	42.39	43.42	43.25	33.52	33.57	33.54
2	33.71	34.15	33.71	36.78	37.92	40.58	42.43	43.44	43.22	33.53	33.57	33.55
3	33.71	34.19	33.71	36.83	37.92	40.69	42.47	43.46	43.20	33.60	33.56	33.53
4	33.70	34.25	33.79	36.91	37.91	40.80	42.51	43.48	43.18	33.64	33.57	33.49
5	33.72	34.25	33.88	36.97	37.92	40.91	42.54	43.50	43.14	33.63	33.58	33.50
6	33.73	34.31	33.88	37.07	37.98	41.01	42.58	43.52	43.10	35.61	33.59	33.49
7	33.71	34.38	33.96	37.14	38.05	41.11	42.61	43.56	43.06	33.63	33.58	33.57
8	33.72	34.39	34.05	37.17	38.12	41.19	42.65	43.58	43.01	33.65	33.57	33.55
9	33.75	34.49	34.13	37.20	38.22	41.26	42.69	43.61	42.96	33.68	33.57	33.54
10	33.78	34.64	34.20	37.23	38.32	41.30	42.73	43.64	42.92	33.69	33.57	33.53
11	33.79	34.78	34.33	37.27	38.42	41.36	42.77	43.66	42.88	33.70	33.57	35.57
12	33.79	34.85	34.49	37.29	38.51	41.42	42.82	43.68	42.85	33.69	33.56	33.57
13	33.77	35.08	34.62	37.31	38.55	41.49	42.86	43.70	42.83	33.70	33.54	33.55
14	33.79	35.21	34.78	37.34	38.60	41.56	42.89	43.71	42.80	33.70	33.52	33.53
15	33.81	35.43	34.93	37.39	38.66	41.63	42.92	43.72	42.76	33.70	33.58	33.55
16	33.82	35.39	35.06	37.44	38.74	41.69	42.94	43.73	42.69	33.68	33.57	33.60
17	33.85	35.27	35.21	37.48	38.82	41.74	42.96	43.73	33.70	33.69	33.55	33.61
18	33.87	35.17	35.39	37.50	38.86	41.80	42.98	43.74	30.66	33.69	33.54	33.59
19	33.87	35.16	35.55	37.56	38.92	41.85	43.01	43.75	30.31	33.68	33.53	33.53
20	33.90	35.09	35.65	37.62	39.01	41.90	43.03	43.76	31.61	33.66	33.55	33.60
21	33.92	34.86	35.69	37.63	39.11	41.95	43.08	43.76	31.96	33.66	33.53	33.60
22	33.91	34.67	35.75	37.67	39.22	42.00	43.12	43.76	32.36	33.65	33.52	33.60
23	33.92	34.31	35.89	37.70	39.36	42.05	43.14	43.72	32.62	33.63	33.53	33.62
24	33.94	33.42	36.00	37.66	39.52	42.09	43.17	43.63	32.81	33.65	33.55	33.62
25	33.98	33.49	36.13	37.64	39.68	42.13	43.20	43.50	32.97	33.65	33.54	33.55
26	33.98	33.54	36.24	37.65	39.82	42.16	43.23	43.42	33.11	33.64	33.55	33.55
27	34.02	33.60	36.32	37.71	39.95	42.21	43.26	43.34	33.24	33.67	33.54	33.35
28	34.02	33.72	36.43	37.79	40.06	42.26	43.28	43.32	33.33	33.66	33.50	33.27
29	34.03		36.53	37.80	40.14	42.30	43.32	43.30	33.40	33.63	33.50	33.22
30	34.05		36.60	37.81	40.24	42.34	43.35	43.28	33.49	33.60	33.52	32.95
31	34.07		36.64		40.36		43.39	43.27		33.58		32.90

Nash County

1 (*777, p. 135; 817, p. 216; 840, p. 304; 845, p. 336; 886, p. 515; 907, p. 72; 937, p. 79; 945, p. 108; 987, p. 129; 1017, pp. 317-318). Alston well. About 0.5 mile north of Tar River, 100 yards east of State Highway 58, and 8 miles south of Nashville.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	6.60	Mar. 21	4.88	June 9	9.60	Aug. 22	6.07
6	6.76	24	5.47	13	9.78	25	6.20
10	4.97	28	6.77	16	9.93	Sept. 5	7.07
13	2.75	31	7.00	20	10.08	8	7.19
17	3.41	Apr. 4	7.85	23	10.28	12	5.40
20	4.08	7	8.03	27	10.72	15	5.47
24	4.90	11	8.41	30	10.31	19	1.78
27	5.58	14	8.63	July 4	10.38	22	1.63
31	6.58	18	8.85	7	10.49	26	2.96
Feb. 3	6.92	21	9.08	11	9.87	29	3.18
7	7.13	25	9.18	14	10.10	Oct. 3	4.12
10	7.43	28	9.24	18	1.64	6	4.95
14	5.87	May 9	9.78	21	1.10	10	6.14
17	2.98	12	9.91	25	2.07	13	6.48
21	.90	16	9.99	28	3.19	17	6.87
24	1.09	19	10.10	Aug. 1	4.08	20	7.48
28	.96	23	10.14	4	4.12	24	7.58
Mar. 3	1.59	26	10.46	8	5.20	27	8.00
7	1,88	30	9.87	11	5.46	31	8.34
10	2.26	June 2	9.33	15	6.33	Nov. 3	8.43
14	3.27	6	9.48	18	6.6¢	7	8.54
17	3.95						

1 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Nov. 10	8.69	Nov. 24	7.22	Dec. 8	2.65	Dec. 22	2.51
14	5.77	28	7.70	12	4.07	26	1.78
17	6.22	Dec. 1	7.90	15	3.18	29	1.06
21	6.95	5	2.50	19	2.74		

Orange County

1 (*845, p. 337; 886, pp. 516-517; 907, p. 73; 937, p. 77; *945, p. 109; *987, pp. 129-130; 1017 p. 318). McCauley well. At Chapel Hill, on west side of Chi Psi Fraternity house on Cameron Street.

Water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	42.56	42.42	41.97	41.36	41.27	41.52	42.16	42.01	42.06	40.56	40.53	41.04
2	42.68	42.40	41.93	41.31	41.27	41.52	42.17	42.00	42.05	40.49	40.54	41.07
3	42.68	42.40	41.88	41.33	41.22	41.54	42.20	41.99	42.10	40.51	40.54	41.04
4	42.63	42.39	.....	41.32	41.21	41.60	42.23	42.00	42.11	40.54	40.58	40.99
5	42.61	42.35	41.85	41.31	41.25	41.63	42.24	42.01	42.11	40.49	40.64	40.91
6	42.57	42.37	41.75	41.40	41.27	41.66	42.26	41.98	42.12	40.44	40.67	40.87
7	42.51	42.35	41.72	41.37	41.28	41.66	42.29	41.96	42.12	40.41	40.69	40.91
8	42.49	42.32	41.68	41.31	41.28	41.65	42.31	41.98	42.11	40.41	40.68	41.01
9	42.51	42.35	41.68	41.30	41.34	41.67	42.33	42.01	42.11	40.41	40.70	41.00
10	42.54	42.36	.....	41.30	41.27	41.69	42.35	42.02	42.10	40.45	40.73	40.93
11	42.56	42.36	.....	41.29	41.35	41.72	42.39	42.02	42.09	40.45	40.75	41.06
12	42.53	42.37	41.66	41.28	41.32	41.74	42.43	42.03	42.14	40.41	40.74	41.08
13	42.47	42.29	41.63	41.27	41.29	41.77	42.44	42.03	42.17	40.43	40.71	41.04
14	42.47	42.32	41.61	41.25	41.33	41.80	42.45	42.02	42.17	40.44	40.66	40.96
15	42.47	42.34	41.59	41.26	41.34	41.82	42.45	42.00	42.12	40.45	40.80	40.99
16	42.46	42.30	41.56	41.26	41.36	41.83	42.46	42.01	41.95	40.42	40.85	41.05
17	42.50	42.26	41.55	41.23	41.34	41.84	42.43	42.02	41.62	40.44	40.80	41.09
18	42.49	42.26	41.56	41.24	41.32	41.86	42.39	42.04	41.30	40.46	40.81	41.05
19	42.44	42.27	41.51	41.30	41.39	41.88	42.35	42.07	41.17	40.46	40.77	40.92
20	42.44	42.22	41.47	41.26	41.42	41.90	42.24	42.08	41.05	40.45	40.85	41.03
21	42.44	42.13	41.41	41.23	41.42	41.92	42.21	42.02	40.97	40.46	40.86	41.05
22	42.39	42.13	41.43	41.26	41.41	41.94	42.18	41.99	40.92	40.45	40.81	41.03
23	42.38	42.09	41.45	41.25	41.45	41.97	42.17	42.00	40.85	40.43	40.87	41.07
24	42.38	42.10	41.44	41.21	41.46	41.98	42.15	42.01	40.78	40.48	40.92	41.09
25	42.40	42.08	41.44	41.19	41.47	41.98	42.13	41.99	40.72	40.48	40.92	40.95
26	42.40	42.02	41.41	41.20	41.46	42.00	42.12	42.01	40.68	40.50	40.98	40.86
27	42.42	41.98	41.39	41.26	41.48	42.05	42.11	42.04	40.65	40.57	40.98	40.95
28	42.39	41.98	41.40	41.26	41.49	42.07	42.05	42.04	40.62	40.58	40.90	40.91
29	42.39		41.37	41.23	41.46	42.10	42.05	42.06	40.59	40.59	40.90	40.77
30	42.40		41.34	41.26	41.49	42.13	42.06	42.06	40.59	40.56	40.97	40.72
31	42.41		41.31		41.52		42.05	42.07		40.52		40.65

Pasquotank County

31T (*817, pp. 226-227; 840, p. 317; 845, p. 344; 886, p. 526; 907, p. 85; 937, p. 87; *945, p. 110; *987, p. 130; 1017, pp. 318-319). 3 miles west of Elizabeth City and 1,000 feet north of city well fields.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Mar. 8	1.20	Mar. 18	1.89	Mar. 28	2.41	Apr. 17	3.19
9	1.30	19	1.95	29	2.45	18	3.21
10	1.37	20	1.98	30	2.49	19	3.35
11	1.53	21	1.87	Apr. 10	3.03	20	3.45
12	1.58	22	1.94	11	3.09	21	3.44
13	1.65	23	2.05	12	3.13	22	3.49
14	1.74	24	2.15	13	3.15	23	3.61
15	1.55	25	2.24	14	3.17	24	3.54
16	1.63	26	2.30	15	3.18	May 1	4.07
17	1.74	27	2.34	16	3.18	2	4.18

31T --Continued.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
May 3	4.14	June 3	3.98	July 13	1.88	Sept.19	0.63
4	4.09	4	4.09	14	1.70	20	.76
5	4.16	5	4.27	15	1.76	21	.90
6	4.27	12	3.45	16	1.13	22	.73
7	4.39	13	3.58	17	.30	23	.77
8	4.47	14	3.75	Aug. 7	1.22	24	.71
15	4.90	15	3.90	8	1.34	25	.82
16	4.94	16	4.02	9	1.47	Oct. 2	1.67
17	4.97	17	4.08	10	1.64	3	1.76
18	3.48	18	4.07	11	1.78	4	1.92
22	3.77	19	4.12	12	1.92	5	1.94
23	3.33	July 3	1.10	13	2.03	6	1.86
24	3.98	4	1.45	14	2.10	7	1.79
25	4.10	5	1.60	15	2.17	8	1.95
26	4.19	6	1.50	16	2.21	9	2.05
27	4.25	7	1.00	17	1.45	10	2.18
28	4.32	8	1.36	18	1.56	11	2.27
29	4.35	9	1.40	19	1.75	12	2.32
30	3.90	10	1.60	20	1.60	13	2.38
31	3.84	11	1.20	21	.78	14	2.48
June 1	3.88	12	1.70	Sept.18	.47	15	2.48
2	3.93						

33T (*845, pp. 344-345; 886, p. 526; 907, p. 86; 937, p. 88; *945, p. 110; *987, p. 131; 1017, p. 319). 3 miles west of Elizabeth City in city well field, about 20 feet west of pump house.

Mean daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Mar. 8	1.90	Apr. 19	4.77	June 2	6.06	Aug. 12	3.22
9	1.82	20	4.78	3	6.10	13	3.35
10	1.78	21	4.72	4	6.32	14	3.50
11	1.98	22	4.97	5	6.52	15	3.50
12	1.95	23	5.02	13	6.10	16	3.67
13	1.90	May 1	5.09	14	6.27	17	3.55
14	1.99	2	5.30	15	6.36	18	3.46
15	1.96	3	5.10	16	6.37	19	3.61
16	1.90	4	5.05	17	6.30	Sept.18	1.50
17	1.96	5	5.23	18	6.28	19	1.50
18	2.20	6	5.39	19	6.40	20	1.61
19	2.15	7	5.52	July 3	3.27	21	1.77
20	2.01	8	5.57	4	3.25	22	1.90
21	1.88	15	6.00	5	3.29	23	1.92
22	2.06	16	6.11	6	3.30	24	1.86
23	2.45	17	6.10	7	3.03	25	2.53
24	2.48	18	5.50	8	3.05	Oct. 2	2.55
25	2.64	19	5.22	9	3.12	3	2.79
26	2.60	20	5.55	10	3.14	4	3.00
27	2.59	21	5.66	11	3.10	5	2.94
28	2.72	22	5.68	12	3.26	6	2.85
29	2.70	23	5.84	13	3.31	7	2.78
30	2.67	24	5.98	14	3.41	8	....
Apr. 10	4.10	25	6.08	15	3.42	9	3.10
11	4.15	26	6.14	16	3.48	10	3.33
12	4.19	27	6.20	17	2.60	11	3.41
13	4.22	28	6.19	Aug. 7	2.45	12	3.41
14	4.19	29	6.05	8	2.68	13	3.52
15	4.32	30	5.89	9	2.82	14	3.69
16	4.42	31	5.95	10	2.94	15	3.80
17	4.25	June 1	6.08	11	3.06	16	3.75
18	4.39						

Perquimans County

2 (*1017, p. 320). Naval Auxiliary Air Station well 2. In Harvey Point, about 250 feet south of water tanks and distribution pump station.

Highest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
1	9.69	9.60	5.87	8.79	9.69	11.14	12.73	....
2	8.99	9.55	6.05	8.85	10.12	11.90	13.03	8.27
3	9.42	9.24	5.53	9.88	9.91	11.40	14.41	8.33
4	9.69	9.09	6.05	9.80	10.40	11.87	13.13	8.42
5	9.49	8.70	5.45	9.51	9.33	11.70	13.47	8.38
6	9.58	8.74	5.80	10.16	9.46	11.83	.....	7.37
7	9.07	....	6.38	....	9.73	12.00	.....	7.99
8	8.86	9.88	6.82	....	10.88	11.55	.....	8.14
9	8.78	8.82	7.73	....	9.68	11.86	.....	8.61
10	8.24	9.49	6.55	....	....	11.74	.....	9.30
11	....	8.48	6.65	10.19	9.58	11.99	.....	8.99
12	....	9.20	6.80	9.57	9.58	12.10	12.98	8.89
13	....	8.55	7.20	10.66	9.27	12.54	13.17	8.78
14	....	8.00	7.32	9.32	9.65	12.30	12.32	9.73
15	....	7.96	7.05	....	10.20	12.72	12.20	9.59
16	....	7.75	7.42	....	10.35	12.52	12.82	....
17	....	7.37	8.02	....	10.05	12.52	12.51	....
18	8.89	7.13	7.55	10.87	9.90	12.22	14.16	....
19	8.72	7.28	7.44	10.14	9.66	12.40	.....	....
20	8.50	7.22	7.53	10.36	9.88	13.54	.....	....
21	....	6.85	8.05	10.18	9.82	13.08	.....	....
22	8.68	6.75	7.49	9.09	11.05	12.75	.....	....
23	8.22	6.40	9.00	....	.....	14.85	.....	6.70
24	8.20	5.68	8.28	....	10.77	13.20	.....	5.58
25	8.67	6.05	8.08	....	11.28	13.15	.....	5.63
26	8.75	5.87	8.06	9.59	10.05	11.68	.....	5.20
27	8.62	5.98	8.23	10.67	10.25	14.65	.....	5.75
28	8.27	6.25	8.89	9.69	10.94	13.00	.....	5.80
29	8.40		9.66	9.79	.....	14.47	.....	5.64
30	8.96		8.72	9.33	.....	15.41	.....	....
31	8.75		8.80		10.48		.....	....

Randolph County

9 (*817, pp. 218-221; *840, pp. 308-311; 845, p. 339; 886, p. 520; 970, p. 79; 937, p. 82; *945, p. 111; 1017, p. 320). W. C. Warner. About 2 miles southwest of Climax. No measurements made in 1945.

9B (*817, pp. 218-222; *840, pp. 308-312; 845, pp. 339-340; 886, p. 520; 907, p. 80; 937, p. 82; *945, p. 111; 1017, p. 320). W. C. Warner. Location same as well 9. No measurements made in 1945.

10 (*777, pp. 138-139; *817, pp. 218-222; *840, pp. 308-314; 845, pp. 339-340; 886, p. 520; 907, p. 80; 937, p. 83; *945, p. 111; 1017, p. 320). W. F. Beason. Near Cedar Square Church, 6 miles northwest of Randleman. No measurements made in 1945.

11 (*817, pp. 218-222; *840, pp. 308-312; 845, pp. 339-340; 886, p. 520; 907, p. 80; 937, p. 83; *945, p. 111; 1017, p. 320). Emery Taylor. Near Coletranes Mill, about 7 miles northwest of Randleman. No measurements made in 1945.

20 (*777, pp. 138-139; *817, pp. 218-224; *840, pp. 310-313; 845, pp. 340-341; 886, p. 521; 907, p. 80; 937, p. 83; *945, p. 111; *987, p. 131; 1017, pp. 320-321). Dr. Bush. At Archdale, 100 feet east of paved road to High Point and 480 feet north of State Highway 62.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 25	23.70	Apr. 26	22.05	July 26	23.20	Oct. 28	23.75
Feb. 22	22.89	May 24	21.93	Aug. 29	22.77	Nov. 25	24.24
Mar. 29	22.68	June 28	21.88	Sept.30	23.95	Dec. 30	24.42

21 (*777, pp. 138-139; *817, pp. 218-224; *840, pp. 310-315; 845, pp. 340-341; 886, p. 552; 907, p. 81; 937, p. 37; *945, p. 113; 1017, p. 321). J. W. Young. About 2 miles west of Randleman and 1 mile north of U. S. Highway 311. No measurements made in 1945.

23 (*777, pp. 138-139; *817, pp. 219-224; *840, pp. 310-313; 845, pp. 340-341; 886, p. 522; 907, p. 81; 937, p. 83; *945, p. 113; 1017, p. 321). Mrs. Lonnie Pugh. At New Salem, 40 feet north of road. No measurements made in 1945.

25 (*777, pp. 138-139; *817, pp. 219-224; *840, pp. 310-313; 845, pp. 340-341; 886, p. 522; 907, p. 81; 937, p. 83; *945, p. 112; *987, p. 132; 1017, p. 321). J. S. White. 1 mile southwest of Trinity and 120 feet southeast of State Highway 62.

Water level, in feet below land-surface datum, 1945

Jan. 25	28.02	Apr. 26	26.55	July 26	28.00	Oct. 28	28.16
Feb. 22	27.05	May 24	26.70	Aug. 29	28.27	Nov. 25	28.90
Mar. 29	27.26	June 28	26.93	Sept.30	28.23	Dec. 30	28.50

27 (*777, pp. 138-139; *817, pp. 219-224; *840, pp. 310-313; 845, pp. 340-341; 886, p. 522; 907, p. 81; 937, p. 83; *945, p. 112; *987, p. 132; 1017, p. 321). Walter Lambeth. About 3 miles southwest of Trinity, 550 feet north of State Highway 62.

Water level, in feet below land-surface datum, 1945

Jan. 25	17.70	Apr. 26	12.38	July 26	13.74	Oct. 28	13.32
Feb. 22	13.00	May 24	13.50	Aug. 29	14.88	Nov. 25	18.85
Mar. 29	13.81	June 28	16.39	Sept.30	10.80	Dec. 30	18.10

Surry County

1 (*845, p. 337; 886, p. 517; 907, p. 73; 945, pp. 112-113; 987, p. 132; 1017, p. 321). A. D. Terrell. 4 miles south of Dodson, 1.8 miles east of Fairview, about 0.5 mile north of State Highway 268, and 50 feet west of county road.

Water level, in feet below land-surface datum, 1945

Jan. 6	42.45	Apr. 22	41.32	July 11	40.02	Oct. 10	40.39
28	42.37	May 2	41.35	18	40.53	15	40.40
Feb. 6	42.38	7	41.37	25	40.49	28	41.35
16	42.35	14	41.22	Aug. 3	40.59	Nov. 7	41.84
25	42.25	20	41.22	11	40.67	18	41.93
Mar. 4	42.11	30	41.14	18	40.71	Dec. 1	42.07
18	42.08	June 4	40.95	30	40.87	9	42.22
25	41.98	15	40.83	Sept.15	41.00	19	42.11
Apr. 1	41.97	24	40.68	27	40.18	24	42.52
12	41.74	July 1	40.68	Oct. 1	40.28	31	42.52

Transylvania County

1 (*777, p. 136; 817, p. 215; 840, p. 304; 845, p. 335; 886. p. 515; 907, p. 71; 937, p. 77; *945, p. 114; *987, p. 133; 1017, pp. 321-322). Baldwin well. Near Blantyre, about 200 yards west of depot.

Water level, in feet below land-surface datum, 1945

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	34.74	33.96	33.20	32.15	31.26	30.80	31.51	33.19	34.10	34.39	33.98	34.20
2	34.80	33.94	33.19	32.09	31.23	30.78	31.56	33.22	34.12	34.36	33.98	34.21
3	34.84	33.93	33.16	32.09	31.21	30.79	31.61	33.25	34.14	34.34	33.98	34.21
4	34.78	33.88	33.14	32.06	31.17	30.79	31.67	33.29	34.16	34.33	33.99	34.16
5	34.82	33.83	33.12	32.05	31.16	30.81	31.61	33.35	34.19	34.30	34.00	34.12
6	34.80	33.80	33.08	32.02	31.15	30.82	31.78	33.38	34.21	34.26	34.01	34.11
7	34.69	33.78	33.06	32.13	31.13	30.83	31.83	33.42	34.22	34.23	34.02	34.11
8	34.67	33.73	33.02	31.92	31.11	30.82	31.89	33.45	34.23	34.22	34.03	34.13
9	34.62	33.71	32.99	31.89	31.11	30.82	31.96	33.49	34.26	34.20	34.04	34.12
10	34.56	33.70	32.98	31.85	31.08	30.83	32.01	33.42	34.27	34.18	34.04	34.11
11	34.54	33.67	32.93	31.83	31.06	30.84	32.07	33.56	34.28	34.11	34.06	34.11
12	34.49	33.66	32.91	31.80	31.05	30.87	32.16	33.61	34.30	34.14	34.07	34.11
13	34.44	33.53	32.87	31.76	31.02	30.88	32.29	33.64	34.32	34.13	34.06	34.11
14	34.40	33.53	32.84	31.75	31.01	30.90	32.24	33.67	34.34	34.11	34.07	34.07
15	34.39	33.53	32.80	31.70	30.99	30.93	32.23	33.69	34.36	34.10	34.08	34.06
16	34.36	33.53	32.76	31.66	30.98	30.95	32.35	33.71	34.37	34.08	34.11	34.06
17	34.38	33.52	32.74	31.61	30.95	30.97	32.43	33.75	34.34	34.06	34.11	34.05
18	34.38	33.48	32.72	31.60	30.94	31.00	32.47	33.78	34.34	34.06	34.11	33.99
19	34.31	33.47	32.67	31.58	30.94	31.01	32.54	33.81	34.39	34.05	34.12	33.97
20	34.28	33.42	32.61	31.55	30.92	31.04	32.59	33.84	34.38	34.03	34.13	33.97
21	34.27	33.35	32.55	31.53	30.91	31.08	32.64	33.86	34.39	34.02	34.14	33.96
22	34.23	33.23	32.54	31.49	30.90	31.12	32.61	33.88	34.40	34.01	34.13	33.95
23	34.22	33.24	32.51	31.46	30.89	31.14	32.73	33.90	34.41	33.99	34.14	33.91
24	34.19	33.26	32.49	31.42	30.88	31.16	32.78	33.93	34.41	34.00	34.16	33.89
25	34.19	33.26	32.45	31.39	30.86	31.18	32.85	33.95	34.40	33.99	34.16	33.76
26	34.19	33.23	32.41	31.37	30.85	31.27	32.90	33.98	34.40	33.99	34.18	33.73
27	34.17	33.22	32.33	31.35	30.84	31.30	32.93	34.00	34.40	33.99	34.19	33.72
28	34.09	33.22	32.27	31.34	30.84	31.37	32.97	34.03	34.39	34.01	34.19	33.71
29	34.04		32.24	31.33	30.83	31.50	33.01	34.05	34.39	34.01	34.19	33.67
30	33.99		32.19	31.27	30.82	31.45	33.11	34.06	34.39	33.99	34.19	33.62
31	33.98		32.17		30.81		33.15	34.09		33.99		33.58

Wake County

1 (*777, p. 134; 817, p. 215; 840, p. 304; 845, p. 335; 886, p. 515; 907, p. 71; 937, p. 79; 945, p. 114; 987, p. 133; 1017, p. 322). Fishdam well. 1 mile downstream from bridge across Neuse River on U. S. Highway 15 and about 2 miles west of Northside, on left bank of river.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	9.03	Mar. 25	8.60	July 18	12.48	Oct. 17	8.65
21	8.86	Apr. 8	9.80	25	9.20	28	10.00
28	9.22	15	9.46	Aug. 12	11.80	Nov. 7	9.58
Feb. 11	9.39	May 6	10.34	19	10.20	18	10.10
18	8.87	30	12.28	Sept. 2	9.60	25	9.98
Mar. 4	7.24	June 17	14.13	16	8.78	Dec. 12	9.85
14	7.92	July 4	14.07	Oct. 10	7.78	23	8.34

Washington County

1 (*945, p. 115; *987, pp. 133-134; 1017, p. 322). R. H. Lucas. About 1.5 miles west of Plymouth and 50 yards south of U. S. Highway 64.

Water level, in feet below land-surface datum, 1945
(From recorder charts)

Day					June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	12.59	.....	.....	16.02	15.04	11.64	12.52	13.04	14.40	.....
2	.....	12.57	.....	15.08	16.07	15.09	11.61	12.56	13.05	.....	.....
3	.....	12.46	.....	15.09	16.11	15.13	11.73	12.69	13.11	.....	.....
4	.....	12.60	13.98	15.10	16.15	15.16	11.84	12.78	.....	.....	.....
5	.....	12.56	.....	15.15	16.18	15.16	11.88	12.78	13.26	.....	.....
6	.....	12.47	.....	15.19	16.20	15.16	11.92	.....	13.27	.....	.....
7	14.07	12.58	.....	.....	16.21	15.17	11.94	12.20	13.29	14.59	13.10
8	13.87	.....	.....	.....	16.21	15.07	11.98	12.19	13.35	14.60	13.11
9	13.84	.....	14.20	15.30	16.20	14.75	.....	12.20	13.43	14.62	13.10
10	13.85	.....	14.24	15.31	16.22	14.64	.....	12.24	13.51	14.65	.....
11	13.86	.....	14.24	15.36	16.27	14.65	.....	12.31	13.56	14.67	.....
12	13.89	.....	14.27	15.41	16.31	14.69	.....	12.37	13.58	14.67	.....
13	13.76	.....	.....	15.43	16.36	14.71	.....	12.45	13.65	14.67	.....
14	13.40	.....	.....	15.48	16.38	14.71	.....	12.55	13.71	14.46	.....
15	13.20	.....	.....	15.52	16.42	14.63	.....	12.62	13.76	14.20	.....
16	13.15	13.10	14.48	15.56	16.46	14.59	12.77	12.64	13.81	14.17	.....
17	13.13	13.16	14.51	15.57	16.49	14.40	12.59	12.48	13.86	14.10	.....
18	13.02	13.24	14.55	15.54	16.52	14.23	12.44	12.05	13.91	14.06	13.26
19	12.89	13.28	14.61	15.56	16.45	14.17	12.49	11.94	13.95	14.05	.....
20	12.85	13.27	14.64	15.59	16.32	14.02	12.42	11.98	13.99	14.05	.....
21	12.70	13.25	14.65	15.62	16.33	13.67	11.85	12.11	14.04	14.11	.....
22	12.50	13.29	14.72	15.86	16.38	13.58	11.48	12.24	14.07	14.05	.....
23	12.33	.....	14.75	15.71	16.41	13.15	11.51	12.32	14.08	14.10	.....
24	12.34	.....	14.76	15.74	16.43	12.78	11.62	12.41	14.13	14.14	.....
25	12.42	.....	14.78	15.78	16.30	12.78	11.60	12.52	14.20	14.17	.....
26	12.42	.....	14.81	15.80	15.70	12.81	11.69	12.63	14.22	14.27	.....
27	12.45	.....	14.89	15.81	15.08	12.55	11.86	12.75	14.30	14.30	13.06
28	12.58	13.68	.....	15.84	15.01	12.14	11.98	12.83	14.33	14.24	13.03
29		13.70	.....	15.89	14.99	12.23	12.20	12.90	14.36	14.31	12.85
30		.....	.....	15.92	15.00	12.35	12.29	13.00	14.38	14.36	12.75
31		.....		15.99		12.10	12.42		14.39		12.70

Wayne County

1 (*777, p. 135; 817, p. 215; 840, p. 303; 845, p. 335; 886, p. 514; 907, p. 70; 937, p. 79; 945, p. 115; 987, p. 134; 1017, p. 323). Borden Brick & Tile Co. Brick Pit well. About 3.5 miles south of Goldsboro, 200 feet west of U. S. Highway 117 and Neuse River.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	4.02	Apr. 7	3.32	June 30	4.52	Oct. 13	0.70
13	3.90	14	3.46	July 7	4.50	20	.50
20	3.80	21	3.58	14	4.42	27	.76
27	3.76	28	3.70	21	4.24	Nov. 3	1.04
Feb. 4	3.80	May 5	3.80	28	4.04	10	1.22
10	3.82	12	3.92	Aug. 4	3.90	17	1.32
17	3.78	19	4.00	11	3.32	24	1.48
25	3.64	26	4.14	18	3.12	Dec. 1	1.68
Mar. 3	3.50	June 2	4.02	25	2.64	8	1.60
10	3.30	9	4.24	Sept. 1	2.46	15	1.58
17	3.12	16	4.40	8	2.42	22	1.60
24	3.10	24	4.50	15	2.52	29	1.50
Apr. 1	3.18						

TENNESSEE

By E. M. Cushing and G. K. Mauney

PROGRAM OF WORK

The program of water-level measurements in wells in Memphis and in Shelby County, which is being carried on as a part of the investigation of the ground-water resources of the Memphis area, begun in 1940, was continued in 1945 in cooperation with the Memphis Light, Gas and Water Division.

PUMPAGE

During 1945 pumpage in the Memphis area decreased. The end of the war brought about curtailment of production in certain industries which in turn resulted in less water being pumped from the water-bearing sands. It is estimated that the average daily quantity of water pumped from the "500-foot" sand was about 95 million gallons. This amount is about 10 million gallons a day less than the estimated pumpage in 1944. A cessation of production toward the end of 1945 at the Chickasaw Ordnance Works, west of Millington, resulted in a decrease in the average daily pumpage of about 6 million gallons.

For 1945 the average daily pumpage from the "1,400-foot" sand was about 9 million gallons. In 1944 it was about 10 million gallons a day.

FLUCTUATIONS OF WATER LEVEL

In general, water levels in the Memphis area rose during 1945. In most of the observation wells the water levels did not decline to the lowest levels of 1944. Exceptions to this general trend occurred in southwest Memphis and in the vicinity of the Sheahan Pumping Station in east Memphis. The lowest water levels recorded in four observation wells in southwest Memphis ranged from 0.7 foot to 2.9 feet lower than the lowest levels of 1944. Near the Sheahan Pumping Station the lowest water level was about 1.5 feet lower than the lowest level of 1944.

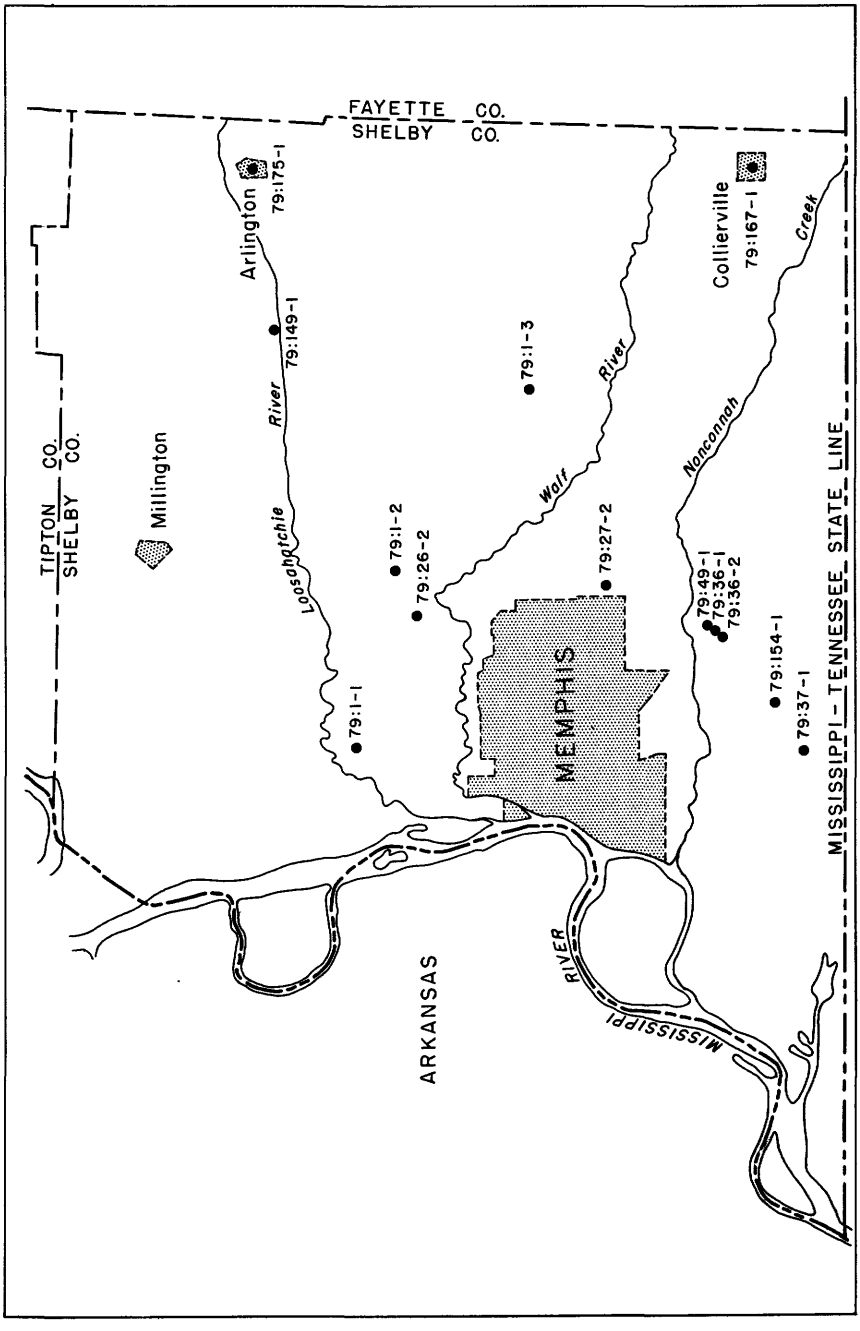

Figure 9.--Map showing location of observation wells in the vicinity of Memphis, Tenn., 1945.

The greatest rise in water levels occurred in wells in north Memphis. Here the lowest water levels recorded in six observation wells ranged from 1.7 to 3.4 feet higher than the lowest levels of 1944, as a result of decreased pumpage in the vicinity.

The fact that the water levels in most wells generally did not reach the low points of 1944 should not be interpreted to mean that water levels will rise in the next few years. In Memphis the average rate of decline of the water levels from 1939 to 1944 was about 4 feet a year. Decreased pumpage during 1945 is causing adjustments in the configuration of the water-level surface. It is believed that after these adjustments have taken place the water levels will continue to decline, but at a rate less than 4 feet a year.

Figure 10 shows the hydrographs of water-level fluctuations in typical wells in the Memphis area. Well 79:7-17 is located in the Parkway well field of the Memphis Light, Gas and Water Division. As might be expected, the yearly range in water level in an active well field is extremely large.

The water level in well 79:1-1, north of Memphis (see fig. 10), has a much smaller range of fluctuations and probably reflects the combined effect of the entire pumpage in Memphis and the pumpage of the Chickasaw Ordnance Works west of Millington.

The fluctuations of the water level in well 79:1-3, east of the city (see fig. 10), probably are caused by pumpage in the Memphis area as a whole.

A total of 4,622 water-level measurements in 37 observation wells is included in this report. Twelve of the wells were equipped with automatic water-stage recorders; in 21 wells the water level was measured about once a week, and in the other 4 wells measurements were made about once a month. The lowest daily water level in wells equipped with recorders was determined from recorder charts. For these wells 3,319 water-level determinations were made, and 1,303 water-level measurements were made in the remaining 25 wells.

WELL-NUMBERING SYSTEM

The well-numbering system devised for Tennessee has been explained in Water-Supply Paper 987.

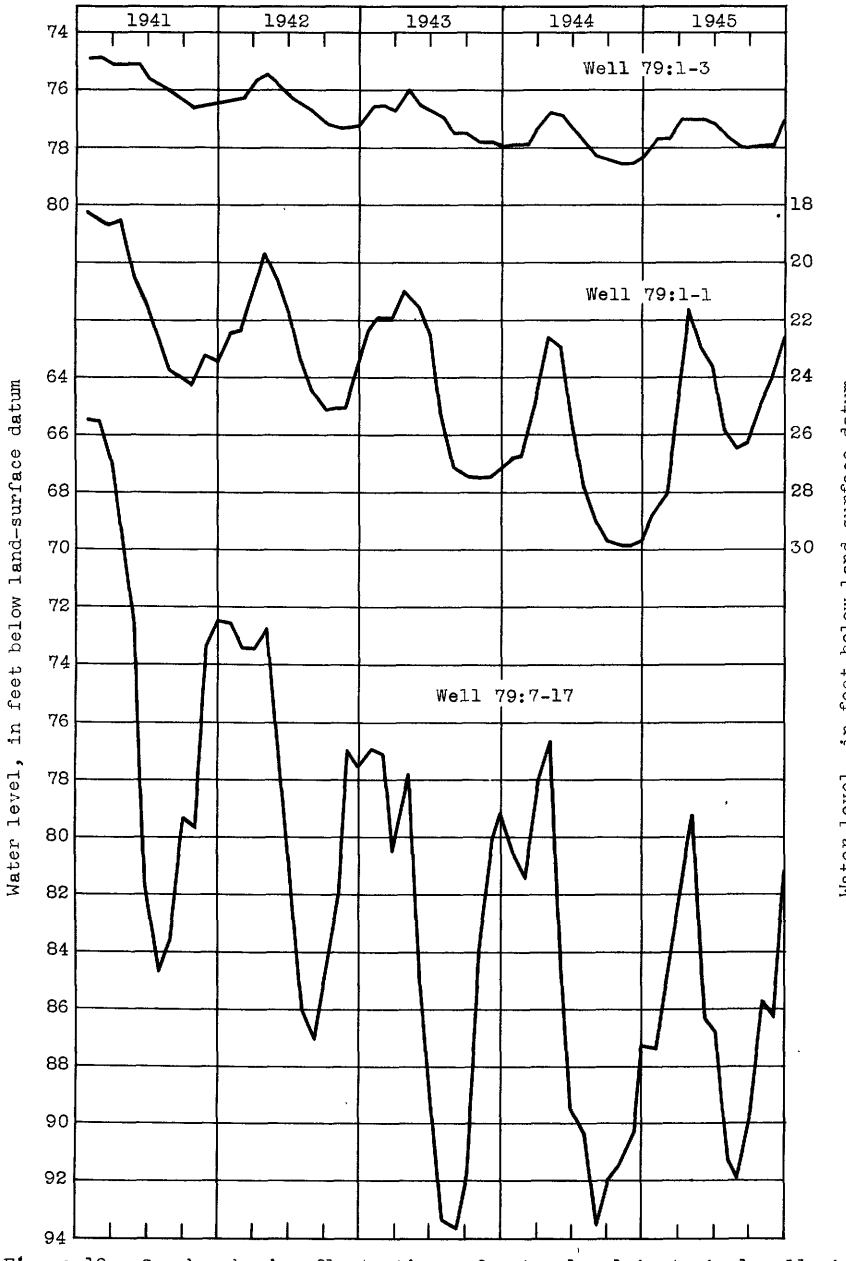

Figure 10.--Graphs showing fluctuations of water level in typical wells in the Memphis area, Tenn.

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WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Shelby County

79:1-1 (*907, p. 100; 937, p. 96; 945, p. 125; *987, p. 141; 1017, p.328). Memphis Light, Gas and Water Division. On O. K. Robertson Road, 2.24 miles north of Frayser.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	28.70	27.66a	25.33	.....	21.66	22.55	23.20	25.82	26.17a	24.95	24.04	22.70
2	28.64	27.65	25.16a	20.98	21.71	22.74	23.45	25.86	26.21	.....	24.06	22.58
3	28.20	27.64	25.15	.....	21.87	22.95	23.65	25.95	26.23	.....	24.10	22.50
4	28.37	27.70	25.00	.....	22.05	23.08	23.79	26.05	26.19	.....	24.11	22.34
5	28.35	27.79	24.71	.....	22.18	23.16	23.91	26.14	26.14	.....	24.04	22.25
6	28.08	27.78	24.50	.....	22.23	23.17	24.00	26.16	26.11	.....	24.06	22.18
7	27.70	27.75	24.50	.....	22.28	23.20	24.08	26.12	26.14	.....	24.07	22.23
8	27.52	27.78	24.35	.....	22.47	23.32	24.12	26.20	26.16a	24.27	24.03	22.30
9	27.39	27.77	24.10	.....	22.50	23.42	24.17	26.20	26.18	.....	24.08	22.35
10	27.39	27.85	23.80	.....	22.55	23.52	24.24	26.20	26.16	24.15	24.03	22.45
11	27.37	27.94	23.45	.....	22.58	23.55	24.34	26.20	26.13	24.11	23.84	22.47
12	27.29	27.93	23.06a	19.95	22.54	23.51	24.45	26.26	26.10	24.11	23.70	22.43
13	27.15	27.80	22.75	20.16	22.63	23.49	24.54	26.34	26.03	24.13a	23.37	22.30
14	27.12	27.83	22.43	20.38	22.62	23.43	24.65	26.35	26.02	24.16	.....	22.23
15	27.17	27.78	22.18	20.50	22.61	23.37	24.79	26.37	26.07	24.16	.....	22.28
16	27.20	27.87	22.00	20.69	22.57	23.33	24.89	26.37	26.08	24.11	.....	22.35
17	27.21	27.82	21.92	20.92	22.61	23.27	24.94	26.30	26.00	24.04	.....	22.36
18	27.20	27.80	21.88	21.08	22.77	23.00	25.02	26.25	25.87	24.02	.....	22.28
19	27.21	27.77	21.75	21.14	22.83	22.97	25.11	26.24	25.82	24.09a	23.31	22.17
20	27.25	27.55	.....	21.18	22.81	22.87	25.19	26.25	25.74	24.12	.....	22.19
21	27.24	27.30	.....	21.24	22.76	22.86	25.29	26.20	25.64	24.12	.....	22.14
22	27.29	26.99	.....	21.25	22.76	22.85	25.35	26.15	25.62	24.15	.....	22.10
23	27.30	26.90	.....	21.24	22.75	22.82	25.37	26.08	25.60	24.18	.....	22.12
24	27.27	26.85	.....	21.21	22.67	22.80	25.41	26.10	25.56	24.20	.....	22.00
25	27.24	26.75	.....	21.23	22.56	22.77	25.45	26.13	.....	24.18	.....	21.85
26	27.33a	26.27a	20.67	21.40	.....	22.77	25.45	26.18	.....	24.27a	23.05	21.85
27	27.37	.....	20.60	21.48	.....	22.75	25.52	26.17	.....	24.30	22.90	21.82
28	27.42	.....	.....	21.43a	22.39	22.78	25.54	.....	.....	24.31	22.84	21.84
29	27.48		.....	21.48	22.35	22.89	25.65	.....	.....	24.25	22.81	21.83
30	27.50		.....	21.62	22.37	23.04	25.74	.....	.....	24.19	22.78	21.81
31	27.59		.....		22.45		25.80	26.19		24.08		21.82

a Tape measurement.

79:1-2 (*907, pp. 100-101; *937, p. 97; 945, p. 126; *987, pp. 141-142; 1017, p.328). Memphis Light, Gas and Water Division. On Scheibler Road, 1.4 miles northwest of Bartlett.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	78.52	78.27	77.54	75.42	74.93	75.36	76.01	76.70	76.79	76.05	75.00	74.39
2	78.53	78.22	77.33	75.20	74.88	75.40	76.01	76.72	76.80	76.04	74.99	74.34
3	78.40	78.15	77.27	75.19	74.93	75.50	76.02	76.75	76.81	76.03	75.05	74.30
4	78.47	78.10	.....	75.14	75.01	75.55	76.03	76.83	76.79	75.99	75.05	74.13
5	78.49	78.11a	77.12	75.21	75.06	75.60	76.08	76.90	76.73	75.95	74.96	74.07
6	78.45	78.08	77.14	75.24	75.07	75.57	76.13	76.91	76.68	75.88	74.97	73.97
7	78.39	78.01	77.20	75.23	75.05	75.57	76.16	76.85	76.67	75.88	74.95	73.95
8	78.38	77.99	77.20	75.18	75.14	75.59	76.15	76.90	76.66	75.84	74.91	73.95
9	78.46	77.96	77.19	75.09	75.14	75.57	76.16	76.90	76.67	75.82	74.93	73.95
10	78.45	78.00	77.16	75.05	75.10	75.61	76.17	76.90	76.65	75.74	74.87	74.06
11	78.45	78.00	77.10	75.00	75.10	75.60	76.23	76.91	76.63	75.66	74.77	74.09
12	78.40	77.96	77.00	74.95	75.05	.....	76.26	76.95	76.61	75.61	74.63	74.05
13	78.31	77.89	76.95	74.92	75.08	.....	76.28	77.03	76.50	75.57	74.50	73.91
14	78.26	77.89	76.82	74.90	75.08	.....	76.31	77.03	76.53	75.55	74.55	73.90
15	78.30	77.87	76.68	74.87	75.11	75.68	76.38	77.04	76.57	75.54	74.62	73.97
16	78.32	77.92	76.58	74.80	75.08	75.73	76.45	77.05	76.57	75.49	74.60	.....
17	78.32	77.90	76.56	74.87	75.16	75.73	76.48	77.02	76.53	75.43	74.60	.....
18	78.26	77.93	76.52	74.94	75.23	75.73	76.51	76.99	76.50	75.36	74.61	.....

a Tape measurement.

79:1-2 --Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
19	78.17	77.92	76.41	74.96	75.28	75.74	76.55	76.95	76.46	75.34	74.55	.....
20	78.19	77.83	76.25	74.92	75.26	75.78	76.59	76.96	76.45	75.33	74.54	.....
21	78.14	77.64	76.18	74.91	75.29	75.85	76.61	76.92	76.38	75.28	74.35	a73.84
22	78.17	77.70	76.15	74.89	75.40	75.90	76.60	76.77	76.35	75.20	74.36	73.83
23	78.18	77.77	76.04	74.84	75.44	75.93	76.58	76.72	76.34	75.16	74.34	73.82
24	78.16	77.80	75.95	74.78	75.40	75.94	76.55	76.73	76.31	75.18	74.35	73.70
25	78.13	77.78	75.90	74.76	75.39	75.95	76.55	76.73	76.24	75.12	74.36	73.55
26	78.17	77.71	75.83	74.92	75.36	75.95	76.49	76.76	76.20	75.18	74.40	73.58
27	78.17	77.70	75.80	74.97	75.38	75.93	76.48	76.75	76.15	75.19	74.35	73.55
28	78.20	77.60	75.74	74.89	75.36	75.92	76.45	76.73	76.14	75.19	74.36	73.48
29	78.22		75.64	74.91	75.35	75.94	76.55	76.77	76.16	75.19	74.39	73.42
30	78.21		75.63	74.95	75.36	75.97	76.64	76.77	76.12	75.15	74.41	73.43
31	78.25		75.49		75.37		76.68	76.79		75.05		73.52

a Tape measurement.

79:1-3 (*907, p. 101; 937, pp. 97-98; 945, pp. 126-127; *987, pp. 142-143; 1017, p.329). Memphis Light, Gas and Water Division. On Macon Road, 4.5 miles north of Germantown.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	77.49	77.67	77.05	76.68	76.89	76.86	77.14	77.58	77.85	77.86	77.72	77.01
2	a77.53	77.61	76.87	76.54	76.70	76.90	77.23	77.54	77.87	77.90	77.75	76.97
3	77.47	77.50	76.76	76.59	76.69	77.00	77.23	77.51	77.88	77.93	77.87	76.96
4	77.40	77.50	76.76	76.68	76.73	77.07	77.20	77.55	77.90	77.88	77.87	76.86
5	77.40	77.57	76.69	76.77	76.78	77.07	77.22	77.60	77.87	77.83	77.84	76.89
6	77.29	77.55	76.73	76.77	76.76	77.05	77.25	77.61	77.87	77.76	77.88	76.86
7	77.09	77.50	76.86	76.71	76.68	77.03	77.26	77.60	77.91	77.78	77.91	76.88
8	77.19	77.55	76.88	76.61	76.82	77.03	77.25	77.67	77.93	77.78	77.89	76.90
9	77.42	77.52	76.91	76.50	76.83	76.99	77.25	77.67	77.93	77.81	77.96	76.91
10	77.42	77.60	76.88	76.54	76.78	77.03	77.27	77.63	77.91	77.78	77.94	77.06
11	77.44	77.61	76.86	76.55	76.79	77.04	77.32	77.60	77.90	77.80	77.85	77.12
12	77.39	77.58	76.85	76.57	76.72	77.05	77.30	77.63	77.90	77.78	77.74	77.10
13	77.27	77.55	76.85	76.60	76.73	77.06	77.29	77.68	77.83	77.78	77.60	76.94
14	77.24	77.57	76.82	76.62	76.73	77.04	77.28	77.69	77.92	77.80	77.72	76.93
15	77.37	77.55	76.77	76.60	76.74	77.07	77.35	77.66	77.97	77.84	77.77	77.03
16	77.45	77.60	76.85	76.60	76.70	77.09	77.42	77.67	77.97	77.84	77.68	77.10
17	77.47	77.60	76.95	a76.71	76.81	77.04	77.43	77.68	77.95	77.80	77.51	77.09
18	77.43	77.66	76.98	76.82	76.87	76.96	77.42	77.71	77.94	77.78	77.49	76.99
19	77.33	77.65	76.93	76.84	76.87	76.95	77.44	77.74	77.93	77.79	77.37	76.97
20	77.38	77.56	76.87	76.77	76.80	76.95	77.45	77.80	77.95	77.80	77.36	76.99
21	77.36	77.25	76.93	76.74	76.72	76.95	77.44	77.78	77.95	77.77	77.20	76.95
22	77.36	77.25	76.95	76.72	76.87	76.97	77.43	77.72	77.94	77.76	77.20	76.89
23	77.39	77.35	76.84	76.65	76.92	76.98	77.44	77.70	77.96	77.83	77.12	76.88
24	77.35	77.35	76.73	76.63	76.87	76.97	77.48	77.73	77.99	77.83	77.09	76.75
25	77.31	77.27	76.69	76.69	76.82	76.95	77.50	77.74	77.97	77.81	76.97	76.66
26	77.40	77.10	76.75	76.92	76.82	76.99	77.50	77.77	77.98	77.89	76.98	76.76
27	77.40	77.07	76.78	76.98	76.83	77.00	77.48	77.80	77.97	77.90	76.93	76.77
28	77.48	77.06	76.82	76.89	76.87	77.02	77.42	77.79	77.96	77.88	76.98	76.74
29	77.54		76.80	76.89	76.86	77.08	77.49	77.84	77.97	77.90	77.02	76.68
30	77.57		76.77	76.95	76.88	77.11	77.57	77.87	77.95	77.85	77.03	76.58
31	77.65		76.72		76.88		77.60	77.87		77.76		76.71

a Tape measurement.

79:3-A (*817, pp. 315-317; 840, p. 375; *845, pp. 437-439; 886, p. 648; 907, pp. 97-98; 937, pp. 95-96; 945, p. 128; *987, p. 143; 1017, p. 329). Memphis Light, Gas and Water Division. In Memphis, on southwest corner of intersection of Sycamore Ave. and Fifth St.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	53.91	52.35	49.62	46.80	48.06	54.29	56.94	59.39	59.58	57.36	55.66	.....
2	53.13	52.65	49.41	45.45	48.40	54.74	56.40	59.81	59.62	56.62	56.06	.....
3	53.01	52.66	49.35	45.13	48.53	54.74	56.52	60.24	59.37	56.45	56.14	a49.31
4	53.07	52.55	49.16	45.70	48.73	54.07	56.59	60.46	a58.45	56.06	56.04	49.35
5	52.95	52.41	48.70	45.83	48.80	53.66	56.37	60.47	.....	55.75	55.33	49.72
6	52.57	52.47	48.43	45.83	48.73	53.58	56.65	60.05	a59.06	.....	54.67	49.96
7	52.12	52.90	48.45	45.80	48.52	54.00	56.94	59.53	60.01	.....	54.80	50.33
8	51.45	53.00	48.45	45.45	48.81	54.89	56.94	59.55	60.04	a54.40	55.15	50.34
9	51.43	53.23	48.32	44.85	48.86	55.35	56.53	59.56	60.01	54.79	55.24	50.21
10	51.86	53.46	48.20	45.22	48.95	55.37	56.82	59.71	a59.34	54.82	55.16	49.78
11	52.05	53.45	47.90	45.82	49.03	54.84	57.16	59.88	.....	55.03	54.78	49.70
12	52.05	53.10	47.03	46.90	49.19	54.27	57.16	59.89	.....	55.35	.....	49.69
13	52.06	52.70	46.41	48.06	49.29	54.72	57.11	59.55	.....	55.48	a53.45	49.49
14	52.10	52.70	46.21	48.66	49.10	54.86	57.09	59.85	.....	55.47	53.70	49.67
15	51.82	52.72	46.16	48.70	49.82	54.88	56.96	59.93	.....	54.62	53.76	49.85
16	52.13	52.79	45.94	a48.27	50.29	55.27	56.55	59.75	.....	53.90	.....	49.85
17	52.21	52.85	46.10	.....	50.53	55.28	56.70	59.06	a57.08	54.15	.....	49.43
18	52.12	52.81	46.06	.....	50.52	54.40	57.13	59.46	57.11	54.62	.....	49.19
19	52.07	52.30	45.32	.....	50.04	53.96	57.70	59.47	57.38	55.10	.....	49.50
20	52.08	51.75	45.16	.....	49.55	54.38	58.22	59.10	57.70	55.35	52.25	49.73
21	51.96	51.41	45.37	.....	49.13	54.55	58.53	59.02	57.99	55.36	52.68	49.91
22	51.52	51.28	45.45	.....	49.87	54.75	58.54	59.46	58.26	54.87	.....	50.09
23	51.80	51.35	45.47	a48.37	50.58	54.85	58.22	59.70	58.27	54.71	.....	50.09
24	52.04	51.35	45.34	.....	51.15	54.85	58.65	59.80	57.84	54.99	.....	49.75
25	52.14	51.19	45.27	.....	51.57	54.26	59.18	59.80	57.87	55.17	.....	49.00
26	52.25	50.70	44.70	a48.79	51.64	54.60	59.42	59.60	57.86	55.33	a51.78	48.44
27	52.26	50.20	44.75	48.88	51.67	55.32	59.55	59.00	58.14	55.32	51.67	47.79
28	52.12	49.81	45.50	48.49	51.45	56.15	59.55	58.61	58.41	55.15	51.68	47.95
29	51.70		46.23	47.97	51.87	56.84	59.35	58.85	58.41	54.71	.....	47.98
30	51.53		46.98	47.86	52.60	56.93	58.66	59.12	58.30	54.97	.....	47.95
31	51.99		47.10		53.29		58.76	59.40		55.22		47.70

a Tape measurement.

79:5-193 (*817, pp. 315, 317-319; 840, p. 374; 845, p. 438; 886, p. 648; 907, pp. 96-97; 937, pp. 94-95; 945, pp. 127-128; *987, p. 144; 1017, p. 330). Memphis Light, Gas and Water Division. In Memphis, near Central Ave. and Tanglewood St.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	93.53	91.60	89.57	90.47	92.21	94.02	96.24	95.79	95.07	93.44	91.29
2	.....	93.50	91.56	89.35	90.49	92.26	94.25	96.35	95.71	95.16	93.60	90.84
3	.....	93.43	91.43	89.50	90.48	92.26	94.33	96.40	95.65	95.14	93.66	90.34
4	.....	93.12	.....	89.57	90.51	92.22	94.33	96.40	95.22	95.13	93.16	89.88
5	.....	a92.50	a90.73	.....	90.55	92.32	93.95	96.24	95.21	95.09	92.38	90.57
6	.....	.....	91.05	.....	90.50	92.27	93.78	95.42	95.47	94.87	92.34	90.21
7	.....	92.58	91.21	.....	90.30	92.31	93.85	95.52	95.75	94.46	92.64	91.00
8	92.06	92.54	91.22	.....	90.28	92.52	93.86	95.62	95.77	93.41	92.84	91.17
9	92.13	.....	91.23	a89.45	90.35	92.53	94.09	95.66	95.79	93.46	93.07	91.04
10	92.28	.....	91.12	.....	90.60	92.40	94.29	95.80	a95.55	93.60	93.00	90.30
11	92.37	.....	91.05	.....	90.83	92.33	94.44	95.85	a95.80	93.74	92.72	90.50
12	92.37	a91.53	a90.17	a89.57	90.85	92.55	94.49	95.89	95.93	93.78	92.47	90.87
13	.....	91.89	.....	89.71	90.80	92.90	94.53	95.87	95.88	93.76	92.45	91.20
14	.....	91.95	.....	89.57	90.75	93.07	94.52	96.04	95.97	93.61	92.77	91.45
15	92.67	92.15	.....	89.53	90.89	93.22	94.40	96.05	95.97	93.62	92.90	91.51
16	92.83	92.15	.....	89.74	91.01	93.20	94.38	95.60	95.70	93.62	92.86	91.24
17	92.99	92.16	.....	89.89	91.18	93.16	94.59	94.68	95.34	93.55	92.91	90.50
18	92.99	92.15	.....	90.03	91.21	93.03	94.76	94.90	95.32	93.69	92.56	90.35
19	92.89	91.96	a89.36	90.01	91.15	93.18	94.94	94.91	95.30	93.80	92.21	.....
20	93.07	91.95	89.54	89.80	90.87	93.37	94.94	94.99	95.40	93.64	92.18	.....

a Tape measurement.

79:5-193--Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
21	93.04	91.85	89.70	89.27	90.64	93.59	94.85	95.18	.....	93.50	92.13a	90.75
22	93.05	92.06	90.40	89.26	90.74	93.67	94.37	95.32	.....	93.30	92.35	91.45
23	93.20	92.14	90.16a	89.25	90.92	93.65	93.72	95.54	.....	93.31	91.91	91.44
24	93.33	92.13	90.46	.....	91.08	93.47	94.35	95.56a	94.89	93.50	92.50	91.17
25	93.35	92.00	.....	.....	91.24	93.21	95.05	95.55	95.30	93.62	92.18	90.30
26	93.50	91.72	89.94	.....	91.39	93.27	95.54	95.45	95.40	93.76	91.96	89.85
27	93.50	91.63	89.81	.....	91.40	93.43	95.76	95.12	95.55	93.73	91.98	90.01
28	93.44	91.57	89.80	.....	91.49	93.71	95.76	95.22	95.55	93.41	92.25	90.25
29	93.28		89.91	.....	91.63	93.97	95.68	95.43	95.52	93.25	92.17	90.35
30	93.32		89.89a	90.36	91.73	94.03	95.72	95.58	95.42	93.36	91.41	90.04
31	93.52		89.99		92.02		96.01	95.78		93.42		90.18

a Tape measurement.

79:7-17 (*907, p. 99; 937, p. 98; 945, p. 127; *987, pp. 144-145; 1017, p. 331). Memphis Light, Gas and Water Division. In Memphis, on North Parkway at end of North Garland St.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	80.88	84.98	81.83	76.58	79.09	86.88	.....	91.55	89.62	84.94a	84.70	76.99
2	80.32	84.55	81.10	74.70	79.31	87.02	.....	91.97	89.65	85.78	86.30	76.53
3	81.11	84.33	78.80	74.76	79.55	81.40a	85.86	92.00	87.19	85.04	85.60	75.20
4	81.21	83.63	78.02	75.70	79.54	81.17	84.62	91.94	87.12	85.00	83.80	76.26
5	81.27	83.16	80.23	75.49	79.50	81.30	.....	91.93	88.22	84.51	81.70	76.81
6	81.40	83.24	82.22	75.49	78.74	.....	.....	88.82	89.00	84.35	81.47	77.50
7	80.32	83.29	79.46	75.26	78.26	.....	.....	89.00	89.21	84.35	81.97	78.00
8	80.52	81.71	78.74	73.42	78.66	.....	.....	89.92	88.75	82.31	82.46	78.21
9	80.57	81.74	78.90	72.75	78.77	82.77a	84.69	89.74	87.80	83.05	82.56	77.85
10	81.44	81.89	78.85	74.09	79.46	81.37	86.09	90.12	88.21	83.70	82.37	77.20
11	81.50	81.11	78.50	75.67	79.67	80.80	85.90	90.20	88.05	85.63	81.61	77.54
12	83.67	79.85	77.10	75.90	79.70	82.11	85.47	90.05	88.11	85.67	80.92	77.64
13	84.40	79.84	79.50	75.88	79.69	83.47	85.47	89.51	87.40	84.91	80.41	77.66
14	84.40	81.94	79.70	75.97	79.06	83.18	85.20	90.98	87.55	84.91	80.90	78.14
15	84.41	82.11	79.24	76.01	79.73	83.10	84.79	89.70	86.96	81.61	81.49	78.14
16	84.83	83.08	79.00	76.10	79.40	85.80	84.23	88.05	86.27	81.73	81.66	78.07
17	84.94	83.21	79.08	77.00	79.72	84.06	85.36	87.81	84.97	82.60	81.70	76.97
18	84.59	81.26	78.25	76.98	79.72	83.42	85.50	88.49	85.26	85.09	81.55	77.37
19	84.61	82.04	77.54	76.99	79.09	85.72	86.07	88.42	85.56	85.11	80.40	77.97
20	84.61	82.50	78.29	77.25	78.63	86.60	86.85	86.79	86.06	85.10	80.54	78.34
21	84.58	82.50	78.36	76.98	78.05	86.52	89.05	88.10	86.34	85.10	80.78	80.20
22	85.42	84.73	78.60	76.20	79.08	86.58	87.20	88.50	87.15a	81.45	81.10	80.61
23	86.76	85.00	78.64	76.26	79.65	86.73	86.66	88.62	86.16	.....	81.25	80.65
24	87.40	84.87	78.55	77.19	80.26	84.10	88.81	88.60	85.86	.....	81.34	80.11
25	87.40	84.30	77.92	78.26	80.52	85.53	91.16	88.09	86.17	.....	81.10	78.69
26	87.10	82.51	77.38	78.95	80.58	.....	90.59	87.15	86.02	.....	80.52	77.10
27	87.02	82.50	77.40	78.83	80.60	.....	91.31	87.11	87.83	.....	80.93	77.51
28	86.85	82.24	77.50	78.65a	79.62	.....	.....	87.50	87.94	.....	79.33	78.20
29	86.21		78.48	78.34	83.80	.....	.....	88.20	88.04	.....	78.78	78.29
30	86.15		78.79	78.54	84.56	.....	.....	89.34	87.44	.....	78.13	77.81
31	84.97		77.80		86.34		a90.11	89.68		.....		77.13

a Tape measurement.

79:7-26. Memphis Light, Gas and Water Division. In Memphis, on the grounds of the North Parkway pumping station, about 125 feet east of North Dunlap St. and about 1,000 feet south of North Parkway. Drilled well, diameter 8 inches, depth 1,388 feet. Measuring point, top of 8-inch coupling, 0.5 foot above land-surface datum. Equipped with water-stage recorder on Jan. 13, 1945.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	49.79	60.55	56.08	57.24	65.96	59.66	61.12	58.64	72.90	.....	56.65
2	.....	49.84	60.48	56.08	57.04	66.21	59.68	60.82	58.51	72.98	.....	56.50
3	.....	49.92	58.65	56.22	57.13	65.43	59.94	61.10	58.55	72.30	.....	56.39
4	.....	49.91	58.81	56.38	57.25	65.43	60.05	61.70	58.46	72.33	.....	56.90
5	.....	49.95	58.83	56.53	57.35	65.57	58.79	61.87	58.28	.....	a57.70	56.98
6	.....	49.93	58.05	56.57	57.21	65.65	58.59	63.05	58.11	.....	58.41	56.90
7	.....	50.52	58.75	56.45	57.10	65.61	58.54	64.20	58.12	.....	58.40	57.10
8	.....	51.14	59.22	56.28	57.30	66.35	58.39	64.51	58.12	a70.40	58.23	57.15
9	.....	51.50	59.32	55.91	57.33	66.67	58.72	63.12	58.16	70.11	58.35	56.85
10	.....	51.94	58.98	56.06	57.42	66.66	59.18	64.60	58.09	70.50	.....	58.09
11	.....	52.14	58.96	56.21	57.45	66.54	59.47	64.75	58.09	72.59	.....	58.06
12	.....	54.33	58.62	.....	57.35	66.55	59.22	61.85	58.10	71.79	.....	57.91
13	a53.06	55.16	60.03	a62.48	57.33	66.58	59.28	61.88	57.81	71.59	a56.24	57.61
14	52.77	55.28	60.25	61.68	60.10	66.50	59.67	63.89	57.79	71.60	57.46	57.63
15	52.00	55.37	60.82	61.65	61.37	62.26	59.97	64.10	57.86	71.50	58.19	57.97
16	51.85	55.50	61.08	61.42	58.81	63.17	60.00	59.40	57.90	71.18	58.50	57.97
17	51.70	54.43	61.30	58.19	59.00	63.18	60.14	61.70	72.68	70.50	58.25	57.89
18	51.42	54.04	59.55	58.50	59.15	62.97	60.32	63.10	73.02	.....	57.82	57.90
19	50.97	53.99	59.34	58.62	59.23	63.15	60.46	60.72	73.11	.....	57.90	57.81
20	50.95	53.87	58.55	58.72	59.16	63.21	60.57	62.00	73.22	.....	57.92	67.76
21	50.73	57.07	56.53	58.81	59.29	63.25	60.12	63.67	73.25	.....	58.20	68.15
22	50.32	58.03	56.36	58.68	59.54	63.89	60.36	.....	72.91	a63.90	58.69	68.27
23	50.04	58.98	56.03	59.81	59.65	63.85	63.55	.....	72.76	.....	58.82	67.56
24	49.64	59.36	55.73	60.35	62.72	63.72	65.24	57.25	72.52	.....	58.80	67.25
25	49.20	58.68	55.69	58.77	63.36	63.57	.....	56.43	72.44	.....	58.55	63.32
26	49.04	59.40	55.73	59.11	60.30	64.37	.....	56.07	72.52	.....	a58.38	64.45
27	49.16	60.02	55.83	59.03	59.51	65.40	.....	59.26	72.53	.....	.....	64.89
28	49.35	60.52	55.90	58.75	63.56	63.08	.....	59.50	72.71	.....	56.40	65.23
29	49.20		55.98	57.81	64.40	61.19	.....	59.20	72.94	a50.64	56.55	63.70
30	49.10		56.00	57.44	64.97	60.80	a60.62	58.92	72.95	.....	56.58	63.91
31	49.59		56.15		65.38		61.25	58.71		.....		64.06

a Tape measurement.

79:7-34 (*1017, p. 331). Memphis Light, Gas and Water Division. In Memphis, in lot between Leath and North Dunlap Sts., about 250 feet north of North Parkway.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
1	96.74	95.53	93.16	.....	93.90	103.01
2	98.10	93.65	92.95	a 93.28	94.17	102.98
3	99.15	94.26	91.90	94.67	94.50	.....
4	98.70	93.67	91.84	95.55	94.50	.....
5	97.50	94.63	91.40	95.61	94.20	100.30
6	97.99	94.99	92.45	95.59	93.21	99.92
7	93.45	95.64	91.88	95.33	93.26	100.96
8	94.28	95.63	90.70	94.45	93.90	101.38
9	95.38	95.61	90.90	94.55	93.93	100.81
10	97.30	95.55	90.90	95.70	94.56	100.82
11	95.61	95.00	90.02	96.13	94.70	98.06
12	94.83	93.36	88.23	100.27	94.72	100.75
13	95.64	93.30	90.24	101.38	94.32	101.93
14	94.97	93.68	90.30	101.45	94.51	101.53
15	95.54	94.25	89.70	101.25	95.90	105.25
16	95.64	94.65	90.31	.....	95.80	105.73
17	95.75	94.86	90.83	95.90	96.10	102.53
18	95.12	94.16	88.70	96.03	96.00	99.00

a Tape measurement.

79:7-34--Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June
19	94.79	93.15	89.74	96.03	94.00	100.90
20	94.70	93.83	94.22	96.03	93.20	100.90
21	93.66	93.84	94.20	94.98	93.48	99.95
22	93.48	95.27	94.63	94.07	94.95	100.25
23	94.50	95.47	94.74	92.00	95.81	100.25
24	94.45	95.52	94.76	89.72	96.35	98.50
25	95.37	95.08	93.80	93.90	96.83	99.30
26	93.86	92.85	93.33	91.74	96.67	103.50
27	93.57	93.19	94.62	91.70	96.27	107.22
28	92.77	93.19	95.30	92.65	95.98	107.18
29	92.47		.....	92.64	97.29	105.74
30	94.44		.....	93.04	98.11	105.34
31	95.60		.....		102.13	

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	104.82	108.22	107.82	a 96.52	106.95	94.50
2	104.30	108.62	107.80	100.18	107.60	92.41
3	104.60	109.15	105.45	99.47	107.40	93.13
4	104.60	109.15	105.70	99.90	.....	94.53
5	102.81	108.62	107.00	99.25	103.70	94.93
6	104.53	102.90	107.72	99.17	.....	95.38
7	104.60	103.03	109.01	98.71	106.02	95.75
8	104.60	107.42	108.96	a 96.95	106.20	95.68
9	103.78	103.81	107.38	.....	105.61	93.59
10	104.60	106.74	107.00	.....	105.05	94.15
11	104.58	106.74	106.90	.....	103.86	94.17
12	103.62	104.80	106.89	.....	.....	93.95
13	103.43	109.12	106.00	.....	a101.59	94.08
14	102.35	110.09	105.72	.....	103.70	94.58
15	102.31	110.07	104.60	a 101.05	103.72	94.38
16	102.60	104.27	102.70	103.37	102.99	93.44
17	103.79	108.52	101.10	105.36	102.85	94.56
18	104.23	108.55	102.50	105.85	101.70	97.78
19	104.76	105.01	102.62	106.05	101.50	98.38
20	107.03	104.30	103.21	105.90	102.20	98.57
21	108.11	107.95	103.82	105.49	102.61	96.48
22	108.00	108.28	104.20	104.72	102.90	96.54
23	108.52	105.90	104.21	105.98	103.04	96.28
24	109.64	105.71	102.70	106.20	102.85	93.57
25	110.45	104.66	102.68	106.29	101.84	88.25
26	108.70	103.94	103.83	106.50	100.06	88.11
27	108.60	105.36	104.27	106.45	100.88	89.04
28	108.20	106.46	103.32	105.20	97.00	89.51
29	101.64	106.51	103.10	105.71	96.60	89.50
30	105.83	107.90	.....	106.23	94.90	.....
31	107.72	107.86		106.45		.....

a Tape measurement.

79:8-56. Memphis Light, Gas and Water Division. In Memphis, on grounds of Sheahan pumping station, about 50 feet east of Normal St. and about 0.5 mile south of Central Ave. Drilled well, diameter 8 inches, depth 1,370 feet. Measuring point, top of 8-inch coupling, 0.6 foot above land-surface datum. Equipped with water-stage recorder on Dec. 20, 1945.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Dec. 10	a 74.66	Dec. 21	74.93	Dec. 25	75.02	Dec. 29	75.19
14	a 74.40	22	74.94	26	75.11	30	75.24
17	a 74.40	23	74.95	27	75.14	31	75.32
20	a 74.88	24	74.92	28	75.18		

a Tape measurement.

79:11-1 (1017, p.332). Forest Products Chemical Co. In Memphis, in engine room of plant, about 300 feet south of Chelsea Ave. and about 1,200 feet east of Fairfax St.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	68.80	66.22	60.70	63.80	.....	64.45	69.21	67.60	65.70	65.00	60.52
2	a67.58	68.76	65.73	61.01	63.51	.....	66.30	69.01	66.30	66.58	65.14	58.88
3	67.98	68.69	65.79	a60.00	63.11	64.28	66.79	69.39	65.55	66.60	64.88	58.43
4	68.20	67.63	65.76	61.36	64.16	64.35	66.57	68.63	65.05	66.68	62.90	59.30
5	68.54	67.97	65.16	61.69	63.40	64.15	.....	66.40	65.80	66.67	62.60	59.70
6	69.17	67.79	65.42	61.64	63.26	64.51	.....	65.87	66.81	66.25	63.36	60.32
7	68.09	68.28	65.39	60.12	62.52	65.02	.....	66.93	67.10	64.30	64.15	60.48
8	68.00	68.00	65.39	59.40	62.96	65.32	.....	67.30	67.21	63.28	64.60	60.15
9	68.70	68.23	65.28	59.32	63.13	64.87	a66.87	68.69	66.93	64.39	64.90	58.69
10	68.54	66.69	65.72	59.39	64.13	63.77	67.54	68.30	a64.82	65.49	64.84	59.31
11	68.63	66.82	65.49	60.80	64.18	64.48	67.18	68.71	.....	65.40	63.51	59.89
12	69.05	67.11	64.91	61.86	64.02	65.00	67.80	66.91	67.70	65.39	61.70	60.59
13	68.80	67.51	64.41	62.00	64.25	65.67	67.59	67.51	67.01	65.34	63.48	60.76
14	68.53	67.55	64.08	61.70	64.24	65.67	68.41	67.71	66.92	64.72	64.20	a59.51
15	67.79	67.22	.....	60.64	63.36	67.20	67.80	67.30	67.05	64.95	64.70	.....
16	68.59	66.57	.....	61.49	64.17	66.51	67.91	63.70	66.32	64.41	64.48	.....
17	68.90	66.86	.....	a61.69	64.00	65.78	67.67	64.41	66.36	64.72	64.90	.....
18	68.84	66.83	.....	62.46	63.52	65.11	68.06	65.62	66.29	64.85	63.58	.....
19	68.79	67.04	a63.22	62.15	63.64	65.94	68.00	65.48	.....	64.83	63.65	.....
20	69.31	66.75	63.56	62.43	63.39	65.89	67.18	66.03	66.25	65.18	63.45	.....
21	68.58	66.60	63.44	62.60	62.71	66.09	65.74	66.62	66.00	63.23	64.24	a61.95
22	68.73	67.10	63.74	62.22	62.66	66.27	63.64	67.03	66.30	64.10	64.08	63.13
23	69.17	67.42	63.65	61.52	63.51	66.65	65.37	66.64	64.96	63.90	64.43	62.59
24	69.03	67.17	63.27	62.28	63.56	65.62	65.80	66.90	65.57	64.76	64.99	62.34
25	68.99	66.50	61.96	63.09	64.00	65.29	66.87	66.68	66.16	64.85	63.29	60.83
26	68.84	66.00	62.00	63.09	64.20	64.03	67.71	66.69	66.67	64.78	61.91	60.86
27	69.09	65.56	61.73	64.31	63.95	63.79	69.49	66.70	66.95	64.72	61.69	.....
28	68.62	66.61	61.87	63.36	64.30	.....	68.36	66.89	66.61	64.95	61.64	a60.60
29	68.95		62.22	62.90	64.31	.....	66.60	67.15	66.37	64.50	61.68	62.61
30	68.86		62.20	64.12	64.23	65.13	67.99	67.19	66.08	64.70	.....	61.66
31	68.90		61.92		64.30		68.37	67.60		65.01		61.63

a Tape measurement.

79:16-1 (*1017, p.332). Layne & Bowler, Inc. In Memphis, in well house next to University St., and about 250 feet south of Chelsea Ave.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	62.54	Apr. 3	a 74.20	July 9	63.15	Oct. 8	61.10
8	63.83	10	58.48	16	63.12	15	60.58
15	64.53	24	57.20	23	60.96	22	59.71
22	64.74	May 1	58.88	30	64.60	29	60.45
29	65.03	8	58.47	Aug. 6	63.00	Nov. 5	58.85
Feb. 5	64.41	15	59.18	13	64.16	13	59.64
12	61.95	22	58.41	20	61.87	19	59.60
20	62.08	29	60.03	28	62.81	26	60.60
26	61.93	June 5	60.10	Sept. 4	61.49	Dec. 3	58.80
Mar. 5	60.34	12	60.49	10	62.93	10	58.85
13	59.55	19	60.37	17	61.91	17	58.85
20	58.12	26	62.78	24	62.05	26	56.75
27	56.89	July 5	61.20	Oct. 1	62.30		

a Pumping.

79:19-1 (*1017, p.333). Oliver Finnie Co. In Memphis, about 50 feet south of Vance Ave., and about 450 feet west of South Front St., in basement of plant.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	101.78	Apr. 3	96.36	July 5	108.85	Oct. 2	109.38
9	100.67	10	96.06	10	108.20	9	104.50
16	101.74	24	99.80	17	108.60	16	103.86
23	101.61	May 1	99.29	24	110.33	23	104.72
30	101.40	8	99.22	31	111.78	30	103.28
Feb. 6	102.37	15	100.75	Aug. 7	111.50	Nov. 6	104.70
13	102.47	22	101.98	21	110.88	13	103.14
20	100.77	29	104.80	28	111.24	20	102.30
28	100.19	June 5	106.45	Sept. 5	111.90	27	104.64
Mar. 6	98.12	12	106.64	11	111.52	Dec. 4	100.70
13	95.97	19	107.55	18	109.42	11	98.60
20	96.24	26	107.87	25	109.80	17	99.06
27	95.69						

79:20-4 (*987, pp. 145-146; 1017, p.333). Memphis Generating Co. In Memphis, just east of South Fourth St. and about 500 feet north of Iowa Ave.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	97.29	Apr. 10	96.60	July 17	108.65	Oct. 9	103.50
9	99.25	24	101.79	24	110.63	16	101.99
16	100.05	May 1	99.57	31	111.43	23	102.40
23	98.34	8	100.77	Aug. 7	110.41	30	104.10
30	98.81	15	101.25	14	112.50	Nov. 6	102.07
Feb. 6	98.86	22	101.36	21	110.43	13	100.20
20	101.50	29	103.55	28	110.68	20	99.09
28	97.96	June 5	105.63	Sept. 5	110.00	27	98.65
Mar. 6	99.30	12	105.97	11	110.97	Dec. 4	97.02
13	95.80	19	112.02	18	107.30	11	96.93
20	96.43	26	106.40	25	107.98	17	99.56
27	97.86	July 5	107.54	Oct. 2	107.20	26	95.18
Apr. 3	96.22	10	107.98				

79:22-1. The Liquid Carbonic Corporation. In Memphis, about 375 feet north of McLemore Ave. and about 400 feet west of Florida St. Drilled well, diameter 8 inches, depth unknown. Measuring point, top of 3-inch reducer, 1.8 feet above concrete base and 3.0 feet above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Mar. 1, 1944	103.86	July 18, 1944	119.96	Dec. 12, 1944	115.92
6	109.11	25	120.24	19	116.51
14	102.58	Aug. 1	120.60	29	115.45
20	108.13	8	120.77	Jan. 3, 1945	108.22
29	108.18	15	121.28	9	113.45
Apr. 4	107.65	22	120.75	16	113.76
11	107.04	29	120.92	23	114.17
18	107.03	Sept. 5	118.93	30	114.49
25	106.70	12	119.50	Feb. 6	115.00
May 2	106.30	19	120.87	13	115.24
9	99.85	26	121.08	20	113.49
16	108.10	Oct. 3	120.73	28	106.98
23	105.32	10	119.34	Mar. 6	111.59
30	112.70	17	117.84	13	108.83
June 6	108.05	24	117.87	20	107.98
8	108.65	31	117.67	27	107.52
13	115.94	Nov. 7	117.45	Apr. 3	107.10
20	117.63	14	116.95	10	101.63
27	117.84	21	116.43	24	104.70
July 4	112.66	28	116.37	May 1	110.70
11	119.38	Dec. 5	109.59	8	111.69

79:22-1--Continued.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
May 15, 1945	107.62	July 31, 1945	121.66	Oct. 16, 1945	117.20
22	106.37	Aug. 7	120.50	23	117.50
29	107.63	14	122.07	30	116.45
June 5	114.77	21	121.16	Nov. 6	117.46
12	110.30	28	122.31	14	115.72
19	110.39	Sept. 5	121.99	20	108.65
26	111.79	11	122.33	27	108.40
July 5	117.53	18	114.75	Dec. 4	113.00
10	117.08	25	107.20	11	113.05
17	113.30	Oct. 2	113.40	17	113.62
24	119.60	9	116.75	26	105.56

79:23-1 (*1017, p.333). Memphis Park Commission. In Memphis, at south end of lake in Riverside Park.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	97.48	Apr. 10	88.51	July 17	98.41	Oct. 9	102.75
9	96.75	24	90.02	24	99.40	16	103.21
16	97.56	May 1	91.20	31	100.13	23	103.28
23	97.01	8	93.36	Aug. 7	100.52	30	101.17
30	98.56	15	93.94	14	101.11	Nov. 6	103.35
Feb. 6	99.89	22	93.86	21	101.23	14	99.20
13	97.86	29	94.30	28	101.84	20	100.54
20	96.40	June 5	96.00	Sept. 5	110.47	27	100.91
28	94.68	12	95.94	11	101.90	Dec. 4	100.83
Mar. 6	93.55	19	95.65	18	101.62	11	102.32
13	91.17	26	95.71	25	103.30	17	97.18
20	89.22	July 10	96.99	Oct. 2	104.25	26	96.32
27	89.11						

79:25-1 (*1017, p.334). Apex Laundry Co. In Memphis, in lot between Rozelle and Kyle Sts., about 225 feet south of Lamar Ave.

Water level, in feet below land-surface datum, 1945

Jan. 3	100.77	Apr. 10	97.34	July 17	101.40	Oct. 9	101.80
9	100.21	24	97.45	24	101.74	16	101.78
16	100.50	May 1	97.67	31	102.16	23	101.82
23	100.80	8	97.88	Aug. 7	102.71	30	101.77
30	101.16	15	98.13	14	102.99	Nov. 6	101.26
Feb. 6	101.00	22	98.36	21	103.12	13	101.02
13	100.44	29	98.60	28	103.24	20	100.80
20	100.21	June 5	99.24	Sept. 5	103.20	27	100.81
28	100.07	12	99.66	11	103.41	Dec. 4	98.23
Mar. 6	99.86	19	100.04	18	103.51	11	98.49
13	98.87	26	100.43	25	103.51	17	99.20
20	98.14	July 5	100.92	Oct. 2	103.48	26	98.24
27	97.53	9	101.05				

79:26-2 (*1017, p.334). C. S. Chapman. On Mill Road, about 0.7 mile north of Raleigh.

Water level, in feet below land-surface datum, 1945

Jan. 2	82.06	Apr. 2	78.87	July 2	79.29	Oct. 1	79.46
8	82.00	9	77.76	9	79.57	8	79.30
15	81.85	17	77.60	16	79.83	15	81.08
22	81.83	23	77.66	23	80.04	22	81.40
29	81.92	30	77.93	30	80.17	29	78.43
Feb. 5	81.79	May 7	78.12	Aug. 6	80.47	Nov. 5	78.25
12	81.51	14	78.21	13	80.66	13	77.78
19	81.40	21	78.38	20	80.36	19	81.04
26	81.22	28	78.50	27	80.26	26	81.57
Mar. 5	80.49	June 4	78.76	Sept. 4	80.32	Dec. 3	79.97
12	80.20	11	78.85	10	80.33	10	81.21
19	79.40	18	79.08	17	80.07	21	77.00
26	78.70	25	79.21	24	80.95	28	76.76

79:27-2. The Wallace Sanitarium. East of Memphis city limits, about 600 feet north of Wallace Road and about 0.35 mile east of Goodlett St. Drilled well, diameter 4 inches, depth 560 feet. Measuring point, top of casing, 3.7 feet above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1944	84.27	Oct. 2, 1944	87.10	May 21, 1945	82.88
15	84.27	9	86.91	29	83.05
20	84.29	16	86.40	June 4	83.02
27	84.26	23	85.92	11	84.90
Apr. 3	84.24	30	85.56	18	83.23
10	84.03	Nov. 6	85.28	25	83.37
17	83.83	13	84.99	July 9	84.54
25	83.39	20	84.67	16	85.25
May 2	83.22	27	84.36	23	85.83
8	83.17	Dec. 4	84.20	30	86.29
15	83.13	11	84.05	Aug. 6	86.82
22	83.26	18	83.94	13	87.23
29	83.46	26	83.93	20	87.61
June 5	83.62	Jan. 2, 1945	83.90	27	87.73
12	83.79	8	83.87	Sept. 4	88.20
19	83.93	15	83.84	10	88.20
26	84.25	22	84.10	17	88.42
July 3	85.05	29	84.48	24	88.55
10	85.33	Feb. 5	84.59	Oct. 1	88.65
17	85.87	12	84.54	8	88.50
24	86.26	20	84.47	16	88.30
31	86.38	26	84.04	22	87.88
Aug. 4	86.48	Mar. 5	83.66	29	87.00
7	86.54	12	83.60	Nov. 5	87.67
14	86.84	20	83.57	13	87.09
21	87.11	26	83.33	19	86.68
28	87.20	Apr. 17	83.10	26	86.25
Sept. 4	86.92	23	81.02	Dec. 3	84.02
11	86.81	30	83.02	10	85.52
18	86.87	May 7	83.01	17	85.32
25	87.03	14	82.93	26	85.25

79:28-2 (*1017, p.334). Virginia Carolina Chemical Co. In Memphis, about 375 feet east of Collins St. and about 700 feet north of Poplar Ave. Nearby well pumping at time of measurement.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	44.10	Apr. 10	46.30	July 9	43.97	Oct. 8	45.30
8	44.20	24	44.99	16	44.08	15	45.10
15	a 41.44	May 1	45.39	23	43.91	22	45.05
22	44.68	8	a 39.87	30	44.16	29	44.88
29	44.10	15	44.65	Aug. 6	42.50	Nov. 5	45.10
Feb. 5	a 41.05	22	45.09	13	41.91	13	42.60
12	a 41.32	29	44.74	20	44.86	19	41.70
20	47.87	June 5	44.75	Sept. 4	46.67	26	42.86
26	a 41.08	12	44.42	10	45.72	Dec. 3	44.25
Mar. 6	47.02	19	44.40	17	a 41.98	10	45.96
13	46.84	26	a 39.24	24	46.16	17	42.69
20	46.99	July 5	43.76	Oct. 1	46.21	26	42.60
27	46.53						

a Nearby well shut down.

79:32-4 (*987, pp. 147-149; 1017, p.335). Bannon Ice & Fuel Co. In Memphis, about 150 feet south of Auction Ave., and about 150 feet east of North Seventh St.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 2	59.68	Apr. 2	52.63	July 2	66.77	Oct. 1	64.10
8	57.81	9	52.28	9	66.61	8	63.20
15	59.04	16	58.55	16	65.99	15	61.75
22	58.10	23	57.57	23	68.57	22	62.54
29	57.94	30	57.08	30	68.27	29	63.77
Feb. 5	59.53	May 7	58.00	Aug. 6	69.03	Nov. 5	61.90
12	59.66	14	58.20	13	70.40	13	61.35
19	58.77	21	57.99	20	68.55	19	63.93
26	57.85	28	65.81	27	67.98	26	61.44
Mar. 5	55.93	June 4	63.53	Sept. 4	68.26	Dec. 3	59.04
12	53.45	11	63.50	10	69.18	10	61.14
19	51.77	18	63.09	17	64.87	17	56.54
26	53.17	25	63.37	24	66.10	26	53.59

79:33-2. Memphis State College. In Memphis, in pump house, about 600 feet south of Norriswood Ave. and about 700 feet east of Patterson St. Drilled well, diameter and depth unknown. Measuring point, top of 1½-inch tee in air line, 4.5 feet above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Mar. 9, 1944	100.44	Oct. 2, 1944	106.31	Feb. 26, 1945	101.29
15	102.43	9	103.38	Mar. 12	101.69
27	102.37	23	102.77	27	99.93
Apr. 3	101.47	30	102.42	Apr. 10	99.38
10	101.44	Nov. 6	102.35	17	100.16
May 15	100.90	13	101.98	30	99.91
22	103.05	20	101.40	May 7	101.04
29	103.11	Dec. 4	101.52	June 18	102.34
June 5	103.81	11	101.43	July 30	107.14
12	101.89	18	101.28	Aug. 27	109.33
19	104.17	26	102.63	Sept. 4	110.03
July 3	105.74	Jan. 2, 1945	102.62	24	104.12
17	110.30	15	102.35	Oct. 22	103.85
24	107.06	29	103.70	29	103.02
31	105.94	Feb. 5	101.80	Dec. 17	103.06
Aug. 14	107.08	12	101.22	26	102.85
21	108.95				

79:34-1 (*1017, p.335). H. Blockman & Co. In Memphis, about 250 feet south of Mallory Ave., and about 600 feet east of South Third St.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	41.63	Apr. 4	34.73	July 5	40.94	Oct. 9	45.67
9	41.03	10	34.14	10	41.36	16	43.01
16	41.06	24	36.00	17	42.94	23	43.27
23	41.09	May 1	36.92	24	39.26	30	44.21
30	41.34	8	37.78	31	44.74	Nov. 6	44.66
Feb. 6	41.66	15	39.05	Aug. 7	44.72	14	42.45
13	41.71	22	39.41	14	45.70	20	46.21
20	40.92	29	39.42	21	45.76	27	46.23
28	39.81	June 5	41.85	Sept.11	45.62	Dec. 4	43.04
Mar. 6	38.97	12	41.31	18	42.34	11	45.23
13	37.12	19	40.92	25	43.93	17	40.44
20	35.29	26	41.31	Oct. 2	43.57	26	38.96
27	34.79						

79:35-1 (*1017, p.335). A. J. Green. In Brunswick, about 350 feet east of Brunswick Road and about 0.15 mile north of the Brunswick railroad depot.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	3.36	Mar. 28	2.05	June 28	1.70	Oct. 10	2.18
Mar. 7	2.44	Apr. 6	2.16	Aug. 4	2.43	15	2.14
14	2.40	May 14	1.47	30	2.58	Dec. 12	1.09
21	2.91	June 2	1.82	Sept.26	2.42		

79:36-1. Oakville Memorial Sanatorium. In pump house, about 675 feet northwest of Getwell Road and about 1,200 feet southwest of U. S. Highway 78. Drilled well, diameter 12 inches, depth 502 feet. Measuring point, top of slot in east side of pump base, 0.8 foot above land-surface datum. Equipped with turbine pump and electric motor.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Apr. 18, 1944	59.60	Dec. 29, 1944	61.40	July 17, 1945	60.99
26	59.40	Jan. 3, 1945	61.30	24	61.05
May 2	59.41	9	61.48	Aug. 7	61.48
9	59.37	16	62.57	14	61.57
16	59.33	Feb. 13	61.15	21	61.60
23	59.72	20	60.47	28	61.62
30	59.70	28	60.27	Sept. 5	61.70
June 6	59.90	Mar. 6	60.35	11	62.80
13	60.05	13	60.44	18	61.60
20	60.27	20	60.15	25	61.80
27	60.60	27	60.06	Oct. 2	62.91
July 4	60.87	Apr. 4	59.89	9	66.76
11	60.80	10	59.77	16	61.58
18	60.99	25	59.59	23	61.42
Aug. 1	61.23	May 2	59.61	30	61.69
8	61.29	8	59.83	Nov. 6	61.36
22	61.79	15	59.93	14	61.26
29	61.78	22	60.13	20	60.84
Sept. 5	61.90	30	59.55	27	61.01
Oct. 24	62.36	June 5	60.37	Dec. 4	60.77
Nov. 14	62.82	19	61.73	11	60.65
21	61.80	26	60.50	17	60.81
28	61.97	July 5	60.80	26	60.56
Dec. 12	62.04	10	60.77		

79:36-2. Oakville Memorial Sanatorium. In pump house, about 750 feet northwest of Getwell Road and about 900 feet southwest of U. S. Highway 78. Drilled well, diameter unknown, depth 413 feet. Measuring point, top of 1-inch coupling (breather connection) in east side of pump base, 1.8 feet above land-surface datum. Equipped with turbine pump and electric motor.

Water level, in feet below land-surface datum, 1944-45

Apr. 18, 1944	52.65	Aug. 22, 1944	56.94	Dec. 29, 1944	53.74
26	52.37	29	53.96	Jan. 3, 1945	53.75
May 2	58.96	Sept. 5	53.86	9	53.74
9	58.81	12	56.03	16	53.76
16	58.44	19	54.01	23	53.73
23	58.24	26	54.12	30	53.92
30	57.74	Oct. 3	54.07	Feb. 13	53.80
June 6	57.63	10	54.09	20	54.20
13	52.99	17	53.99	28	a 75.47
20	56.94	24	53.97	Mar. 6	53.33
27	56.54	31	53.98	13	53.52
July 4	56.40	Nov. 7	53.89	20	53.28
11	55.74	14	53.87	27	53.34
18	55.71	21	53.91	Apr. 10	53.06
25	55.25	28	53.93	25	52.99
Aug. 1	55.13	Dec. 5	53.85	May 22	53.70
8	54.45	12	53.87	June 5	53.70
15	53.95	19	53.86	19	53.53

a Pumping.

79:36-2--Continued.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
June 26, 1945	53.85	Sept.18, 1945	55.31	Dec. 11, 1945	55.83
July 10	53.65	Oct. 9	57.93	17	a 76.29
31	53.92	16	54.33	26	53.68
Aug. 7	54.43	30	55.57		

a Pumping.

79:37-1 (*1017, p.335). Whitehaven High School. In Whitehaven, about 250 feet west of U. S. Highway 51 and about 0.35 mile south of the Capleville-Whitehaven Road.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	46.52	Apr. 4	43.68	July 10	41.82	Oct. 9	42.25
9	46.40	10	43.83	17	41.81	16	41.05
16	46.41	25	43.26	24	41.87	23	43.60
23	46.33	May 2	43.13	31	41.94	30	43.73
30	46.09	8	42.92	Aug. 7	42.04	Nov. 6	43.74
Feb. 6	45.97	15	42.69	14	42.18	14	43.80
13	45.93	22	42.57	21	42.32	20	43.80
20	45.65	29	42.39	28	42.39	27	43.83
28	45.52	June 5	42.27	Sept. 5	42.66	Dec. 4	43.72
Mar. 6	45.49	12	42.12	11	42.80	11	43.14
13	45.13	19	42.08	18	42.89	17	43.49
20	44.78	26	41.94	25	43.62	26	43.19
27	44.45	July 5	41.88	Oct. 2	43.20		

79:38-3. American Finishing Co. In Memphis, about 150 feet east of Lauderdale St. and about 275 feet south of Bodley Ave. Drilled well, diameter 12 inches, depth unknown. Measuring point, top of casing, at land-surface datum. Equipped with water-stage recorder on June 22, 1945.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	78.80	85.13	.....	.....	85.40	76.28
2	.....	76.84	85.39	.....	a 85.67	85.55	75.90
3	.....	74.95	85.64	.....	.....	85.50	80.55
4	.....	74.59	85.69	.....	.....	81.50	81.79
5	.....	73.98	83.00	a 86.88	.....	83.54	82.83
6	.....	73.80	80.50	.....	.....	84.81	82.76
7	.....	73.55	82.10	.....	.....	84.30	83.00
8	.....	73.55	83.73	.....	.....	84.81	83.41
9	.....	75.31	84.40	.....	a 86.33	84.58	83.26
10	.....	78.53	84.42	.....	.....	83.90	81.39
11	.....	79.37	84.52	a 87.20	.....	80.59	82.80
12	.....	79.80	84.65	.....	.....	81.70	83.52
13	.....	80.38	83.45	.....	.....	82.89	83.06
14	.....	80.64	85.52	.....	.....	83.20	83.16
15	.....	80.60	85.60	.....	.....	84.26	83.16
16	.....	79.00	79.55	.....	a 84.73	84.44	82.90
17	.....	80.59	82.70	.....	.....	84.39	81.76
18	.....	81.10	84.92	a 86.53	.....	83.35	82.46
19	.....	81.60	85.82	.....	.....	82.10	82.54
20	.....	81.72	85.78	.....	.....	83.07	82.87
21	.....	82.16	85.97	.....	.....	83.70	82.91
22	a 79.87	82.24	86.37	.....	.....	83.84	82.70
23	79.37	80.00	86.54	.....	a 84.78	86.54	78.45
24	79.50	82.53	86.76	.....	85.42	83.34	74.94
25	78.66	82.75	87.33	a 80.30	85.32	80.65	74.19
26	79.12	83.17	87.30	.....	85.36	81.58	79.84
27	79.38	83.80	81.48	.....	85.25	82.63	81.12
28	79.81	84.10	86.81	.....	84.97	83.34	81.58
29	80.10	84.40	87.02	.....	83.68	82.73	81.41
30	80.90	82.40	.....	.....	85.21	76.51	77.70
31		84.33	.....		85.18		73.90

a Tape measurement.

79:38-4. American Finishing Co. In Memphis, about 275 feet east of McMillan St. and about 350 feet south of Bodley Ave., in center of east reservoir. Drilled well, diameter 8 inches, depth unknown. Measuring point, top of reservoir roof, 14.6 feet above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
June 13, 1944	60.80	Dec. 27, 1944	63.92	July 5, 1945	57.00
20	60.31	Jan. 3, 1945	61.86	10	59.20
27	61.91	9	61.52	17	62.83
July 4	58.26	16	62.02	24	62.66
11	62.45	23	61.71	31	63.19
25	64.55	30	61.32	Aug. 7	63.99
Aug. 1	64.69	Feb. 6	61.76	14	65.27
8	65.67	13	62.49	21	63.90
15	66.22	20	61.99	28	64.90
22	66.10	28	61.63	Sept. 5	64.88
29	64.97	Mar. 6	61.08	11	65.12
Sept. 5	62.03	13	59.66	18	68.00
12	62.92	20	57.03	25	64.11
19	64.56	27	58.44	Oct. 2	63.54
26	65.45	Apr. 4	58.20	9	63.80
Oct. 3	64.38	10	56.79	16	63.59
10	63.00	24	55.79	23	63.77
17	62.67	May 2	59.23	30	65.17
24	62.72	8	59.96	Nov. 6	64.08
31	63.04	15	60.94	14	62.58
Nov. 7	63.10	22	60.04	20	63.45
14	62.20	29	61.46	27	63.32
21	62.27	June 5	62.21	Dec. 4	60.25
28	63.67	12	61.22	11	62.51
Dec. 5	62.18	19	61.47	17	58.90
12	63.02	26	60.35	26	57.44
19	63.21				

79:49-1. Jack Callie, Oakville. About 20 feet northwest of Getwell Road and about 400 feet northeast of U. S. Highway 78. Drilled well, diameter 6 inches, depth 48 feet. Measuring point, top of 6-inch terra cotta pipe, 3.3 feet above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Apr. 18, 1944	36.63	Nov. 7, 1944	37.01	June 19, 1945	35.53
26	38.31	14	37.80	26	41.37
May 2	37.85	21	37.90	July 5	38.64
9	38.05	28	37.36	10	37.83
16	39.78	Dec. 5	37.14	17	40.06
23	39.68	12	38.78	24	40.50
30	36.50	19	36.95	31	38.78
June 6	36.48	29	36.94	Aug. 7	40.48
13	39.53	Jan. 3, 1945	37.54	14	39.07
20	42.90	9	36.64	21	39.12
27	37.35	16	38.53	28	39.75
July 4	36.93	23	36.58	Sept. 5	39.08
11	42.83	30	37.12	11	36.90
18	40.51	Feb. 6	36.75	18	36.51
25	37.57	13	38.16	25	39.08
Aug. 1	40.60	20	36.56	Oct. 2	36.70
8	37.98	28	36.55	9	36.88
15	38.26	Mar. 6	36.46	16	37.14
22	37.61	13	39.50	23	37.86
29	37.78	20	36.53	30	37.89
Sept. 5	40.77	27	36.72	Nov. 6	37.03
12	37.34	Apr. 4	34.37	14	37.45
19	37.41	10	37.29	20	36.40
26	39.48	25	35.48	27	38.85
Oct. 3	39.55	May 2	36.57	Dec. 4	36.92
10	39.18	8	38.04	11	37.43
17	36.74	22	37.33	17	36.69
24	38.16	30	36.67	26	39.31
31	39.09	June 5	39.90		

79:54-1. Banner Laundry-Cleaner. In Memphis, about 75 feet south of Beale Ave. and about 140 feet east of Hernando St. Drilled well, diameter 6 inches, depth unknown. Measuring point, hole in top of flange, 1.8 feet above land-surface datum.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Apr. 6	66.84	July 10	79.76	Sept. 5	83.30	Oct. 23	75.88
24	70.91	17	80.16	11	83.92	30	75.20
May 1	69.58	31	83.57	18	80.11	Nov. 6	74.40
22	73.09	Aug. 7	83.70	25	80.90	13	73.48
29	76.59	14	84.73	Oct. 2	78.60	20	71.50
June 5	78.12	21	84.94	9	77.29	27	72.52
26	80.03	28	85.63	16	74.61	Dec. 11	72.94
July 5	80.68						

79:61-1 (*1017, p.336). Chickasaw Cooperage Co. In Memphis, about 50 feet north of Pershing Ave. and about 300 feet west of Scott St., in sub-basement of plant.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	79.33	Apr. 10	75.15	July 16	78.14	Oct. 8	75.10
9	80.13	24	75.00	23	74.87	15	75.59
16	80.25	May 1	76.78	30	77.93	22	70.49
23	81.42	8	75.14	Aug. 6	75.35	29	74.88
29	80.98	15	77.12	13	78.34	Nov. 5	72.68
Feb. 5	80.03	22	74.65	20	75.92	13	77.34
13	79.46	29	76.80	27	76.94	19	75.75
20	79.22	June 5	76.24	Sept. 4	75.20	26	79.17
28	78.37	12	77.95	10	76.75	Dec. 3	70.67
Mar. 6	77.70	19	77.85	17	75.73	10	74.42
13	77.79	26	78.61	24	76.79	17	76.27
20	75.96	July 5	74.17	Oct. 1	76.14	26	71.23
27	73.19	9	79.73				

79:65-1. Clover Farm Dairy. In Memphis, about 85 feet east of Manassas St. and about 125 feet north of Beale Ave. Drilled well, diameter 6 inches, depth unknown. Measuring point, top of casing, 0.4 foot above land-surface datum. Equipped with water-stage recorder on Aug. 29, 1945.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Aug.	Sept.	Oct.	Nov.	Dec.
1	.....	122.20	118.38	117.43	109.85
2	.....	121.79	118.05	118.01	106.48
3	.....	119.60	118.08	116.10	107.25
4	.....	121.12	117.11	114.90	108.27
5	.....	121.91	117.20	114.62	108.94
6	.....	123.70	115.25	115.60	109.01
7	.....	124.10	113.60	116.25	110.60
8	.....	123.59	.....	117.00	108.93
9	.....	121.88	a 111.70	116.45	107.14
10	.....	123.33	114.62	114.69	108.19
11	.....	122.58	115.05	111.60	108.83
12	.....	122.30	115.60	111.89	.....
13	.....	121.60	115.39	.....	.....
14	.....	120.91	113.49	a 110.55	a 108.45
15	.....	119.60	112.55	113.64	108.70
16	.....	116.73	113.90	114.00	105.90
17	.....	117.68	115.49	113.05	108.41
18	.....	118.49	114.99	112.48	109.10
19	.....	119.08	117.01	111.95	107.95
20	.....	119.35	115.30	112.47	108.30
21	.....	122.01	115.26	112.72	108.03
22	.....	121.80	115.66	113.61	.....
23	.....	119.13	114.72	112.82	.....
24	.....	120.08	116.71	111.82	.....
25	.....	119.26	115.21	110.25	.....

a Tape measurement.

79:65-1--Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Aug.	Sept.	Oct.	Nov.	Dec.
26	.....	120.58	115.31	112.12	.....
27	.....	121.15	114.80	112.09	.....
28	.....	121.62	114.15	110.89	a 106.30
29	a 118.62	119.25	115.30	110.43	.....
30	122.32	118.07	116.38	109.61	.....
31	123.69		116.79		.....

a Tape measurement.

79:105-1 (*1017, p.336). Memphis Light, Gas and Water Division. In Memphis, about 125 feet east of Kansas St. and about 250 feet south of McLemore Ave., in engine room.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	108.44	Apr. 3	103.17	July 10	111.90	Oct. 9	112.05
9	109.46	10	101.67	17	112.38	16	111.33
16	109.99	25	103.87	24	114.05	23	112.32
23	110.17	May 1	106.30	31	115.16	30	112.29
30	110.65	8	107.54	Aug. 7	114.86	Nov. 6	112.30
Feb. 6	111.12	15	107.29	14	116.04	14	110.74
13	111.60	22	106.35	21	115.93	20	108.18
20	109.82	29	107.33	28	116.13	27	108.57
28	107.09	June 5	110.49	Sept. 5	119.90	Dec. 4	106.30
Mar. 6	107.46	12	109.72	11	115.50	11	108.71
13	105.90	19	109.54	18	114.20	17	108.14
20	103.73	26	110.70	25	106.09	26	105.16
27	103.47	July 5	111.50	Oct. 2	112.54		

79:149-1. National Fireworks, Inc. About 125 feet west of Brunswick Road, about 1.3 miles north of Brunswick, on the U. S. Navy proving range. Used drilled well, diameter 3½ inches, depth 214 feet. Measuring point, top of 4-inch reducer, 4.0 feet above land-surface datum.

Water level, in feet above land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
July 11, 1944	a 0.64	Jan. 5, 1945	1.85	June 30, 1945	3.17
Aug. 4	a .36	Mar. 7	a .93	July 1	3.11
4	1.95	7	2.67	8	2.94
19	1.58	14	2.75	15	2.93
26	1.36	21	3.22	22	3.80
30	1.32	28	2.98	Aug. 4	2.70
Sept. 7	1.41	Apr. 4	2.92	5	2.60
13	1.33	15	2.60	12	2.90
20	1.16	22	3.40	19	2.04
27	1.07	25	3.39	26	2.02
Oct. 2	1.23	May 14	3.57	30	2.44
9	1.02	20	3.57	Sept. 2	2.04
16	1.02	June 2	3.35	15	2.84
26	.97	3	2.64	26	2.53
Nov. 8	.97	10	3.30	Oct. 10	2.80
24	1.15	17	3.80	15	2.81
29	1.15	24	3.40	Dec. 12	3.96
Dec. 9	1.32				

a Pumping.

79:154-1 (*1017, p. 336). O. T. Smith Dairy. In shed about 400 feet east of Airways Road and 0.55 mile south of Raines Road.

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79:154-1--Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 3	79.64	Apr. 4	63.55	July 10	57.84	Oct. 9	65.58
9	79.26	10	62.04	17	58.07	16	67.38
16	78.34	25	59.21	24	58.54	23	68.10
23	77.64	May 2	58.24	31	59.09	30	68.82
30	76.78	8	57.50	Aug. 7	59.84	Nov. 6	69.52
Feb. 6	76.31	15	56.45	14	60.59	14	70.12
13	75.70	22	54.90	21	61.38	20	70.38
20	74.71	29	55.64	28	62.13	27	69.68
28	73.30	June 5	56.36	Sept. 5	63.18	Dec. 4	67.11
Mar. 6	71.61	13	56.71	11	63.68	11	69.16
13	69.55	19	57.03	18	64.38	17	69.66
20	67.49	26	57.21	25	64.30	26	68.79
27	65.55	July 5	57.70	Oct. 2	65.55		

79:167-1. City of Collierville. In engine room of the Collierville waterworks, about 75 feet east of Main St. and about 750 feet south of State Highway 57. Drilled well, diameter 6 inches, depth 240 feet. Measuring point, hole in concrete cap at top of casing, 0.2 foot above land-surface datum.

Water level, in feet below land-surface datum, 1944-45

Date	Water level	Date	Water level	Date	Water level
Nov. 17, 1944	99.32	Apr. 24, 1945	98.76	Oct. 15, 1945	99.11
Dec. 9	99.35	June 2	99.99	Nov. 5	100.18
Jan. 5, 1945	99.07	Aug. 4	100.16	Dec. 12	100.33
Mar. 7	99.19	30	100.31		

79:175-1. C. W. Bond. In Arlington, about 150 feet west of Chester St. and about 0.45 mile south of railroad depot. Drilled well, diameter 2 inches, depth 200 feet. Measuring point, top of casing, 2.4 feet below land-surface datum. Water levels, in feet below land-surface datum, 1945: Sept. 26, 61.65; Oct. 15, 61.68; Dec. 12, 61.10.

VIRGINIA

INTRODUCTION

The two programs of water-level measurements, begun in June 1928 in cooperation with the Virginia Geological Survey, were continued in 1945. The wells included in one of these programs are in the northern part of the State, and those included in the other are in the southeastern part of the State. The two programs are discussed separately in this report.

The long-range program, a systematic study of the ground-water resources of the State, was carried forward.

NORTHERN VIRGINIA

By Rodney Hart

Program of work

All of the six observation wells in northern Virginia are in Arlington and Fairfax Counties, in the general vicinity of Washington, D. C. An automatic water-stage recorder was maintained on the Bacon well and measurements by the wetted-tape method were made weekly in the other wells. Since measurements in all of the Swart wells, with the exception of Swart 162, were discontinued after February 1944, Swart well 162 will be referred to in the future as simply the Swart well. A total of about 282 individual measurements of water level was made during 1945 by the wetted-tape method.

Fluctuations of water level

Inasmuch as the observation wells in the northern part of Virginia are shallow wells and are underlain by crystalline rocks, their water levels are greatly affected by precipitation. The precipitation and departure from normal at Washington, D. C., in 1945, which are representative of the precipitation in the northern part of Virginia, are given for each month and for the year in the following table:

Precipitation and departure from normal at Washington, D. C., in inches, 1945
(From Monthly Meteorological Summary, U. S. Weather Bureau)

Month	Recorded precipitation	Normal precipitation	Departure from normal	Accumulated departure from normal
January	2.89	3.55	-0.66	-0.66
February	2.94	3.27	-.33	-.99
March	.84	3.75	-2.91	-3.90
April	3.26	3.27	-.01	-3.91
May	3.44	3.70	-.26	-4.17
June	5.13	4.13	+1.00	-3.17
July	9.99	4.71	+5.28	+2.11
August	1.37	4.01	-2.64	-.53
September	4.56	3.24	+1.32	+.79
October	1.46	2.84	-1.38	-.59
November	4.62	2.37	+2.25	+1.66
December	5.29	3.32	+1.97	+3.63
Year	45.79	42.16	+3.63	+3.63

It will be seen from the preceding table that the precipitation was a little more than 3.5 inches above normal in 1945 in contrast to the almost normal reading of +0.04 inch in 1944. This increase in precipitation is reflected in the net rise in water levels in all of the wells in the northern Virginia area.

The following table has been compiled from data for 1945 on the six wells in northern Virginia. It shows the water level for each well in early January and late December, the highest and lowest levels during the year, the range in level, and the net change for the year.

Summary of water levels in 6 observation wells in northern Virginia in 1945
(Net change and range, in feet; water levels, in feet below land-surface datum)

Well	Water level Jan. 6	Water level Dec. 17	Net change	Highest level	Lowest level	Range in level
Ross	22.68	22.11	+0.57	21.20	23.24	2.04
Halls Hill	26.11	24.74	+1.37	23.00	26.11	3.11
Jefferson	23.17	21.96	+1.21	20.95	23.82	2.87
Bell	1.17	1.85	-.68	.76	4.53	3.77
Swart	1.16	1.17	-.01	.35	2.01	1.66
Bacon	a 15.78	b 13.63	+2.15	11.81	16.19	4.37

a Jan. 1. b Dec. 23.

As indicated by this summary, the greatest rise in water level occurred in the Bacon well, near Fairfax, where the water level was 2.15 feet higher at the end of the year than at the beginning. The greatest range in water-level fluctuation also occurred in this well, where the difference between the highest and lowest stages was 4.37 feet. The average net rise for the four deepest wells, the Bacon, Halls Hill, Jefferson,

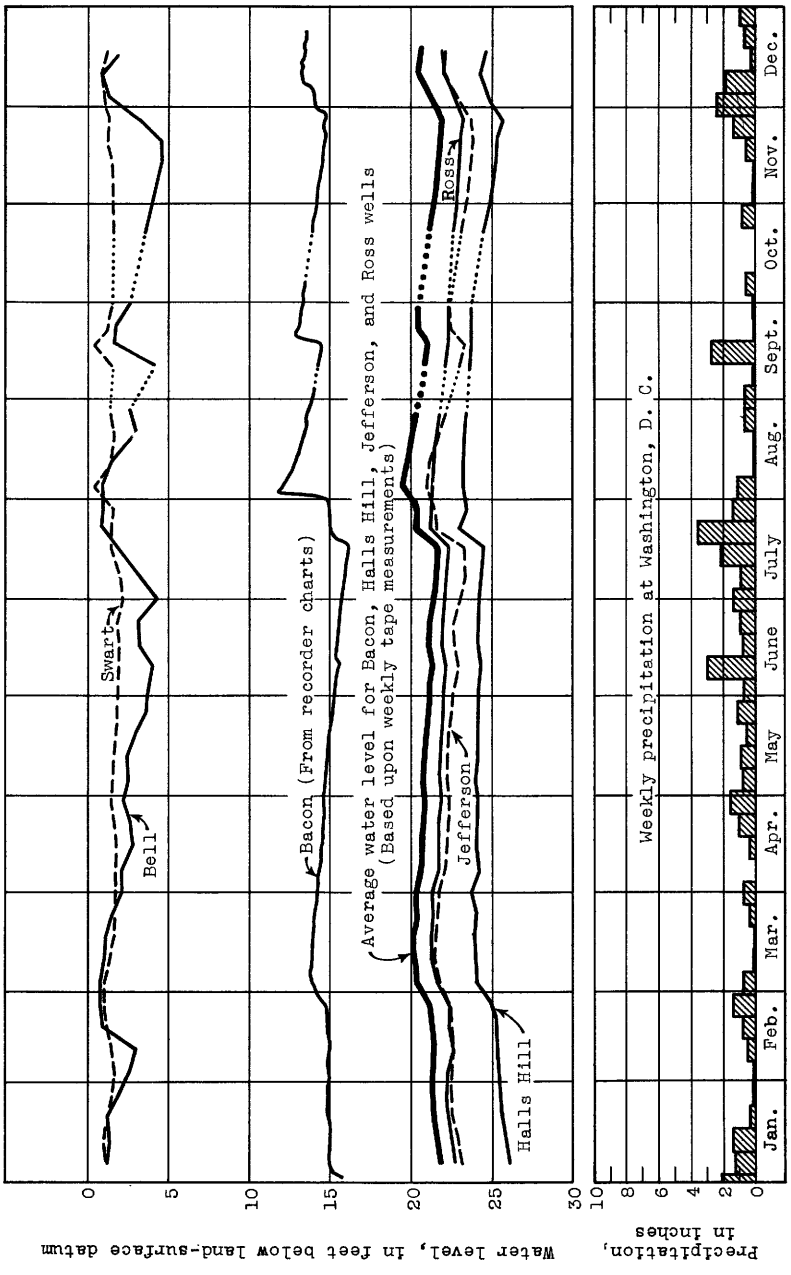

Figure 11.--Graphs showing fluctuations of water level in six wells in northern Virginia, and precipitation at Washington, D. C., in 1945.

and Ross wells, [1] which indicates a small increase in ground-water storage since December 1944. With the exception of the Halls Hill and Swart wells, the lowest water levels recorded during 1945 in the other four wells occurred in November. The lowest stage in the Halls Hill well occurred in January and in the Swart well, at the end of June. There was, however, a noticeable decline in water level in these two wells in November also. Some recharge occurred in March, but the highest water levels for the year occurred in late July and early August in all of the wells. This was due, for the most part, to the excessive amount of rain--more than 5 inches above normal--that fell during July. Figure 11 shows the weekly fluctuations of water level which occurred in the six observation wells in northern Virginia during 1945, the weekly averages of water level for the four deepest wells, and the weekly precipitation at Washington, D. C.

Well descriptions and water-level measurements

Arlington County

Halls Hill well (*777, pp. 250, 253-258; 817, pp. 482-483; 840, p. 623; 845, p. 679; 886, p. 906; 907, p. 107; 937, p. 101; 945, p. 130; 938, p. 165; 1017, p. 342). On Lee Highway, at Langston School.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	26.11	Mar. 31	23.80	June 23	24.16	Sept.22	23.72
13	25.87	Apr. 7	24.22	30	24.23	29	23.71
20	25.66	14	24.03	July 7	24.35	Oct. 22	24.53
27	25.55	21	24.07	16	24.49	29	24.87
Feb. 3	25.45	28	24.17	22	23.00	Nov. 5	25.02
10	25.36	May 5	24.00	28	23.43	13	25.25
17	25.32	12	24.14	Aug. 4	23.25	19	25.33
24	25.01	19	24.13	11	23.26	26	25.67
Mar. 3	24.12	26	24.20	20	23.31	Dec. 3	24.93
10	24.05	June 2	24.16	27	23.43	10	24.35
17	23.96	9	24.32	Sept.10	23.63	17	24.74
23	24.00	16	24.10	17	23.77		

Ross well (*777, pp. 250, 254-258; 817, pp. 480, 482-483; 840, p. 623; 845, p. 678; 886, pp. 906-907; 907, p. 107; 937, pp. 101-102; 945, pp. 130-131; 987, pp. 165-166; 1017, p. 343). At 1918 North Wayne Street, Rosslyn.

Water level, in feet below land-surface datum, 1945

Jan. 6	22.68	Mar. 31	21.33	June 23	21.93	Sept.22	22.29
13	22.51	Apr. 7	21.72	30	22.06	29	22.37
20	22.28	14	21.71	July 7	22.20	Oct. 22	22.66
27	22.18	21	21.75	16	22.32	29	22.82
Feb. 3	22.22	28	21.90	22	21.20	Nov. 5	22.92
10	22.60	May 5	21.79	28	21.24	13	23.03
17	22.39	12	21.82	Aug. 4	21.30	19	23.08
24	22.39	19	21.88	11	21.37	26	23.24
Mar. 3	21.64	26	21.99	20	21.58	Dec. 3	22.80
10	21.33	June 2	22.00	27	21.76	10	22.08
17	21.27	9	22.15	Sept.10	22.06	17	22.11
23	21.42	16	21.94	17	22.29		

[1] The average net rise of 3.55 feet for the five deepest wells (Bacon, Carne, Halls Hill, Jefferson, and Ross), as given in Water-Supply Paper 1017, is incorrect and should be 0.71 foot.

Fairfax County

Bacon well (*777, pp. 251, 254-258; 817, pp. 480, 482-483; 840, p. 621; 845, p. 678; 886, p. 907; 907, p. 108; 937, p. 102; 945, pp. 131-132;*987, pp. 166-167; 1017, p. 343). About 2 miles west of Fairfax, at Fair Acres farm, on U. S. Highway 50.

Daily noon water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.
1	15.78	14.94	14.14	14.31	14.74	15.37	15.84	14.20	13.94	13.39	14.28	14.16
2	15.26	14.95	14.04	14.29	14.77	15.38	15.87	11.81	13.98	13.31	14.29	14.15
3	15.18	14.96	13.91	14.30	14.78	15.37	15.90	12.08	14.07	13.42	14.30	14.09
4	15.10	14.98	13.93	14.33	14.75	15.43	15.95	12.13	.....	13.50	14.36	14.08
5	15.06	14.93	13.93	14.33	14.76	15.47	15.95	12.28	.....	13.50	14.40	14.08
6	15.05	14.98	13.84	14.45	14.80	15.50	15.96	12.36	.....	13.49	14.45	13.83
7	15.02	14.98	13.86	14.46	14.83	15.52	16.00	12.48	.....	.....	14.48	13.48
8	15.00	14.94	13.94	14.46	14.83	15.53	16.03	12.63	.....	.....	14.50	13.40
9	15.01	14.96	13.93	14.46	14.91	15.55	16.06	12.74	.....	.....	14.53	13.32
10	15.05	14.98	13.92	14.49	14.90	15.56	16.06	12.81	14.26	.....	14.58	13.28
11	15.06	15.00	13.95	14.51	14.91	15.47	16.06	12.88	14.27	.....	14.61	13.37
12	15.08	15.03	13.97	14.52	14.91	15.39	16.10	12.96	14.36	.....	14.62	13.41
13	15.02	14.95	13.97	14.53	14.89	15.43	16.15	13.03	14.42	.....	14.61	13.37
14	15.02	14.91	13.98	14.55	14.95	15.48	16.17	13.07	14.44	.....	14.62	13.44
15	15.03	14.94	13.98	14.58	14.97	15.51	16.19	13.09	14.46	.....	14.68	13.47
16	15.01	14.89	13.98	14.60	14.99	15.53	16.13	13.20	14.50	.....	14.73	13.54
17	15.02	14.91	14.00	14.60	15.02	15.56	16.15	13.25	14.52	.....	14.73	13.59
18	15.02	14.90	14.06	14.59	15.01	15.58	15.68	13.32	13.70	.....	14.75	13.50
19	14.98	14.95	14.06	14.63	15.05	15.60	15.29	a13.39	13.01	.....	14.76	13.58
20	14.96	14.93	14.02	14.67	15.11	15.61	15.19	13.46	12.99	.....	14.78	13.64
21	14.96	14.89	14.01	14.66	15.11	15.61	15.13	13.49	13.04	.....	14.82	13.66
22	14.92	14.84	14.04	14.72	15.12	15.63	15.10	13.54	13.15	13.98	14.73	13.63
23	14.90	14.75	14.10	14.74	15.18	15.65	15.06	13.62	13.16	14.00	14.69	13.63
24	14.88	14.59	14.13	14.72	15.22	15.67	15.05	13.62	13.17	14.05	14.73	.....
25	14.94	14.53	14.18	14.72	15.24	15.68	15.04	13.58	13.17	14.07	14.75	.....
26	14.93	14.45	14.18	14.69	15.25	15.69	15.01	13.63	13.22	14.07	14.82	.....
27	14.95	14.33	14.17	14.67	15.26	15.73	15.00	13.73	13.27	14.16	14.83	.....
28	14.94	14.29	14.20	14.69	15.26	15.75	14.98	13.76	13.29	14.20	14.78	.....
29	14.89		14.22	14.69	15.25	15.78	14.97	13.83	13.30	14.22	14.36	.....
30	14.93		14.22	14.72	15.28	15.82	14.96	13.88	13.38	14.23	14.22	.....
31	14.93		14.23		15.32		14.97	13.93		14.23		.....

a Interpolated.

Bell well (*777, pp. 250, 254-258; 817, pp. 482-483; 840, p. 722; 845, p. 678; 886, p. 907; 907, p. 108; 937, p. 103; 945, p. 132; 948, p. 167; 1017, p. 344). At Ash Grove, about 1 mile northwest of Tysons Crossroads on State Highway 7, Leesburg pike.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	1.17	Mar. 31	2.08	June 23	3.05	Sept. 22	1.60
13	1.25	Apr. 7	2.09	30	4.23	29	2.46
20	1.17	14	2.70	July 7	3.13	Oct. 22	3.52
27	1.89	21	2.47	16	1.76	29	3.84
Feb. 3	2.58	28	2.07	22	.78	Nov. 5	4.18
10	2.90	May 5	2.43	28	.81	13	4.53
17	.86	12	2.34	Aug. 4	.76	19	4.51
24	.76	19	2.92	11	1.34	26	3.19
Mar. 3	.76	26	3.59	20	2.84	Dec. 3	1.32
10	.98	June 2	3.73	27	2.43	10	.86
17	1.10	9	3.98	Sept. 10	4.00	17	1.85
23	1.46	16	3.12	17	1.52		

Jefferson School well (*845, pp. 676, 680; 886, p. 908; 907, p. 108; 937, p. 103; 945, p.132; 987, p. 167; 1017, p. 344). In Falls Church, near southeast corner of Jefferson School.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 6	23.17	Mar. 31	21.71	June 23	22.65	Sept. 22	22.46
13	22.91	Apr. 7	22.07	30	23.03	29	22.32
20	22.56	14	22.24	July 7	23.34	Oct. 22	23.16
27	22.47	21	22.37	16	23.27	29	23.43
Feb. 3	22.53	28	22.35	22	21.57	Nov. 5	23.58
10	22.63	May 5	22.25	28	21.45	13	23.74
17	22.59	12	22.27	Aug. 4	20.95	19	23.82
24	22.40	19	22.30	11	21.09	26	23.72
Mar. 3	21.76	26	22.52	20	21.72	Dec. 3	22.89
10	21.50	June 2	22.65	27	22.17	10	22.10
17	21.49	9	22.93	Sept. 10	23.00	17	21.96
23	21.65	16	22.68	17	23.38		

Swart 162 (*817, pp. 482, 484-485; 840, p. 626; 845, p. 683; 886, p. 910; 907, p. 111; 937, pp. 105-106; 945, pp. 133-134; 987, p. 170; 1017, p. 345). On the Swart farm, about 1.5 miles west of Fairfax, on U. S. Highway 50, at Difficult Run, on north side of abandoned stretch of old highway.

Water level, in feet below land-surface datum, 1945

Jan. 6	1.16	Mar. 31	1.67	June 23	1.73	Sept. 22	1.11
13	.94	Apr. 7	1.64	30	2.01	29	1.38
20	1.14	14	1.69	July 7	1.89	Oct. 22	1.53
27	1.41	21	1.60	16	1.35	29	1.51
Feb. 3	1.60	28	1.41	22	1.38	Nov. 5	1.47
10	1.43	May 5	1.47	28	1.46	13	1.44
17	1.16	12	1.52	Aug. 4	.35	19	1.19
24	.96	19	1.62	11	1.24	26	1.27
Mar. 3	.95	26	1.73	20	1.54	Dec. 3	1.00
10	1.25	June 2	1.81	27	1.29	10	.83
17	1.55	9	1.83	Sept. 10	1.45	17	1.17
23	1.60	16	1.84	17	.35		

SOUTHEASTERN VIRGINIA

By D. J. Cederstrom

Program of work

Eight observation wells were included in the water-level program in southeastern Virginia at the end of the year. Three of the wells are equipped with automatic water-stage recorders actuated by floats. Tape measurements were made also, generally about once a week. A total of 405 measurements was made in 1945.

A detailed study of the Roanoke area was made by Bruce Latta during the writer's absence on a war assignment. Other field work was done and much time was given to the writing of reports. Virginia Geological Survey Circular 3, "Selected well logs in the Virginia Coastal Plain north of James River", and Structural geology of southeastern Virginia", which appeared in vol. 29, No. 1, of the Bulletin of the American Association of Petroleum Geologists, both by D. J. Cederstrom, were published in 1945.

Fluctuations of water level

Petersburg area

Measurements were continued on the Pilcher well, near Petersburg, (Chesterfield County well 36). See figure 12. At the beginning of the year the water level was about 1 foot above normal or about 16.5 feet below the land surface. In spite of somewhat subnormal rainfall, a rise of 2 feet was recorded by March 24. In the following 2 months a decline of about 1 foot was recorded, bringing the water level down to 2 feet above

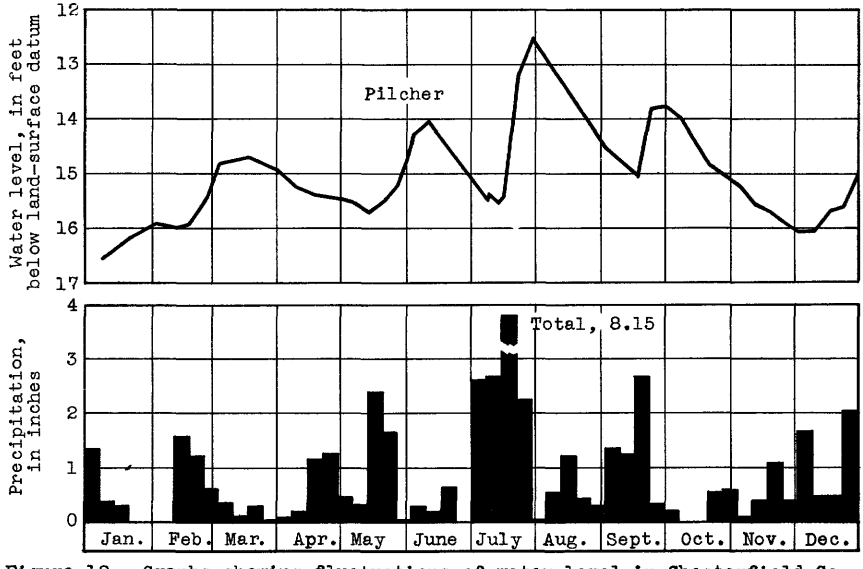

Figure 12.--Graphs showing fluctuations of water level in Chesterfield Co. well 36 (Pilcher well), near Petersburg, Va., and precipitation, by weeks, at Richmond, in 1945.

normal, even though rainfall was somewhat above normal. In this period much of the rain which fell was taken up by vegetation. A temporary rise was recorded in June but on July 16 the water level was again about 2 feet above normal.

From July 14-19, inclusive, 10.47 inches of rain fell as a result of which water levels rose almost 3 feet and stood 5 feet above normal, 12.5 feet below the land surface, on July 29. A decline set in and on September 16 the water level had receded to about 2.5 feet above normal. Heavy rains fell again in the middle of September--over 4 inches being recorded from

September 14-18, inclusive--which caused water levels to rise almost 1 foot. From September 23 to December 2, a period of deficient rainfall, water levels declined 2.25 feet, 16 feet below the measuring point, or 1.5 feet above normal. Heavier rains in December and less demand by growing plants resulted in a rise of water levels to about 15 feet below the land surface, or 2.5 feet above normal at the end of the year.

The rainfall for the year was 9.69 inches greater than normal and the net rise in water level was about 1.5 feet. During the first half of the year the rainfall was deficient 4 months out of 6, and by July 1 the accumulated departure from normal was -4.68 inches. During this period water levels in the Pilcher well varied widely but, early in July, showed no gain or loss over the levels of early spring. The very heavy rains of July, which totaled 16.08 inches, or 11.35 inches above normal, more than account for the total excess rainfall for the year. Due to the July rains, water levels rose sharply but began to decline rapidly again during the month of August when rainfall was deficient. Smaller rises were recorded with the greater-than-normal rainfall of September but moderate rains of October and November failed to provide enough recharge to maintain water levels and early in December the water level was about 0.5 foot above the level of January 1. Heavy rains in December resulted in a rise of about 1 foot above the December low by the end of that month.

Hopewell area

Measurements of water levels in Prince George County well 13, at Hopewell, indicate that artificial recharge at the nearby Solvay Proces. Company began about the middle of December 1944, at which time the water level rose to about 36.5 feet below land-surface datum, or about 2 feet above normal. During January and February the water levels remained near or above this stage but declined less than 1 foot in March, April, and May. It is thought, therefore, that artificial recharge ceased early in March and, although water levels declined somewhat thereafter, they stood about 1 foot higher than normal in the succeeding inactive period because of the large volume of water which had been added to the underground reservoir.

After May 19 pumping began at the Solvay Process Company. Water levels during the heavy pumping season of 1945 were about 13 feet lower than the static level of May 19, or 3 feet higher than the lowest points reached in the 1944 pumping season.

Upon cessation of heavy pumping at the Solvay Process Company, after October 14, water levels in the observation well began to rise. By November 16 the water level was 38.5 feet below the land surface. (37.75 to 38.75 feet below the land surface is considered normal under nonpumping conditions.) It is thought that artificial recharge may have begun late in November because by the end of the year the water level was less than 36 feet below the land surface.

Sussex County

Weekly measurements of water levels in Sussex County well 90, the Jeb S. White well, at Wakefield, were continued in 1945. The accelerated decline of water levels, which began in 1942 and continued in 1943, began to slacken in 1944 and ceased in 1945. The decline may have been due to the droughts of 1941-42, but it seems more likely that water levels at Wakefield have declined in response to heavy discharge at Franklin, 20 miles to the south-southeast. The accelerated decline and late decrease in decline of water levels in this well corresponds with the record of wells 29 and 89, in Southampton County.

Franklin area

Measurements made in 1945 on Isle of Wight County well 161, at Franklin, show that the steady decline of water levels, due to almost continuous heavy pumping at the Chesapeake-Camp Corporation pulp mill, has almost ceased. During the latter part of 1944 the water level in the observation well was about 17.5 feet below land surface. In 1945 the lowest water level in this well was 18.75 feet below the land surface and during the greater part of the year it was generally about 18 feet below the land surface.

Water-level measurements were discontinued on well 97b, at South Quay, Nansemond County.

Measurements made in 1943 on the courthouse well at Courtland, Southampton County well 89, show a net decline of 1.56 feet from October 31, 1944, to July 5, 1945. On December 20, however, the water level was 0.43 foot higher than on July 5.

Measurements in Southampton County well 29, the Virginian Railway well, at Sebrell, showed a net decline of 0.43 foot from October 30, 1944, to July 5, 1945, and a further decline of 0.18 foot by December 20, indicating further stabilization of the cone of depression centering about Franklin.

York-James peninsula

Fort Eustis

Measurements were continued on well Milstead 1, at Fort Eustis, Warwick County. Water levels fluctuated within narrow limits in response to variations in discharge of ground water at Fort Eustis. In general, water levels were about the same as in 1944.

Camp Peary

No significant change occurred in water level in the Camp Peary observation well in 1945. As in 1944, water levels declined temporarily about 1 foot when a few wells were put into limited service for cooling and other uses.

Northumberland County

The record of the Dawson well at Byrdton, Northumberland County, is similar to that of the Pilcher well near Petersburg. Water levels rose over 4 feet in January and February but declined about 4.5 feet during March, April, and the first half of May. Slight recovery occurred in the period May 13-July 15.

Heavy rains in July brought the water level to within 1.5 feet of the surface, a gain of 4.5 feet in 2 weeks. The water level fell to about 6 feet below the surface in the following 5 weeks and remained there until late in October, when a further decrease of more than 1 foot occurred and water stood 7 feet below the surface. Heavy rains and slight water use by vegetation in December brought about a recovery of water level. On December 23 the water level was less than 4.5 feet below the surface and, reflecting a heavy rain on December 29, it rose to 1.40 feet below the surface on December 30.

If comparison is made with the measurement on January 6, 1946, when the water level was 2.42 feet below the surface, rather than with the measurement made on December 30, 1945, the net gain for the year was 4.07 feet.

The net gain in the Pilcher well was only 1.5 feet. The Pilcher well is drilled in rock in rolling country and reflects the long time trends better than the Dawson well which, being on a flat terrace with poor runoff, produces greater and almost instantaneous variations of water level in response to local rainfall.

Well descriptions and water-level measurements

Petersburg--Hopewell area

Chesterfield County

36 (*886, p. 913; 907, p. 119; 937, p. 112; 945, p. 151; *987, p. 166; 1017, p. 343). Pilcher well. 3 miles north of Petersburg. Equipped with automatic water-stage recorder.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	16.61	Apr. 23	15.42	July 22	13.20	Oct. 14	14.36
14	15.28	29	15.47	29	12.48	20	14.79
Feb. 3	15.93	May 6	15.52	Aug. 5	12.88	28	14.98
11	15.98	14	15.69	12	13.29	Nov. 4	15.17
18	15.91	20	15.58	19	13.79	11	15.50
26	15.47	27	15.17	26	14.18	18	15.67
Mar. 4	14.84	June 3	14.24	Sept. 2	14.42	25	15.76
11	14.73	10	14.02	9	14.76	Dec. 2	16.00
18	14.70	17	14.47	16	14.98	9	15.99
24	14.79	July 1	15.11	23	13.73	16	15.60
31	14.92	8	16.15	30	13.73	23	15.54
Apr. 8	15.22	16	15.35	Oct. 7	13.94	30	14.90
17	15.36						

Prince George County

13 (*886, p. 914; 907, p. 119; 937, p. 113; 945, p. 152; *987, pp. 171-172; 1017, p. 346). Old Dominion Water Co. In Hopewell.

Water level, in feet below land-surface datum, 1945

Jan. 6	35.98	Apr. 7	37.72	July 7	50.22	Oct. 7	50.15
13	34.50	14	37.20	17	40.56	14	50.31
20	35.56	21	37.23	21	49.98	20	46.77
27	35.83	May 1	37.17	28	49.23	27	40.67
Feb. 3	35.94	6	37.06	Aug. 4	50.12	Nov. 4	39.71
10	35.77	12	37.13	11	49.85	9	39.10
18	35.22	19	37.51	18	49.70	16	38.46
24	36.63	26	41.01	26	50.29	23	37.56
Mar. 3	36.57	June 2	47.76	Sept. 1	50.57	Dec. 5	29.86
10	37.03	9	49.08	8	50.49	7	35.66
19	37.21	16	49.61	16	50.69	14	36.66
24	37.16	24	49.91	23	49.96	21	35.91
31	37.17	30	50.16	29	49.82	28	25.76

Southampton County

29 (*945, p. 152; *987, p. 172; 1017, p. 347). Virginian Railway. At Sebrell. Water levels, in feet below land-surface datum, 1945: July 5, 30.62; Dec. 20, 30.80.

89 (*945, p. 152; *987, p. 172; 1017, p. 347). Southampton County Courthouse. At Courtland. Water levels, in feet below land-surface datum, 1945: July 5, 10.25; Dec. 20, 9.82.

205 (*945, p. 153; *987, p. 172; 1017, p. 347). City of Franklin.

Water level, in feet below land-surface datum, 1945

Jan. 6	22.8	Apr. 7	25.5	July 7	23.5	Oct. 6	22.5
13	24.7	14	26.0	14	22.7	13	22.7
20	24.5	21	22.5	21	22.5	20	22.5
27	25.2	28	22.3	28	23.0	27	19.5
Feb. 3	25.3	May 5	25.0	Aug. 4	23.0	Nov. 3	23.0
10	22.5	12	24.8	11	23.0	10	23.5
17	24.0	19	25.5	18	23.2	17	23.3
25	24.1	26	25.3	25	23.5	24	20.7
Mar. 3	24.7	June 2	25.4	Sept. 1	22.3	Dec. 1	20.0
10	25.0	9	25.3	8	22.0	8	23.3
17	24.7	16	25.5	15	23.2	15	23.7
24	24.8	23	26.0	22	23.0	22	24.1
31	24.7	30	26.2	29	22.7	29	24.5

243 (*937, p. 114; 945, p. 153; *987, p. 172; 1017, p. 347). Webb School well. 4 miles west-southwest of Franklin. Well no longer available. Measurements discontinued in 1945.

Sussex County

90 (*907, p. 120; 937, p. 114; 945, p. 153; *987, p. 173; 1017, p.347). Jeb S. White well. In Wakefield.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	70.39	Apr. 2	70.80	July 2	70.85	Oct. 1	70.23
8	69.07	9	70.56	9	70.56	8	70.11
15	69.40	16	70.53	16	69.85	15	70.14
22	70.17	23	69.96	23	70.46	22	70.62
29	70.78	30	70.20	30	70.20	29	70.16
Feb. 5	69.56	May 7	70.04	Aug. 6	70.34	Nov. 5	70.24
12	69.58	14	70.23	13	70.18	12	70.38
19	70.68	22	70.40	20	70.33	19	70.44
26	71.90	28	70.31	27	70.69	26	70.35
Mar. 3	70.45	June 4	70.20	Sept. 3	70.40	Dec. 3	70.20
12	69.83	11	70.58	10	70.40	10	70.51
19	69.90	21	70.40	17	70.54	17	70.20
26	70.03	25	70.70	27	70.20	24	70.59

Franklin area

Isle of Wight County

161 (*945, p. 151; *987, p. 171; 1017, p. 345). Chesapeake-Camp Corporation.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 1	15.85	Apr. 9	18.24	July 9	16.23	Oct. 8	14.55
8	16.83	16	18.23	16	17.95	15	13.50
15	17.20	23	15.94	23	17.64	23	17.72
22	17.40	30	17.74	30	18.00	29	12.58
29	17.60	May 7	17.85	Aug. 6	18.24	Nov. 5	17.26
Feb. 6	17.93	14	18.14	14	18.50	12	17.73
12	15.59	21	18.29	20	18.48	19	17.79
19	17.54	28	18.35	28	18.49	26	18.10
26	17.51	June 4	18.52	Sept. 6	15.56	Dec. 3	14.50
Mar. 5	17.68	11	18.51	10	17.96	10	17.37
12	17.78	18	18.71	17	18.10	17	18.11
19	17.98	25	18.87	24	18.08	24	13.40
26	18.03	July 2	17.89	Oct. 1	18.42	31	11.31
Apr. 2	17.98						

Northumberland County

Col. Dawson well (*1017, p. 346). East Richlands Estate. 0.5 mile northeast of Byrdton. Incorrectly published in Water-Supply Paper 1017 as being in Lancaster County.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 7	6.49	Apr. 8	5.88	July 8	6.12	Oct. 7	6.04
14	5.20	15	6.07	15	6.00	14	6.53
21	5.08	22	5.85	22	2.44	21	6.58
28	5.09	29	5.78	29	1.50	28	6.69
Feb. 4	5.88	May 6	6.23	Aug. 4	2.79	Nov. 4	6.80
11	5.89	13	6.88	12	4.19	11	6.88
18	3.87	20	6.77	19	5.01	18	7.12
25	2.22	27	6.17	25	5.41	24	7.12
Mar. 4	2.43	June 3	6.00	Sept. 2	6.10	Dec. 2	7.03
11	3.38	10	6.15	9	6.06	9	4.64
18	4.51	17	6.33	16	6.39	16	4.79
25	5.14	24	6.43	23	6.22	23	4.41
Apr. 1	5.83	July 1	5.91	30	5.78	30	1.40

Warwick County

Milstead 1 (*937, p. 114; 945, p. 153; *987, p. 173; 1017, p. 347). At Fort Eustis. Equipped with automatic water-stage recorder.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 10	4.85	Mar. 29	4.15	July 23	4.68	Oct. 16	4.80
16	5.25	Apr. 5	4.20	30	3.49	23	4.70
23	4.45	12	5.00	Aug. 8	3.51	31	5.00
30	4.85	19	5.10	15	4.00	Nov. 7	4.75
Feb. 6	4.25	28	4.90	23	3.83	14	5.35
13	5.30	May 4	5.00	Sept. 1	3.90	19	5.20
20	4.85	15	4.44	8	4.00	26	5.30
Mar. 1	5.35	23	4.10	18	5.70	Dec. 3	6.00
8	5.25	June 9	4.28	25	4.80	10	5.40
15	5.77	14	4.30	Oct. 2	4.40	20	4.90
22	5.30	19	4.60	9	5.00	26	5.50

York County

Camp Peary D6 (*987, p. 174; 1017, p. 348). At Camp Peary, in block 11, about 1 mile east of main gate on State Highway 168 and 1 mile southwest of Magruder.

Water level, in feet below land-surface datum, 1945

Jan. 1	79.6	Mar. 26	79.2	June 19	80.5	Sept. 11	80.6
8	79.6	Apr. 2	79.3	25	80.7	25	80.2
16	79.5	9	79.3	July 2	80.9	Oct. 2	80.3
22	79.7	16	79.2	10	80.6	8	79.7
29	80.4	23	79.2	16	80.5	15	79.6
Feb. 5	79.9	30	79.1	23	80.0	Nov. 19	79.0
12	79.2	May 7	79.6	30	80.2	26	78.9
19	79.2	14	79.5	Aug. 5	80.2	Dec. 3	78.6
26	79.2	22	79.5	13	80.4	17	78.6
Mar. 5	79.1	28	80.2	20	80.6	24	78.5
12	79.3	June 3	80.1	27	80.5	31	78.5
19	79.3	12	79.6	Sept. 4	81.1		

WEST VIRGINIA

By H. F. Johnston

PROGRAM OF WORK

The observation-well program in West Virginia was continued in 1945, in cooperation with the West Virginia Geological and Economic Survey as part of the investigation of the ground-water resources of the State. Periodic measurements of water levels were made in 21 wells during the year, and single measurements were made in about 150 other wells. Automatic water-stage recorders were maintained on six wells during most of the year, five other wells were measured weekly, three biweekly and seven monthly. A total of 870 individual measurements of water levels in wells or of flows from springs or wells are listed in this report. Not listed are several hundred additional measurements of water level that were made during the testing of local water-supply installations.

The general investigation of the ground-water resources throughout the State was continued during the year. Particular attention was given to the water-bearing alluvial deposits along the Ohio and Kanawha Rivers. Detailed investigations were continued at Parkersburg. Investigations were completed at Point Pleasant and other military installations. Data on local ground-water conditions furnished by the State and Federal Geological Surveys were used extensively throughout the State and numerous reports were prepared for war agencies, municipal and other interests during the year.

FLUCTUATIONS OF WATER LEVEL

The average precipitation in West Virginia during 1945, as recorded by the Weather Bureau, United States Department of Commerce, was 50.37 inches, which is 7.20 inches above normal and 5.59 inches more than in 1944. Precipitation was 5.46 inches above normal in the northeastern panhandle, 9.73 inches above normal in the northern division of the State and 3.66 inches above normal in the southern division. The precipitation

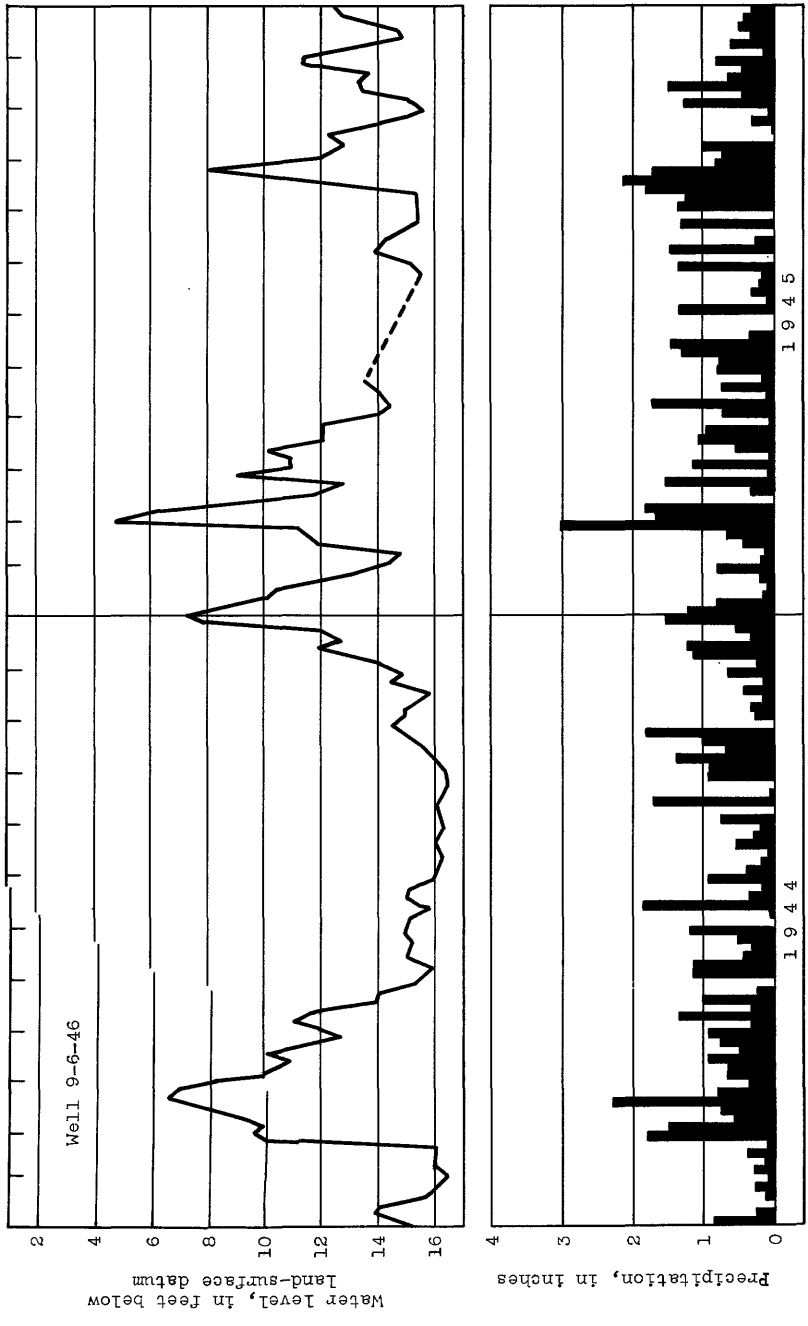

Figure 13.--Graph showing fluctuations of water level during 1944 and 1945 in well 9-6-46, at Morgantown, W. Va., and precipitation at the State Farm.

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was above normal for all quarters of the year. September, with 4.20 inches above normal, was the wettest September of record and November with 2.52 inches above normal, was the second wettest November of record.

The water table generally rises following periods of heavy precipitation and declines during dry seasons. However, the effects of precipitation may be modified considerably by other factors such as the retarding of downward percolation by frozen soil, and the capture of water for plant use or for the replenishment of soil moisture. The water level in well 9-6-46, at Morgantown, fluctuated importantly with variations in local precipitation, as shown in figure 13.

Large quantities of water from melting snow and heavy precipitation during February, and March, September, and November 1945 were accompanied by rises in the water level. On February 26 the highest stage of record was recorded--2.68 feet below land-surface datum. As a result of lower precipitation and increased transpiration during the early summer, the water level declined and reached the low for the year on July 23--13.70 feet below land-surface datum. The heavy rains in September and November again caused a rise in water levels. The year closed with the water levels at 9.47 feet below land-surface datum or 4.37 feet below the level at the opening of the year.

The fluctuation of water levels of wells in the deeper alluvial gravels along the Ohio and Kanawha River valleys are related primarily to the variations in the stage of the adjacent rivers. Where one or more wells are pumped heavily, as at the Parkersburg waterworks, river water may be entering the aquifer throughout the year. At most places, however, recharge from the river occurs only during floods or periods of high river stage. The major rise in water level at well 27-3-21, about 150 feet from the Ohio River, at Parkersburg, occurs during periods of high river stage in the spring. The water level then declines more or less regularly until there is another rise in the river. The fluctuations in water level at well 50-1-5, at Kenova, in Wayne County, also reflects the variations in river stage, but the change lags behind the high water crest in the river from one to two weeks. There were four flood crests in the Ohio River during the month of March and corresponding high levels in the nearby wells.

Water levels in bedrock wells in unpumped areas fluctuated moderately during 1945 and were below normal at the end of the year. In the heavily pumped areas in Morgantown and Charlestown critical conditions developed with the lowest water levels of record but they recovered by the end of the year so there was only a slight departure from the December levels of 1944.

In well 9-6-27, at Morgantown, the water level was below normal at the opening of the year and was the lowest of record during the first of September, being 2.23 feet lower than the previous recorded low of August 17, 1944.

WELL-NUMBERING SYSTEM

Observation wells in West Virginia have been assigned segmented numbers that indicate their location by county, magisterial district, and position with the district. For this purpose the counties are numbered consecutively in a general southward direction, beginning with Hancock County, which is at the northern tip of the State; the magisterial districts within each county are also numbered consecutively according to the same plan, beginning with the northernmost district; then, in each district the individual wells are numbered consecutively, roughly according to their geographic location relative to other wells in the same district. Thus, in the segmented number 9-6-27, which is assigned to a well in Morgantown, 9 represents Monongalia County, 6 represents Morgan district, and 27 represents the individual well in that district. Springs and mine drains are identified by the addition of the letter S to the final segment of the number, as 9-6-S1.

WELL DESCRIPTIONS AND WATER-LEVEL MEASUREMENTS

Fayette County

42-1-1 (*987, p. 182; 1017, p.357). In Boomer, Falls district, about 0.5 mile southeast of crossroads. No measurements made in 1945.

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42-4-1 (*945, p. 158; *987, p. 182; 1017, p.356). Baldwin Supply Co. At Montgomery, Kanawha district.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 18	23.60	Mar. 17	23.56	Aug. 2	29.19	Sept. 9	27.11
24	24.67	May 3	25.23	14	28.78	17	26.82
Feb. 7	24.46	July 9	27.24	22	30.18	24	25.19
15	24.51	19	27.70	31	27.68	Oct. 2	26.66
Mar. 3	22.55						

42-4-2 (*945, p. 158; *987, p. 182; 1017, p.356). Virginian Railway Co. At Deepwater, Kanawha district.

Water level, in feet below land-surface datum, 1945

Jan. 5	0.64	Jan. 17	0.20	Mar. 10	0.45	May 18	1.65
12	.95	Mar. 2	.60	26	.60		

Harrison County

12-2-26 (*945, p. 158; 987, p. 182; 1017, p.356). City of Lumberport, At Lumberport, Eagle district. No measurements made in 1945.

Jackson County

30-2-1 (*945, p. 159; *987, p. 182; 1017, p.357). City of Ravenswood. At Ravenswood, Ravenswood district. Well covered; no measurements made in 1945.

30-2-2 (*987, p. 183; 1017, p.357). City of Ravenswood. At Ravenswood, Ravenswood district. Well covered: No measurements made in 1945.

Kanawha County

40-3-1 (*945, p. 159; 987, p. 183; 1017, p.357). L. T. Smith. At Nitro, Union district, along 40th Street, 0.45 mile west of U. S. Highway 35.

Water level, in feet below land-surface datum, 1945

Jan. 1	5.29	Apr. 25	10.69	July 19	13.08	Sept. 4	12.16
22	6.18	May 15	9.39	23	13.08	11	12.27
Feb. 20	4.90	28	6.80	28	12.86	29	7.28
28	4.39	June 6	8.96	Aug. 6	12.30	Oct. 17	8.86
Mar. 12	4.61	19	4.39	14	11.58	25	9.66
23	5.68	27	7.99	21	11.40	Nov. 15	6.50
Apr. 1	8.85	July 13	12.80	27	11.38	Dec. 12	5.76
19	10.38						

40-5-14 (*937, p. 117; 945, p. 159; 987, p. 183; 1017, p.357). Coyle & Richardson Department Store. At Charleston, Charleston district.

Water level, in feet below land-surface datum, 1945

Jan. 4	32.20	Apr. 6	31.77	June 23	38.98	Sept.20	39.13
11	32.30	12	31.63	28	40.35	27	43.04
20	32.56	19	31.98	July 13	40.61	Oct. 11	35.84
25	32.58	26	31.42	21	41.24	18	35.13
Feb. 1	32.50	May 4	31.35	26	42.45	25	34.80
8	32.32	18	32.69	Aug. 4	41.18	Nov. 7	34.40
22	31.80	24	32.26	9	42.88	8	34.34
Mar. 1	31.22	June 1	33.88	28	42.44	21	34.70
19	31.78	7	32.45	Sept. 6	43.44	30	33.55
29	31.30	13	36.69	13	42.69	Dec. 6	33.28

40-5-15 (*945, p. 159; 987, p. 183; 1017, p.357). Valley Bell Dairy At Charleston, Charleston district, along Delaware Avenue, 600 feet from Roane Avenue. No measurements made in 1945.

Marion County

10-3-20 (*937, p. 117; 945, p. 160; 987, p. 183; 1017, p.357). Bethlehem Mines Corporation. At Barrackville mine, Fairmont district, about 450 feet southeast of boiler house. No measurements made in 1945.

Mason County

38-3-3 (*945, p. 160; *987, p. 184; 1017, p.358). West Virginia Industrial School for colored boys. At Lakin, Robinson district. No measurements made in 1945.

38-3-4 (*945, p. 160; 987, p. 184; 1017, p.358). V. K. Smith. At Kaylong, Robinson district, 1 mile south of post office.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	54.95	Apr. 21	53.22	May 18	52.68	June 29	52.28
19	55.06	27	52.54	25	52.44	July 6	52.30
Mar. 31	54.50	May 5	52.64	June 8	52.34	13	52.29
Apr. 13	53.54	11	52.61	22	52.29		

38-3-5 (*945, p. 160; 987, p. 185; 1017, p.358). Homer Smith. At Kaylong, Robinson district. 1.2 miles south of Lakin. No measurements made in 1945.

38-3-6 (*945, p. 160; 987, p. 185; 1017, p.358). West Virginia Ordnance Works. At Kaylong, Robinson district. No measurements made in 1945.

38-3-8 (*1017, p.358). West Virginia Ordnance Works well P-1-16. At Kaylong, Robinson district.

Water level, in feet below land-surface datum, 1945

Jan. 1	36.62	Jan. 23	37.15	Mar. 30	28.55	May 19	33.84
2	36.63	29	37.59	Apr. 1	29.45	25	33.77
3	36.02	Feb. 2	37.64	13	32.06	June 8	34.59
4	35.85	9	37.81	21	33.14	22	34.78
5	34.91	16	37.79	27	34.88	29	34.90
9	35.63	23	37.38	May 5	34.09	July 7	37.07
16	36.68	Mar. 16	25.66	11	34.34	13	35.32

38-3-9 (*1017, p.359). West Virginia Ordnance Works well P-3-2. At Kaylong, Robinson district.

Water level, in feet below land-surface datum, 1945

Jan. 5	31.65	Apr. 13	29.50	May 11	33.09	June 22	33.78
12	35.27	21	31.43	19	32.27	29	33.90
20	36.72	27	32.37	25	32.44	July 6	34.07
26	36.94	May 5	33.00	June 8	33.74	13	44.10
Feb. 2	36.42						

38-3-10 (*1017, p.361). West Virginia Ordnance Works well P-4-3. At York Station, Robinson district. Recorder removed July 15.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	.....	a41.42	.....	33.93	37.24	38.21	37.88
2	.....	a41.44	.....	34.16	37.33	.....	37.90
3	.....	.....	.....	34.57	37.27	.....	37.90
4	.....	.....	.....	34.48	37.40	.....	37.92
5	40.03	.....	.....	34.94	37.55	.....	37.90
6	40.15	.....	.....	34.98	37.66	.....	37.91
7	40.32	.....	.....	.....	37.67	.....	38.01
8	40.48	.....	.....	.....	37.93	38.54	38.04
9	40.63	.....	.....	.....	37.87	38.57	38.00
10	40.69	a41.53	.....	.....	37.89	38.64	38.00

a Tape measurement.

38-3-10--Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
11	40.75	.....	.....	.....	37.97	38.72	38.09
12	41.00	.....	.....	.....	37.99	38.66	38.21
13	41.13	.....	.....	35.76	37.78	38.62	38.14
14	41.15	.....	.....	36.40	37.78	38.68	38.15
15	41.18	.....	.....	36.03	37.65	38.70	.....
16	41.27	a 41.47	a 31.60	36.04	37.90	.....	.....
17	41.25	.....	.....	36.38	37.98	.....	.....
18	41.15	.....	.....	36.40	a 37.85	.....	.....
19	41.09	.....	.....	36.48	37.79	.....	.....
20	41.03	.....	.....	36.37	37.50	.....	.....
21	41.01	.....	.....	36.68	37.22	.....	.....
22	41.29	.....	.....	36.74	37.70	37.75	.....
23	41.34	a 40.10	.....	36.60	37.74	37.74	.....
24	41.39	.....	.....	36.72	37.78	37.75	.....
25	41.37	.....	.....	36.97	37.79	37.75	.....
26	41.42	.....	.....	37.22	37.97	37.86	.....
27	41.43	.....	.....	37.40	38.04	37.83	.....
28	41.42	.....	.....	37.25	38.10	37.85	.....
29	a 41.43		.....	37.14	38.13	37.85	.....
30	a 41.43		a 33.42	37.18	38.23	37.88	.....
31	a 41.42		33.87		38.26		.....

a Tape measurement.

38-3-11 (*1017, p.). West Virginia Ordnance Works well P-6-2. At York Station, Robinson district.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Jan.	Feb.	Mar.	Apr.	May	June	July
1	.....	34.71	.....	21.81	29.95	.....	32.44
2	.....	34.54	.....	22.35	30.05	.....	32.47
3	.....	.....	.....	22.87	30.14	.....	32.49
4	.....	.....	.....	23.36	30.29	.....	32.51
5	33.25	.....	.....	23.69	30.40	.....	32.54
6	a 33.42	.....	.....	24.14	30.49	.....	b 32.56
7	a 33.63	.....	.....	24.47	30.56	.....	32.59
8	a 33.79	.....	.....	24.49	30.64	31.74	32.60
9	a 33.97	35.20	.....	.....	30.71	31.79	32.62
10	34.09	b 35.17	.....	.....	30.77	31.82	32.64
11	a 34.25	.....	.....	.....	30.84	31.85	32.67
12	34.32	.....	.....	.....	30.86	31.89	32.70
13	34.39	.....	.....	26.86	30.90	31.91	b 32.74
14	34.45	.....	.....	27.10	30.94	31.95	.....
15	34.49	.....	.....	27.36	30.95	31.97	.....
16	34.59	b 34.16	.....	27.59	30.99	.....	.....
17	b 34.69	.....	.....	27.80	31.04	.....	.....
18	b 34.79	.....	.....	28.00	31.10	.....	.....
19	34.84	.....	.....	28.20	31.15	.....	.....
20	34.90	.....	.....	28.40	31.15	.....	.....
21	34.95	.....	.....	28.61	30.95	.....	.....
22	34.99	.....	.....	28.78	30.62	b 32.20	.....
23	35.00	b 33.84	.....	28.95	30.66	32.22	.....
24	35.04	.....	.....	29.10	30.70	32.24	.....
25	35.08	.....	.....	29.24	30.81	32.25	.....
26	35.13	.....	.....	29.37	31.10	32.27	.....
27	b 35.08	.....	.....	29.52	31.22	32.29	.....
28	b 35.01	.....	.....	29.64	31.27	32.31	.....
29	b 34.94		.....	29.75	31.32	b 32.41	.....
30	34.86		b 20.59	29.85	31.37	32.42	.....
31	34.79		.....		31.41		.....

a Interpolated.
b Tape measurement.

38-3-12 (*1017, p.363). C. C. Lewis. 1.1 miles south of York Station, Robinson district. No measurements made in 1945.

Monongalia County

Wells 9-2-1, 9-2-2, 9-2-2A, and 9-2-3 are in the town of Blacksville which is partly in Clay district, Monongalia County, W. Va., and partly in Wayne Township, Greene County, Pa. These wells are actually in Pennsylvania, a few feet north of the West Virginia boundary. They are listed in this report with West Virginia wells because Blacksville post office is in West Virginia.

9-2-1 (*937, p. 117; 945, p. 161; 987, p. 183; 1017, p.363). D. C. Johnson. At Blacksville. No measurements made in 1945.

9-2-2 (*937, p. 117; 945, p. 161; 987, p. 186; 1017, p.364). Earl Miller. At sawmill in Blacksville. Water levels, in feet below land-surface datum, 1945: Mar. 14, 12.48; July 6, 13.79.

9-2-2A (*987, p. 186; 1017, p. 364). Earl Miller. At sawmill in Blacksville. Water level, in feet below land-surface datum, 1945: July 6, 8.17.

9-2-3 (*937, p. 117; 945, p. 161; 987, p. 187; 1017, p.364). Eli Huss. At Blacksville. Water levels, in feet below land-surface datum, 1945: Mar. 14, 12.48; July 6, 13.79.

9-6-1 (*937, p. 117; 945, p. 161; 987, p. 187; 1017, p.364). Baltimore & Ohio Railroad. At Sabraton, Morgan district, at mouth of Aaron's Creek. This is a flowing well.

Rate of flow, in gallons a minute, 1945

Date	Rate of flow	Date	Rate of flow	Date	Rate of flow	Date	Rate of flow
Jan. 19	26.8	Apr. 20	26.8	July 9	29.9	Nov. 8	19.50
Feb. 7	21.2	May 26	20.0	24	23.9	30	23.31
Mar. 3	23.9	June 25	18.7				

9-6-27 (*937, p. 118; 945, p. 161; 987, p. 187; 1017, p.364). T. J. Johnsen. At Morgantown, Morgan district, east end of Foundry Street.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 19	144.21	June 4	152.72	Aug. 22	163.56	Nov. 8	151.43
Feb. 17	144.33	25	154.04	Sept.10	166.41	30	150.24
Mar. 3	144.04	July 9	158.58	Oct. 19	153.98	Dec. 7	147.51
Apr. 20	143.78	17	159.42	26	152.89	21	147.39
May 4	143.64	24	160.78	Nov. 2	151.85	28	146.48
26	150.57	Aug. 14	162.14				

9-6-45 (*937, p. 118; 945, p. 161; 987, p. 187; 1017, p.364). Deckers Creek Sand Co. At Greer, Morgan district, below sand quarry.

Water level, in feet below land-surface datum, 1945

Jan. 19	10.84	Apr. 20	10.96	July 9	11.59	Oct. 19	11.25
Feb. 17	10.93	May 26	11.03	24	12.47	Nov. 8	11.15
Mar. 3	10.88	June 25	10.87	Aug. 14	11.98	Dec. 10	10.60

9-6-46 (*987, p. 187; 1017, p.364). W. L. Madire. In Morgantown, Morgan district, at corner of Prairie Street and University Avenue.

Water level, in feet below land-surface datum, 1945

Jan. 1	5.10	Feb. 5	12.66	Mar. 19	11.30	Apr. 23	9.70
8	8.30	12	8.90	26	6.58	30	11.80
15	8.59	19	9.90	Apr. 2	9.88	May 7	12.93
23	11.16	26	2.68	9	8.20	21	11.48
28	12.28	Mar. 5	4.40	16	10.55	July 23	13.70

9-6-46 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
July 30	13.39	Sept. 24	5.63	Oct. 31	13.70	Dec. 3	10.38
Aug. 6	11.89	29	9.28	Nov. 4	13.28	11	12.84
27	13.90	Oct. 8	10.87	12	10.87	17	12.87
Sept. 5	13.68	15	10.29	19	11.90	24	9.70
11	13.68	22	13.03	26	9.10	31	9.47

Preston County

11-3-3 (*937, p. 118; 945, p. 162; 987, p. 188; 1017, p.365). Preston County Coal & Coke Co. At Cascade, Valley district.

Water level, in feet below land-surface datum, 1945

Jan. 19	4.89	May 26	5.97	July 24	6.82	Nov. 8	5.24
Feb. 7	4.73	June 25	7.39	Aug. 14	5.59	30	4.21
Mar. 3	5.06	July 9	7.71	Oct. 19	5.49	Dec. 10	4.71
Apr. 20	4.87						

11-3-3A (*987, p. 189; 1017, p.365). Preston County Coal & Coke Co. At Cascade, Valley district. Dug well surrounding well 11-3-3.

Water level, in feet below land-surface datum, 1945

Jan. 19	3.87	May 26	4.56	July 24	5.36	Nov. 8	4.50
Feb. 7	3.66	June 25	4.12	Aug. 14	5.50	30	2.70
Mar. 3	3.58	July 9	3.30	Oct. 19	3.96	Dec. 10	3.72
Apr. 20	3.71						

11-3-4 (*937, p. 118; 945, p. 162; 987, p. 189). Masontown well 4. At Oak Park, Valley district. No measurements made in 1945.

11-3-8 (*937, p. 118; 945, p. 162; 987, p. 189; 1017, p. 365). G. E. Lemmons. At Masontown, Valley district, on East Depot Street.

Water level, in feet below land-surface datum, 1945

Jan. 19	13.85	Apr.	14.41	July 9	17.58	Oct. 19	16.24
Feb. 7	14.04	May	15.76	24	18.92	Nov. 8	16.84
Mar. 3	14.00	June	16.61	Aug. 14	16.66	11	11.99

11-3-14 (*937, p. 118; 945, 162; 987, p. 189; 1017, p.365). National Youth Administration. At Reedsville, Valley district, near plant. Water levels, in feet above land-surface datum, 1945: Oct. 19, 0.36; Nov. 8, 0.43.

11-3-51 (*937, p. 119; 945, p. 162; 987, p. 189; 1017, p.365). Elmer Smith. About 1 mile northwest of Sutherland, Valley district. No measurements made in 1945.

Putnam County

39-1-6 (*987, p. 189; 1017, p.365). Town of Buffalo. At Buffalo, Buffalo district, near waterworks.

Water level, in feet below land-surface datum, 1945

Jan. 5	69.46	Feb. 15	69.97	Mar. 30	45.80	Apr. 27	44.16
15	67.13	24	71.22	Apr. 2	48.62	May 5	44.20
19	69.15	Mar. 3	64.63	7	44.70	12	46.51
24	71.38	9	56.47	9	42.80	25	45.06
Feb. 2	69.13	16	63.13	13	43.91	June 1	45.22
9	70.38	24	72.55	20	44.87	8	45.97

39-1-7 (*987, p. 189; 1017, p.366). C. C. Wears. At south edge of Buffalo, Buffalo district.

39-1-7 --Continued.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	1.18	Mar. 20	5.93	June 22	5.03	Oct. 5	16.20
15	.85	Apr. 2	3.43	29	8.09	12	12.20
19	2.27	7	.90	July 13	8.71	19	15.80
24	1.77	13	7.10	21	11.08	26	13.10
Feb. 2	4.93	20	2.92	Aug. 3	10.41	Nov. 2	10.50
9	5.77	27	4.30	24	12.60	9	14.50
15	1.18	May 5	6.91	30	6.20	16	3.90
24	1.18	12	+.33	Sept. 9	16.00	Dec. 1	3.35
Mar. 2	.92	25	3.01	14	3.60	8	3.85
9	1.02	June 1	5.02	22	13.90	15	7.76
16	5.93	8	8.99	28	10.40	22	9.26
21	1.27						

39-1-8 (*987, p. 189; 1017, p.366). H. E. Fruth. At Buffalo, Buffalo district, about 1 mile south of church. No measurements made in 1945.

39-1-10 (*945, p. 162; 987, p. 189; 1017, p.366). Burgess Tate. At Woods, Buffalo district, along highway. No measurements made in 1945.

Wayne County

50-1-5 (*945, p. 162; 987, p. 190; 1017, p. 366). Ashland Oil & Refining Co. At Kenova, Ceredo district, at refining plant.

Water level, in feet below land-surface datum, 1945

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Jan. 5	40.73	Mar. 30	30.59	July 6	35.81	Oct. 11	38.50
12	39.87	Apr. 6	31.56	13	36.12	18	38.51
19	39.27	20	32.10	20	36.60	27	38.77
27	39.27	28	32.70	28	36.97	Nov. 17	39.50
Feb. 2	39.43	May 11	33.75	Aug. 3	37.25	24	39.05
9	39.60	18	34.12	11	37.57	30	39.00
16	39.67	26	33.68	17	37.75	Dec. 7	38.53
23	39.55	June 8	34.20	24	37.96	14	38.27
Mar. 2	37.81	15	34.72	Sept. 22	39.02	20	38.01
9	34.77	27	35.42	30	38.83	29	38.84
17	32.20						

Wetzel County

6-1-1 (*987, p. 190; 1017, p. 366). Ida Monroe. At Proctor, Proctor district, about 0.75 mile east of church. No measurements made in 1945.

Wood County

27-3-20 (*987, p. 190; 1017, p. 367). City of Parkersburg well 4. At Parkersburg, Parkersburg district, in city well field.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Jan. 1	36.90	Jan. 15	36.27	Jan. 29	37.84	Feb. 12	39.79
2	36.87	16	36.31	30	37.83	13	39.40
3	35.87	17	36.33	31	37.84	14	39.46
4	36.82	18	36.31	Feb. 1	37.84	15	39.05
5	36.22	19	36.29	2	37.93	16	38.70
6	36.29	20	36.45	3	38.16	17	38.47
7	36.13	21	36.40	4	38.58	18	37.49
8	35.92	22	37.39	5	38.98	19	36.85
9	35.65	23	37.00	6	39.16	20	36.56
10	35.52	24	37.37	7	39.25	21	37.19
11	35.80	25	37.44	8	39.40	22	37.46
12	36.65	26	37.67	9	39.47	23	37.50
13	36.90	27	37.71	10	39.87	24	36.90
14	36.95	28	37.63	11	39.99	25	35.51

27-3-20--Continued.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Date	Water level	Date	Water level	Date	Water level	Date	Water level
Feb. 26	33.89	Mar. 2	27.50	Mar. 6	21.56	Mar. 10	a 0.78
27	33.25	3	25.78	7	19.15	11	5.36
28	32.57	4	24.25	8	a 2.53	30	21.67
Mar. 1	27.78	5	23.02	9	a 5.88	Apr. 27	30.99

a Above land-surface datum.

27-3-21 (*1017, p. 367). City of Parkersburg well 3. At Parkersburg, Parkersburg district, in city well field. Recorder removed Jan. 19.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Jan.									
1	32.85	6	32.24	11	31.75	15	32.22
2	32.76	7	32.08	12	32.60	16	32.26
3	31.82	8	31.87	13	32.85	17	32.28
4	32.77	9	31.60	14	32.90	18	32.26
5	32.17	10	31.47				

27-3-27 (*1017, p.368). City of Parkersburg well 18. At Parkersburg, Parkersburg district, in city well field.

Lowest daily water level, in feet below land-surface datum, 1945
(From recorder charts)

Day	Mar.	Apr.	May	June	July	Aug.	Sept.
1	.....	.....	26.15	27.63	29.65	29.13	28.00
2	.....	.....	26.57	27.78	29.59	29.26	28.09
3	.....	.....	26.68	27.36	29.54	29.27	28.19
4	.....	.....	26.93	27.95	29.53	29.20	28.35
5	.....	.....	27.16	28.08	29.60	29.19	28.57
6	.....	.....	27.28	28.11	29.65	29.23	28.48
7	.....	.....	27.22	28.19	29.67	29.22	28.43
8	.....	.....	27.33	28.32	29.74	29.14	28.44
9	.....	.....	27.20	28.51	29.78	29.15	28.48
10	.....	.....	26.95	28.63	29.63	29.13	28.49
11	.....	.....	26.28	28.51	29.54	28.97	28.49
12	.....	.....	26.64	28.55	29.51	28.68	28.49
13	.....	.....	25.15	28.62	29.49	28.55	28.51
14	.....	.....	25.10	28.81	29.43	28.44	28.38
15	.....	.....	25.24	28.86	29.36	28.35	28.05
16	.....	.....	24.84	28.92	29.33	28.28	27.95
17	.....	.....	24.14	28.99	29.50	28.20	27.90
18	.....	.....	23.17	29.09	29.68	28.13	.....
19	.....	.....	22.32	29.16	29.77	28.09	.....
20	.....	.....	22.23	29.15	29.79	28.04	.....
21	.....	.....	22.37	29.16	29.53	28.03	.....
22	.....	.....	22.87	29.46	29.43	28.16	.....
23	.....	.....	23.58	29.70	29.33	28.35	.....
24	.....	.....	24.35	29.75	29.24	28.55	.....
25	.....	.....	25.05	29.68	29.23	28.63	.....
26	.....	.....	25.94	29.82	29.19	28.73	.....
27	.....	25.72	25.31	30.03	29.12	28.41	.....
28	.....	25.42	26.35	29.93	29.09	28.25	.....
29	.....	25.44	26.79	29.87	29.11	28.21	.....
30	14.75	25.64	27.10	29.74	29.10	28.18	.....
31	.....		27.35		29.14	28.10	

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